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OF LEISURE, LEARNING AND LEVIATHAN:

ENHANCING THE USE OF INTERPRETATION IN AUSTRALIAN WHALE WATCHING



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'And enormous mother whales lie dreaming
suckling their whale-tender young
and dreaming with strange whale eyes wide open
in the waters of the beginning and the end.'

D. H. Lawrence, *Whales Weep Not*

To my mother, for everything

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ABSTRACT

'Whale watching' is emerging as a prominent trend in nature-based tourism world-wide, and as a youthful but vibrant industry in Australia. Whilst some believe whale watching to be a quintessential opportunity for promoting (marine) conservation ideals, others fear that its growth and expansion will adversely impact the very resources on which it depends. The use of 'interpretation' as an educational management tool is commonly proffered as a desirable and effective means to address both perspectives. However, the increasing enthusiasm for interpretation displayed by whale watching stakeholders is largely premised upon its presumed potential and success. Thus far, theoretically justified principles in interpretation remain ill-defined and somewhat discontinuous, and empirical documentation of the use of this management tool in whale watching is conspicuous in its scarcity.

This thesis explores the status and nature of interpretation within the Australian whale watching industry, and develops strategies which may enable this form of tourism to reach its highest educative potential. The research has three main components: (1) the conceptual and theoretical task of defining best practice standards for interpretation in whale watching; (2) the empirical task of evaluating the current interpretive practices of the Australian industry according to these standards; and (3) the integration of the best practice standards and empirical results into a practical means for enhancing interpretation in whale watching. Discussion also illustrates how these research tasks and results have implications for the use of interpretation as a management tool in other forms of nature-based tourism.

A conceptual framework guides all components of the research, and its main feature is the acknowledgment of the importance of contextual parameters to the success of interpretation in whale watching. In particular, it incorporates an ecological perspective in its portrayal of the phenomenon of whale watching, and highlights the interaction between the primary stakeholders of the tourism (e.g. resource managers, tour operators, participants, whales) as it is influenced by interpretation. In terms of defining best practice standards, this framework encourages the use of interpretation to enable all stakeholders to derive benefit from the tourism activity. As applied to the empirical component of research, the framework identifies key targets for analysis, and in the discussion of results it directs the development of recommendations for enhancing interpretation such that they accommodate the identified interests and needs of the whale watching stakeholders.

A set of standards for best practice interpretation is developed from an interdisciplinary analysis of the literature, and is comprised of techniques for generating visitor satisfaction and stimulating environmentally responsible behaviour. Connections between these outcomes and other stakeholder benefits are emphasised, along with prescriptions for a whale watching interpretation program in terms of its processes (e.g. planning, review), its practices (ie. delivery) and its products (e.g. form, content). The breadth of the standards enables them to incorporate pedagogic principles from significant learning theory, as well as to promote a comprehensive approach to interpretation which accounts for temporal and spatial factors of a nature-based tourism experience. The standards also emphasise the importance of strategic and cooperative efforts amongst all likely interpreters, a thorough understanding of visitor preferences and characteristics, and a clarity of intent for the use of interpretation as a management tool for whale watching.

The empirical component of the research employs the set of best practice standards as an heuristic model for evaluating interpretation in Australian whale watching, on both a national scale and as it is practiced at three diverse case study sites along the southern

coast. Data collected include the identification and critique of: (1) interpretation policies and perspectives offered by key interpreters (ie. staff of resource management agencies, non-government organisations, commercial tours); (2) trends in the nature and use of interpretation, and (3) psychographic profiles of whale watchers.

Results from the national industry and case studies exhibit a broad range of general goals for interpretation, including intentions to promote both visitor satisfaction and environmentally responsible behaviour. Yet, there is no unified direction for use of the management tool, and individual interpreters' professed intentions are disparate in detail and profundity. Most interpreters are committed to the fundamental aspects of planning and evaluation to enact interpretive goals, although these activities are weakened by a lack of strategic effort and explicit policies. Existing channels of liaison between interpreters are also undervalued in terms of their potential for the coordination of responsibilities and information exchange, despite an avowed interest in further discourse and cooperation regarding interpretive strategies for whale watching.

Major trends in interpretive processes (as above) and to an extent, products and practices, are consistent within the national industry and case studies. Greater detail of the latter results indicate the salience of idiosyncratic and contextual features of a whale watching experience (e.g. platform, location, visitor type) to the nature and success of interpretation. In particular, there is a discernible influence of temporal and spatial factors on whale watchers' access and exposure to interpretation. In terms of interpretive content, there are important deficiencies which have the potential to thwart objectives of visitor satisfaction and environmental protection. However, the interpreters' genuine concern for promoting *whale* protection is evident in their affinity for guidelines of appropriate behaviour during whale watching, which they use in both an orientative and educative capacity.

Whale watchers are generally satisfied with the tourism experience and available interpretation on whales, and are potentially receptive to further detail regarding conservation issues. The degree of (land-based) whale watcher compliance with visitor management directives whilst on-site suggests that attention to specific issues within the interpretation is appropriate, though the ability of interpretation to translate whale watcher interest and concern into longterm environmental attitudes and behaviour remains unclear. Such outcomes are likely to be hindered by a paucity of holistic themes, although the aforementioned guidelines exhibit great scope for the enumeration of actions for protecting whales and other features of the tourism (e.g. flora/fauna, coastal ecosystems) beyond the discrete whale watching experience.

The thesis concludes that current interpretation within Australian whale watching presents many opportunities for improvement, although it is already somewhat precocious for an industry in its infancy. The use of interpretation in Australian whale watching is characterised by enthusiasm and an acknowledgment of its potential benefits for the tourism stakeholders (human and non-human), and there is a discernible foundation for progress toward ambitious conceptions of best practice. Recommendations acknowledge this foundation in their priorities for interpretation in future, and suggest that a more sophisticated application of this management tool would enhance its potential to maximise the associated benefits of whale watching. The theoretical ideas, empirical information and recommendations presented in this thesis can facilitate the use of interpretation toward this end, in both whale watching and other forms of nature-based tourism.

DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any University or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I consent to copies of this work, when deposited in the University library, being made available for loan and photocopying.

Elizabeth Reid
December 1999

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CHAPTER ONE
EDUCATIONAL WHALE WATCHING: TOWARD A NEW FORM OF TOURISM

'Recognising that whale watching is an expanding tourist industry which contributes significantly to the economies of a number of contracting parties... to education and to furthering scientific knowledge...[the International Whaling Commission] desires to encourage the further development of whale watching as a sustainable use of cetacean resources.'

International Whaling Commission
1993 Resolution on Whale Watching

1.1 Introduction to an Emerging Industry

Human fascination with cetaceans[1] spans centuries, an enduring testimony to our obsession with the mysterious, immense, and to some extent, the unknowable. The allure of the great whales is powerful considering the majority of their lives is spent hidden from view, and though people from ancient civilisations to modern times have continued to look to the oceans for a glimpse of leviathan, we can still only claim familiarity with a mere fraction of their activity (Stewart 1995). Until recently, any prolonged contact with wild whales was reserved for scientific professionals, frequent seafarers, hunters of the animals, or the very patient; whereas the general public's encounters with whales were typically fleeting, infrequent and opportunistic, or reduced to a choreographed performance by the animals *ex situ* (Simmons 1996).

Whilst whales can escape our scrutinising gaze, this has not yet discouraged the compulsion to foster a relationship with them, and over the last two decades a new form of tourism has emerged that is engendering more frequent and easy access to the elusive marine mammals. Commonly known as 'whale watching,' this tourism offers the opportunity to encounter whales in their own habitat, where participants aboard boats, aircraft or on land-based viewing platforms can witness the whales' antics and enormity. Whale watching has become so prevalent as a commercial enterprise[2] that it is currently practiced in an estimated 65 countries (comprising 295 communities), and is enjoyed by a global population of whale watchers in the millions (Hoyt 1995a; 1996).[3]

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[1] Order *Cetacea*; includes whales, dolphins, and porpoises

[2] Commercial whale watching denotes the practice as conducted purposefully for profit and pleasure (e.g. on a guided tour) as well as observations which take place opportunistically and often without cost. Although not addressed as such in this thesis, whale watching may also signify scientific research and media work (see International Fund for Animal Welfare, Tethys & European Conservation 1995).

[3] In 1994 alone, an estimated 5 million people around the world went whale watching, a figure which has been increasing at a healthy rate of 10.3% since 1991 (Hoyt 1996).

Buoyed by a steady increase in popularity over the last decade (Hoyt 1996), whale watching does not seem to be at risk of ultimate dismissal as a novelty or fleeting trend. Indeed, whale watching has attracted accolades that transcend the usual enthusiasm that accompanies nature-based tourism, and has even been hailed as an inspirational and life-changing experience.[4] Claims that whale watching can challenge indifference and nurture respect toward the great whales (e.g. Beach & Weinrich 1989; Dedina & Young 1995; Payne cited in White 1995) are likely to be well received by a tourism industry which seeks approval from the 'green' market. Furthermore, the industry is not adverse to the portrayal of whale watching as benefactor to a future constituency of environmentalists (e.g. Berger 1996).

Whether or not such a reputation is deserved remains to be seen. Certainly, the rise of whale watching is not without concern, regarding (1) the extent and implications of adverse impacts on the whales and coastal environment, and (2) its actual capacity to generate benefits (e.g. Colgan, Prasser & Jeffery 1996; Duffus & Dearden 1993; Forestell 1993, 1995; Gambell 1995; Hoyt 1996; International Fund for Animal Welfare [IFAW], Tethys & European Conservation 1995; Kaschner 1993; Postle & Simmons 1994). The manifestation of either result depends on the nature of the tourism's management, and one tool in particular which receives notable attention in recent discussion on whale watching is 'interpretation' (e.g. Colgan et al. 1996; Forestell 1993; Gambell 1995; Hoyt 1996; Orams 1995, 1996; Postle & Simmons 1994). Indeed, the ability of whale watching to fulfil such ambitious expectations as those mentioned above is ostensibly derived from its educational opportunity, as engendered by an interpretation program delivered during the tourism experience.

The use of interpretation as a desirable and successful management tool is embraced as a concept by many types of stakeholders[5] in the whale watching industry in Australia and abroad (see Colgan et al. 1996; Hoyt 1996; Kaschner 1993; Orams 1995; Postle & Simmons 1994). However, the achievements, quality, and even extent of interpretation in whale watching must receive greater research attention before it can justify its perceived value as a management tool for the tourism.

It is the intent of this thesis to determine how to maximise the potential success of interpretation as a management tool, in the context of the current Australian whale watching industry.

Chapter One introduces whale watching as a significant form of nature-based tourism internationally and in Australia, in terms of its growth and potential impacts. Discussion illustrates how management concerns arise from the expansion of whale watching, and inspire the primary efforts that guide the further development of the tourism, including

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[4] see section 1.3.2

[5] e.g. tour operators, government officials, researchers, conservation group staff, tourism association staff

interpretation. The enthusiasm and specific expectations for interpretation as part of whale watching's management are described, and a review of its current use within international and Australian whale watching reveals the dearth of information about its status. Several primary research priorities are evident, which must be pursued to enhance the performance of interpretation as a management tool for the tourism. These research needs are developed into the major aims and objectives of the thesis, and are presented in the final section of the chapter with an outline of the thesis structure.

1.2 The Significance of Whale Watching as Nature-Based Tourism

Whale watching is an enduring and complex industry in need of research attention to enhance its management through interpretation. The significance of whale watching as a form of tourism is illustrated below in terms of the changing nature of its practice, the subsequent concerns for its impacts, and the acknowledgment by the international community of its need for improved management in general.

1.2.1 An Auspicious Beginning Fuels Industry Diversity

As an industry, whale watching has evolved considerably from its humble origins in 1955, when an enterprising Californian boat owner began to supplement his fishing tours with the opportunity to watch migrating Grey whales (*Eschrictius robustus*) for a paltry $1 (Hoyt 1995, 1995a, 1996). Figure 1 includes only a modest selection of the international sites for whale watching, and whilst individual nations have reached different stages of development at different rates, common to nearly all is a discernible pattern of growth in practice and participation (Hoyt 1996). Even the well-known industries of more established locations (e.g. USA) indicate only a few signs of reaching a plateau in the numbers of tours and participants (Hoyt 1995a; 1996; Tilt 1986).[6] The interest in whale watching is even more remarkable when one notes that it has only been widely familiar since the 1980s, and is still considered to be in its infancy in the majority of the countries where it is practiced (Hoyt 1996).[7]

Australia's own nascent whale watching industry has been embraced quickly and is continuing to exhibit signs of expansion. The country's earliest commercial whale watching began in the mid 1980s,[8] and it is now practiced on some level in all Australian states. Merely a decade later (circa 1994), Australia's commercial whale watching industry employed at least 270 people nationally and hosted over half a million whale watchers (Anderson 1994; Anderson, Forbes & Pirzl 1996; Kaschner 1993).

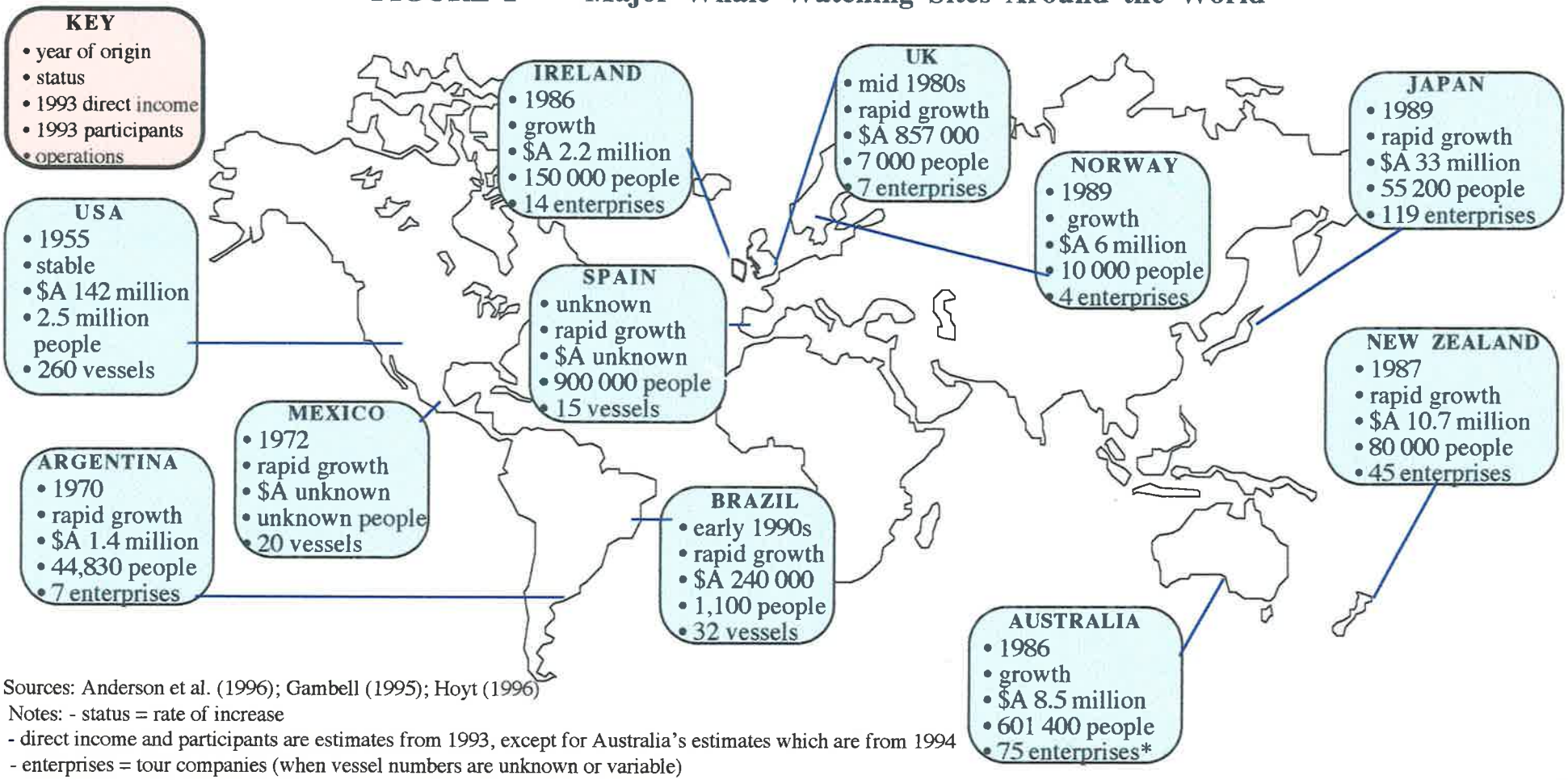
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[6] The USA was once estimated to host 46% of the world's whale watchers, but participation has reached a plateau since 1990 (Hoyt 1996). As the practice expands its global reputation, it is possible that the current 'stable' status will not endure (see Forestell & Kaufman 1996).

[7] Hoyt (1996) considers 'infancy' to be less than 10 years of business.

[8] with the exception of Monkey Mia's (WA) dolphin feeding opportunity, active since the late 1960s.

FIGURE 1 Major Whale Watching Sites Around the World



Sources: Anderson et al. (1996); Gambell (1995); Hoyt (1996)

Notes: - status = rate of increase

- direct income and participants are estimates from 1993, except for Australia's estimates which are from 1994
- enterprises = tour companies (when vessel numbers are unknown or variable)
- vessels are water-based unless specified
- '*'= enterprises include aircraft and known land-based tour enterprises
- Although this is one general indication of global whale watching, it should be noted that estimates of income, participants and enterprises are only approximations and derived from respondents to an IWC survey (compiled by Gambell 1995) or from independent research. As such, methods of calculation differ and sources of the discrepancies are unknown.

Further to its significant and rapidly increasing participation, whale watching has quickly earned a reputation as an economic blessing. Figures circa 1994 indicate that total revenues in a global context nearly doubled in less than five years to reach A$700 million (Hoyt 1996), and again, the Australian industry has followed suit with the direct value of whale watching (ie. expenditure on tours) rising exponentially to an apex of approximately $A 8.5 million (Anderson 1994; Anderson et al. 1996). The indirect value of whale watching (garnered from secondary tourist amenities like accommodation, food, or travel costs) can be even more substantial,[9] and is believed to net upwards of $A 10 million per annum in one of Australia's popular coastal resort towns (Hervey Bay, QLD) (Berger 1996).

An indication of the industry's growth is that 'whale watching' now connotes a staggeringly diverse range of opportunities, as the increase in popularity inspires (if not demands) tour operators to push the boundaries and find their own niche as a viable addition to the industry. Once practiced almost exclusively by boat-based tours, whale watching is now also performed from helicopters, fixed wing aircraft, and terrestrial vantage points. Furthermore, whale watching is not entirely a commercial enterprise, and is increasingly practiced opportunistically from private vessels or public land (see Colgan et al. 1996; IFAW et al. 1995).

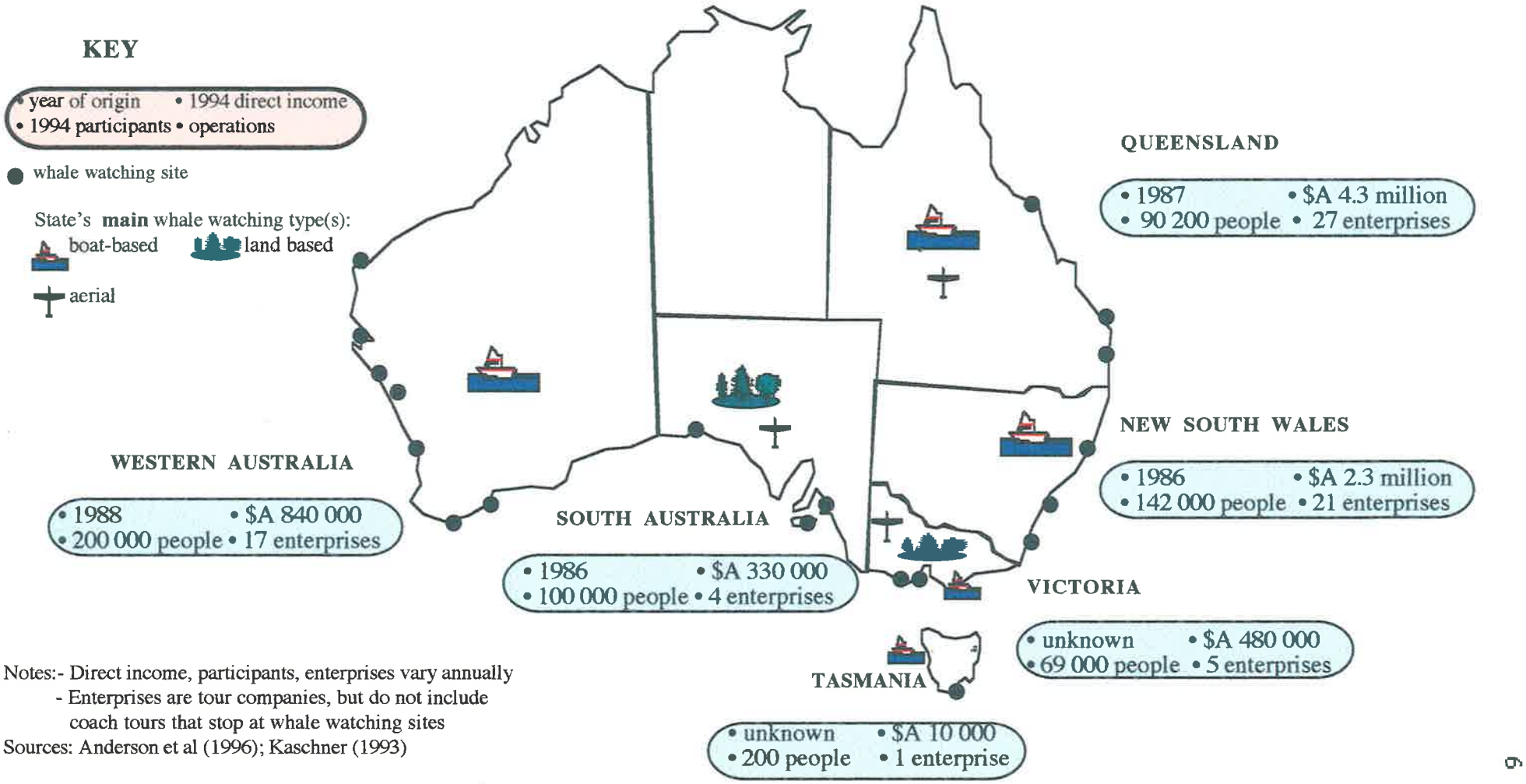
There is the usual predominance of boat-based tours in Australian whale watching (see Kaschner 1993), yet despite its youth, the industry also illustrates such a level of diversity that it caters for most whale watcher preferences or interests. In Australia, a potential whale watcher can select amongst the type of region, tour (or no tour), focal species, and a series of other amenities and options that create a distinct tourism experience (Figure 2) (e.g. Anderson et al. 1996; Colgan et al. 1996; Dalton & Isaacs 1992; Hoyt 1996; International Whaling Commission [IWC] 1994; Kaschner 1993; Postle & Simmons 1994; Stevens, Jeffery, & Coughran 1996).

Both globally and in Australia, whale watching displays a predilection for growth in practice and profit, spatial expansion, and diversification. Driven by an auspicious start, as well as by competitive necessity and consumer interest, this form of tourism is poised to expand even further. In future one can expect the discovery and practice of new whale watching opportunities, and a greater awareness of the tourism amongst the international community. Yet the significance of whale watching extends beyond its monetary gains and participation rates, for regardless of its youth, it is reflective of changes to the contemporary face of the tourism industry.

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[9] To estimate the value of USA whale watching, Kraus (1989) first used a factor of 3.5; the figure has also been used in later estimates of global (Hoyt 1992) and Australian (Gambell 1995) industries.

FIGURE 2 Whale Watching in Australia



Notes:- Direct income, participants, enterprises vary annually
- Enterprises are tour companies, but do not include coach tours that stop at whale watching sites

Sources: Anderson et al (1996); Kaschner (1993)

1.2.2 The Potential Risks of Whale Watching

In recent years, there has been an increased interest in experiential activities with a range of wild animals in their own habitat (Amante-Helweg 1996; Duffus & Dearden 1990; Kellert 1980; Pearce 1991), but whale watching in particular is one of the highest profile representatives of 'nature-based tourism' (Shaw 1987; Valentine 1992). Valentine (1992:108) defines nature-based tourism as:

> *'primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature,'*

though the simplicity of his definition belies the salience of this trend to tourism and to the resources on which it depends. Through the nature-based sector, the tourism industry in general wants to shed its predominantly frivolous image and be acknowledged as an extension of the growing public concern for the environment, and as a means by which to respect and promote the integrity of the ecosystems in which the tourism experience takes place (Nelson 1994).[10] However, despite being a conspicuous trend and fashionable part of tourism vernacular, evidence of its success to this end is limited.

As is the intent with all nature-based tourism, whale watching is professedly a 'non-*consumptive*' engagement with its focal resources (ie. whales),[11] yet this appellation does not necessarily imply the tourism will be non-invasive or that the activity is devoid of impact (Duffus & Dearden 1990). Indeed, Butler (1991) notes the prevalence in the literature of the sentiment that tourism is generally destructive to the environment (e.g. Krippendorf 1987; Mercer 1991; Nelson 1994; Turner & Ash 1975; Urry 1990), and if left uncontrolled it will harm the very features it requires (e.g. Butler 1991; Mathieson & Wall 1982; Stewart 1993; Valentine 1992).[12] A primary concern for nature-based tourism is that it *fosters* greater access to natural resources which may not be able to withstand prolonged and/or increased exposure to recreation pressure (e.g. Agardy 1993; Crabtree & Gibson 1992; Valentine 1992a).

If one concurs with Butler's (1991) forecast for the nature-based tourism industry in general,[13] the future may not bode well for whale watching. In response to the steep ascent in whale watching's popularity, there has been growing trepidation regarding the protection of whales, the fragile coastal ecosystem where the tourism occurs, and the maintenance of a quality recreational experience (e.g. Colgan et al. 1996; Duffus & Dearden 1993; IFAW et al. 1995; Kaschner 1993; Postle & Simmons 1994).

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[10] as exemplified by the many terms signified by nature-based tourism: environmentally-friendly, green tourism, appropriate tourism, soft tourism (Valentine 1992).

[11] ie. where whales are 'not purposefully removed or permanently affected by the engagement' (Duffus & Dearden 1990: 215). The term has also been used (contentiously) to denote benign research, media use, and captivity (cf. Jamieson & Regan 1984), and Tilt (1986: 22) insists 'non-consumptive' whale watching is impossible, and instead varies in its degree of *low* consumptive use.

[12] Not all reviews of the tourism-nature relationship are wholly negative, e.g. see Shaw (1987)

[13] Butler's (1980; 1991) 'curve' is a stage model often cited as illustrating the likely evolution of nature-based tourism. It depicts a sine curve driven by factors of visitor numbers and time, where the risk of adverse impact from the tourism increases with participation over time.

One source of the potential adverse impacts of whale watching is the increasing access the industry has to the whales. It seems today that anywhere cetaceans are found they may be watched commercially. In fact, almost all of 80 known species of cetaceans are now subjects of whale watching somewhere in the world, and even many of the rarer and more elusive specimens are no exception (e.g. deep water beaked whales), as they too, are sometimes spotted opportunistically (see Carlson 1995).[14] The Australian whale watching industry is based on access to Humpback whales (*Megaptera novaeangliae*), and Southern Right whales (*Eubalaena australis*), which migrate from the Antarctic to spend the winter months in relatively warmer coastal waters. Both species were previously targets of the country's whaling industry which decimated their populations and rendered them vulnerable to extinction. This status persists today, and one major concern regarding whale watching is that this tourism activity will hinder their (already slow) recovery (Bannister, Kemper & Warneke 1996).

This apprehension is even more profound when one considers that the very traits of the animals which made them easy prey for whaling are now exploited by the tourism industry. For instance, the species' affinity for coastal waters decreases the travelling time required to locate whales, and site fidelity increases the predictability of sighting the animals. Both cases result in greater access to the whales, and although this contributes to the tourism's viability, it may not be as advantageous for its focal resources. In Australia, whale watching coincides with an important stage in the lifecycle of the whales, since Humpback and Southern Right whales visit the coastal waters to search for a mating opportunity or to give birth and tend their newborn calves (Evans 1987; Tucker 1989). Australian whale watching sites are now located in calving grounds and along almost the entire length of the migratory corridors of the east and west coasts of the country, and even sites previously inaccessible to whaling (e.g. the cliff-faced coastline of SA's far west) are no longer remote enough to evade the expanding tourism industry (Anderson et al. 1996; Evans 1987; Stevens & Page 1994; Stevens et al. 1996; Tucker 1989).

Acute risks of the industry's ancillary activities may be more conspicuous. For instance, poor practice by watercraft, including the relentless pursuit and overcrowding of whales, can cause a discernible increase in swimming speed and avoidance (e.g. diving), and at worst, can lead to collision and serious injury (Australian National Parks & Wildlife Service [ANPWS] 1989; Baker & Herman 1989; Baxter 1994; Duffus & Dearden 1993; Sears 1995; Stevens et al. 1996).[15] Another problem is noise generated by vessel number, operation, type (e.g. aircraft) and presence, and even commotion from land-based whale watchers (Baxter 1994; Olesinski 1994; Stevens & Page 1994; Stevens et

[14]Discussion focuses on large whales because they represent the majority of the industry (ie. 85%, as opposed to dolphins/smaller species at 15%; Hoyt 1995, 1995a, 1996) and because the nature of the impacts are much broader for smaller cetaceans due to their use in swim and feeding programs, instead of passive viewing only. See Amante-Helweg (1996); Orams (1994)

[15] Again borrowing from whaling techniques, irresponsible captains stalk/overtake whales through 'blockade' of the migratory route, and 'leapfrogging' (Stevens & Page 1994; Stevens et al. 1996).

al. 1996; Watkins 1986). Whilst both noise and poor practice interfere with short-term behaviour of individual whales (e.g. courtship behaviour, nursing), they may also have significant cumulative effects on whale populations.[16]

Table 1 illustrates the complexity of whale watching's adverse impacts, and whilst not exhaustive, it demonstrates that several threats can emanate from a single source, and that the implications or costs of these threats exist along different time scales (Duffus & Dearden 1993; IFAW et al. 1995). The table also identifies risks to the integrity of the coastal and marine environments, such as factors that compound marine pollution (e.g. poor handling of fuel by whale watching vessels) (Bannister et al. 1996; Evans 1987; Gaskin 1982; Thompson, Wilson & Curran 1995), and the degradation of the fragile coastline from pressures of land-based activities (e.g. vehicular and pedestrian traffic) (Dubas 1989; Olesinski 1994).[17] Finally, whale watching can have adverse social impacts on the host community (e.g. severe traffic congestion, lack of respect for private property; Madigan 1995), and on whale watchers themselves, due to poor boat manoeuvring (Australian Associated Press 1995; Reuter 1996),[18] or hazards at land-based sites (e.g. cliff edges which are prone to collapse, tidal surge; Dubas 1989; Olesinski 1994).

The diversity and dynamics of the whale watching industry may exacerbate certain impacts, and its changing nature continues to pose new potential threats. Such issues dominate much of current research and international discussion regarding how best to manage this tourism (e.g. Baxter & Donoghue 1995; Beach & Weinrich 1989; Ford 1995; Forestell 1993; Gambell 1995; Hoyt 1996; IFAW et al. 1995; IWC 1994).

1.2.3 International and Australian Interests in Whale Watching Management

The international community's considerable interest in whale watching suggests the significance of the tourism in affecting the global community's relationship with cetaceans. Only a few decades ago, the relationship was dominated by harvest rather than tourism, yet following the moratorium on commercial whaling in 1982, whale watching has emerged as the *most prevalent* 'use' of whales around the world (Hoyt 1995b). This fact, along with whale watching's propitious reputation and potential impacts, have prompted great interest in the practice from governmental and regulatory bodies, conservation groups, and the academic community. Internationally and in

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[16] Such interference can lead to the separation of mother and calf pairs, which ultimately may reduce whale survivorship through extra energy expenditure (e.g. of lactating mother whales who are already under physiological stress), or displacement from preferred areas such as nursery sites and hence exposure to greater risks (e.g. predation) (Bannister et al. 1996; Norris 1994; Salden 1988; Stevens 1990; Stevens & Page 1994). Furthermore, the resulting energetic imbalance (ie. from prolonged alteration of activity budgets) may lead to a reduction of fitness as a local group or even population level (Baxter 1994; Duffus & Dearden 1993; Ford 1995; Salden 1988) .

[17] During the 1991 whale watching season, upwards of 70 000 people travelled to terrestrial vantage points in Encounter Bay (SA) and in 15 days created noticeable and significant damage to the coastline (Olesinski 1994).

[18] both recreational and commercial; in the latter, incidents of injury (Australia) and death (New Zealand, Canada) were caused by operating in dangerous sea conditions that affected vessel stability.

TABLE 1 Potential Adverse Impacts of Whale Watching

SUBJECT OF IMPACT	MAIN SOURCE OF IMPACT	IMPACT TYPE	PRIMARY IMPLICATIONS Direct / Indirect		
			Immediate	---------->	*Longterm*
WHALES	• *Water-based Vessel* • *Aircraft*	• **Poor Conduct** • **Over-crowding** • **Noise**	• Disrupt behaviour *e.g. diving, increased swimming speed communication interference, separation of mother/calf pairs* • Collision	• Displacement *e.g. Altering migration; leaving preferred breeding or nursery areas* • Deplete energy resources *e.g. Physio-logical stress to lactating mothers*	• Reduction of fecundity *e.g. From prolonged energetic imbalance*
MARINE & COASTAL ENVIRON-MENT	• *Water-based Vessel* • *Land-based Vehicle* • *Pedes-trian*	• **Poor Conduct** • **Over-crowding**	• Trample flora • Disrupt geological features *e.g. anchor scrape*	• Diminished water quality • Disturb other flora & fauna	• Erosion • Change nature of ecosystem
WHALE WATCHER	• *Water-based Vessel* • *Aircraft* • *Land-based Vehicle* • *Pedes-trian*	• **Poor Conduct** • **Over-crowding** • **Noise**	• Risk to safety • Diminished experience		
LOCAL COMMUN-ITY	• *Land-based Vehicle* • *Pedes-trian*	• **Poor Conduct** • **Over-crowding** • **Noise**	• Traffic congestion • Littering • Trespassing • Destruction to vegetation*	• Strain to inadequate infrastructure	• Lost opportunities to develop other resources *e.g. fishing* • Decreased amenity value

* Though also an environmental impact, in this case the destruction of vegetation refers to its impact on the scenic amenity of a community's coastal features

Sources: Compiled from ANPWS (1989); Bannister et al. (1996); Baxter (1994); Baxter & Donoghue (1995); Beach & Weinrich (1989); Berger (1996); Centre for Marine Conservation [CMC] and National Marine Fisheries Service [NMFS] (1988); Coughran (1996); Dubas (1989); Duffus & Dearden (1993); Edyvane & Andrews (1995); Ford (1995); Jeffery (1994); Glockner-Ferrari & Ferrari (1990); Hearne (1996); Kleinschmidt (1996); McCauley, Cato & Jeffery (1996);Madigan (1995); Norris (1994); Olesinski (1994); Salden (1988); Stevens (1990); Stevens and Page (1994); Stevens, Jeffery, & Coughran (1996); Stewart (1993); Watkins (1986)

Australia, such parties are intent on examining its performance and seeking to encourage ways by which it will endure as a viable practice not only for the stakeholders but for the resources on which it depends.

In perhaps the most prominent example of the interest in whale watching, this tourism has secured a place on the agenda of the principal international body designed for the global regulation of cetacean management, the International Whaling Commission [IWC].[19] Historically, the IWC only addressed issues involving the consumptive use of cetaceans (as its name suggests), yet after monitoring the early development of whale watching (circa 1980s), it too became a 'legitimate concern' of the Commission. Delegates of the 1993 IWC meeting passed the *Resolution on Whale Watching* and established a Whale Watching Working Group, initiatives which enable the IWC to serve in an advisory capacity regarding the further development of the practice, and to gather and disseminate information towards this end (IWC 1993).

The advantages of the IWC's role in whale watching are twofold. Firstly, the annual meetings of the IWC serve to amass new information from countries with more established whale watching industries. Secondly, this can lead to the distribution of pertinent information that burgeoning industries might not have access to otherwise. That is, international discussion of the practice can help to identify and encourage a distinct direction for the phenomenon of whale watching *and its management*, as the lessons of more mature whale watching industries can set a precedent for the youthful, such as Australia.[20]

Australia has also demonstrated notable interest in discourse on, and improvement of, the management of whale watching. Through its representatives at the IWC,[21] Australia has produced information on its industry for use by the Commission in its efforts to take inventory and establish the nature of international whale watching.[22] Australia has also initiated a biennial '*Encounters with Whales*' conference series to provide a national focus for whale watching issues, in terms of the review of the current status of whale watching and the identification of future directions (see Colgan et al. 1996; Postle & Simmons 1994:5).[23]

In each forum of discussion, managers of whale watching examine the utility of the different strategies at their disposal. Whilst early discussion at these national and

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[19]Appendix 1 contains a list of abbreviations referred to in this thesis.

[20]A significant effort thus far has been a series of workshops and conferences initiated in 1995, when prominent researchers in whale watching and related fields united with international and nationally-based non-government organisations to discuss aspects of whale watching including regulatory standards, educational benefits, social and ethical issues (see IFAW et al. 1995).

[21] In addition to the current Director of the IWC; Peter Bridgewater, an Australian

[22]see section 1.3.3

[23]An important aspect of the series is that in addition to representatives from state and federal government, it incorporates the perspectives of the wider whale watching community, including those from academics and scientists involved in relevant research, conservation groups with cetaceans, tourism, and/or the marine environment on their agendas, and the tour operators themselves. The significance of the conference series is discussed further in Chapters Six, Seven and Ten.

international conferences focused on the mitigation of adverse impacts, recently there has been greater attention to proactive measures that can be taken in face of uncertainty.[24] The use of educative techniques such as interpretation has the potential to fulfil both obligations, which has led to its rising prominence and support in discussion as a management tool for whale watching. The remainder of the chapter considers the popularity of and expectations for interpretation within international and Australian whale watching, and why any guarantee of its success remains elusive.

1.3 Interpretation as a Management Tool for Whale Watching: Origins, Aspirations and Status

The use of interpretation in the management of whale watching follows a tradition of visitor management that originated in National Park systems, where interpretation was expected to satisfy visitors and promote environmental learning, attitudes and behaviour (Sharpe 1976). These functions of interpretation are widely embraced by a plethora of whale watching stakeholders, yet the following discussion reveals that the extent and merits of interpretation's actual use in whale watching may not yet support the accolades bestowed upon it as a management tool.

1.3.1 Introducing Interpretation

Recognition of the utility of interpretation as a visitor management tool has origins in the traditional learning institutions of the school system,[25] but is also premised on a relatively concise history of education within tourism. For instance, the tradition of the 'Grand Tours' practiced by British nobility (c. 17th-19th centuries) which entailed chaperoned young men travelling through Europe to observe culture and society, led to the modern incarnation of 'educational tourism' where structured learning (either by formal or experiential means) is the expressed intent of the activity (Kalinowksi & Weiler 1992).[26] A less formal practice of 'guiding' arose in the tourism of the latter half of the 19th century, when pioneers of nature guiding like Enos Mills[27] used the spectacular setting of the United States' National Parks as a testing ground for a new way of educating *and* entertaining visitors (Sharpe 1976).

Soon after the declaration of Yosemite and Yellowstone National Parks in the late 1800s, a tradition began of guided walks, sign-posted nature trails and natural history lectures

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[24] In terms of any certainty in addressing or alleviating the adverse impacts of whale watching, the information compiled to date on either management success or the precise implications of impacts is unable to offer any unequivocal conclusions, except that more substantial research effort is required in future (Bannister 1996; Bannister et al. 1996; Baxter 1994; Corkeron 1996; IFAW et al. 1995; Raaymakers 1994).

[25] discussed in Chapter Two, where this information is part of an effort to distinguish (conceptually) between environmental education and interpretation.

[26] Though not a focus of this thesis, formal study tours which involve cetaceans are in fact quite popular, particularly where there is opportunity to participate in research, and are offered by many conservation groups, research institutions, and other organisations (e.g. Earthwatch, Smithsonian Institute).

[27] Mills is said to have influenced the recognition of interpretive guides as a professional position (McArthur 1996; McArthur & Hall 1996; Regnier, Gross & Zimmerman 1994; Sharpe 1976)

for visitors (Bayfield & Barrow 1976; Sharpe 1976).[28] All are familiar aspects of the practice known today as *interpretation,* defined by Tilden (1977:8) as:

> *'an educational activity which aims to reveal meaning and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information.'*

This early (and oft-quoted) definition of interpretation alludes to its potential to add value to nature-based tourism, outlined below as one of three major functions of this management tool.

(1) The value-adding function of interpretation is premised on the notion that visitors are interested in obtaining information on the focal points of the nature-based experience (e.g. the flora, fauna, viewscape), and that this knowledge contributes to their enjoyment (Carter 1983; Davies 1987 in Hall & McArthur 1996; Dustin & McAvoy 1985; Hall, Mitchell, Springett & Springett 1992; Uzzell 1989b). In the case of whale watching specifically, the experience may be a visitor's first encounter with the animals, and an understanding of the behaviour that is happening before their eyes may increase satisfaction with the experience (e.g. Neil, Orams & Baglioni 1996). In the event that no whales are encountered (and the appearance of whales *is* often difficult to guarantee), information that draws attention to other wildlife or features of the environment can ease the disappointment of the visitors (Kaza 1982).

The added value from this use of interpretation, or its role in visitor satisfaction, is derived in part from the personal value whale watchers might attribute to the information. Driver & Tocher (1968) believe the goal (and outcome, Mannell & Iso-Ahola 1987) of nature-based tourism is an experience, and in this sense 'success' within an activity of whale watching constitutes something of (non-economic) personal value. This personal value can take on many meanings, and Shaw (1987:211) says, its 'essence...lies in the mind of the beholder.' The psychological benefits of tourism are elusive and difficult to assess since they enter into relatively unexplored areas such as inspiration, awe, and cultural identity, and are best reviewed elsewhere (e.g. Kellert 1984). However, as part of the experience, interpretation can inform, entertain and contribute to the general 'success' of a whale watching experience in these terms.

Interpretation is also recognised as an appropriate technique for visitor management, especially in cases when it is not possible to manipulate the resource (Gale & Jacobs 1987; Hammitt & Cole 1987). Indeed, whale watching management can have little influence over the movements and activities of the large and free-ranging whales, yet their habitat can be protected and control can be exercised over those who contact them through tourism activities (Forestell 1995; Neil et al. 1996), from those operating tours who have immediate access to the wildlife, to independent tourists who encounter the animals without mediators.

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[28]These interpretive endeavours were undertaken as early as 1864 when Yosemite was declared a State Park, and were common by the time it was declared a National Park in 1890.

(2) Interpretation functions indirectly as a management tool in nature-based tourism, by educating visitors about behavioural directives and encouraging their compliance. The compliance of the intended audience is dependent on (*inter alia*) an awareness of the directives existence, as well as an understanding of the consequences of activities they are designed to assuage. In this sense, provision of information can be used to reduce the impact of visitors by complementing other visitor management techniques that address the modification of behaviour during the tourism experience (Hammitt & Cole 1987; Hooper & Weiss 1991; Marion & Rogers 1994; O'Laughlin 1989; Peart 1984) .

In the example of whale watching, the use of behavioural guidelines for management is claimed to be widespread internationally and in Australia (see Carlson 1995; Coughran 1994; Olesinski 1994; Stevens et al. 1996). Whale watching guidelines, such as those developed in 1989 by the ANPWS,[29] prescribe distance limits for the proximity of vessels and also pertain to manoeuvring in the presence of whales (e.g. avoid head-on approaches).[30] To be effective, the guidelines rely on the use of interpretation to raise awareness and understanding amongst their intended audience.

(3) Finally, the function of interpretation in nature-based tourism can entail the provision of a certain type of information which adds value to the tourism in an environmental sense. In this case, interpretation is used to encourage the personal value of a nature-based tourism experience to develop (albeit secondarily) into wider societal value, such that it affects one's attitudes and behaviour. Support from the literature is varied, but some authors suggest that participation in tourism like that of whale watching may encourage the interest (Amante-Helweg 1996; Duffus & Dearden 1990; Kellert 1980; Pearce 1991), concern (Crabtree & Gibson 1992), values (Charters 1996), perspectives (Duenkel & Scott 1994) and even an environmental consciousness (Stewart 1993) regarding the resources on which the tourism is based. In each of these cases, the long-term conservation benefits generated by tourism like whale watching are anticipated to result primarily from the concern of participants, *which can be targeted by interpretation.*

It is this very use of interpretation that gives rise to the notion of 'educational whale watching', where information provided during the activity ostensibly results in increased awareness, and pro-environment attitudes. Moreover, interpretive efforts can be used to engender motivation not only for appropriate behaviour during the experience, but that which endures after the experience and guides the participants' relationship with the environment throughout their ordinary lifestyles. In this guise, interpretation is unique in that it may be the only management option that can *actively* promote many of the long-term benefits of the tourism (Hammitt & Cole 1987).

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[29] now Australian Nature Conservation Agency [ANCA]

[30] The ANPWS (1989) guidelines also set limits for aircraft, swimmers and divers; these guidelines are a major part of discussion in the empirical chapters which attempt to evaluate aspects of their success; also see Appendix 2.

1.3.2 Enthusiasm for Educational Whale Watching

Through all of its functions, the use of interpretation in nature-based tourism gives meaning to the elements of the experience (e.g. management issues, the focal resource), and endeavours to treat more than the symptoms of management concerns (Edwards 1969:18). Awareness of interpretation's different uses is demonstrated to some extent (in the literature) by major stakeholders of the whale watching industry (see Colgan et al. 1996; IFAW et al. 1995; Postle & Simmons 1993; Tyack 1989). Yet there is a pronounced tendency for enthusiasts to exhibit unmitigated faith in the implicit capabilities of interpretation, in absence of any rigorous attempts to substantiate their claims.

Though 'interpretation' may not be the preferred term in much of the whale watching literature or by the industry itself,[31] there is clear advocacy of educational techniques as management tools, along with the conviction that they will undoubtedly lead to the notoriously elusive outcomes introduced above (ie. pro-environmental attitudes and behaviour). In some cases, 'education' is presented as a defining feature and/or result *of* whale watching, such as the opening quote by the IWC (1993).[32] Others dwell on the outcomes, such as Dedina & Young (1995:8) who describe the Gray whale watching industry in Mexico as:

> *'a multi-million dollar industry ...[that] has spawned a growing international constituency of Gray whale advocates dedicated to protecting the species and its habitat.'*

Renowned cetologist Roger Payne[33] (cited by White 1995: 294) concurs that whale watching:

> *'is a very important experience for people to have in terms of positioning their attitudes in favour of the wild world,' and 'is performing an extremely valuable function in terms of attracting people's interest and attention to whales. That's a brutal fact.'*

Government staff (ie. Beach & Weinrich 1989:85)[34] share these views;

> *'We've found that participants usually leave a whale watch with a greater appreciation of whales, whale conservation, and the overall marine environment.'*

Even more enthusiasm is displayed by Berger (1996:6), a Queensland tour operator:

> *'There is absolutely no doubt whale watch operators here, and throughout the world, have made an enormous contribution to education and conservation of the whales .... In Hervey Bay we will be taking out another 70 000 people, who will become, as a result of their, in many cases quite emotional experience, vitally interested in the welfare of the whales. Multiply this worldwide and "Saving All the Whales" could become a distinct possibility'*

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[31] ie. 'education' is more commonly used

[32] see page 1 of this Chapter

[33] Payne has dedicated a lifetime to researching and living amongst the Southern Right whales of Patagonia (Argentina) and has earned a reputation as great advocate for conservation of cetaceans

[34] Both authors represent that National Marine Fisheries Service [USA]

It is not the point of this thesis to disagree with the sentiments of such claims, nor to dissuade the enthusiasm for whale watching's *potential* educational value as aided by interpretation. However, a cautiously optimistic perspective is advocated in place of extravagant and/or unsubstantiated claims, as the latter may undervalue the need to seek enhancement to the practice of interpretation, and thereby put at risk the very results championed by interpretation's advocates.

By recounting the above views verbatim, it is possible to see just how ambitious these claims can be: whale watching *has* created an environmental constituency (e.g. Dedina & Young 1995), it *is* attracting interest, attention to, and appreciation of whales and the marine environment (e.g. Beach & Weinrich 1989; Payne in White 1995), and *has* undoubtedly led to whale conservation (e.g. Berger 1996). These are strong words, and of these examples only Beach & Weinrich (1989) and Payne (in White 1995) qualify their statements with words to the effect of, 'whale watching can have such positive impacts *if* it is practiced in a certain way...' Furthermore, these authors imply rather than explain how they expect to generate the desired outcomes of the tourism (e.g. contribution to conservation). As a result, they may contribute to dubious presumptions that either mere participation in whale watching is enough to generate these outcomes, and/or that interpretation need not be a deliberate and carefully applied management tool.

Early participants in a workshop on whale watching management in the USA hoped to avoid the perpetuation of any such myth that whale watching *is inherently* educational (Centre for Marine Conservation [CMC] and National Marine Fisheries Service [NMFS] 1989:25). Yet it seems that thus far their calls to engage in more comprehensive research on the relationship between whale watching and educational management tools have been somewhat ignored. Indeed, the belief in whale watching's unequivocal educational value has now become so prevalent as to be branded a 'motherhood' statement that accompanies all (proponents') accounts of the tourism (Corkeron 1996:129).

1.3.3 Evidence of Educational Efforts within Whale Watching

The types of statements presented in the previous section play a large role in defining the reputation of the youthful practice of whale watching, but the central questions include: are these statements justified, if not by results than at least by actual effort toward educational whale watching? Does the current use of interpretation for whale watching management illustrate that it is employed specifically to pursue goals such as changing environmental attitudes? Are the opinions expressed above largely rhetoric, where 'interpretation' in practice consists of the simplistic provision of information in hopes of reaching far-reaching goals? Is interpretation even widely used within the whale watching industry? One cannot reply to these queries with confidence at present, for whether it is called interpretation or simply 'education', the use of this type of management tool in the phenomenon of whale watching is largely unquantified, and of unknown and undefined 'quality.'

(i) An IWC Survey

The only attempt to ascertain the status of interpretation in whale watching on a global scale was a survey conducted by the IWC in 1994. This survey featured four main categories regarding the whale watching activities of its member nations: economic value, regulation, available scientific data (e.g. impact to cetaceans), and educational role.[35] The results from the eleven countries which completed their surveys provided the first indication of the global nature of whale watching, and reaffirmed the Commission's commitment to assist information exchange. Nevertheless, the size and diversity of the industry in some countries (e.g. USA), and the length of the survey itself,[36] meant that many generalisations ensued which ultimately provide little meaningful information regarding specific issues such as 'education.'

Nearly three-quarters (8/11) of those countries completing their questionnaires stated that their whale watching industries had 'at least some' educational component, but this does not necessarily include all enterprises within the industry, nor does it discriminate between the type, extent, content or quality of the educational component (see Gambell 1995). In fact, in Hoyt's (1995a; 1996:34) interpretation of the IWC results, he is less generous in accepting evidence of any use of educational material, and contends that *more* than three quarters of whale watching throughout the world is 'entirely commercial.'

This opinion appears justified in light of a closer examination of the answers provided by respondent countries. For instance, a country may claim that its industry has 'some' educational component, yet the percentage of the industry involved varies from an estimated 75% (Mexico) to only 10% (Argentina). Again, the quality and type of 'education' provided is also a pertinent issue, but the vague nature of these responses make it nearly impossible to discriminate between them.[37]

The image that emerges thus far of the global whale watching industry's commitment to the use of education is not promising, though admittedly, the scope of IWC survey questions was limited and education was not the sole focus of the survey. Part of the value of the IWC survey is that it served as an impetus for individual nations to review the status of their whale watching industry, and also inspired a general overview of whale watching in Australia (to submit to the survey) which perhaps may not have been forthcoming otherwise.

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[35] The final report (1995) was compiled by the Secretary to the Commission, Dr. Ray Gambell. The 11 countries to complete the survey (at least to some extent; ie. certain questions/details may have been omitted) and/or make a submission were Argentina, Australia, Brazil, France, Ireland, Japan, Mexico, New Zealand, Spain, UK, and the USA.

[36] 6 main sections, 32 total questions

[37] e.g. Ireland claims that 'information on whales and dolphins is available' on (only) one of its 14 enterprises; Mexican enterprises which have an educational component 'provide scientific background on some level'. As admitted by the USA, ' most vessels provide some educational background but the merits of these educational programs are unverifiable' (in Gambell 1995:117).

(ii) Australian Initiatives

The Australian submission to the IWC's international survey of whale watching was derived from a study sponsored by Greenpeace. In addition to compiling answers to each IWC question, the Greenpeace study features concerns and recommendations for the industry as well as a state-by-state analysis of each known commercial whale watching tour company. However, the final report[38] still fails to address education beyond a summary for the entire country, and resorts to general claims such as:

> *'all Australian operators provide educational background information on their tours'* (Kaschner 1993:30).

Greater details regarding this information is required, such as the content of the commentary, and the patronage (or attention) bestowed by whale watchers to either verbal or printed interpretative efforts. Otherwise, it is difficult to comment on the extent to which these efforts would be fulfil any of the roles outlined for interpretation in previous discussion.[39]

The nature of Kaschner's (1993) Greenpeace report as a general 'overview' renders it incapable of generating any information on the status of specific features (e.g. type, how, why) of interpretation in Australian whale watching. The report does raise 'issues and concerns' for education in whale watching, including the lack of mandatory requirements for the provision of information on tours, or the training of commercial permit applicants (see Anderson et al. 1996). Though likely to be valid concerns, it seems peculiar to make these points in absence of details on the current status of interpretation in whale watching, or on the educational qualifications of the tour operators at present.

Additional research which could enhance the function of interpretation in whale watching has only recently become evident in Australia, and includes the work of Orams (1995, 1996) on the interpretation program of a Queensland dolphin-feeding site; and Bauchap's (1995) unpublished study which measures the effectiveness of the Queensland Department of Environment and Heritage's (QDEH; Central Coast Region) efforts to promote awareness of whale watching regulations in place in a Marine Park. The results of such research are encouraging in terms of demonstrating the successful use of interpretation, but each study was site-specific and undertaken in Queensland. Certainly the essence of their findings are applicable to other contexts of whale watching, but as yet they do not contribute to any conception of the national status of interpretation in Australian whale watching, nor do they afford specific attention to how results *can* be adapted to the multitude of different opportunities that occur in other states.[40]

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[38] adapted for submission to the IWC in 1993 by G. Anderson of ANCA but originally compiled by Greenpeace's K. Kaschner.

[39] refer to section 1.3.1

[40] ie. in light of different platforms for whale watching, or that which occurs independently, where whale watchers are not supervised or on tour.

Two other Australian initiatives include information guides by the QDEH (1995) and Barber (1996) which target the use of interpretation in boat-based whale watching. The guides are informal, unpublished, and an attempt to encourage 'best practice' by cetacean tour operators. The extent of the use or demand for either guide by whale watching operators is not yet apparent, and likewise it is not clear how well they have been received by their target audience in terms of perceptions of their importance or utility. Furthermore, in the absence of information on the status of the Australian industry, it is unknown whether or not such guides or other efforts to enhance the use of education in whale watching are addressing the most critical issues or the priorities of the stakeholders, and/or offering advice that is applicable in the variety of contexts of the Australian whale watching experience.

This deficiency of information on whale watching interpretation in Australia (and elsewhere) is cause for concern, given the expectations for the educational outcomes of the tourism. Perhaps more alarming is the fact that the above examples are currently relied upon as the major sources of information available to directly inform discussion on the use of interpretation as a management tool for whale watching.

It must be considered that recommendations from any international sources (e.g. IWC meetings, conferences, surveys, other research) offer potentially idiosyncratic information, hence a question remains regarding how they may be *best applied* within an Australian context. The use of interpretation as a management tool, even if ostensibly based on 'world best practice' (cf. Postle & Simmons 1995:10), is faced with unknown obstacles or opportunities within the Australian industry.

Furthermore, research attention that has been directed toward the whale watching in Australia focuses on the most popular areas and their circumstances, such as the boat-based enterprises of Queensland, even though boat-based whale watching is but one form of the industry, and is not conducted on the same scale throughout the country. If little information exists in total on the most popular whale watching sites, far less is offered by the industry's newer and/or less publicised locations and forms of whale watching. Certainly research in areas that are experiencing the greatest visitor pressure is essential, but it is also critical that the Australian national forum for discussion of whale watching does not neglect issues specific to its developing sites.

The implications of these concerns, in conjunction with the demands and expectations placed on the performance of interpretation in whale watching, give rise to several research directions which are in critical need of pursuit. These are outlined in the final section of this chapter, which presents the thesis aims and objectives.

1.4 Major Research Issues for Interpretation and Whale Watching

1.4.1 The Research Imperative

Discussion in this chapter has portrayed the basic nature of whale watching as a multifarious industry and a formidable challenge for resource managers. In spite of the risks of adverse impact, the timely and judicious use of interpretation as a management tool may have the potential to offer a future for whale watching that ensures when whales and humans do meet, neither are worse off from the encounter. However, this thesis rejects ambitious statements regarding the expected results from interpretation within whale watching which fail to indicate the basis of their claims.

Again, the purpose of this challenge to the viewpoints of clear advocates of an essential management tool is not to discourage their enthusiasm for the use of interpretation in whale watching. Instead, the questions raised in this first chapter are intended to demonstrate the importance of critical and comprehensive research required on the topic. In fact, one of the most important values of research on interpretation in whale watching is its role in the precautionary management of the tourism. Consider how whale watching persists in spite of apparent risks and amidst the uncertainty of its outcome.[41] If its persistence under such circumstances was due only to great demand and the subsequent economic advantages, the tourism would not be likely to receive the endorsement it does by conservation organisations nor resource management agencies. Rather, one significant reason why whale watching might still be perceived favourably by these stakeholders is its presumed educational benefits that were exemplified above.

If it is dangerous[42] to proceed in light of the uncertainty of whale watching's adverse impacts, it is even more so to rationalise the continuation and/or expansion of the tourism by means of another ambiguous factor (ie. its educational value). According to Bucy (1991:11), adverse impacts of nature-based tourism were once considered a 'reasonable price to pay' for its advantages (particularly economic but also educational). Whilst it is unlikely that current proponents of whale watching would ever agree expressly with this particular supposition, it is in fact tacitly accepted as long as significant doubt remains over the precise relationship between whale watching and interpretation.

Given its accelerated growth and vulnerable resources, whale watching cannot afford to take risks by assuming or hoping for positive outcomes. Complacency need not be the newest threat to whales, but research is required to lend support to the confidence in interpretation, and to demonstrate that if used in a certain manner, it can encourage whale watching to be an educational and appropriate modern relationship between humans and cetaceans. It is therefore imperative to further ascertain how to maximise the educative potential of whale watching, through research on the use of interpretation as a management tool.

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[41] as noted in section 1.2.2

[42] ie. for whales, the environment, and for tour operators who may be left without a focal animal for their business.

1.4.2 Research Directions: Aims, Objectives and Thesis Structure

A central hypothesis of this thesis is that current use of interpretation within the Australian whale watching industry lacks sophistication in form, content, quantity, technique and ideology. A consequence of these deficiencies is that the industry would be unable to maximise its own potential for success, and/or contribute functional knowledge to the global use of interpretation within whale watching. To address this hypothesis and empower the Australian whale watching industry's use of interpretation as a management tool, this thesis pursues **three primary aims**:

(1) to formulate standards for 'best practice' interpretation in the context of whale watching;

(2) to identify the status of the use of educational efforts in the Australian whale watching industry, and evaluate the quality of such efforts according to their approximation to 'best practice' standards

and, based on the above aims,

(3) to suggest means by which to enhance the use of interpretation in the Australian whale watching industry.

These aims require both conceptual and empirical treatment in the current research, and accordingly the thesis contains three main sections:

Part I: a **conceptually and theoretically oriented discussion** that defines and develops 'best practice' interpretation for whale watching with the assistance of multi-disciplinary literature (Chapters Two through Four)

Part II: an **empirical review** of the performance of current interpretation in Australian whale watching (Chapters Five through Nine)

Part III: the **integration** of the concept of best practice and the empirical results into a practical means for enhancing interpretation in whale watching (Chapter Ten)

These main sections are described below, along with the specific tasks of each chapter and the associated objectives.

(i) Part I: Defining 'Best Practice' Interpretation for Whale Watching

Chapters Two through Four focus on defining 'best practice' interpretation and developing standards that can guide its use as a management tool for whale watching. Development of the standards is informed by the multidisciplinary literature, where knowledge from the fields of tourism research, psychology, and education can contribute to the enhancement of interpretation in whale watching. 'Best practice' interpretation is also contextual, in that standards must be applicable to any special needs or concerns of a particular whale watching industry (in this case, the Australian industry), and to specific sites therein. To facilitate both the review of the vast array of relevant literature and the identification of salient contextual factors, it is necessary to delineate the conceptual

parameters of the study. To this end, the task of Chapter Two is

> to describe a new conceptual framework which guides theoretical and empirical analysis of the use of interpretation as a management tool for whale watching.
>
> **(Objective 1)**

The conceptual framework identifies issues that affect the success of interpretation as a management tool for nature-based tourism. It also introduces the primary targets and context for analysis in both the theoretical and empirical components of the research, and specifies the epistemological and methodological boundaries of the research.[43]

In Chapters Three and Four, the conceptual framework is employed

> to critically analyse the relevant policy, theory, and philosophy regarding interpretation as a management tool for nature-based tourism
>
> **(Objective 2)**

and

> to develop a set of standards for best practice interpretation applicable to nature-based tourism in general, and adapt these standards to the specific tourism activity of whale watching
>
> **(Objective 3)**

The scope of these standards is broad, and accounts for the intentions, form, content, delivery, and creation/evaluation of interpretation programs for whale watching.

(ii) Part II: Evaluating Interpretation in Australian Whale Watching

The second major part of the thesis entails empirical analysis of the performance of interpretation in Australian whale watching, in terms of how its current use compares to the standards of best practice interpretation as defined in Part I. Again, the conceptual framework is employed to guide the research directions, and in Chapter Five, the primary tasks are

> to derive a series of hypotheses from the best practice standards, and outline the associated targets of empirical analysis (see below)
>
> **(Objective 4)**

and

> to describe the procedures by which these targets are examined within the Australian whale watching industry.
>
> **(Objective 5)**

Chapter Five also explains how the empirical work involves different scales of analysis, entailing both a national review of interpretation in Australian whale watching, and the case study exploration of its practice at three discrete whale watching sites. The selection criteria for the case study sites are outlined, along with the methods of data collection. The latter are discussed in terms of general techniques (e.g. the use of social surveys) and procedures specific to the different scales (e.g. how surveys were administered at a case study site).

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[43]Methodology, discussed in Chapter Two, reveals broad directions and techniques for the conceptual *and* empirical sections of the research; a detailed account of empirical procedures is found in Chapter Five.

The empirical results presented in Chapter Six constitute an overview of the whale watching industry in Australia with regard to the endeavours of the major stakeholders in the tourism's management. These stakeholders include resource management agencies (ie. state and federal government departments), tour operators, and non-government organisations. The overview of results and trends in Chapter Six is conducted

> to ascertain the current status of interpretation in Australian whale watching in a national context, and determine the nature and quality of the national industry's status and performance according to best practice standards for interpretation.
>
> **(Objective 6)**

Chapters Seven through Nine examine the interpretation programs of the three case study sites of whale watching activity along the southern coast of Australia: (1) a remote land-based site along the far west coast of South Australia; (2) a land-based site in a Victorian coastal resort town; and (3) a boat-based site in a coastal resort town in southwest Western Australia. In the case study analysis, data are presented

> to ascertain the current status and performance of interpretation in Australia whale watching on a case study basis, and determine the nature and quality of its status and performance according to the best practice standards for interpretation.
>
> **(Objective 7)**

For both scales of the empirical work (ie. the national review and case studies), the targets for data collection and analysis comprise interpretation programs (e.g. materials, delivery), and the 'interpreters' (ie. those stakeholders mentioned above who contribute to the interpretation of whale watching). Case study data collection also features the development of psychographic profiles of each site's whale watchers, who represent the audience for the interpretation.

(iii) Part III: Applying Results to the Enhancement of Interpretation in Australian Whale Watching

Chapter Ten reviews the empirical results from the national context and case studies and discusses their ramifications in respect to the premises of the best practice standards for interpretation. Conclusions are drawn regarding the strengths and weaknesses of the use of interpretation within the Australian whale watching industry. The final objectives formalise these tasks:

> to assess and integrate the results of the conceptual and empirical work, and ascertain their implications for the future use of interpretation in Australian whale watching;
>
> **(Objective 8)**

> to formulate recommendations on how to maximise the potential success of this management tool within the industry;
>
> **(Objective 9)**

and

> to comment on the implications of the Australian industry's results for further research and the use of interpretation in whale watching and nature-based tourism enterprises elsewhere in the world.
>
> **(Objective 10)**

By fulfilling these objectives, the thesis makes several major contributions to knowledge. Firstly, the conceptual part of research provides a unique approach and contextualisation of the topic of interpretation in whale watching through its development and use of a new conceptual framework. Secondly, the thesis offers a significant set of standards for best practice interpretation in whale watching which (*inter alia*) account for contextual parameters of the tourism and incorporate the premises of important educational and tourism management theories. Thirdly, data collected in the empirical research represent previously unknown information on the status of interpretation and its use in Australian whale watching, both in a national context and for three case study sites where the tourism is youthful but growing. Finally, the recommendations for enhancing the use of interpretation in Australian whale watching outline considerations, strategies and priorities specific to best practice standards, and as such set a precedent for the future management of the tourism. Through these contributions, the current research seeks to empower Australian whale watching to set an example for nature-based tourism of all kinds, and to truly advance the phenomenon of whale watching toward a 'new' form of tourism.

CHAPTER TWO
RESEARCH ON INTERPRETATION IN WHALE WATCHING: A NEW CONCEPTUAL FRAMEWORK

'Dissect him how I may, then, I but go skin deep; I know him not, and never will. But if I know not even the tail of this whale, how understand his head? Much more, how comprehend his face, when face he has none?'

(Melville 1851:388)

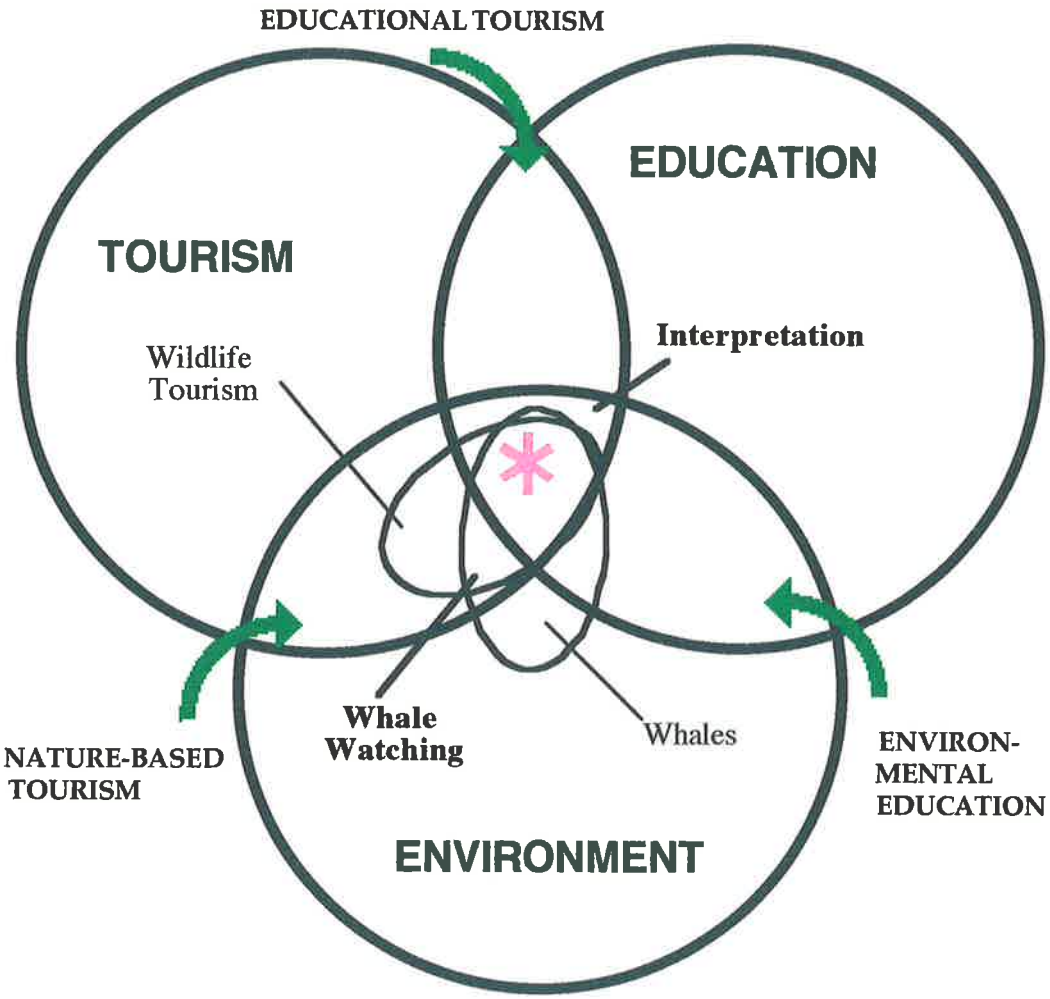
2.1 Introduction: The Necessity of a New Approach to the Research Topic

Despite the increasing frequency in the contact between cetaceans and humans, any 'understanding' of whale behaviour remains largely a matter of conjecture. In fact, more may be known about the celestial bodies above us than about our distant mammalian ancestors that inhabit the seas (Lopez 1995; Stewart 1995). How can one 'know' whales? Judging from Melville's observation above, he may have agreed that in essence, a preferred notion in understanding both whales and nature is that the whole is greater than the sum of its parts. Indeed, Melville's quote was aptly cited by Forestell (1993:268) as a metaphor for the need of a new approach to environmental problems, an approach which does justice to the complexity inherent within the human and environment relationship.

This idea of the need for a new approach is pertinent for the current research, for it addresses the human and environment relationship as it is manifest in whale watching, and explores how the use of one management tool, interpretation, can influence this relationship. In particular, the research topic is derived from three main spheres of interest: tourism, education, and the environment (Figure 3), each with a knowledge base that can inform the research in its development and assessment of best practice standards for interpretation in whale watching.

Support for such eclecticism in research is found in interpretation literature (e.g. Machlis & Field 1984; Strang 1992; VanderStoep, Mullins & Cox 1993), though it can be accompanied by warnings that a 'shotgun strategy' to theory (ie. no defined goal), or strategy resulting in a 'butterfly effect' (ie. vacillating between concepts and techniques) hold little advantage to enhancing interpretation (Carter 1981:12).

FIGURE 3 Research Spheres of Interest



Source: Author

Hence a demanding requirement of the current research was to develop a basis by which one can access and apply knowledge from each main sphere of interest. Furthermore, it had to be accomplished in a manner which was (1) meaningful to the specific context of interpretation in whale watching, yet (2) robust enough to account for the diversity of information which can inform this context. The conceptual framework described in this chapter fulfils this requirement, and directs the theoretical and empirical parts of the thesis by means of its components, structure, and application.

As noted in Chapter One, whale watching is a significant form of tourism, and research to enhance the use of interpretation within this tourism is both timely and important. To guide this type of research, it was necessary to determine which features or issues regarding interpretation merited exploration. Such issues are noted in a brief review of the evolution of interpretation, with an emphasis on its use in Australia. This review highlights the issues that arise in the application of interpretation to the informal and dynamic context of modern nature-based tourism, including the nature of (1) the philosophical foundation, (2) social dimensions, and (3) theoretical support for interpretation. Discussion illustrates why each of these are critical to the quality and future success of interpretation as a management tool for whale watching.

The chapter also explains how the conceptual framework adopts an ecological perspective to enable the current research to address these three types of pertinent issues. This ecological perspective provides a discernible context of analysis for a phenomenon of nature-based tourism like whale watching, and can accommodate the diverse nature of each of the issues cited above.

Finally, elucidation of the epistemological and methodological boundaries of the conceptual framework explain how it was applied to the development of best practice standards for interpretation, and to the empirical examination of their use in Australian whale watching.

2.2 Beyond Park Boundaries: A Change of Context in the Modern Use of Interpretation

Earlier discussion described the genesis of interpretation within the National Park system of the United States, where its use as a management tool was fostered by those who envisioned a prominent role for it in the protection of natural resources.[1] Similar expectations and enthusiasm for interpretation accompanied its importation by Australia in the 1970s, and again, it was applied primarily to the management of Park visitors (O'Brien 1988).[2] However, the initial implementation of interpretation was undertaken

[1] refer ti Chapter One, section 1.3.1

[2] Although O'Brien (1988) argues that 'interpretation' was historically practiced by Aboriginal people in their Dreaming, many take issue with this use of the term (eg. Ballantyne 1995; Gartrell & McLean 1995; Gibson 1993; Sandford 1995). The inception of interpretation in Australia is considered here in a more conventional sense, and in correlation with its initial use within the National Park system.

in absence of adjustments to its new Australian conditions, and this ultimately became a source of several of its problems.[3] For instance, Australia's (then) meagre visitor populations were too small to support a widespread use of the practice, and its scarcity was also exacerbated by the physical distance, expanse and harsh conditions of the Parks (Beckmann 1988, 1991; McArthur 1996; McArthur & Hall 1993, 1996). Consequently, interest in interpretation waned and it became increasingly difficult to justify it as an obligatory competitor with other management initiatives for limited funding (Beckmann 1988, 1991; McArthur 1996; McArthur & Hall 1993a, 1996).

After languishing in a National Park system with little resources to support it, interpretation eventually began to experience renewed interest in Australia in the 1980s (O'Brien 1988), which emanated largely from beyond Park boundaries. In fact, a resurrection of interest in interpretation has been directly attributed to its increasing use by nature-based tour operators beginning in the late 1980s (McArthur 1996; McArthur & Hall 1996b; also see Hockings 1994), and to its further expansion as a mainstay of Australian museums, zoological parks, heritage sites, and botanical gardens (see Beckmann 1991; Beckmann & Hull 1995; Beckmann & Russell 1996; Markwell & Muloin 1994; McArthur 1996; McArthur & Hall 1993, 1996b; O'Brien 1987, 1988).

The physical and conceptual expansion of interpretation beyond the National Park boundaries presents both challenges and opportunities to its success as a management tool. In terms of the challenges, the adoption of interpretation by commercial forms of nature-based tourism[4] exposes a unique social, physical and ideological context that affects its use. Yet an advantage of a new context for interpretation is that its expanded use in different forms of nature-based tourism certainly adds to the attention it receives as management tool, and increases the information base on best practice strategies. Subsequently there have been renewed calls to clarify research priorities for interpretation, and of these, several themes emerge that emphasise philosophical, logistical, educational, attitudinal and (other) social issues that affect the quality of interpretation in nature-based tourism (e.g. Dustin & McAvoy 1985; Field & Machlis 1985; Hooper & Weiss 1991; Knapp 1995; McArthur 1994; Machlis & Field 1984; Mullins 1984; Pearce 1994; VanderStoep et al. 1993).

As common themes in interpretation literature, these priorities are also essential to the development of best practice standards for its use in tourism like whale watching. Hence the next section explores the main themes introduced above in greater detail, offering arguments and evidence as to why they are indeed priorities for interpretation research of any kind.

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[3] McArthur & Hall (1996) claim that the direct importation of the USA Park system itself, with its attendant problems, was not as warmly received in Australia. Refer to Jim (1989) for comments on this problematic trend in unaltered application of strategies for management of natural phenomena in general. In the case of interpretation, this trend is especially apparent in its use within lesser developed countries; see Ham, Sutherland & McGanck (1993).

[4] This is not to suggest that tourism activities within National Parks do not have a commercial element, but instead to signify independent tour operators.

2.3 Research Issues and Priorities for Interpretation in Nature-Based Tourism

2.3.1 Disparity Within Interpretation Objectives and Administration

During its early development within National Parks, the role and function of interpretation in management were set forth by Tilden (1977) who, as the 'father' of interpretation, is responsible for what many believe to be its consummate philosophical basis (e.g. Everhardt 1976; Regnier, Gross & Zimmerman 1994; Sharpe 1976a; Uzzell 1989a, 1989d). As part of his philosophy on interpretation, Tilden (1977) developed a series of principles and penned a popular axiom to guide its use (Table 2) , both of which are still cited and employed today in reference to enhancing interpretation (e.g. Beckmann 1991; McArthur & Hall 1993; Uzzell 1996). Tilden's principles and to a greater extent, axiom, set a direction for interpretation that include both value-adding and educative functions. Significantly, Tilden (1977) maintains that the ultimate outcome of the latter function of interpretation is the protection of the environment.

Whilst the basic functions of interpretation for visitor satisfaction and environmental inclinations (attitudes, behaviour) are not incompatible (Uzzell 1989d), in practice they may remain distinct and receive different emphasis. A major weakness identified for the current use of interpretation in Australia is that its role as a visitor service has a tendency to be overemphasised at the expense of others roles (Beckmann 1991; McArthur 1996). This risk is even greater for commercial nature-based tourism, where client satisfaction directly affects the viability of the tour activity/company (see Beckmann 1988).

A more immediate problem than a discrepancy in the objectives of interpretation is when *no* objectives exist in the first place (Field & Wagar 1976; Griswold 1993; Hammitt 1981; Knapp 1995; Putney & Wagar 1973). In Australian National Parks, the general need for interpretation can be acknowledged within policy documents,[5] though any explicit objectives for its actual use are more recent, and generally remain rare (Beckmann 1989, 1991; O'Brien 1988). One result of this is proposed by Hooper & Weiss (1991), who claim that in the USA, there is no longer a shared image of what interpretation should accomplish. Another possible outcome is that a lack of distinct objectives for the use of interpretation can lead to superficial treatment of it as a management tool, which ultimately renders its function for either satisfying visitors or generating environmentally responsible behaviour hollow and impotent (Hooper & Weiss 1991; McDonough 1982; Uzzell, Rutland & Whistance 1995).

Any obscurity or absence of objectives for interpretation may be symptomatic of a general lack of strategic effort put toward the use of this management tool. Indeed, McArthur & Hall (1993) find that the majority of effort for interpretation in nature-based tourism is directed toward its implementation alone, rather than planning or evaluation of interpretation programs. Though Beckmann (1991) finds an improvement in the more

[5] e.g. legislation, Management Plans

TABLE 2
Highlights of Tilden's Philosophy for Interpretation

AN ADAGE

Through interpretation, understanding;
through understanding, appreciation;
through appreciation, protection.

A SET OF PRINCIPLES

I	*Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.*
II	*Information, as such, is not Interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.*
III	*Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical, or architectural. Any art is in some degree teachable.*
IV	*The chief aim of interpretation is not instruction, but provocation.*
V	*Interpretation should aim to present a whole rather than a part, and must address itself to the whole man* [sic] *rather than any phase.*
VI	*Interpretation addressed to children should not be a dilution of the presentation to adults, but should follow a fundamentally different approach.*

Source: Tilden (1977:9, 38)

recent planning activities for interpretation within Australia's National Parks, she also acknowledges that plans already in existence for interpretation may remain insufficient or ill-received by current resource managers.

Similar to the irresolute stance toward planning, Australian interpreters also display a reluctance to evaluate their efforts, despite the advantages it offers to the enhancement of interpretation and its necessity in given the dynamics of nature-based tourism (Beckmann 1995; Field & Wagar 1984; McArthur & Hall 1993, 1993a). Both planning and evaluation of interpretation may be hindered by perceptions they are complex, expensive, expendable, and a belief that limited resources are best used for implementation (Beckmann 1988, 1991; McArthur & Hall 1993b, 1996c).[6]

Over a decade ago, Peart (1988:112) insisted that

> *'Interpretation can no longer afford to continue without a clear philosophical framework and direction.'*

Certainly this seems to remain a problem in modern interpretation, in light of the discrepancy between (or absence of) interpretation objectives, and the reluctance to engage in strategic effort to aide their realisation. Hence a pertinent issue for the current research is to determine the type of objectives which exist for the use of interpretation within whale watching, and how these are addressed (if at all) in strategic planning and evaluation. Also, as part of the development of best practice standards, there is an apparent need to suggest *which* objectives are ideal for the function of interpretation as a management tool for nature-based tourism like whale watching, and to elucidate strategies for planning and evaluation which are most conducive to fulfilling these objectives .

2.3.2 Diversified Responsibilities for Interpretation

The inconsistency that arises in the different functions of interpretation, and the absence of specific goals, may be due in part to divergent opinions regarding its importance and who should be responsible for implementing it (Beckmann 1991; Hooper & Weiss 1991). This section suggests why it is necessary for research to address social issues in nature-based tourism management, in terms of characteristics and responsibilities of those who utilise interpretation as a management tool.

In National Parks, the use of interpretation depends largely on the opinion of Rangers, such as regional staff who design interpretation programs, prepare materials and generate local publicity (Beckmann 1991; Fox 1996; Olsson 1985). The degree of support for interpretation from senior staff at the head offices may also be influential, for their responsibilities can entail planning, coordination of programs, staff selection and training (Beckmann 1991; Fox 1996). Thus a lack of support for interpretation from the head

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[6]In an admittedly cynical view, McArthur & Hall (1993a) propose interpreters may fear being assessed according to the performance objectives set in planning.

office may lead to a limited allocation of time or resources for regional staff to develop materials/programs. Subsequently, there may be an over-extension of staff and/or the reliance upon restricted use of interpretation, in terms of its roles and products (Bigelow 1995; Bolwell & Sutherland 1996).[7]

Outside of the Park system, the integration of interpretation into nature-based tourism depends on the interest of the tour operators (Hockings 1994; McArthur & Gardner 1992; McArthur 1995). However, in spite of being credited as an impetus for a renewed attention to interpretation in Australia,[8] information on the actual use of interpretation by these operators in Australia is minimal (McArthur 1994). Furthermore, there is concern regarding the level of commitment of independent tour operators to objectives for interpretation beyond visitor satisfaction (Beckmann 1988), as well as a difference of opinion as to whether nature-based tour operators have an *inherent* interest in the use of interpretation (e.g. Hockings 1994; McArthur 1996; McArthur & Hall 1996b), or if they consider it to be more of a luxury than an integral part of the tourism experience (Card 1990). Thus there is acute need for research on interpretation to clarify the positions and opinions of interpreters regarding their use of this management tool (Knapp 1972; McArthur & Hall 1993b; Peyton & Decker 1987).

Irrespective of their perception of the importance or role of interpretation, providers of interpretation in nature-based tourism may lack qualifications or skills which would enhance their capability of delivering or producing it. Concern for this scenario has been noted in Australia, where McArthur (1994) finds that the background of protected area staff responsible for interpretation usually favours natural science to communication. In this case, interpretive staff may have extensive knowledge of natural resource topics, yet they do not necessarily have the educative or communication prowess to relay information about these topics to their audience in the most effective manner.[9] Queensland nature-based tourism operators in a study by Hockings (1994) held few formal qualifications in any field, and instead relied upon on-site experience to obtain knowledge about their interpretive subjects. Again, knowledge of a subject gained by direct experience may not equate to a proficiency in sharing this knowledge with others.

Both formal qualifications in natural science and knowledge of resources gained by experience are certainly desirable qualities in interpreters,[10] yet an important point is that ideally, the background of an interpreter extends to communication skills and an understanding of interpretive philosophy (e.g. Beckmann 1991).[11] One means by which to promote these qualities is to target them through the provision of specialist

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[7]Bigelow (1995) recounts an example where all interpretive duties in a park were relegated to a visitor centre, for presumed efficiency and economy

[8]noted in section 2.2

[9]see Chapter Four for a discussion on effective communication techniques for interpretation.

[10]A study by Weiler, Johnson & Davis (1992) found that tourism company owners perceived the latter to be of greater importance when hiring guides.

[11]also see section 2.3.1

training programs, and Beckmann (1991) has confirmed that such opportunities are considered important amongst protected area staff *in addition to* having a background in education and recreation. Nonetheless, Beckmann (1991) finds that, with few exceptions, resource management agencies often fail to provide in service training on interpretation for their staff. Even the members of a 'professional' interpreters association in the USA do not always pursue opportunities to advance their skills, as only half of those who responded to a survey by Hooper & Weiss (1991) indicated that they had participated in training for their duties as interpreters.

An implication of a lack of training is that without deliberate effort to comprehend the concept of interpretation (including its techniques and philosophy), there can be no assurance that interpreters will recognise all of its possibilities for use as a management tool. Moreover, if the characteristics and capabilities of the interpreter contribute to any failure of interpretation, they are in fact another hindrance to recommendations that call for a devotion of more time and resources to its use.

Characteristics of interpreters such as their liaison with each other, their own perspectives on the use of the tool, and the nature of their qualifications to do so, are largely unknown, unspecified, or unquantified for whale watching (cf. Gambell 1995). Given the concerns demonstrated above, and the diversity and growth of whale watching opportunities in Australia, exploration of these types of social dimensions is clearly a priority for the current research.

According to discussion thus far, a sense of informality and lack of commitment to the use of interpretation (in attitude and resources) may lead to diminished quality and effort. To avoid this scenario, it is necessary for research to demonstrate the relevancy of interpretation as a management tool in the face of competing responsibilities and scarce resources (Card 1990; Dustin & McAvoy 1985 ; Miles et al. 1983; Russo 1996). In spite of a healthy and growing phenomenon of nature-based tourism, there is chronic difficulty in securing funds for interpretation, in the National Park system and beyond (Card 1990; Colpitts 1979; Beckmann 1989; Uzzell 1989d).[12] This is a vicious cycle, for if interpretation fails to appear as a management tool worthy of resources, it may be used sparingly (see O'Laughlin 1986), become only a partial responsibility (Beckmann 1987; 1989; 1991),[13] and/or only be applied in a manner that emphasises visitor satisfaction (and therefore a demonstrative monetary value as a management tool) at the expense of effective communication (Hooper-Greenhill 1994).[14] To minimise this risk for interpretation in whale watching, the next two sections discuss means by which research can and should serve to increase the appeal of interpretation to decision makers and help to justify its use as a management tool.

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[12] Though difficult to isolate interpretive funds (from salaries, saleable publications), Beckmann (1989) found they were usually less than 5% of the total organisation budget in Australian National Parks.

[13] ie. rather than addressed by fulltime interpreters

[14] Also see Beckmann (1994) for a discussion of 'false interactives' as a crowd-pleasing interpretive technique that may not always represent an effective strategy for conveying information.

2.3.3 *Indistinct Visitor Profiles*

Visitor information is critical to research in tourism management, because it can influence resource managers' and/or tour operators' decisions on how to develop and conduct the tourism experience (Pearce 1988). Psychographic information on the tourist population provides a comprehensive baseline from which one can trace any changes in preferences (see Ham, Sutherland & Meganck 1993), either between tourist groups, or for those who have previous experience with the tourism. Such considerations are also a possible means of convincing resource managers or tour operators to increase or improve their *interpretive* efforts, since they provide a more detailed, current, and reliable assessment of the preferences of those who drive the tourism.

To aid the use of interpretation, many authors advocate the examination of visitor characteristics such as factors in their motivation, satisfaction, expectations, and their level of previous experience with nature-based tourism (e.g. Adams & Hammitt 1993; Beck 1993; Beckmann 1991; Cheatley 1994; Cubit & McArthur 1995; Field & Wagar 1984; Hall & McArthur 1993; Hall, Mitchell & Springett 1992; Stevens 1989; Tabata 1989). In absence of such information, an opportunity may be lost for interpretation to generate realistic expectations amongst visitors, or to increase their satisfaction with the tour experience.[15]

Without psychographic profiles, there is also the risk of underestimating visitor interest in interpretation, which ultimately may bias the perspectives of those responsible for providing it. For example, in the nature-based tours of Tasmania, McArthur (1994) found that tour operators undervalued interpretation in terms of visitor interest, and overestimated visitor demand for other aspects of the experience (e.g. remoteness). As a result, interpretation within commercial nature-based tourism in Tasmania receives less attention in marketing and in the development of tour products (McArthur 1994). In addition to potentially handicapping the tourism business,[16] the neglect of interpretation obviously reduces the educational value of the tours.

Further to the last point, other authors encourage the identification of visitor characteristics pertinent to their position as the 'audience' of educational interpretation, including (*inter alia*) knowledge and interest in the educative topics (e.g. S. Carlson 1995; Hammitt 1984; Meredith, Mullins & Fortner 1995; Moscardo & Pearce 1986; Olson, Bowman & Roth 1984; Orams 1994, 1995; Uzzell 1989d; VanderStoep & Gramann 1988). Such visitor information can facilitate the function of interpretation in generating environmental awareness, attitudes, and action.[17] Finally, elucidation of basic travel and on-site behaviour patterns of visitors can facilitate the dissemination of interpretation (Burde, Peine, Renfro & Curran 1988; Gale & Jacobs 1987).

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[15]The ability of interpretation to address visitor satisfaction is addressed in detail in Chapter Four.
[16]ie. by not acknowledging client interest in this part of the experience, the tour companies forego specific opportunities for growth
[17]The ability of interpretation to generate such results is a major topic of Chapter Four.

The issue of visitor research is critical to the use of interpretation in whale watching. Already, the limited psychographic information on whale watchers has resulted in some depictions of them based on imprecise categories that are open to a misconception of their interests in interpretation (e.g. Kaza 1982).[18] Whale watcher studies in Australia (of which there are few) tend to focus on demographic traits or information for promotion of the tourism (e.g. Josif & Mingajtuta 1993), or offer only limited correlations between visitor information and its relevance for whale watching interpretation (e.g. general satisfaction with it, if materials were acquired or not; see Bauchap 1995; Goyne 1993). Important exceptions exist (e.g. Neil et al 1996; Orams 1996), and are discussed later in the thesis, yet they are the minority.

Of course, visitors must not be the only basis for decisions on how to enhance interpretation; certainly, if they were found to be disinterested in interpretation, there would still be a need for its use in terms of the other benefits it can provide beyond satisfaction alone. To demonstrate the relevancy of interpretation to nature-based tourism in general or to whale watching beyond visitor satisfaction or entertainment, there remains the necessity for research to offer theoretical support for the ability of interpretation to fulfil all of its potential roles as a management tool.[19] An undisputed theoretical foundation for interpretation, however, may be as enigmatic as its (current) audience in nature-based tourism and whale watching.

2.3.4 Theoretical Considerations

The appeal for a theoretical foundation to interpretive philosophy has long been voiced in the field (e.g. Hammitt 1981; McArthur 1996; Moscardo et al. 1996), but thus far, a large proportion of interpretation literature remains descriptive and deficient in any theoretical or disciplinary basis (Uzzell 1989a). As a profession, interpretation has largely neglected the opportunity to discuss the need and/or means for expanding and updating a philosophical basis for its use.[20] Instead, Tilden's (1977) principles (refer to Table 2, p. 30) have been the predominant guidance for the practical application of this management tool for twenty years, especially in National Parks (Everhardt 1976). Moreover, these principles have often been relied upon as self-evident, and their potential has been mistaken for certainty (Uzzell 1996). This has occurred in spite of the fact that such principles do not guide the application of interpretation on a day to day basis, specifically address each role of interpretation, nor suggest any necessary adaptations to nature-based tourism outside of National Parks.

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[18]Kaza (1982) recounts how tour operators in California describe groups of whale watchers as either locals, tourists, schoolchildren, or whale fanatics. Such categories are not necessarily exclusive, and serve as no indication of the particular preferences for interpretation

[19]introduced in Chapter One, section 1.3.1

[20] Exceptions to this (ie. efforts of individual interpreters/researchers) are noted below and in Chapter Three (section 3.2).

Some attempts to enhance the Tilden principles (e.g. White 1988) rarely do more than restate them,[21] and other types of guidelines devised for interpretation demonstrate similar inadequacies. For instance, the *Interpreter's Guidebook* by Regnier et al. (1994) offers guidelines that appear to distil the essence of educational theory, but are not necessarily *derived* from theory, and certainly do not make the connection if they are. The irony of this type of guidebook is that although it was not created to be a definitive text on the concept of interpretation, its reduction of theory to pithy phrases (whilst seeming elegant and attractive), ultimately compromises its utility.[22] A stronger theoretical background for these guidelines is required before interpreters (whether Park personnel or tour operators) can prioritise and adapt them to a specific issue or context.

Perhaps the reliance on these types of guidelines or on Tilden's principles (at face value) is due to their attractive simplicity, and/or to a constructivist perspective like Miles et al. (1983:1) who believe all interpretation products 'by their very nature' have some educational content.[23] Yet one must heed warnings about a perceived linearity in the path from knowledge to action (e.g. Cone & Hayes 1980; Hines, Hungerford & Tomera 1986; Hungerford & Volk 1990; Peyton & Decker 1987), where it is presumed that educative efforts need only be directly toward an increase in knowledge, and people will then process information themselves toward changing attitudes or taking action. Interpretation should not be expected to overcome challenges to its use merely by embracing simple guidelines or well-meaning principles (Orams 1994; Uzzell 1989c).

This problem of a weak or contentious theoretical basis for interpretation, and the ensuing reliance upon general guidelines for interpretation, is important to research that seeks to enhance the ability of interpretation to meet ambitious educative goals. Therefore it is important that the conception of best practice interpretation developed by the current research deliberately incorporates specific elements of learning theory, and moreover, that it is comprehensive in its attempt to do so.[24]

Discussion in this section (2.3) has suggested that research to enhance the use of interpretation within nature-based tourism must address specific issues of:

- objectives and perspectives for the use of interpretation
- diversity in the type of interpreter, and his/her respective responsibilities and qualifications
- visitor characteristics
- theoretical support for the use of interpretation

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[21] By contrast, Hammitt's (1981) proposed theoretical foundation for the principles incorporates lessons from cognitive psychology, as discussed in Chapter Four.

[22] For example, both Tilden (1977) and Regnier et al. (1994) recommend to 'relate interpretation to its audience', yet several communication and education principles claim that this requires a delicate balance in terms of familiarity (see Chapter Four). Without a basal level of theoretical understanding (as well as empirical knowledge), the interpreter has no guidance on how to strike this balance.

[23] These authors refer specifically to interpretive exhibitions, but the types of products and techniques they describe are parallel to those commonly used for interpretation in nature-based tourism.

[24] e.g. addresses visitor qualities that are important to the educative task of interpretation; seeks elements of learning theory that relate to generating understanding as well as changing attitudes and behaviour.

The current research on interpretation in whale watching also assumes these issues as priorities for its theoretical and empirical analysis, and thus they comprise primary components of the conceptual framework. The perspective and context of analysis for this framework, as described in the next section, enable it to integrate each of the above issues into the development and evaluation of best practice standards, and to ensure that these standards are applicable to whale watching as it is practiced in Australia.

2.4 The Conceptual Framework's Perspective and Context of Analysis

2.4.1 An Ecological Perspective for Research

As interpretation struggles to secure a place in nature-based tourism that ventures out of protected areas, and to solidify its position within National Parks (e.g. Beckmann 1991), the issues it faces, as described above, are applicable to its use in whale watching. To incorporate these issues into the current research as priorities for theoretical and empirical analysis, the conceptual framework offers a perspective particularly appropriate to a topic grounded in environmental studies: an ecological perspective.

An ecological perspective for research enables a comprehensive and holistic approach to the use of interpretation as a management tool for nature-based tourism. A primary advantage of this perspective is that it unites the social dimensions of environmental problems (e.g. costs and benefits of the interaction between humans and the environment) with a context of analysis that extends beyond the site-specific (Williams & Patterson 1996). Furthermore, other applications of an ecological perspective to research in environmental education and nature-based tourism illustrate how it may also be beneficial to the enhancement of interpretation. For instance, in nature-based tourism research, an ecological perspective can address the dynamics of the tourism activity, a variety of stakeholders and a vast range of diverse experiences (e.g. Farrell & Runyan 1991; Pearce & Moscardo 1985; Ross 1994).[25] It is also believed to have tremendous potential to improve theory and practice in environmental education, by guiding research that expands educative goals and context toward a more biocentric[26] outlook (Corcoran & Sievers 1994; Gough 1987).

Each of these applications of an ecological perspective is important considering the issues faced by interpretation in nature-based tourism (as outlined in the previous section); and in fact, similar applications are recommended specifically for whale watching (e.g. Duffus & Dearden 1990, 1993; Forestell 1995) and interpretation research (e.g. Machlis & Field 1984). An ecological perspective within whale watching research can focus on the costs and benefits of the interaction between the focal animals and tourists, and

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[25] Farrell & Runyan (1991) discuss an ecological perspective and summarise other articles on integrated approaches that appear in a special volume of *Annals of Tourism Research* Vol. 18

[26] ie. ensuring that education is used for environmental protection and the promotion of intrinsic values of nature; see Chapter Three for a discussion on such goals.

suggest how managers of the tourism might address them (see Duffus & Dearden 1990; 1993).[27] Whilst certainly relevant to the issues of the current research, Machlis & Field's (1984) ideas on the use of an ecological perspective for interpretation research offer additional (and greater) advantages for the conceptual framework, in that they focus on a specific management tool, and incorporate managers into the social dimensions of the tourism.

Machlis & Field (1984) were precocious in their call for new research perspectives in interpretation that account for political, social, economic and environmental issues. To advance the understanding of interpretation toward a broader perspective, Machlis & Field (1984:157) promote a 'human ecology' approach to research, where the unit of analysis is the 'human ecosystem': [28]

> *'the interaction of people, social organisations, and available technology in response to a set of environmental conditions'.*

Machlis & Field (1984) consider National Parks to be the quintessential 'human ecosystem' for research on interpretation, for within this context, there is an identifiable 'interpretive setting' of management agencies, visitors to the Park, and interpretation programs. The conceptual role of interpretation in this setting is as a means of helping visitors 'adapt' to the human ecosystem of the Park (e.g. to encourage visitors to behave in a low-impact manner) (Machlis & Field 1984).[29]

Such a role can transcend Park boundaries, and thus a similar conception can be applied to the use of interpretation in other nature-based tourism. The adaptive role for interpretation in the 'human ecosystem' of whale watching is the same, whether the scale is in terms of a national industry or a specific site. In this sense, the 'ecosystem' has less discernible (and less artificial) boundaries, but this is not a disadvantage since the more grandiose goals of interpretation (ie. longterm environmental attitudes and behaviour) already reach beyond its initial setting.

The current research uses the human ecosystem as the context of analysis for the conceptual framework, due to its acknowledgment and attention to both social and environmental dimensions of interpretation as a management tool in tourism (Clapham 1981). A further advantage of the human ecosystem to current research is that it enables one to focus on separate elements of the ecosystem (e.g. managers, visitors) without compromising complexity (Clapham 1981). For instance, in pursuit of research

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[27] Duffus & Dearden (1993) applied this framework to research of a whale watching management scenario, and found that its ecological perspective was able to facilitate management decisions by demonstrating implications of the industry's growth, and its social and environmental management needs.

[28] Despite Machlis & Field's (1984) intent to broaden the perspective of interpretation, however, it should be noted that their purpose in introducing a human dimension to ecology was to advance sociology as an appropriate discipline for interpretation research, and that they define sociology as scientific (read: bias-free) study of social interactions. Nonetheless, the mono-disciplinary orientation and supposed objectivity of the human ecosystem in Machlis & Field's (1984) application does not necessarily preclude its elements and ideas from offering insight for the current research.

[29] Field & Machlis (1985) contend that the adaptation of people to changing Park management actions (eg. more trails) is as natural as the adaptation of flora/fauna to conditions of their ecosystem.

priorities such as objectives for interpretation, the *reciprocity* of relationships within the social environment, and between the social and biophysical environments, is a major consideration in analysis (Machlis & Field 1984). Indeed, research priorities for interpretation, such as the goals, motivations, and capabilities of the human stakeholders are well-suited to the human ecosystem framework (Clapham 1981:396; Machlis & Field 1984), where the notions of dynamics, interrelations, and implications for non-human stakeholders are maintained.

Though Machlis & Field's (1984) own suggestions for interpretation research through the perspective of the human ecosystem coincide with those of the current research, they were never tested in their entirety.[30] A possible reason is that Machlis & Field (1984) did not offer any procedures or methods for applying their conceptual framework. The remainder of the chapter outlines structural modifications and procedures that were necessary to employ the human ecosystem for the current research.

2.4.2 A Modified Human Ecosystem Structure

The first necessary adjustment to the human ecosystem for use by research in interpretation and whale watching was to broaden the setting from a sole construct (ie. a National Park). As Peterson (1996) points out, the 'whole' in human ecosystems is a matter of scale. Hence the current research addresses the human ecosystem of whale watching as a nature-based tourism *phenomenon*, such that the interaction between elements of the tourism and the interpretive setting can occur in several types of locations, such as a coastal National Park, Marine Park, public land, privately managed land or unprotected section of coastal waters. This is a valid modification since the interactions (or processes) which connect the network of stakeholders are more of a defining feature of a human ecosystem than a spatial setting (Clapham 1981).[31]

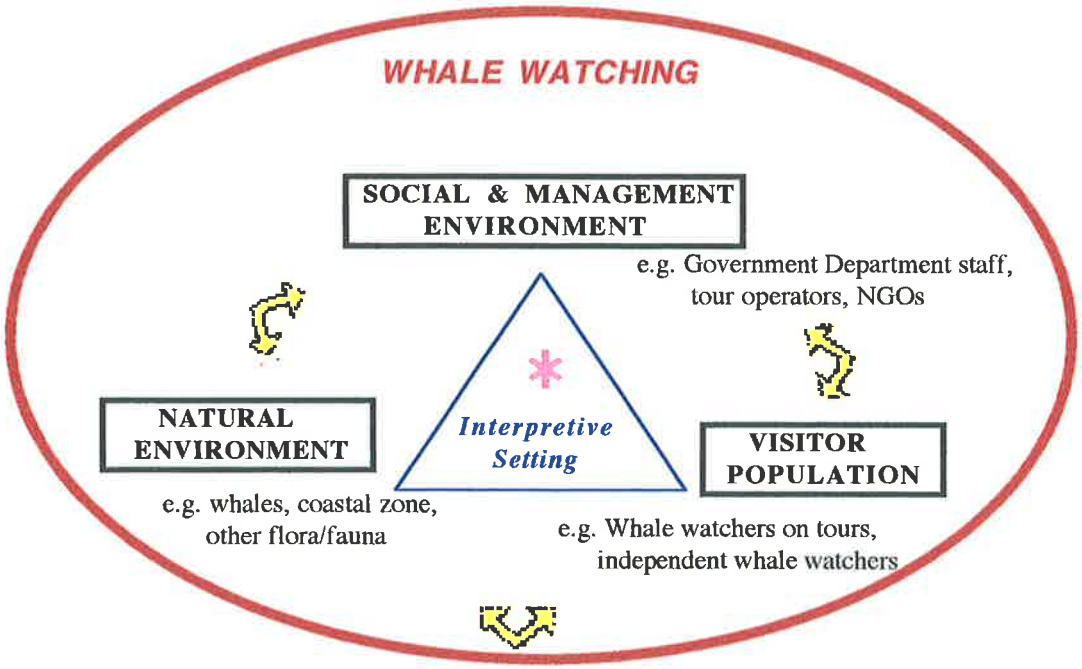
The conceptual framework for the current research maintains the primary elements of the human ecosystem as used by Machlis & Field (1984) : the social/management environment, natural environment and visitor population (Figure 4). However, in this case the social environment is extended to include groups other than resource managers. For instance, both independent whale watching tour operators and NGOs are major groups to consider in terms of creating the tourism experience and/or having a role in interpretation. Another modification for the current research is that elements of the interpretive 'setting' are signified by categories which demarcate their role within a communication model (refer again to Figure 4). Thus, visitors in nature-based tourism are also the *audience* for interpretation, and the main responsibility of resource managers

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[30] Specifically, Machlis & Field's (1984:160-2) suggested topics include changes to the interpreter and visitor populations; how visitors adapt their behaviour because of interpretation; interpretation as an agent of social change; and the influence of different institutions on interpretation.

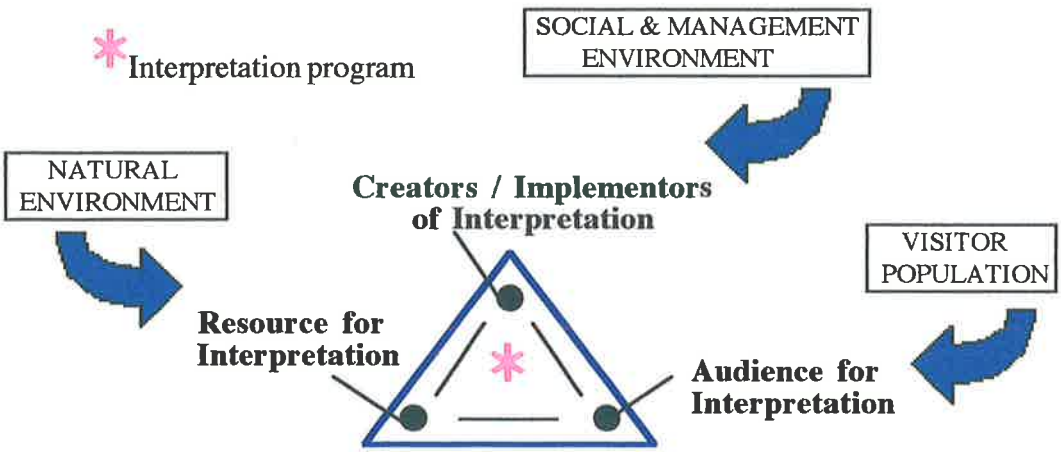
[31] Furthermore, nature-based tourism is still created by society and comprises sociological and natural features supporting the use of interpretation. Also, as noted previously, certain goals for interpretation extend beyond a specific setting and indeed, the phenomenon of nature-based tourism itself.

FIGURE 4 Whale Watching as a Human Ecosystem



Elements of whale watching as a human ecosystem include managers of the tourism (social environment), what it is based upon/where it takes place (natural environment), and participants in the tourism. Arrows signify interaction between components, which generates the setting within which interpretation can function.

The Interpretive Setting within the Human Ecosystem



Within the interpretive setting, more specific elements derived from whale watching activity interact to create the opportunities for the use of interpretation as a management tool, and operate according to their roles in the communication process. Together, these elements result in the interpretation program, comprised of dimension of interpretive processes, practices and products.

Source: Adapted by the author from Machlis & Field (1984)

and tour operators is to create/deliver/evaluate interpretation . Particular biophysical resources are the basis of interpretation, used directly (ie. as a live demonstration) or symbolically in its message or delivery.

Finally, the human ecosystem framework employed by the current research conceptualises interpretation as more than an endpoint or product. This is necessary because several dimensions in addition to just the interpretive form (ie. printed material or commentary) may affect whether or not it can fulfil any communicative or adaptive function. Interpretive dimensions addressed within the conceptual framework include (1) its *process* of creation and evaluation as determined by various interpreters; (2) its *practice* by interpreters in their delivery of materials or commentary;[32] and (3) its *products* , the commentary/materials (Figure 5).

Beckmann (1991) also addressed several interpretation dimensions in her study of interpretation in Australia's National Parks. Beckmann's (1991) consideration of interpretation processes and practices demonstrates that such dimensions are integral to a comprehensive view of how this management tool may be best used by Park staff. In the current research, attention to dimensions of interpretation lends practical value to its conceptual roles, and provides targets for its best practice standards. Hence the value of results from theoretical and empirical analysis is able to be demonstrated in terms that enable their immediate application in the Australian whale watching industry.

2.5 Applying the Conceptual Framework to Research

Application of the type of conceptual framework used in this thesis demands a comprehensive research design. Elements of the framework described thus far in the chapter delineate the 'who, what and why' of current research. This section illustrates the 'where, when, and how' the framework functions, by outlining the epistemological and methodological boundaries of research on interpretation in whale watching.

2.5.1 Epistemological Boundaries

In its holistic perspective of the role of interpretation in whale watching, the current research embraces humans as *part* of an ecosystem, not problem-solvers or observers who exist as outside forces acting on the environment (e.g. Field & Machlis 1985). This position reflects distinct epistemological foundations which guides the selection of methods for theoretical and empirical analysis.[33]

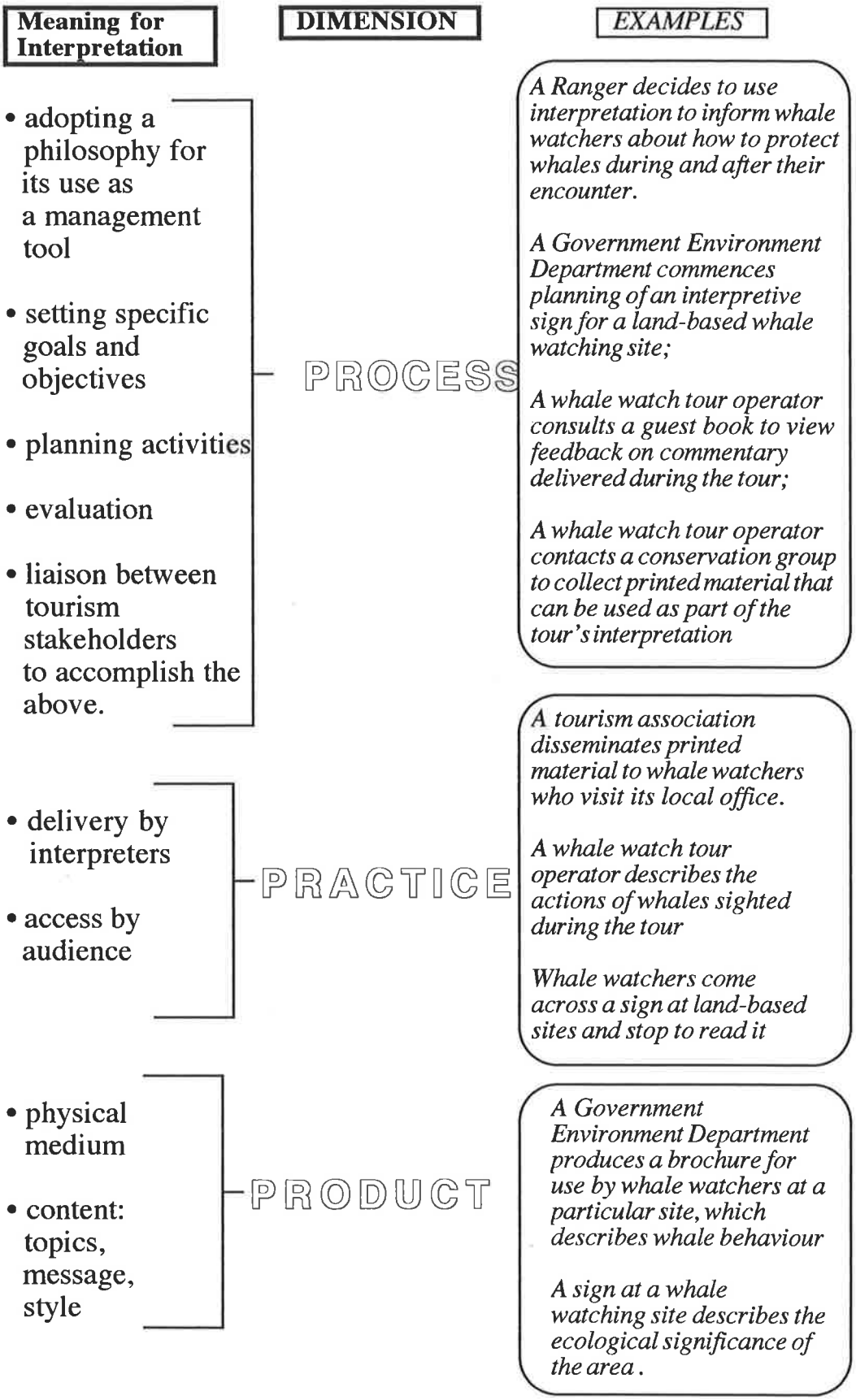
Though epistemology and its relation to creative methodological approaches is a topic of recent interest in both environmental education and tourism research (see Dann, Nash &

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[32]The thesis distinguishes between the use of the term 'practice' as the delivery of interpretation, and 'best practice' interpretation, which can incorporate aspects of any of the dimensions.

[33]Robottom & Hart (1995:5) refer to this influence as the 'politics of method,' where the epistemology of the research paradigm can determine the methodology for inquiry, and clarify why specific methods are required or preferred to ascertain particular types of knowledge .

FIGURE 5 Dimensions of Interpretation



Source : Author

Pearce 1988; Robottom & Hart 1995;), the use of certain traditional paradigms or methodologies prevails. In response to concern voiced in these fields of study, the current research seeks to minimise the influence of positivistic methods which contend that humans can 'know' nature and natural phenomena in a pure and objective form (Charlesworth 1982).[34]

A positivistic research approach has a predominance of empirical techniques and is of questionable capacity to understand the complexity of the social phenomena, for in Sheldrake's (1991:57) words, it constitutes a

> '*partial way of knowing*...[that omits] *most of living experience*'.

Nevertheless, positivism is still a discernible presence within environmental education research, identifiable by instrumentalist goals and the treatment of teachers and students as manipulatable components of objective reality (Fetterman 1988; Robottom & Hart 1995).[35] Tourism research may also still rely on techniques (e.g. quantitative measurements) which, on their own, provide an insufficient understanding of the social and natural phenomena (see Beck 1993; Dann et al. 1988; Patton 1980; Radbone 1990).

Such a predominantly positivist approach is inappropriate for the current research, and instead, the methodology employed in this examination of interpretation in Australian whale watching combines quantitative and qualitative techniques for data collection, as well as acknowledges the inherent subjectivity of research of its kind. Several authors agree that a combined quantitative and qualitative approach is advantageous for research in tourism, environmental education and interpretation (e.g. Beckmann 1989; Hartmann 1988; LeCompte & Goetz 1984). For interpretation, this means research is not restricted to measuring the quantity of learning which takes place, but is instead concerned with less tangible elements of the educative experience, such as the nature of the interaction between social groups (e.g. the interpreters and their audience) (Beckmann 1989; Fetterman 1988; Russell 1989). For nature-based tourism, qualitative techniques enable a more naturalistic research design (ie. rather than manipulating the setting and risking disruption of the experience), and can accommodate greater detail and (potentially) more accurate responses from visitors (Beck 1993; Patton 1980).

In terms of subjectivity, both the discovery and application of the knowledge derived from the current research entail value-based decisions, for one cannot observe, describe, or analyse phenomenon outside of a theoretical framework due to the subjective nature of these tasks (Brown 1973; Clapham 1981; Mayer 1994; Robottom & Hart 1995; Zube 1981). As the knowledge gained from the study and how it is encouraged to be used

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[34] For further detail on features of positivism, including its dualistic and reductionist view of nature and knowledge, its use of knowledge to manipulate nature for human benefit, and methodological monism, see Charlesworth (1982); Phillips (1977); Williams & Patterson (1996).

[35] Robottom & Hart (1995) base this claim on their review of studies within the *Journal of Environmental Education* e.g. Hungerford & Volk (1990); Hines et al. (1986); these references will be discussed in Chapter Three, where their results inform current research but are mindful to the demands of the conceptual framework.

depend in part on the perspective of the researcher, an integral step in defining best practice interpretation is that the researcher's position and supporting arguments are made explicit.[36] Likewise, recommendations for the application of results are based on perceived and identified needs within the Australian whale watching industry.

The current research offers greater epistemological support for the holistic view of interpretation originally promoted by Tilden (1977). Correspondingly, it offers the phenomenon in which this interpretation takes place (in this case, whale watching) a conceptual basis for integrating its many social and environmental dimensions.

2.5.2 An Interdisciplinary Approach

As Tilden (1977) was reluctant or unable to find any obvious grounding for interpretation in a discrete discipline, the concept of interpretation was vulnerable to fragmentation and/or annexation by singular disciplines where the questions for inquiry were narrowed.[37] A multidisciplinary approach is recommended for phenomena which integrate social science into ecosystem management (Williams & Patterson 1996), as well as for nature-based tourism specifically (e.g. Edington & Edington 1986; Kenchington 1993, Pearce & Stringer 1991; Valentine 1992), and both environmental education and interpretation (e.g. Bennett 1977; Mullins 1984; VanderStoep et al. 1993).

To address the diverse priorities of the current research, it is eclectic in its access of knowledge from traditional disciplines. Pertinent areas of study that inform the current research on interpretation in the nature-based tourism of whale watching include sociology, geography, ecology, several branches of psychology (e.g. educational, cognitive, social, environmental), and tourism.[38]

Knowledge gained from a multidisciplinary approach to the current research offers different perspectives,[39] and illustrates that *one* method or perspective is not enough to understand or solve the environmental issue at hand. Whilst this approach certainly adds to the complexity of a task, the epistemological foundation of environmental studies research assures it need not, nor indeed cannot, know everything.[40] Furthermore, inquiry is ultimately narrowed in its selection of which knowledge it recovers from which disciplines, and in its reconciliation of the different problem-solving approaches of each discipline (Kocklemans 1979). Thus in the current research, access to knowledge from several disciplines sustains the breadth of study, and remains amenable to its attempts to develop rigorous standards for best practice interpretation.

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[36] These are made clear in the development of best practice standards in Chapters Three and Four.
[37] A similar problem is found for tourism research, see Pearce (1985).
[38] an eclectic field in itself; see Miller & Auyong (1992); Pearce (1985, 1991)
[39] e.g. of how or why interpretation should function as a management tool for whale watching
[40] This is in response to common criticisms of a multidisciplinary approach, such as its tendency for unclear definitions, boundaries, and procedures (Kocklemans 1979), and the consideration of knowledge in a compounded rather than holistic manner (Jorgenson & Johnson 1981).

2.5.3 *Stages and Types of Analysis*

As stated in Chapter One, the thesis is comprised of both theoretical exploration and empirical work, both of which employ the conceptual framework. One advantage of the conceptual framework in the theory-driven stage of research is that its identification of priority issues drives the exploration of the multidisciplinary literature. Also, the framework ensures that knowledge retrieved from the literature is applicable to a specific social and environmental context, and its attendant demands (e.g. needs of stakeholders, the nature of their interrelations, dimensions of interpretation).

In the empirical stage of research, the conceptual framework engages the same priorities, and elucidate the targets for analysis which can be explored through field work (ie. the elements of the interpretive setting). Thus the priority issues concerning whale watching interpreters, interpretation, and audience (participants) are addressed in the national and case study site contexts. The specific features of these sites, along with greater detail on the empirical procedures for exploring both contexts of the Australian whale watching industry (e.g. sampling techniques, site selection and characteristics, statistical analysis) are best left until discussion reaches these stages of inquiry (Chapter Five). The remainder of this section describes the general techniques of analysis required for the application of the conceptual framework to each stage of research.

'Analysis' entails discerning patterns in data, such as themes or issues that clarify a situation and/or the nature of the problem (Elliot 1994). Congruent to a multidisciplinary approach and an environmental studies perspective, the strategies of analysis employed for the current research are eclectic (see Hartmann 1988). There are other types of analysis than those cited here which may also be theoretically appropriate, but whose exclusion is justified in light of the advocacy of a practical management orientation for interpretation studies (see Beckmann 1989).[41] Furthermore, those which are included overlap and complement each other, and their titles may be more of an indication of their various points of emphasis than a representation of vastly different approaches.

One main technique employed in the current research is conceptual analysis, which is especially pertinent when dealing with unwieldy concepts encountered in the course of discussion whose vague nature demands clarification, such as 'interpretation,' 'nature-based tourism,' or 'environment.' In fact, the potential for their changing meanings provides the impetus to study such concepts, since those not amenable to precise or enduring definitions are subject to careless application. Also, there is an important difference between analysis of what a concept has come to mean and what one thinks it should mean (Jickling 1993). Discourse analysis may facilitate identification of the latter, and in this study it complements conceptual analysis as a means to understand the construction of ideas and to reveal the ideological basis for concepts (see Eagleton 1983).

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[41] e.g. those which examine detailed factual recall may have little use for resource managers compared to data yielded by other types of analysis

Conceptual and discourse analysis in the current research also provide an understanding of what resource managers, tour operators and visitors believe interpretation 'is', and how it should function in whale watching. In the theoretical stage of research, conceptual analysis is used to explore how the literature, and particular stakeholders of nature-based tourism, treat the terms noted above.[42] Another task of this stage is to offer the author's perspective of how they should be defined in terms of best practice standards. In the empirical stage, interpreter perspectives on these terms are particularly relevant to the objectives of their efforts, and are determined by their use of these terms in policy and in their response to ethnographic measures (in interviews and questionnaires; see below). Discourse analysis in this stage is used primarily to examine the interpretive materials of the different whale watching sites.

One indication of resource manager, NGO and tour operator conceptions of nature-based tourism and interpretation can be found in relevant policies (e.g. National Parks legislation, accreditation schemes), and the decision-making processes from which they are derived. Though the current research does not engage in policy analysis as a major strategy, it does address documents which are derived from policy processes, and borrows elements from the multidisciplinary, contextual, and problem-oriented nature of this type of analysis (see Clark 1993; Lerner & Lasswell 1951). In the theoretical stage of the research, the study of policy processes reveals the general nature of how decisions are made for the use of interpretation in nature-based tourism. In the empirical stage, specific sources are consulted which illustrate such decisions for the use of interpretation in Australian whale watching (e.g. Management Plans for protected areas; nationally based strategies for interpretation in the tourism).

Fundamental aspects of network analysis are also employed during the empirical stage of research, to yield information on the context and nature the social relations between interpreters. Network analysis focuses on temporary communication channels of those interested in a topic, to reveal patterns of decision making and their meaning (Doyle 1986; Ross 1994). One strength of network analysis in tourism research of the present kind is that it can reveal the different opportunities that stakeholders have regarding access to information and resources (Ross 1994:140). According to earlier discussion (sections 2.2, 2.3.2), this is a priority issue regarding the enhancement of interpretation's role in nature-based tourism management.

Data for (general) network analysis collected in the empirical stage of research is largely derived from ethnographic methods that indicate (*inter alia*) the frequency and nature of contact between interpreters for whale watching. As a 'human ecosystem', whale watching can be perceived as a subculture, where ethnographic techniques offer information about its social components (e.g. demographic / psychographic data) as well the impacts (beneficial and adverse) that can arise from the use of interpretation. The

[42] as well as other concepts relevant to the management of nature-based tourism through interpretation, e.g. 'sustainability,' 'ecotourism,' 'environmental education,' 'environmental protection.'

purpose of ethnographic analysis is to study subcultures without the artificial constraints of experimentation, but instead in a phenomenological, naturalistic, holistic and unobtrusive manner (LeCompte & Goetz 1984; Patton 1980; Spradley 1980). In addition to characterising the social networks of interpreters, such analysis in the current research yields information relevant to the interpretive audience, ie. the whale watchers.

Ethnographic analysis is highly appropriate for visitor research (e.g. Hartmann 1988; Pearce & Moscardo 1985) as well as for the evaluation of educative strategies (e.g. Fetterman 1984, 1988; LeCompte & Goetz 1984). Most often in visitor research, ethnographic techniques rely on social surveys (e.g. structured interviews and questionnaires) (Spradley 1980), which are the primary techniques utilised by this thesis. Methods such as participant observation are also advantageous (Spradley 1980), especially for tourist research where they yield information on travel patterns and other behaviour pertinent to the management of the tourism for visitor satisfaction and resource protection (e.g. Hartmann 1988). In the current research, participant observation conducted at the case study sites is an important part of determining the nature of whale watcher visitation and their access/attention to interpretation found on-site.

2.6 Summary: The Essence of the Conceptual Framework for Research

The conceptual framework for research comprises several elements (Figure 6), which together enable the deconstruction of grand and complex phenomena. Ryan (1997, 1997a) finds that an ecological approach to the social dimensions of nature-based tourism management (through any means) is essential to advancing its understanding. In fact, rather than being reductionist in the face of complexity, this approach, and its associated components and methods of application, offer a means by which to conceptualise differences and preserve them. As such, the type of conceptual framework utilised in this research can offer what Clapham (1981) contends is the best knowledge on which to base environmental decisions, decision which affect the use of interpretation as a management tool for whale watching.

As noted in Figure 6, the purpose of the framework is to address the aims and objectives set forth in Chapter One. In doing so, it incorporates research priorities identified for interpretation in nature-based tourism in general, which can facilitate the enhancement of its use in whale watching. The conceptual framework maintains a holistic perspective when addressing these issues, such that information from the literature and field work considers both the social dimensions of nature-based tourism management, as well as implications of the interactions between human and non-human stakeholders, as inspired and moderated by the use of interpretation. A practical orientation for the research is maintained through the application of knowledge and results to specific dimensions of interpretation. Finally, eclecticism in methodology and disciplinary review is exercised in the discovery of this knowledge and analysis of the results.

FIGURE 6 The Conceptual Framework for Research

PURPOSE — ***To guide the pursuit of aims and objectives in theoretical and empirical sections of research***

Current research seeks to enhance interpretation in whale watching through:

- the development of best practice standards
- evaluation of Australian whale watching according to the standards (from Chapter One)

COMPONENTS — ***Issues and research priorities for interpretation in nature-based tourism***

Research must address:

- Intentions for the use of interpretation as a management tool
- Strategic effort and coordination amongst different types of interpreters, and their personal characteristics pertinent to the development and implementation of interpretation
- Preferences and characteristics of visitors / tourism participants
- A theoretical foundation for interpretation's value-adding and educative functions

PERSPECTIVE — ***An ecological perspective to research***

This perspective emphasises social and environmental aspects of the research in terms of:

- interaction between human and non-human stakeholders in nature-based tourism (e.g. benefits and costs)
- how interpretation mediates this interaction

CONTEXT — ***A human ecosystem as the unit of analysis***

Targets of analysis within the human ecosystem of whale watching include elements of the interpretive setting:

- the interpreters (ie. resource managers, NGOs, tour operators)
- the audience for interpretation (ie. whale watchers)
- the interpretation created for whale watching and its dimensions: - processes - practice - products

APPLICATION — ***As determined by epistemological and methodological boundaries***

- use of qualitative and quantitative knowledge
- multidisciplinary approach
- eclectic methods of analysis: - conceptual - discourse - network - ethnographic

(Source: Author)

CHAPTER THREE
BEST PRACTICE STANDARDS FOR SETTING GOALS AND DEVELOPING INTERPRETATION IN WHALE WATCHING

'The true interpreter will not rest at any dictionary definition. Besides being ready in his [sic] information and studious in his [sic] use of research, he [sic] goes beyond the apparent to the real, beyond a part to a whole, beyond a truth to a more important truth.'

Tilden (1977:8)

3.1 Introduction: Preliminary Processes in the Use of Interpretation

Mere definitions of interpretation do not reveal its full potential as a management tool for whale watching, and even Tilden's classic effort to define the term remains by his own admission, inadequate. To challenge the ambiguity which surrounds interpretation in whale watching, and to offer a 'more important truth' to which its application in the tourism could aspire, there must be the elucidation of an explicit goal and philosophical foundation for the use of interpretation. If interpretation is expected to 'satisfy visitors' and/or lead to 'environmental protection', clarity is essential regarding the connotation of these terms, and their significance as roles for interpretation. Once a broad direction for interpretation is outlined, it can guide efforts to develop and coordinate its use and monitor its success.

Standards for best practice presented in this chapter pertain to the 'process' dimension of interpretation. Interpretive processes are the features of its use that delineate and foster the implementation of this management tool in nature-based tourism: goals/objectives, planning and evaluation, and liaison between interpreters.[1] Standards for each of these are designed to complement the social and environmental context presented by nature-based tourism, and whale watching in particular.

Principal sections in the chapter describe the major premises of the best practice standards, followed by the theoretical justification of their necessity and validity.[2] Any endorsement of these types of standards by the whale watching industry of Australia is

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[1] refer also to Figure 5, p. 42

[2] Note that the proposed standards in this chapter appear where appropriate in the text, but for greater convenience they are also listed in their entirety at the end of the chapter (Table 6, p. 76).

noted when evident within the literature, and discussion also identifies the means by which whale watching interpretive programs might be able to accommodate such standards in their efforts.

Standards for best practice which refer to the goals and objectives of interpretation are based on its traditional uses in nature-based tourism, and supporting arguments explain how the goals offer an appropriate direction to the function of interpretation within a human ecosystem context for whale watching. It is proposed that these goals/objectives for interpretation are best pursued through strategic efforts in planning and evaluation, which ensure that its use as a management tool is reconciled with significant social and environmental parameters of its context. To this end, mechanisms to coordinate action and foster liaison between interpreters are considered to be essential (ie. as part of best practice), and contribute to the interpreters' capability to design, produce and deliver interpretation.

3.2 A Direction for Best Practice Interpretation

3.2.1 Promoting Benefits for All Whale Watching Stakeholders

In accord with Mullins' (1984) counsel, it is not the aim of the current research to seek or attempt to generate consensus on a single definition of interpretation. However, it is critical to the success of interpretation in whale watching that a common direction and philosophy for its use be established and endorsed, such that *all* of its roles are pursued to their broadest potential. As described in this section, the first standard for best practice interpretation embraces an ultimate goal for the use of this management tool, and represents a discernible direction for its application in whale watching.

The introduction to whale watching and interpretation (Chapter One) described the peril of failing to enhance educative strategies that manage the tourism, since the activity subjects vulnerable resources to increasing visitor pressure. However, in spite of Butler's (1991) pessimistic forecast for nature-based tourism,[3] other sentiments within the tourism literature suggest there are means by which tourism like whale watching can strive to avoid its worst-case scenario, and moreover, result in benefits to its varied stakeholders.

Support for a goal to maximise the benefits of nature-based tourism has its origin in Budowski's (1976) classic paper, where he offers three scenarios that conceptualise the tourism-environment interface: conflict, coexistence, and symbiosis. When in 'conflict', tourism activities are detrimental to the natural resources on which they depend (Budowski 1976:27). In 'coexistence,' the tourism industry and those representing environmental interests may have little contact, either because the industry is not yet well developed, or due to administrative barriers, including conceptual obstacles such as

[3] a view shared by several authors; refer to Chapter One, section 1.2.2

ignorance of each others' field. This relationship is rarely static, and leads either to conflict, or to (seemingly) the most elusive of the three: 'symbiosis' (Budowski 1976).

The concept of 'symbiosis' is borrowed from an ecological principle of a mutually beneficial relationship between organisms, but in a tourism context, it refers primarily to the benefits of interaction between those providing the activity and the resources upon which it depends.[4] In an analogous conception to Budowski's (1976) terminology, Cater (1994) portrays symbiosis as 'win-win,' such that both environmental and tourism interests are satisfied.[5] For example, in the case of environmental interests, not only is the integrity of the natural resources preserved, but practice of the tourism actively contributes to efforts to ensure that it remains as such. As a result, (commercial) tourism stakeholders would benefit by maintaining a quality product and the regular revenue it attracts.

Both Cater (1994) and Budowski's (1976) conceptions are of an optimal nature-based tourism relationship between human and non-human stakeholders in the activity, and as a management tool for this tourism, interpretation should contribute to such a relationship. Symbiosis is a suitable concept for the current research, for the conceptual framework stipulates that a goal for interpretation must relate to its function in the 'human ecosystem' of a whale watching site/experience. Specifically, the framework conceives of interpretation as a function for ecosystem integrity,[6] where it 'adapts' components to the system. Symbiosis is an ultimate embodiment of ecosystem integrity, but in less esoteric terms, it can signify a state in which benefits are attained by all stakeholders.[7]

As the first standard for best practice interpretation in whale watching, this thesis proposes that interpretation should contribute to the notion of ecosystem 'integrity' by promoting benefits for both human and non-human[8] stakeholders that result from their interaction in the nature-based tourism.

Standard I

The ultimate goal of interpretation in whale watching should be to promote and produce benefits for all of the tourism's stakeholders (human and non-human).

Though Cater (1994) and Budowski (1976) find that 'win-win' scenarios in nature-based tourism are more the exception than the rule,[9] the promotion of benefits it still a suitable goal to which interpretation can aspire. Certainly, it is the management of nature-based tourism, rather than mere participation in the experience itself, which has the greatest potential to produce a broad range of produces benefits from the interaction.

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[4]These benefits can be biological and life-sustaining, but are not restricted to such criteria.

[5] Cater (1994) also offers three other combinations which fit under a more detailed perspective of 'conflict' (there is no coexistence): lose-lose, win-lose, and lose-win.

[6]cf. Machlis & Field 1984; Chapter Two, section 2.4.1

[7]Sections 3.2.3 and 3.2.4 discuss the benefits that may accrue for non-human stakeholders in a 'human ecosystem,' and the role of interpretation in creating such benefits for whale watching stakeholders.

[8]including non-human organisms *and* 'ecosystems' (e.g. the coastal and marine environments)

[9]In fact, Budowski (1976) believed the majority of nature-based tourism enterprises to be in a state of coexistence moving toward conflict.

Furthermore, the use of stakeholder benefits as a guiding concept in interpretation research and/or application has been endorsed in the literature (e.g. Beckmann 1991; Knudson, Cable & Beck 1995; VanderStoep, Mullins & Cox 1993), which illustrates techniques that facilitate interpretation's function toward this goal.[10]

A central feature of this goal is that it includes the natural environment (e.g. coastal ecosystems, whales) as a major rather than marginal stakeholder. In fact, for the goal to be meaningful and legitimate within an ecological perspective of a nature-based tourism phenomenon, it is essential to maintain a focus on benefits additional to those enjoyed by the human stakeholders. The potential benefits that the use of interpretation in whale watching can yield for the tourism's natural resources (e.g. whales, marine and coastal ecosystems) are offered in discussion below, but admittedly there is a need for research within the 'human ecosystem' framework to exercise caution when attempting to discern what may be in the 'interest' of the non-human stakeholders. Furthermore, there is a risk of deviation from the 'mutual' aspect of the goal of stakeholder benefits, due to the confusion and complexity regarding the meaning of benefits to non-human stakeholders, and the seemingly greater practical value of focusing on visitor and manager needs.

This risk is apparent in Beckmann's (1991) use of the concept of benefits in a review of the status of interpretation in Australian National Parks, where she categorised them according to the advantages offered to either visitors (recreational, educational) or to resource managers (management, promotional). There is no direct reference to the benefits that could accrue for the natural resources interpreted in the Parks; although Beckmann (1991) does acknowledge that educational benefits of using interpretation can in turn result (ie. indirectly) in benefits to the natural resources or management agency. Beckmann (1991) also asserts that promotional benefits can have advantages for visitors, which demonstrates the links between addressing benefits for different social groups.[11] Such links could have been developed further had the research been oriented toward a more explicit 'symbiotic' or mutual goal, and thus provided more assurance that educational benefits are pursued *so that* they also benefit the resources.

The current research prefers to emphasise the 'links' between the benefits effected by interpretation as part of Standard I, with the rationale that the links are themselves an important factor in both enhancing or encouraging the use of this management tool. As an example, encouraging the use of interpretation is crucial for countries with developing whale watching enterprises who do not yet have an educational component to the experience (see Gambell 1995; Hoyt 1995a). To enhance their use of the management tool, it may first be necessary to demonstrate to these countries how interpretation contributes to visitor satisfaction, as well as to the longevity of their whale watching

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[10]These types of techniques are discussed in Chapter Four.

[11]ie. promotional information presumably benefits those who offer the tourism experience, but can also benefit the participants if it results in realistic expectations. Such benefits of interpretation are acknowledged at this point, but as the use of interpretation for promotional and orientative purposes is a complex issue, further discussion is reserved for Chapter Four, section 4.2.

industry. In this case, the links between visitor satisfaction and industry growth could be described (as part of the goal delineated by Standard I), with emphasis on how they may be forged through interpretation.[12]

The various potential benefits from interpretation are presented in Table 3, which illustrates their diversity between and within the different whale watching stakeholders. Note that some arise from a promotional and orientative, as well as educative role for interpretation. The advantages of these additional roles, and their interrelation, are discussed in detail in Chapter Four. Here it is sufficient to note their salience in promoting a goal of maximum benefits. In this case, the educative role of interpretation addresses value-adding in terms of entertainment, as well as influencing on-site and long-term behaviour.

Advocacy for these roles is apparent within whale watching literature. The *Encounters With Whales* conference series[13] initiated in 1993 sets a similar goal for interpretation within Australian whale watching, and urges the industry to consider interpretation as an important management tool for generating benefits of the whales and environment in particular. Through discussion workshops, delegates agreed that maximising the protection of whales and the environment and minimising impacts was a central function of interpretation, and significantly, that goals for its use should include the encouragement of environmentally responsible, proactive behaviour regarding whale protection and other environmental issues (see Colgan et al. 1996; Postle & Simmons 1994).[14] Similarly, the QDEH's (1995) guidebook for whale watching tour operators endorses a 'conservation ethic' as part of the goal for interpretation's use in the tourism.

These efforts embrace a direction for interpretation similar to that proposed in Standard I, although this alone does not comprise an adequate philosophical basis for its use in nature-based tourism like whale watching. Additional standards, such as those in the following sections, are also required to promote interpretation as a significant and essential management tool.

3.2.2 Explicit Objectives for Best Practice Interpretation

The theme of the first standard for best practice interpretation developed in this thesis is that the use of interpretation should pursue benefits for all stakeholders of nature-based tourism. Such a position supports the traditional use of interpretation in that its various roles in value-adding, on-site behaviour, and longterm environmental protection can help address the different kinds of 'potential' benefits cited in Table 3. This 'potential' is a

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[12]The legitimacy of links between benefits are described in Chapter Four where they are given theoretical support, and traced within the traditional roles of interpretation in nature-based tourism.

[13]introduced in Chapter One, section 1.2.3

[14]As the 1995 meeting occurred during the course of this research, it did not directly contribute to the conceptual development of best practice standards; however, its proceedings were able to inform empirical work in the 1996 season, and offer an indication of support for the standards for interpretive goals and objectives.

TABLE 3
Benefits of Interpretation: The Case of Whale Watching

Stakeholder and Type of Benefit	*POTENTIAL BENEFITS OF INTERPRETATION*
Whale Watchers *Promotion and Orientation*	• appropriate expectations of the experience • able to find the site or choose the best time to visit • come prepared (ie. have items needed for comfort or convenience).
Whale Watchers *Education*	• a value-added experience (e.g. describes what they are seeing, such as types of whale behaviour) • an understanding of the complexities of the environment (e.g. ecosystem function) • able to make informed choices in future • empowerment to help protect whales and the environment • encouraged to take action that will protect whales and the environment, and satisfaction or sense of well-being that arises from taking action
Tour Operator *Promotion and Orientation*	• safety and comfort of clients • reduced risk of disappointed clients • distinguishes operators from others
Tour Operator *Education*	• experience does not rely solely on one feature (e.g. whales) • clients less likely to behave inappropriately and damage the resources upon which the tourism depends
Resource Manager *Promotion and Orientation*	• visitors are 'matched' to a site (ie. they want what it has to offer, rather than demanding a different experience once they arrive) • better public relations and an understanding of the managers' roles
Resource Manager *Education*	• visitors less likely to behave inappropriately and adversely impact whales or the environment (ie. fulfils their management responsibility)
Whales, the marine & coastal environment *Promotion and Orientation*	• (whales) are not expected to perform, so operators are not pressured to disregard appropriate behaviour to provide a better viewing experience
Whales, the marine & coastal environment *Education*	• receive minimum or no adverse impact during the interaction due to (human) knowledge of appropriate behaviour • longterm measures to protect them in the whale watching area (e.g. Marine Park) are inspired from whale watcher (and other social stakeholder) knowledge and interest • longterm protection in non-whale watching contexts is inspired from whale watcher (and other social stakeholder) knowledge and interest

Sources: Adapted from Beckmann (1988); Hall & McArthur (1993); Sharpe (1976)

key concept for an interpretive goal to promote benefits of human and non-human stakeholders, for these benefits are what interpretation should *strive* to achieve. Thus to be 'best practice', it should *attempt* to incorporate all such benefits. Otherwise, there is a risk of social benefits dominating the goal, as well as the marginalisation of particular benefits of non-human stakeholders. In fact, a major concern within the interpretation literature is that some roles are utilised in favour of, rather than in conjunction with, others.[15] To mitigate this tendency and to facilitate an ultimate goal of mutual benefits, a second standard for best practice interpretation proposes that objectives for interpretation should be explicit in their effort to incorporate all roles of interpretation.

Standard II

Objectives for interpretation should be explicit and inclusive of all its potential roles as a management tool (ie. value-adding, environmental protection on-site and in the longterm)

This standard seeks to ensure that interpreters are aware of each role of interpretation and the respective contributions toward various stakeholder benefits, *and* that pursuit of each is compulsory to achieving its ultimate goal as a management tool for nature-based tourism (cf. Standard I).

Value-adding for visitor satisfaction is a critical part of the management equation, not only for the contribution to various social benefits, but because this use of interpretation may also be able to lead to the attainment of other environmental benefits. Support for this point is found within learning theory and recreational studies which elucidate particular visitor characteristics, interpretive content and forms of delivery that can facilitate visitor satisfaction and subsequent benefits for other stakeholders. As the function of interpretation in this manner entails aspects of its products and practice, further discussion of this point is reserved for Chapter Four. At this stage it is simply acknowledged that the use of interpretation to add value to the whale watching experience is a valid objective for more reasons than its capacity to satisfy visitors, and hence is essential that this objective is included when developing an interpretive program.

The proposed Standard II suggests that in addition to value-adding, an objective for interpretation's contribution to environmental protection is also a critical part of an interpretive program. Support for an 'environmental protection' objective of interpretation is illustrated by the whale watching industry's development of operational guidelines.[16] In Australia and internationally, management discourse and literature emphasise the need for wider availability (and consistency) of these guidelines as a primary means of educating tour operators and recreational boaters (ie. independent whale watchers) about how to minimise disturbance to the whales (see Bannister 1996; Carlson 1995; Hodda 1996a; IFAW et al 1995; May 1996). In some instances, aspects of guidelines such as those developed by ANPWS (1989) in Australia have been adopted

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[15] as noted in Chapter Two, section 2.3.1

[16] introduced in Chapter One, section 1.3.1

within legislation or other official policy (e.g. permits for whale watching, in WA) to become enforceable regulations (see Baxter 1994; Coughran 1994; Coughran & Crawford 1996; Gooch 1994). Whether formal or not, any promotion of guidelines for appropriate behaviour is evidence of the pursuit of interpretive objectives in whale watching beyond value-adding for visitor satisfaction.

Nonetheless, as part of an interpretive campaign for whale watching, these types of guidelines also demonstrate the potential to truncate an environmental protection role, if they are presented as only critical for human behaviour *during* whale watching (rather than whenever one encounters a whale). When whale watching guidelines fail to emphasise long-term (and non-tourism related[17]) interaction with whales, an important benefit to the animals may be overlooked. In this example, the ultimate goal of mutual benefits for tourism stakeholders could be undermined by the vagueness of the objective for 'environmental protection,' and thus neither Standard I nor II would be fulfilled. In light of this threat, the remainder of this section (3.2) focuses on the importance and means of making this particular objective more explicit. Discussion of the history of the use of interpretation for environmental protection, its parallels to environmental education and the principles of ecotourism, and the basic tenets of value theory all support the premise of the proposed Standard II, and illustrate its significance as part of best practice interpretation in whale watching.

3.2.3 Defining Interpretation's Role in Environmental Protection

The mention of whale watching guidelines alluded to the use of interpretation to educate its audience such that they behave in a certain manner. An 'action' or behavioural objective of an educative tool in tourism has a foundation in the ideology of both environmental education and ecotourism.

Earlier discussion introduced the advent of interpretation as derived from early guiding within National Parks, but the role of education in tourism also has its origins in the concept of experiential education, where firsthand experience and interaction with resources convey information through all of the senses.[18] In the 1960s and 1970s, coincident with the growth in outdoor and wilderness recreation, 'environmental education' arose in part as a modern form of experiential and outdoor education (Miles 1986). The purpose of environmental education is not only to teach:

- *in* the environment (as an appropriate setting), and
- *about* the environment (providing information on elements of the setting),

but also • *for* the environment.

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[17] For instance, in Warrnambool, VIC, similar guidelines have been created to manage the local fishing industry's interaction with whales when they animals are in the vicinity (McKinnon 1995). In this instance, the fishing vessels are not operating in order to see the whales, but their manoeuvres around the animals can have the same impacts if not regulated.

[18] These ideas of educational methodology can be traced to Greek philosophers (Plato), Renaissance educators (Komensky), and later philosophers (Rousseau, Pestalozzi). All inspired modern theory and practice which affirm the merit of educating about nature in a practical environment, and hence are of relevance to interpretation in nature-based tourism (see Beckmann 1989; Hawkins & Vinton 1973).

When educating *for* the environment, knowledge is to be used to promote preservation or conservation principles and action (Hawkins & Vinton 1973; Huckle 1990; Linke 1980; McCrae 1990; McInnis 1975; Swan 1971). The intentions for environmental education along these lines are apparent within the early literature on the topic (e.g. Hawkins & Vinton 1973; Lucas 1979; McInnis 1975; Stapp 1969), but were able to reach a wider audience and attain international attention through the *Tbilisi Intergovernmental Conference on Environmental Education* (1978). Objectives listed in the conference declaration are still applicable today (Hungerford & Volk 1990), where environmental education is intended to contribute to knowledge and other characteristics (e.g. skills, perspectives, attitudes, action) that would encourage longterm environmentally responsible behaviour.[19] (Table 4)

In addition to its traditional application (and evolution) within the formal school system (Linke 1980), environmental education can provide the inspiration, direction, and pedagogical roots for the modern use of educative techniques within nature-based tourism (see Roggenbuck & Driver 1996), including interpretation. In fact, this thesis considers interpretation to be a form of environmental education which is applied to and developed from the informal context of nature-based tourism. The early philosophy of Tilden (1977) supports this conception of interpretation; indeed, his famous adage seems to summarise the concept of environmental education 'for' the environment (see Table 2, p. 30). Thus, the types of objectives listed in Table 4 can inform the use of interpretation, such that it too, promotes environmental sensitivity and awareness, and develops environmental knowledge, attitudes, skills and action amongst its audience.

The concept of education (or interpretation) 'for' the environment appears particularly well-suited to nature-based tourism if one accepts the principles developed for its (ostensible) zenith, known as 'ecotourism' (Table 5). According to its many advocates, 'ecotourism' should not denigrate but rather benefit the tourism resources, and result in (*inter alia*) a positive environmental ethic[20] (Butler 1993; Charters 1996; CDT 1992; Figgis 1993; Nelson 1994; Preece, Van Oosterzee, & James 1995; Ryel & Grasse 1991; Valentine 1992; Whelan 1991). In this sense, an educative technique like interpretation has a critical role in the tourism context, as a tool that mediates the activities of its participants such that an 'ecotourism' enterprise fulfils such a goal.

Consternation regarding the relationship of environmental education and interpretation is acknowledged,[21] and the label 'ecotourism' can be controversial in its usage (see below).

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[19] and these objectives are thus part of its application 'for' the environment.

[20] Specifically, it should promote intrinsic rather than extrinsic values and adhere to a biocentric philosophy; see below.

[21] Several authors indicate (if not insist) that environmental education and interpretation are strongly linked in concept, but should not be treated as synonymous (e.g. Aldridge 1989; Beckmann 1989; Butler 1991; Cossons 1988; Follows 1988; Hammitt 1981, 1984; Knapp 1995; Mullins 1984; Orams 1994). This thesis agrees with the common point of divergence between the two as the approach or procedure by which education occurs, in terms of their audiences (students vs. tourists), the formality of the location (structured vs. loosely or un-structured), and the presentation of information (sequential and cumulative vs. single session or familiarisation (Aldridge 1989; Hammitt 1984). However, this 'debate' in fact

TABLE 4 *Tbilisi Declaration (1978)* Objectives for Environmental Education

Environmental education should contribute to:

- ***environmental awareness***
  (through knowledge and understanding of issues and their implications)
- ***environmental sensitivity***
  (through experience with & understanding of the environment)
- ***environmental attitudes***
  (values and motivation to actively participate in environmental improvement)
- ***environmental skills***
  (for identifying and solving environmental problems)
- ***environmental action***
  (by providing opportunities for involvement)

Source: Adapted from Hungerford & Volk (1990)

TABLE 5 Principles in Ecotourism

Ecotourism...

(conceptual)[22]	• is consistent with a positive ***environmental ethic***
	• does not denigrate but does ***benefit the resource***
	• promotes ***intrinsic*** rather than extrinsic values and adheres to a biocentric philosophy [23]
(pedagogic)	• is a ***first hand experience*** with the natural environment
	• allows gratification to be measured by ***appreciation and education***
	• adds high ***cognitive and affective*** elements to the experience

Source: Adapted from Butler (1993)

supports the premise that contextual differences are significant to research that is attempting to enhance the use of interpretation within a nascent form of tourism, and that environmental education theory can contribute to this end, but not without adaptation.

[22] Conceptual principles are relevant to discussion here, whereas the pedagogic are addressed in Chapter Four. Yet it is interesting that *tourism* principles incorporate this pedagogic focus, which signifies the importance to ecotourism (a supposed 'ideal' form of nature-based tourism) of educative management tools like interpretation.

[23] The antithesis of anthropocentrism, where humans are the superior measure for interpreting value from nature, biocentrism is a basis for decisions that accounts for intrinsic values (Dyer & Gunnell 1993). See section 3.2.4 for a review of value theory as it relates to interpretive goals/objectives.

Nonetheless, the principles of environmental education and ecotourism feature a similar ideology that (1) supports the use of interpretation for environmental protection (cf. Standard II), and (2) alludes to the benefits arising from the use of educative tools (like interpretation) beyond appropriate on-site behaviour (cf. Standard I).

Certainly a behaviour-based 'objective' is advantageous to interpretation in that it helps to minimise on-site impacts and to promote the conception of interpretation as more than a visitor service (re: the concerns of Beckmann 1989, 1991; McArthur 1996). Yet, there is a problem with equating an environmental protection role of interpretation to the encouragement of appropriate behaviour *on-site* : environmental knowledge and attitudes which might sustain the behaviour in the longterm are relegated to the background (Uzzell, Rutland & Whistance 1995). This is evident in Australia, where despite an apparent recognition of the importance of a behavioural objective for longterm environmental benefits, an overemphasis and/or general treatment of 'behaviour' often results in the principal use of interpretation being to supervise and direct behaviour during the nature-based tourism experience (Beckmann 1989; McArthur 1996)

The perception of interpretation's role in environmental protection as merely the minimisation of adverse impacts and/or behaviour during a nature-based tourism experience is heightened through the industry's affinity for the often confusing concept of 'sustainability.' [24] Butler (1993:29) offers a definition of this concept as applied to tourism, where 'sustainable' tourism is that which is:

> *'developed and maintained in an area (community, [natural] environment) in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment (human, physical) in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes.'*

Many believe the concept of sustainability is (or at least should be) found in the objectives for nature-based tourism (e.g. Budowski 1976; CDT 1992; Farrell & Runyan 1991; Harris & Leiper 1995; Mercer 1991; Nelson 1994; Pigram 1980; Romeril 1985; Salm 1985; Valentine 1992).[25] In such cases, interpretation as a management tool for the tourism would be expected to contribute to 'sustainability'. However, not all agree on the definitions, measurements, and parameters of the 'sustainability' in practice (Nelson 1994).[26] In light of the above definition, 'sustainability' is of limited advantage as a part of the environmental protection goal for interpretation, because of its ambiguity

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[24]Now a familiar idea within political decisions about natural resource-based industries, sustainability began to enter the realm of tourism management and policy with the rising sentiment that the industry must consider its consequences and take responsibility for its natural resources (Mercer 1991). During its advent in the 1980's it catalysed the introduction of two of the most influential treatises on the state of the environment: the *World Conservation Strategy* (IUCN 1980) and *Our Common Future* (World Commission on Environment and Development 1987), both of which had great symbolic value in a time when environmentalism began to gain momentum. (Mercer 1991). There is a sizeable literature on the origin and interpretation of sustainability, see Mercer (1991); Stockdale (1989), Turner (1988).

[25]Also note that the IWC (1993) already tenders whale watching as 'a sustainable use of cetacean resources.' (p. 1)

[26]nor that sustainability is at present an *unequivocal feature* of the practice (e.g. Valentine 1992).

and possible connotation as only the minimisation of adverse impact. In fact, reference to whale watching as 'ecotourism' is avoided within the current research for similar reasons, for it is perceived by many to be the ultimate embodiment of 'sustainable' practices (e.g. Boo 1990; Cater 1994; CDT 1994; Nelson 1994; Whelan 1991).[27]

Rather than adhere to imprecise concepts such as 'sustainability,' Standard II for best practice interpretation in whale watching urges interpreters to include distinct objectives for pursuing its ultimate goal (set in Standard I); and to ensure that the objectives themselves are clear in intent, such that the management tool is used to address visitor satisfaction as well as environmental protection in terms of visitor behaviour on-site *and* beyond the tourism experience. Although similar caution is taken in reference to the popular vernacular of 'environmental education' and 'ecotourism,' the underlying principles of these concepts (as outlined above) are in fact significant to the development of best practice standards for interpretation, since they emphasise the longterm benefits of its use.

Furthermore, both environmental education and ecotourism principles suggest (in essence) that knowledge or learning gained from the use of an educative technique like interpretation is insufficient in itself to effect environmental benefits such as longterm behaviour. Instead, there must also be deliberate effort toward engendering pro-environment attitudes, behaviour, and eventually, an ethic to maintain both (e.g. Bennett 1977; Maloney & Ward 1973). Therefore, as part of the 'environmental protection' objective endorsed by Standard II, this thesis suggests that interpretation should attempt to generate maximum benefits for the natural resources of the tourism by promoting longterm commitment to environmental protection amongst its audience.

3.2.4 Environmental Benefits and Indoctrination

A foundation for inspiring longterm environmental protection via interpretation is comprised of theoretical elements (e.g. precursors to behaviour) which are examined in Chapter Four. As part of the discussion of the goals and objectives of interpretation, however, the final point in need of qualification is the relevance of values to sustaining environmental attitudes and behaviour amongst participants in nature-based tourism like whale watching. A thorough analysis or explanation of value theory is far beyond the scope of this thesis, though in order to clarify the environmental protection objective for interpretation, discussion addresses the issue of values as they pertain to environmental education and ecotourism principles in general.

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[27]'Ecotourism' can be traced to the ideas of Hetzer, who in 1965 urged people to rethink the relationship between culture, education, and tourism and introduced the term 'ecological tourism' which set early principles for ecotourism (similar to those in the text) (Miller 1993; Nelson 1994). According to Crinion (1993), the world first became mindful of ecotourism through Boo's (1990) Ecotourism; Potentials and Pitfalls, where it was used as a synonym for nature-based tourism. Today some of the definitions of nature-based and ecotourism are virtually identical or used to signify the same concept, and throughout the tourism industry the terms continue to be frequently used as interchangeable (Preece et al. 1995; Valentine 1992, 1992a) though others try to separate them on basis of sustainability.

According to Murie (1954:289), our 'ethical struggle to understand our place in nature' has generated and will continue to create different goals for its future, as well as different means for achieving these goals.[28] The 'environment' must be acknowledged as a social construction which is perceived through cultural filters, and as such it is comprised of a wide range of ideologies and values (Anderson 1991; Doyle 1987). In turn, people's different conceptions of the value of the environment, and their practice of a personal code of ethics, will ultimately affect their perception and treatment of cetaceans and the environment in general (Amante-Helweg 1996).

In terms of the values of whales specifically, the human relationship with cetaceans has proceeded through many stages since we first took notice of leviathan (e.g. Aron 1988; Duffus & Dearden 1993; Hawley 1989; Kelsey 1991; McIntyre 1974). From ancient civilisations to modern times the great whales have been variously (and more or less sequentially) regarded and treated as (*inter alia*) revered symbols, resources for consumption, subjects of scientific inquiry, and commodities for entertainment (Evans 1987; Gilders 1995; Hawley 1989; Kempf & Phillips 1994). Each of these incarnations demonstrates the complex societal value systems and perceptions popularly held regarding whales, although whale watching is unique in that it is the only interaction thus far which can span the entire spectrum of values. That is, unlike whaling or captivity, whale watching has the *potential* to exist not only as a form of exploitation, resource conservation or preservation, but it may be able to illustrate and promote intrinsic values, depending on its goals and practice.

As defined by Fox (1990), instrumental values such as exploitation, resource conservation or preservation[29] measure the merit of features of the environment solely in terms of their utility to humans, whereas intrinsic values contend that human needs are neither the supreme nor sole basis for ethical decisions. If interpretation embraces environmental education and ecotourism principles, it must endorse the types of values that correspond to the intrinsic rather than (only) the instrumental worth of whales or the environment.[30] The promotion of certain intrinsic values should be encouraged as a valid means of ensuring longterm protection of the resources of whale watching, from the whales to their habitat (e.g. Kellert 1987). For instance, autopoietic and ecosystem ethics essentially claim that 'living entities matter unto themselves', and because they have interests, humans are morally obligated to prevent them from being compromised

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[28]Doyle (1987; & Kellow 1995) notes that environmentalism, or what can be described as an consciousness of and interest in our relationship with the environment (natural and human-made), is often (wrongly) believed to have a common or single direction.

[29]Resource conservation imposes restrictions to exploitation, and recognises limits to the resource supply; resource preservation allows resources to follow their own pattern of existence, but remain a source of value to humans for a variety of (largely non-consumptive) arguments (e.g. as a recreational opportunity, as a contribution to human psychological health). See Dyer & Gunnell (1993); Ehrlich & Ehrlich (1981); Fox (1990).

[30]Some resource preservation arguments can lead to the longterm protection of cetaceans, although they may also inadvertently lead to an over-emphasis on the entertainment role of the animals that can become exploitative (see Forestell 1995; Jamieson & Regan 1984).

(Fox 1990:172).[31] Such values are an implicit part of the environmental protection objective of interpretation in whale watching proposed in Standard II, for they suggest that benefits to the tourism's resource are not solely reliant upon peoples' own interest in whales as entertainment (or other instrumental values) to motivate any contribution to their longterm protection.

Thus for interpretation to pursue a goal of mutual benefits (cf. Standard I), it should portray not only the entertainment value of whale watching and whales, but also contribute to substantial longterm benefits of non-human stakeholders by at least implying that the animals and natural arena matter unto themselves. In this sense, interpretive materials such as whale watching guidelines could inform their audience that the recommended behaviour is relevant to any context of interaction between humans and cetaceans.[32] For example, guidelines could allude to the intrinsic values of whales by including reference to the description of their role in the ecosystem, and how management of the tourism attempts to protect other features of the marine and coastal environment (see Bannister et al 1996; Forestell 1993).

It must be acknowledged that it is not interpretation's duty nor should it be its aspiration to *create* particular values. However, in respect to Standard II, this thesis suggests that interpretation should present the various options as a means of generating potential for environmentally responsible behaviour in the longterm. Both environmental education and interpretation have long been plagued by the threat of the indoctrination label (e.g. Nyberg 1984). Yet even early discourse on these fields insisted that their intent was to promote freedom of choice amongst an array of options, and themes of alternatives, empowerment, and questioning continue to be voiced amongst interpretation's advocates (e.g. Aldridge 1989; Beck 1993; Brewer 1969; Brown 1973; Colpitts 1979; Hawkins & Vinton 1973; Huckle 1990; McInnis 1975; Newhouse 1990; Nixon, Smith & Upcher 1994; Roggenbuck & Driver 1996).

Much of the concern about indoctrination may be unfounded, for in addition to strenuous denials from interpreters, it is almost against the nature of interpretation's philosophy to indoctrinate for ideological, theoretical and pedagogical reasons. In each of Tilden's (1977) offerings to the philosophy of interpretation, from his definition to his axiom and principles (noted in Table 2, p. 30), he stressed the need for it to be used to inspire and engage visitors to form their own sense of appreciation, and to be prompted, not prodded, toward revelation.

The discussion of values may seem somewhat tangential to the enhancement of interpretation which may not yet incorporate *any* (discernible) environmental protection objectives. The salient point is that this clarification of terms provides the foundation for

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[31] This description is largely of autopoietic ethics, but Fox (1990) concedes that ecosystem ethics can be a subset of autopoietic ethics that emphasise ecosystems as the relevant boundary for 'living entities'.
[32] Of course this argument has no influence over exploitative uses of cetaceans (ie. whaling), but is meant to denote the encounter with whales beyond a deliberate tourism experience.

the future use of the management tool, in respect to an ideal to which it strives in its promotion of benefits for all stakeholders. Hence in the remainder of this thesis, the 'environmental protection' objective of interpretation (in Standard II) is denoted by this foundation in intrinsic values, ecotourism/environmental education principles and other points above which advocate the use of interpretation for promoting longterm benefits of the resources (ie. non-human stakeholders) of nature-based tourism.

3.3 Processes in the Development of Interpretation

3.3.1 The Utility of Strategic Effort Toward Developing Interpretation

Thus far, the task of this chapter has been to define and clarify the goals and objectives for best practice interpretation in whale watching. The capacity to foster, approach (ie. in interpretive products and practices), and achieve these goals and objectives depends in part on the nature of strategic effort put toward the development of interpretation programs, as proposed by standards in this section.

Once defined, the goals and objectives for interpretation can be integrated into strategies that delineate the methods of developing, implementing, and reviewing interpretation within the tourism experience. Strategic planning is a critical way by which interpretation can be proactive and comprehensive in its management efforts (Gare 1982; McArthur & Hall 1996c). A structured planning process/program creates a tangible medium for the application of the goals and objectives described above, and satisfies their requirement to be 'explicit'. It can also have the advantage of facilitating a much needed commitment to the evaluation of interpretation (Capelle 1984).

Evaluation need not signify the review of a 'completed' interpretive program, and as Hall et al. (1992:50) suggest,

> *'The lesson of quality management...is that there is no "final" product, we instead continually strive to modify and improve service and delivery in light of our participants' objectives and our heritage.'*

Although Hall et al. (1992) are referring mainly to general visitor management for 'heritage' tourism,[33] interpretation is an integral tool for management of this type of tourism, and as such is part of the effort to continue 'to modify and improve service.' To do so, an interpretative program should maintain enough flexibility to incorporate new information, whether it be related to its content, of a theoretical nature, and/or gained through the evaluation of its successes to date.

Through attention to detail in planning, an interpretation program can accommodate greater sophistication in its design, and thus increase its capacity to address (all) the objectives of interpretation (in Standard II), and to respond to priority issues as

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[33] In Hall et al.'s (1992) conception, 'heritage' includes natural and cultural heritage, and hence heritage tourism denotes both nature-based tourism and cultural sites.

discovered through evaluation. However, as discussed in Chapter Two, neither interpretive planning nor evaluation appear to be common practice in nature-based tourism, and may be generally insufficient.[34] Accordingly, an important premise for a standard for best practice interpretation is to recommend that interpreters make a commitment to engage in these activities. Given the types of goals and objectives set by the previous standards (I and II), however, it is also critical that planning and evaluation are encouraged to be strategic and purposeful in their treatment of interpretation as a management tool.

Standard III

A strategic approach to the development and continued use of interpretation is essential, and should include planning and evaluation activities which are structured, comprehensive and longterm in their perspective.

At present, the level or strategic nature of these activities for the development and use of interpretation within Australian whale watching is unknown. Thus it is suitable to confine discussion to support this third proposed standard to what may be considered the fundamental aspects of 'quality' planning and evaluation. The remainder of section 3.3 explores such aspects of planning and evaluation, including the structure (e.g. procedural stages) and components of models than endorse the strategic nature of these activities. Nonetheless, one should note that opportunities for whale watching interpretation to adopt more detailed measures exist within the standards for interpretive products and practices set forth in Chapter Four.[35] Such standards can be integrated into both strategic activities, as either items to incorporate into interpretation's design, or criteria to search for in the review of interpretation's progress.

3.3.2 Planning Procedures

An effective plan for interpretation entails more than merely the compilation of statements of one's intentions (Beckmann 1991), but beyond this, there is a need to balance the adoption of common procedures with differentiation based on contextual features of the nature-based tourism in question. With the discovery that there were nearly as many approaches to interpretive planning for nature-based tourism as agencies who conducted it in the USA, Capelle (1984) suggested that too great a diversity in planning methods can hinder advancement and weaken the credibility of the process. Yet when this diversity accounts for different contexts of interpretation and the respective challenges it faces,[36] it may also be a strength (e.g. Turner 1992).

A suitable planning model for best practice interpretation in whale watching can be found in recent studies in Australia/New Zealand which draw from the traditional use of interpretation in protected areas, yet also acknowledge the contextual parameters of

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[34] described in section 2.3

[35] In fact, theory reviewed in Chapter Four includes that which is applied to some authors' 'models' *for* planning (e.g. Capelle 1984).

[36] as noted in Chapter Two, sections 2.2, 2.3

independent forms of nature-based tourism. Hall et al.'s (1992) model for interpretation planning[37] distils its main components from classic efforts in the literature (e.g. Bradley 1976; Countryside Commission 1979), which continue to be upheld in the field today (e.g. Beckmann 1991; Parsons 1996; Regnier et al. 1994). This model demarcates several stages within the planning process and indicates which aspects of interpretation are best addressed in each stage (Figure 7). Stages constitute broad tasks of setting aims and objectives, as well as endeavours to select and develop interpretation products and practice (Hall et al. 1992). As shown in Figure 7, planning stages can also correspond to different dimensions of interpretation, which is advantageous for the pursuit of other standards for best practice proposed in this thesis.

For instance, the first stage in this model addresses the overall direction for the interpretive program (Hall et al 1992; McArthur & Hall 1996c), which can (and should) include explicit objectives such as those endorsed above. Acknowledging these objectives first in the planning process enables them to inform the rest of the planning agenda. This is especially pertinent to the task of the 'strategic stage,' since choices for interpretive products (and associated features like themes) and delivery which are facilitated by the earlier stages ensure that the program is consistent in concept and execution. In light of the emphasis placed on goals and objectives by standards for best practice in this thesis, such consistency is considered a critical part of enhancing the use of interpretation.

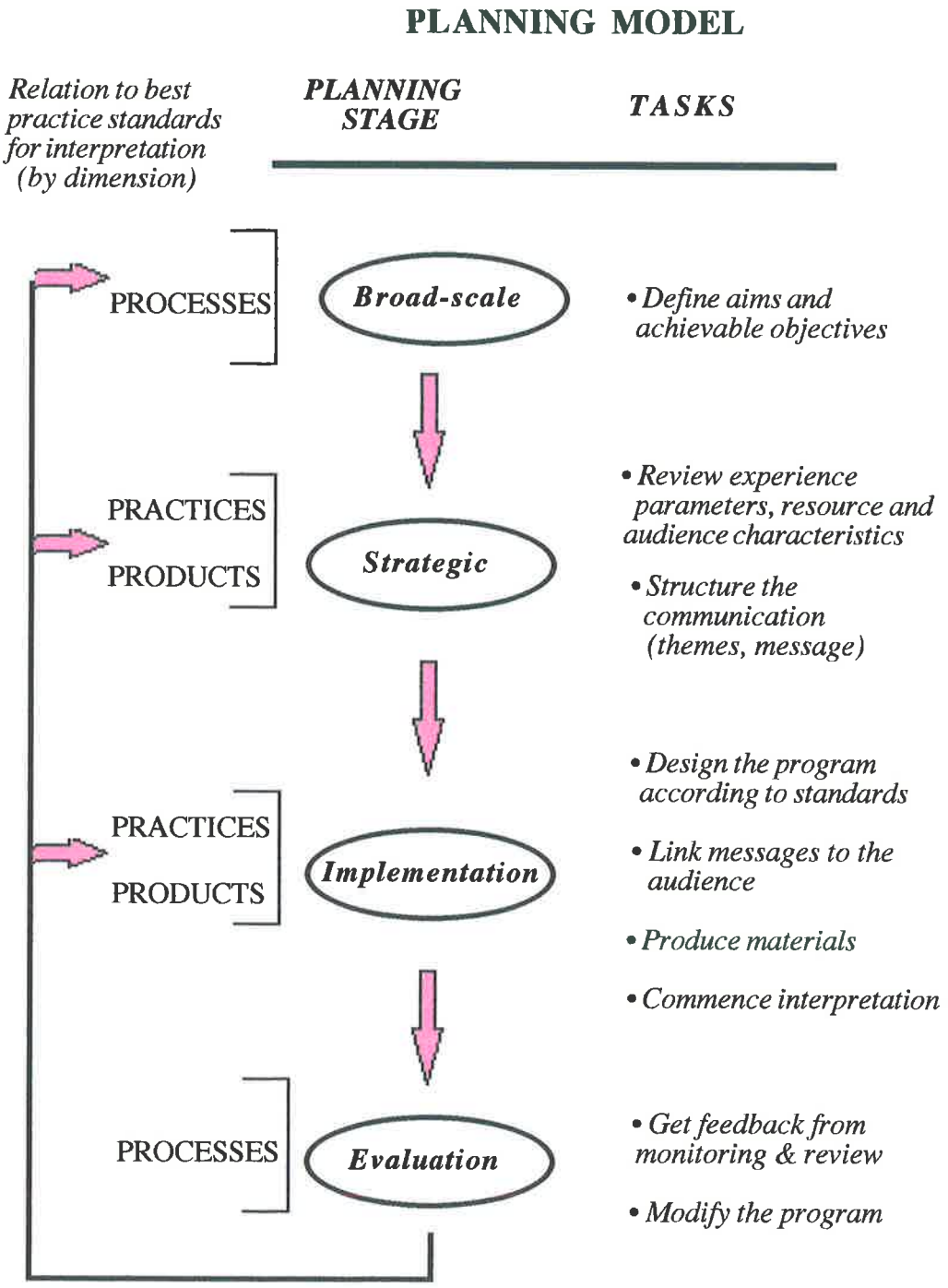
Decisions made during the 'strategic stage' of this planning model determine whether or not the implementation of interpretation is efficient and comprehensive. Aside from guidance from explicit goals and objectives, decisions in this stage can also be informed by learning and communication theory, parameters of the tourism experience (e.g. setting, timing), and aspects of the site (e.g. geography) (Capelle 1984; Hall & McArthur 1996a; Palmer 1982).[38] Another task of this stage is to define the interpretive audience (e.g. gather psychographic information, identify travel patterns) in order to adjust interpretive content and delivery to their profile.

Though initially created according to objectives and strategic decisions, the products and practices of interpretation that are made available in the 'implementation stage' should remain flexible to feedback gained by processes of monitoring and evaluation in the final stage in the model. The idea that modifications are necessary to enhance the performance of interpretation implies there is a non-linear feature to the model, in which 'planning' processes are repeated periodically (Hall et al. 1992; McArthur & Hall 1993a).

All stages of this type of planning process can enhance the use of interpretation in whale watching by drawing attention to salient aspects of efficiency, contextuality, and flexibility in its use. Yet the notion of planning as a non-linear process is of particular

[37]and a more recent version in McArthur & Hall (1996c)
[38]This is exemplified in Chapter Four.

FIGURE 7 A Planning Model for Interpretation



Sources: Standards compiled by the author; model adapted from Hall et al. (1992); McArthur & Hall (1993a, 1996b)

significance to a standard for best practice, for it implies that interpretation which is already in use is not exempt from the planning process. Furthermore, if planning is not treated as a singular process, it provides the scope for introducing additional standards for best practice, including those pertaining to interpretive goals and objectives. Evaluation is the strategic activity which can illustrate any current progress toward these goals (or other standards), and as noted below, it too, is characterised by certain features of relevance to the enhancement of interpretation in whale watching (cf. Standard III).

3.3.3 Evaluation Strategies

The above point regarding the non-linear aspect of planning alludes to the fact that evaluation can provide continual modifications, and can be initiated either when interpretation is in use or even earlier (ie. in the process of developing interpretation). 'Front-end' evaluation, for instance, entails the provision of information to assist the stage of goal setting (e.g. by identifying potential resources to be interpreted, and the audience), whereas 'formative' evaluation highlights features of interpretation in progress (e.g. if the audience reads the text, their satisfaction with topics) (see McArthur & Hall 1996c; Miles & Clarke 1993; Moscardo 1995). 'Summative' evaluation is intended for use after the completion of an interpretation program, but summative questions are appropriate and advantageous in the evaluation of ongoing efforts, as long as they do not suggest interpretation is a finished product. In this sense, evaluation can reveal whether or not particular goals of the program have been met at the *present* stage of operation, or identify the most satisfying features of the program according to a sample audience who attended during a particular stage in the program's operation (e.g. first season, five years after first implementation).(McArthur & Hall 1996c).

Differentiation between evaluation types can be extensive (e.g. McArthur & Hall 1996c; Moscardo 1995); but amongst the most significant aspects of evaluation as a strategic activity for interpretation is that it is an ongoing process that can and should be initiated as early as possible, as well as continued at intervals as the tourism activity (and interpretation) are ongoing. In this sense, modifications can thus be addressed before an interpretation program becomes entrenched in substandard methods (McArthur & Hall 1996c; Miles & Clarke 1993). Hence as part of the premise of Standard III, a periodic nature of evaluative efforts is advocated as best practice interpretation in whale watching.

Delineation of many of the important topics/procedures which can be addressed in the evaluation of interpretation is found within a series of studies on behalf of the UK's Countryside Commission, carried out by Dartington Amenity Research Trust [DART] (1978), Pennyfather (1975) and Stansfield (1981).[39] Together these studies cover various interpretive sites and centres in the UK and employ strategies that examine a

[39] Whilst addressing a breadth of information for consideration when evaluating interpretation, this series of research is not without criticism. For instance, Pearce (1988) takes exception with the 1978 report, since it offered a review of cognitive learning as a framework for evaluation, but failed to mention any part of it again or compare results to its initial set of criteria.

combination of content, form, delivery and visitor characteristics. The targets of evaluation in these studies illustrate the importance of reviewing more than visitor satisfaction or recall as means to measure the success of interpretation. Other targets include such diverse features of the interpretation and tourism experience as: the complexity and appearance of material; timing of access to it during the experience; the physical effect of interpretation on the resource; ongoing costs of the interpretive program; and if the text/medium encourage participatory activities (see DART 1979; Pennyfather 1975; Stansfield 1981).

Whilst undoubtedly amongst the more comprehensive of evaluative studies, the breadth of the exercises need not exacerbate a perception of evaluation as 'too difficult' (e.g. entailing complicated statistics or theoretical tedium; Beckmann 1988). Evaluation is not exclusively a formal process, and many modest techniques can still yield valuable information about the visitors and the performance of the interpretation. For instance, Stansfield (1981) recognises the merit of visitor comments in evaluation, for they provide reactions to aspects of interpretation which might not have been deliberately tested.[40] Nonetheless, as a strategic exercise (cf. Standard III), evaluation should avoid an *over*-reliance on informal or undirected collection of feedback and basic visitor information (ie. demographics), and interpreters should welcome opportunities to involve other stakeholders or incorporate more elaborate attempts to evaluate interpretation (McArthur 1994; McArthur & Hall 1996b). In some cases, evaluation by outside parties may be advantageous in providing a (perhaps) more objective perspective, and bearing the costs and management of the process.[41]

Analogous to the point made regarding the planning of interpretation, evaluative effort can vary in complexity, but in respect to the basis of Standard III, it is proposed that evaluation is ideally initiated as soon as possible, and longterm in perspective (ie. continued on a periodic basis). Moreover, as part of the non-linear planning process, 'strategic' or comprehensive evaluation would address different stages in the development of interpretation, and accordingly, the various dimensions of interpretation (processes of development, aspects of products and delivery/access).

3.3.4 Accounting for Context: Strategic Effort in Australian Whale Watching

The extent to which Australian whale watching stakeholders plan and/or evaluate their interpretation has yet to be ascertained, although several examples in the literature agree that these activities should be a priority for the tourism, and support the premise of Standard III as a means of enhancing the use of interpretation. For instance, Crabtree & Weiler's (1996) suggestions for developing a whale watching interpretive program

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[40]Stansfield (1981) does warn, however, that the samples in such cases are self-selecting, unless visitors are forced to comment.

[41] although this type of evaluation may face even more resistance from those who are wary of having their efforts judged (Griswold 1993; Parsons 1996).

(though not referred to as 'planning' *per se*) imply there are different stages in the process which need to address dimensions of interpretation products and delivery, similar to Hall et al.'s (1992) model above.

An even more extensive proposal for planning and evaluation is found within the QDEH's (1995) *Interpretive Notes* developed for Hervey Bay Marine Park whale watching tour operators. The suggestions presented in this document refer to many of the points made in this chapter, and though informal in style, they intimate the necessity of strategic processes to development of whale watching interpretation such as (1) setting objectives, (2) thoughtful selection of interpretive techniques and content according to learning theory, and (3) the evaluation to measure specific aspects of the performance of the interpretation. The QDEH's (1995) guide appeals to tour operators to not be daunted by evaluation, and along with more involved methods (e.g. questionnaires), and presents several informal ways for evaluating success such as gaining feedback from visitors comments and from colleagues.

Notably, Crabtree & Weiler (1996) and QDEH (1995) incorporate contextual factors of the whale watching experience into their recommendations for the design and development of interpretation. In particular, they both outline the decisions to be made for interpretation according to the temporal stages in the tourism experience (e.g. during pre-trip, whilst travel to the whales).[42] Although guidance for planning and evaluation can be found in the general interpretation literature of Australia (and overseas, as noted in previous sections), the advantage of examples which are specific to whale watching is that the task interpreters face of adapting general principles to the experience has already been undertaken, and may facilitate the use of the recommendations. Nonetheless, both Crabtree & Weiler's (1996) and QDEH's (1995) efforts refer to boat-based tours, when independent whale watchers and land-based opportunities in Australia and elsewhere would have different parameters in the timing/stages of the experience.[43]

Despite their limitations in scope, Crabtree & Weiler's (1996) and the QDEH's (1995) planning recommendations for the industry are also significant in respect to their treatment of the social parameters of whale watching, for they note the importance of consulting other parties during the development and review of their interpretative efforts. This is not only advantageous in terms of fostering access to material/information, but it also draws attention to the concern regarding the coordination of interpretation by different whale watching stakeholders, of which there may be many at any given site. McArthur & Hall (1996a) contend that an interpretive plan which results from a process that omits key stakeholders is not likely to be supported, nor is one which is comprised of concepts that the interpreters do not concur with or cannot understand. It is not suggested that the development of a single interpretive plan for each whale watching

[42]Chapter Four (section 4.3) describes the further significance of these stages in the tourism experience in respect to the creation/delivery of interpretation.
[43]see Chapters Four and Eight

site/area is essential (or feasible),[44] but strategic effort toward the development of interpretation may be *enhanced* by coordination amongst stakeholders (Capelle 1984). The final standard for best practice interpretation presented in this chapter explores the necessity and advantages of stakeholder communication/liaison regarding interpretation in whale watching.

3.4 Liaison and Professionalism in the Development of Interpretation

3.4.1 Advantages of Coordinating Interpreter Efforts

Progress toward the first three proposed standards for best practice interpretation would be bolstered if they were addressed via the coordinated activities of the many stakeholders in the management of whale watching. Cooperation between resource managers and tour operators regarding interpretation increases the opportunities to pursue each role of the management tool (visitor satisfaction, environmental protection) and expand its potential benefits as a result. In recognition of this, an enhanced relationship between resource managers and tour operators has been specifically encouraged for nature-based tourism (Roggenbuck & Driver 1996; Hall & McArthur 1993, 1996) and for whale watching (Forestell & Kaufman 1994). Further advantages of regular and meaningful liaison between the various types of interpreters in nature-based tourism like whale watching include the efficient use of resources through division of labour (see Cohen 1985),[45] wariness of the duplication of effort (Beckmann 1988), and the sharing of information regarding successful strategies (VanderStoep et al. 1993).

Formal communication links (e.g. in official policy, scheduled periodic meetings) between tourism and interpretation stakeholders have been advocated as a means of promoting such advantages, as they can result in a discernible avenue and routine program for information exchange (e.g. Capelle 1984; McArthur & Hall 1996c; Seel 1987). Informal contact, however, is also of value (Wearing & Brock 1991), particularly for whale watching since stakeholders are numerous and also represent independent and private organisations. In an informal sense, interpretation can function as a catalyst and focal point for communication between these stakeholders if liaison (for any reason) is otherwise limited (Field & Machlis 1985). Therefore, part of enhancing the use of interpretation entails the discovery and promotion of ways in which the main stakeholders can be encouraged to coordinate their efforts, both formally or informally.

Standard IV

Interpreters should liaise/coordinate efforts with all tourism stakeholders regarding the use of interpretation in whale watching (e.g. policy, issues, materials, delivery); and in particular, they should pursue opportunities for increasing their own capabilities to produce and implement this management tool.

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[44] although this could be advantageous for discrete land-based sites or those within official boundaries like Marine Parks where common goals can be developed within a Management Plan.

[45] Cohen (1985) claims professional guides can concentrate more on communication or education in tourism if there is a division of labour.

Liaison between interpreters is advantageous to the achievement of *all* of the proposed standards for best practice interpretation. Progress toward Standard IV could facilitate strategic measures to develop interpretive programs (e.g. process standards for goal setting, planning/evaluation, as emphasised above cf. Standards I-III). It could also inform the selection and design of interpretive products, and designation of responsibilities for delivering interpretation during the tourism experience (as presented in Chapter Four).

There are several existent opportunities for liaison between interpreters in whale watching which demonstrate the significance of and scope for pursuing Standard IV as part of the enhancement of interpretation in this industry. These include current endeavours to increase the professionalism of interpretation, national forums for discussing its use in nature-based tourism (and whale watching), and programs for skill enhancement on an individual and industry-wide basis.

3.4.2 Cultivating Professionalism Amongst Interpreters

Discourse on the use of interpretation as management tool can cultivate professionalism in the field and enhance current programs through exchange of knowledge on best practice. Professional development in interpretation is promoted in a number of ways, such as through membership in an association and through other less formal strategies and schemes that provide support on interpretation products and practice (Everhardt 1976). Features of the National Association of Interpreters (NAI) in the USA demonstrate the benefits of such associations, such as a membership directory,[46] access to a database of products/services, advertising of one's own efforts to non-members, and subscription to an active and acclaimed journal regarding interpretation (Brochu 1993). The journal (*Legacy*) and assembly of the NAI provide a valuable forum for such issues as the necessary skills of interpreters, methods of planning, and conceptual directions for interpretation. Whilst the members may not achieve consensus on a topic (VanderStoep & Capelle 1993), the debate fostered by the Association can enhance interpretation by raising the issues in the first place.

The Interpretation Association of Australia [IAA], formed in the early 1990s, offers comparable benefits to its members as the NAI. In particular, it hosts a annual national conference which brings together a variety of types of interpreters, from those employed by the Government, to consultants, private tour operators, museum staff, and academics (see Beckmann & Hull 1995; Beckmann & Russell 1996; Markwell & Muloin 1994). Each conference adopts a theme for its discussion on interpretation, with recent proceedings addressing the adaptation of interpretation to specific contexts (ie. heritage-based interpretation; Beckmann & Hull 1995), and conceptual/theoretical issues for use of the management tool (ie. 'the getting of wisdom'; Beckmann & Russell 1996).

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[46]of utility to seeking advice/materials from other interpreters

Proceedings from this conference series offer information relevant to interpretation in whale watching. In particular, the proceedings exemplify successful interpretation programs as achieved by those who have a primary responsibility for its use within different kinds of nature-based tourism.[47] For instance, a recent workshop at an IAA conference revealed that the Association's future plans to assist Australian interpreters include the development of best practice guidelines, awards for exemplary use of interpretation, a booklet on the theoretical issues of interpretation, a priority list, and an increased effort toward networking (McArthur 1996). All such measures would be an invaluable contribution to expanding and enhancing the use of interpretation in whale watching specifically (cf. Standard IV), if members of this specialist industry participate in the conferences and/or have access to the IAA's information.

Other non-government organisations [NGOs] offer similar advantages to whale watching interpreters, and would also facilitate progress toward proposed Standard IV for best practice interpretation. An example is the Ecotourism Association of Australia [EAA] which provides its members with newsletters, codes of practice, and networking opportunities at conferences. Also of great significance is a recent training/accreditation program developed by the Australian Tour Operators Association [ATOA], which is designed to increase the skills and credibility of tour operators, including skills for interpretation.[48] Provision of interpretive materials themselves and/or 'professional naturalists' to deliver interpretation during guided tours may also be offered by some NGOs to assist whale watching activities. In both Hawaii and Queensland, for example, the Pacific Whale Foundation has been known to place its members aboard many of the local industry's whale watching vessels, which enables the captain and crew to attend to other responsibilities whilst maintaining an emphasis on interpretation as part of the experience (see Forestell & Kaufman 1994; Hoyt 1995; MacPherson 1996).

At present, the interest of many Australian whale watching stakeholders in the opportunity for liaison/information exchange with these associations/groups is unclear, although thus far in the IAA conference proceedings there has been no contribution from those with specific whale watching interests. A possible reason may be reminiscent of the experiences of the USA, which may serve as a warning to the fledgling IAA in its efforts to advance interpretation as a 'profession'. If interpretation 'professionals' attempt to set themselves apart, they might risk isolating others who are in need of the wisdom and resources they might offer, or distancing themselves from the practical concerns of those who interpret as only part of their duties (Bucy 1991). Uzzell (1989a) concurs that a danger of professionalism in interpretation is an expanding fissure between the developers and implementors of interpretation, which (ironically) hinders rather than helps communication.

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[47] ie. delegates at the IAA conferences are often Education Officers from government departments, or interpreters within nature-based tourism activities (as opposed to tour leaders who also undertake interpretive responsibilities).

[48] The next section describes this accreditation program in detail.

Such a scenario clearly disadvantages those seeking to enhance interpretation. However, regardless of membership in a professional association, the premise of Standard IV suggests that the purpose of liaison between interpreters should still be to engender professional attitudes regarding the use of the management tool. This can include efforts to hone one's communication skills, to make sure to provide accurate material, and to establish network connections (Resing 1992). Furthermore, 'professionals' or association members are not the only source of liaison regarding the use of interpretation. For instance, a recent series of international whale watching workshops hosted by the IFAW, European Conservation and Tethys include one workshop (1998) dedicated to the use of education in the tourism.[49] Also, the *Encounters With Whales* conference series has been repeatedly mentioned in discussion as a significant opportunity for national (and international) discussion on the management of the tourism in Australia. Amongst this series' own recommendations for the industry is the desire to foster greater communication and information exchange regarding whale watching, including the specific use of interpretation as a management tool (see Postle & Simmons 1994).

Ideally,[50] the network connections between the whale watching conferences and interpretation-based conferences/associations would be more cogent. But in addition to the missed opportunities from the absence of whale watching stakeholders at IAA forums, the *Encounters With Whales* series does not yet emphasise detailed prescriptions or standards for interpretation. In fact, two of the studies which approach this topic in a manner which could guide others in the enhancement of interpretation for whale watching (ie. Neil et al. 1996; Orams 1996) were only included in the conference proceedings and not presented to the delegates during the course of assembly. Though delegates received a copy of the proceedings, there was no opportunity for comment or clarification regarding the results of these important studies, and hence diminished chance to contribute or profit directly from such measures to enhance interpretation.

Nevertheless, the increasing discussion and attention to interpretation (at all) within the whale watching conferences in Australia and abroad is beneficial in and of itself. In terms of Standard IV, the examples mentioned in this section represent major opportunities to approach best practice. As part of the premise of this standard, whale watching stakeholders are encouraged to attend national/international gatherings whenever possible. For those unable to do so, liberal access to the proceedings may facilitate their enhancement of interpretation. For instance, one possibility for communicating the lessons from these conferences is the development of training outreach programs by the sponsors of the conference (e.g. ANCA) that cover the main points of discussion.

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[49] As this workshop occurred in the later stages of the current research, its recommendations were not used in the development of the present best practice standards, although Chapter Ten discusses their compatibility with the workshop proceedings and the implications for the future use of interpretation in whale watching.

3.4.3 Training and Accreditation for Interpretation in Nature-based Tourism

National conferences and other sources can appeal to interpreters to increase their own skills, and foster the means to do so, by providing or inspiring training programs and workshops. It has been suggested that these programs cultivate the professionalism of interpretation in Australia through satisfying training needs which are specific to (1) techniques for developing and delivering interpretation (e.g. nurturing creativity and communication skills), and (2) the conceptual and logistical considerations for its use in nature-based tourism (e.g. audience details, Tilden principles) (Bolwell & Sutherland 1996; Cheatley 1994; Crabtree & Weiler 1995; Lewis 1989; Wagoner 1989; Weiler, Johnson & Davis 1992).

For instance, the Great Barrier Reef Marine Park Authority (GBRMPA) is one agency that offers courses for tour operators in regional centres in Queensland, and staff from other resource management agencies may have (occasional) access to workshop sessions and in-service courses (Beckmann 1989; O'Brien 1988). However, in general training for interpretation in Australia is depicted as somewhat restricted, irregular, aimed at extreme levels of proficiency (e.g. novice vs. tertiary) and hindered by the seasonality of staff or dispersal of tour operators/guides (Beckmann 1989; CDT 1994; Crabtree & Weiler 1996; Jacobs & Gale 1994; O'Brien 1988). Similarly, training opportunities specific to whale watching remain informal, and unique to various sites and the interest of local stakeholders, according to Crabtree & Weiler (1996). Whilst the *Encounters With Whales* conference series advocates increased training opportunities, no mechanisms are in place yet to implement any such programs.

A possible remedy to this neglect of training, which supports and would also facilitate the ability of interpreters to meet the latter part of the requirements of Standard IV, may be the introduction of the *National Ecotourism Accreditation Scheme*. First introduced in the *National Ecotourism Strategy* (CDT 1994) this accreditation scheme is designed to instigate the provision of 'more accurate interpretive services' by tour operators. Within the scheme itself, an entire section is devoted to core requirements and bonus criteria for the use of interpretation. Core requirements include:

- the provision of at least two types of interpretation (e.g. guided tours, publications)
- that material is referenced from at least two sources (natural history books, IAA proceedings),
- content mentions the conservation values of the tour site, and
- discussion of resource management issues of the site and solutions that visitors could address through their own activities (ATOA 1996).

Bonus criteria for interpretation within the accreditation scheme relate to greater specificity of information, the accommodation of diverse visitors groups (e.g. children, intellectually disabled, foreign), and the completed training of at least half of the staff (ATOA 1996).

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[50] ie. in respect to the pursuit of Standard IV

The advantages of endorsing this type of accreditation scheme mirror those for professionalism (VanderStoep & Capelle 1993:9), for it is an additional means of advising interpreters of the critical issues, directions, and techniques for best practice interpretation. Regarding training specifically, the core criteria support Standard IV for best practice in that they recommend that the tour operators/staff actively and continually seek training opportunities in relation to interpretation and other skills (see ATOA 1996). In fact, the interest of tour operators in attaining this qualification is expected to increase the demand for training opportunities (Crabtree & Weiler 1996). Another noteworthy feature of the scheme is that it singles out whale watching as a potential form of ecologically sustainable tourism, and includes interpretation of whale conservation issues as part of its core criteria (ATOA 1996). Though the scheme is too new to expect to see accredited tour operators within the whale watching industry,[51] it is a critical step toward enhancing the industry's interpretation that it already receives special attention.

In the meantime, the Australian whale watching industry has demonstrated interest in the general notion of accreditation schemes to improve its practice of interpretation. This is directly addressed in a *National Education Strategy*, tabled during a workshop by 1995 delegates of the *Encounters With Whales* conference. Delegates suggested that the strategy include the coordination of efforts through a national forum specific to the discussion of the use of interpretation in the national whale watching industry. Also recommended was the establishment of an accreditation program for tour operators, and though not specified, there is scope for the development of such a program concurrently with the ATOA national scheme outlined above. Both programs represent the interest, endorsement, and opportunities for pursuing the types of communication links and professional development advocated by Standard IV, and thus illustrate its significance as part of best practice interpretation.

3.5 Summary of the Chapter's Standards for Best Practice Interpretation

The standards for best practice interpretation developed and proposed in this chapter are summarised in Table 6. In essence, Standard I describes a management ethos such that the use of interpretation is not restricted to instrumental values or agendas which compromise the natural resources of nature-based tourism like whale watching.[52] This standard also implies that the function of interpretation in tourism must be deliberate and considered, which is an idea supported by Standard II and its encouragement of explicit objectives for interpretation. It is proposed that these objectives address *all* potential management roles of interpretation, and thus appeal to human and non-human interests,

[51] ie. at the time of the empirical work of the study

[52] ie. in respect to only addressing the minimisation of adverse impacts, or the failure to consider the interests of the non-human stakeholders

TABLE 6
Summary of Process Standards for Interpretation

Standard Number	STANDARD FOR BEST PRACTICE INTERPRETATION IN WHALE WATCHING
I	The ultimate goal of interpretation in whale watching should be to promote and produce benefits for all of the tourism's stakeholders (human and non-human)
II	Objectives for interpretation should be explicit and inclusive of all its potential roles as a management tool (ie. value-adding, on-site behaviour, longterm environmental protection)
III	A strategic approach to the development and continued use of interpretation is essential, and should include planning and evaluation activities which are structured, comprehensive and longterm in their perspective.
IV	Interpreters should liaise/coordinate efforts with all tourism stakeholders regarding the use of interpretation in whale watching (e.g. policy, issues, materials, delivery), and in particular, pursue opportunities for increasing their own capabilities to produce and implement this management tool.

(Source: Author)

during the tourism experience and beyond. Standard III advocates strategic effort to incorporate these types of goals and objectives, where comprehensive planning and evaluation activities help to ensure these goals are manifest in the creation and implementation of interpretation. To facilitate the above processes, Standard IV encourages formal and informal dialogue and collaboration between interpreters in whale watching, and effort toward increasing their personal skills and knowledge in the use of interpretation.

Although each of these standards emphasise interpretive processes, their premises have implications for the products and practices of interpretation as well. For instance, the proposed objectives for interpretation in Standard II should influence decisions regarding feature of interpretive products (e.g. topics of interpretation), as well as decisions on the practice or delivery of materials (e.g. when information is made available to whale watchers). Learning theory and other lessons from the psychology and tourism literature (in Chapter Four) illustrate ways interpretation may satisfy visitors or inspire particular behaviour, but the process standards in this chapter provide the predominant direction (via goals) and means (through strategic effort and liaison) of accomplishing such tasks.

Support for (and the necessity of) the themes or major points of the proposed standards is evident within the interpretation literature, and illustrated by the recent activities and sentiments of the Australian whale watching industry, at least according to its representation through a national conference series and published documents. However, the literature cited here merely supports the premises of these standards as a *direction* for enhancing interpretation. Empirical review of the current status of interpretation in the second part of the thesis reveals the degree to which these standards are achieved or approximated within the actual interpretive efforts of the Australian whale watching industry, and determines if the opportunities outlined in this chapter are embraced.

CHAPTER FOUR
BEST PRACTICE STANDARDS FOR IMPLEMENTING INTERPRETATION IN WHALE WATCHING

'Think of the hearts of these whales beating warm against the sea, through darkness and night. On and on for centuries. How the red life-blood must rush and gurgle in and out of the huge ventricles, bucketfuls, barrelfuls at a beat. One might well wish to come near these stupendous lives, but not close contact is allowed. We on land, they in the sea to fill and keep warm all the great world.'
(Muir 1879)[1]

4.1 Introduction: Choices in Interpretive Content and Delivery

A wealth of knowledge about whales could be ascertained from Muir's observations above: they are warm blooded and ancient species, with hearts large enough to pump gallons of blood, and whom we are somewhat privileged to encounter, given their habitat. Such information could easily have been delivered in a more sterile fashion (e.g. 'whales evolved 50 million years ago in the Eocene'). Yet as noted by standards for best practice interpretation proposed in this chapter, mere exposure to information does not mean it will maintain a whale watching audience's attention, nor be processed in a way that leads to their satisfaction or to environmental protection. Muir's expressive words are a suitable example of techniques derived from learning theory which are amongst the most favourable for use in interpretation.[2] This chapter investigates how interpretation can adapt lessons from educational and tourism theories to its own form, content and delivery, in an attempt to fulfil its objectives as a management tool for whale watching.

Standards for best practice in this chapter primarily concern the products and practice of interpretation in whale watching. An interpretive 'product' denotes form (e.g. brochures, scripted or impromptu verbal commentary) as well as aspects of its content (e.g. topics, messages, and style). The 'practice' of interpretation refers to its communication or delivery to the audience, including features of its accessibility (when and where it is delivered) and manner of communication (e.g. active or passive relay of information).[3] Prior to the implementation of interpretation in whale watching, decisions regarding its products and practice are made in the strategic stage of the planning process, although standards proposed here are also applicable to the modification of

[1] excerpt from a letter penned by John Muir upon his arrival in Alaska in 1879; in Stewart (1995:19)
[2] e.g. use of imagery, directing the reader's attention to specific topics; these are discussed in section 4.5
[3] refer also to Figure 5, p. 42

interpretation following evaluation. Furthermore, several of the standards refer to characteristics of the interpretive audience, in this case the whale watchers, which facilitate both the creation and review of the interpretation program.[4]

In accordance with the goals and objectives for best practice interpretation proposed in Chapter Three, interpretation must contribute to visitor satisfaction and environmental protection. An important theme of this chapter is to demonstrate how pursuit of these objectives can be linked to the selection and nature of interpretation products and their delivery. The proposed standards for best practice enable interpretation to address diverse factors in visitor satisfaction, and demonstrate the value of treating this management tool as part of a broader information campaign for the tourism. The standards also accommodate conceptual precursors to environmentally responsible behaviour, and incorporate techniques that promote the attractiveness and potency of interpretation. In their entirety, the product and practice standards for interpretation facilitate the acquisition, retention and ideally, translation of information into both visitor satisfaction and longterm action for the protection of the environment.

4.2 An Expanded Role for Interpretation in a Tourism Information Strategy

4.2.1 Matching Interpretation to Factors in Visitor Satisfaction

The use of interpretation in whale watching can add value to the experience (in terms of visitor satisfaction) if it coincides with visitor interest *in* interpretation as a part of the tourism, and if it corresponds to their preferences for other aspects of the experience. To address the former, features of the content and delivery of interpretation may contribute to satisfaction when they match visitor interests (e.g. in particular topics). In general, or when no such preferences exist, the creativity of the composition or the enthusiastic commentating by an interpreter can also help to promote visitor satisfaction with the interpretation. These and other aspects are reviewed in greater detail in later discussion.[5]

The focus of this section (4.2) is the means by which interpretation engenders visitor satisfaction with the tourism activity itself. This requires an understanding of the factors which create the visitor experience, in respect to why they engage in nature-based tourism and what they intend and/or hope to achieve from their participation. Some visitor factors in the selection of tourism activities include their motivations, preferences, past experience and expectations (Hall & McArthur 1993a; Pearce & Moscardo 1985, 1985a), which are also factors in their satisfaction with the tourism. The logical extension of this idea is that visitors who are faced with an experience which does not correspond to their motivations, preferences or expectations are likely to be disappointed;

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[4]Note that the proposed standards in this chapter appear where appropriate in the text, but are also listed in their entirety at the end of the chapter (Table 9, p. 110).

[5] in section 4.5

whereas visitors who are able to choose activities that match these individual factors are more likely to be satisfied by the tourism experience (Hall & McArthur 1993a; Pearce & Moscardo 1985a; Ross 1994). Hence, the task for interpretation is to facilitate this match, which can be attempted through its products and delivery.

In an indirect sense, the form of interpretation may either enhance or detract from visitor satisfaction with the tourism experience, depending on the aspects of the experience that they consider to be important. For instance, a scenario may arise when visitors in nature-based tourism are seeking wilderness-oriented experiences, in which factors of aesthetics, solitude, and freedom are integral to their satisfaction (see Pearce & Moscardo 1985a). To satisfy these visitors, all management options are somewhat restricted, since the visible presence or evidence of humans would conflict with the visitors' motivation and preferences (Hammitt & Cole 1987; Heberlein 1973). Interpretation may be similarly limited, where options as signs or personal guides may be perceived by these visitors as intrusive to the experience (Hammitt & Cole 1987; Cohen 1985; Heberlein 1973; Pearce 1982). Furthermore, Saunders (1992) asserts that particular forms of interpretation may become an impact in themselves if used for wilderness-oriented experiences, as a plethora of signage or litter from brochures could affect the integrity of the environment.

The collection of visitor information regarding their preferences for the nature of whale watching will assist the management task of accommodating their interests in key elements of the experience. To enable interpretation to generate visitor satisfaction in this case, it should also be correlated with these preferences. This suggests that the development of psychographic profiles of whale watchers is critical to the planning and implementation of best practice interpretation for the tourism.

Tailoring interpretation to fit visitor preferences for a nature-based tourism experience is a worthy part of its objective for visitor satisfaction (cf. Standard II). Emphasis in this discussion of best practice is placed on a more active role for interpretation, such that it appeals directly to the motivations, preferences, past experience and expectations of its audience. To do so requires an expanded conception of interpretation as more than simply an on-site, educative tool, and hence this thesis proposes that interpretation should take advantage of the scope for its use in promotional and orientative efforts for nature-based tourism like whale watching.

Standard V

Interpretation should be developed as part of a broader information strategy for whale watching, where its content and delivery extend to promotional and orientative information that can promote visitor satisfaction and environmental protection.

This standard should not be mistaken as primarily promoting a commercial opportunity to use an interpretive style[6] exclusively for an advertising purpose. Rather, the incorporation of interpretation into additional uses of information in tourism has clear advantages for engendering certain benefits for many different stakeholders, including the non-human. In fact, many of these were introduced in Table 3 (p. 54) as part of the discussion on the potential for maximising benefits through interpretation. Discussion in the remainder of section 4.2 provides theoretical justification for the use of interpretation proposed by Standard V, and illustrates the significance of an expanded use in respect to its contribution to such benefits. Additional standards which correspond to interpretation as part of a broader tourism information strategy (and therefore complement Standard V) also arise from this discussion.

4.2.2 A Responsibility for Generating Realistic Expectations

The ability of interpretation to address visitor satisfaction is complicated by a theme in the tourism literature which suggests that visitor motivations, preferences or other factors that contribute to their participation (and hence, satisfaction) in tourism are rarely immutable. Instead, Pearce (1982, 1988; & Caltabiano 1983; & Moscardo 1985a:34) found that over time, tourists displayed a

> *'changing pattern of motivating forces prompting decisions to visit certain environments.'*

This idea was developed into the notion of a 'travel career', where tourist needs and motivations are hierarchical (rather than additive) in that early motivations are subsumed by later ones (Pearce & Moscardo 1985a).[7] Essentially, the notion of a travel career contends that visitor motivations and preferences are related positively to their previous experience with the tourism (Pearce & Moscardo 1985a).

The previous experience that visitors have with a nature-based tourism activity is especially important to consider in the use of interpretation to address their satisfaction. In fact, it has been suggested that previous tourism experience correlates with interest *in* interpretation itself, where tourists at either end of the spectrum (ie. with no prior experience vs. major enthusiasts) demonstrate the least amount of interest in educative information during the tour (e.g. Adams & Hammitt 1993; Neil et al. 1996).[8] This implies that improvements to the content of interpretation could include (1) greater depth or different topics to maintain the interest of repeat visitors, or (2) the promotion of

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[6] e.g. the style of Muir's quote, p. 78

[7] For example, whereas an inexperienced tourist may at first seek an experience that provides an opportunity to 'escape' from daily routines, an experienced tourist is more concerned enlightening experiences (also termed 'self-actualising') (Pearce 1982, 1988; Pearce & Caltabiano 1983; Pearce & Moscardo 1985a). However, it should be noted that Ryan (1997b) cautions against any over-reliance on this particular model, and believes one's position in the travel career 'ladder' (in terms of the different needs) may not be invariably due to the level of experience, or even be part of a linear progression.

[8] In Adams & Hammitt's (1993) study, visitors with a moderate amount of previous experience read the most interpretive material. Regarding whale watching, Neil et al. (1996) found little difference between preferences for interpretation and the amount of previous experience of boat-based whale watchers in Queensland. However, those with more experience had a slightly lower level of interest in interpretation.

interpretation as an important and fun part of the experience for inexperienced visitors who may not yet realise its value-adding capabilities.[9]

An additional consideration regarding visitors' previous experience is that it can be a source of their expectations about the tourism activity. Expectations regarding a tourism experience like whale watching can connect visitor preferences and their site/tour selection; as such, the degree of their satisfaction is dependent in part upon the accuracy of their conception of whale watching (Hodda 1996; Hughes 1991; Parsons 1996; Ryan 1997c). However, the discrepancy between what one imagines about a tourism activity and what is offered in reality can be significant (Ross 1991). In fact, visitors participating in the tourism for the first time are not likely to have clear and realistic expectations (Cheatley 1994; Urry 1990; Pearce 1988), which may increase the risk of their disappointment with the activity.

This is a critical consideration for whale watching, as existing visitor information reveals that few whale watchers have had prior experience (e.g. generally less than 20%), and those with experience have only been on one or two trips (Goyne 1993; Neil et al. 1996). Correspondingly, whale watchers are likely to have unrealistic (ie. inflated) expectations about several aspects of the experience, such as the numbers of whales likely to be seen, the whales' likely proximity to the vessels and the type and level of whale activity (Goyne 1993).[10] A study by Neil et al. (1996) correlates whale watcher expectations and experience level, and verifies that those with less prior experience in whale watching have higher (ie. unrealistic) expectations regarding the tourism in general and specific aspects such as whale activity.[11] Aside from the risk of disappointment, some inflated expectations from visitors can also put pressure on tour operators to forego responsible behaviour and provide a closer view or elicit a response from their focal animals (Hodda 1996; Kaza 1982; McIntyre-Varawa 1991).

Thus as part of its objectives to promote visitor satisfaction and environmental protection (cf. Standard II), it is proposed that a duty of best practice interpretation is to ensure that its content and delivery are responsible in their depiction of realistic whale watching.

Standard VI

In the guise of promotion/orientation, interpretation should generate *realistic expectations* amongst visitors regarding:
(1) features of the tourism experience in general (e.g. whale activity; but also interpretation as *part* of the experience),
(2) the potential to address their personal needs and interests within this experience, and
(3) appropriate (ie. non-impact) behaviour during the experience

[9]Moscardo (1991) found that museum visitors who were unfamiliar with this type of recreation were less likely to include education as part of their expected activity. Hence pre-visit interpretation can also introduce learning as part of the tourism experience which may facilitate efforts of other interpretation to procure the visitors' attention; see below.

[10]no figures of statistical significance are available for these results, although the following percentages correspond to whale watchers with the described expectations: 38%, 40.8%, 36.5% respectively.

[11]e.g. 31% of those with no prior experience expected to witness a breach by the whales, compared to 16% of those with previous whale watching experience (error prob. 0.06).

Expectations regarding the first two categories of Standard VI correspond to visitor satisfaction. According to Beckmann (1991), this orientative use of interpretation may be even more important for maximising visitor satisfaction than educative interpretation which is delivered on-site/during the tourism experience. The third type of expectation noted in Standard VI clearly outlines an opportunity for interpretation to address environmental protection as well, and later discussion illustrates how all three points of this standard are interrelated. As a proposed standard for best practice interpretation, the general premise is that content and delivery of some interpretation should be developed/selected to correspond with an orientative use of the management tool. Particular opportunities and advantages for interpretation to address topics relevant to visitor expectations are described below.

4.2.3 Promotional and Orientative Content in Interpretation

It is in the tour operators' own interest to relieve the pressure on them to satisfy visitors by delivering a 'whale performance' (Kaza 1982), and they can (and should) take deliberate and preventative measures to insure against false expectations of their clients. An opportunity to pursue such measures and thus uphold Standard VI arises if an interpreter has already embraced the premise of Standard V (p. 80) to adopt an expanded role for interpretation as part of their promotional and orientative material.[12] For example, visitors with no previous experience in whale watching may find that interpretation within promotional material helps to 'define' the experience for them. Experienced whale watchers, who may have a more realistic perspective but also a higher threshold for excitement (and satisfaction), might be best served by interpretation that promotes other aspects of the tourism (e.g. flora/fauna, significant sites) which could have previously gone unnoticed.

There are many ways by which the promotional and orientative content of interpretation can enable this management tool to engender realistic expectations amongst whale watchers. In fact, this section presents several psychology and tourism theories that support the premises of Standards V and VI, and also demonstrate how interpretation may enhance its potential to pursue a goal of benefits for all stakeholders and assume all possible roles in management (cf. Standards I and II).

Interpretation within promotional material can include text and/or the construction of specific images relevant to a nature-based tourism experience (e.g. Pearce 1994; Urry 1990), both of which can contribute to the 'defining' of an experience like whale watching for potential visitors before their arrival. In an orientative and promotional guise, interpretation may appeal to visitor motivation and preferences, by providing a

[12]Throughout this section discussion refers variously to a role for interpretation in promotional and orientative efforts in tourism, and interpretation as orientation/promotion. A difference is acknowledged between an interpretive style of information within promotional material, and promotional or orientative information within what is considered traditional 'interpretative' (ie. educative) material. Nonetheless, the author contends that such a distinction is not of critical importance to the major points for interpretation content and delivery made in this thesis.

clearer indication of the range of various whale watching experiences from which visitors may select, or demonstrating the flexibility of one tour or site in addressing different preferences (e.g. Cubit & McArthur 1995).

This function of interpretation may be especially advantageous if potential whale watchers' choices are limited logistically (e.g. they cannot travel to certain sites due to distance and/or cost). Under these circumstances, interpretation could distinguish between options that visitors might not have otherwise considered, but which may still be satisfying. If all parties responsible for promoting whale watching do so in a consistent and accurate manner, visitors are empowered to contribute to their own satisfaction by making an informed choice. As part of Standard VI, such a result requires the content of interpretation in promotional material to be forthcoming, accurate and comprehensive in its depiction of the experience (e.g. whale activity, site amenities).

Once visitors have made a decision to participate in a particular tourism activity, an orientative use of interpretation can further prepare them for the experience. Whether it is provided far in advance or just prior to the tourism experience, this incarnation of interpretation can create or reaffirm visitor expectations and provide information and skills so that they derive as much satisfaction as possible from the experience. The QDEH (1995) interpretive guide for whale watching tour operators agrees, and suggests that in boat-based tours, interpretation could include orientative content that:

- instructs whale watchers to bring binoculars for a better view of whales,
- conveys information on the travel time to reach the whales,
- acquaints the whale watchers with features of the vessel, and
- relays tips on how to identify or locate whales.

An orientative function may also increase interpretation's potential to address certain needs of the natural resources of tourism, if information is included which can prepare visitors to behave responsibly (Weiler 1992). This application of interpretation exists for whale watching in the form of guidelines introduced in previous chapters, which are ideally distributed to potential whale watchers prior to the activity to develop expectations of what is appropriate behaviour during the encounter with whales.[13]

Another means by which orientative interpretation can address both visitor satisfaction and behaviour is provided by a major advance in the study of motivation and tourism: Maslow's (1970) hierarchy of needs. Maslow's (1970) hierarchy is one of the best known and most cited theories of motivation (Driver & Tocher 1968; Mercer 1976; Mills 1985; Pearce 1988; Ross 1994), and has implications for both the content and delivery of interpretation. The hierarchy depicts a sequential progression of needs that people are motivated to satisfy. If no needs are satisfied, the lowest on the hierarchy dominates one's motivations and actions; once satisfied, the next need in the series is activated

[13]The utility of these guidelines in both an orientative and educative capacity is detailed in section 4.4.3.

(Maslow 1970; see also Mercer 1976; Mills 1985; Ross 1994). In order of progression, these needs are:

- physiological comfort,
- safety,
- love/belongingness (affective/social),
- esteem (self confidence, strength, capability), and
- self actualisation (a desire to become what one has the potential to be) (Maslow 1970)

Pearce's (1982) travel career clearly draws on ideas from Maslow (1970), adapting the universal needs within the hierarchy to context of tourism, such that a tourist must satisfy lower motivations to proceed higher up along the 'ladder.' Whilst the time frame for Pearce's model incorporates a series of different tourism experiences, Dunn-Ross & Iso-Ahola (1991) find that satisfaction within a tourism experience is also influenced by both motivations and practical concerns that would correlate with the early levels of Maslow's hierarchy: e.g. comfort stops, duration, pace, cleanliness of vehicle.[14] Indeed, Pearce's (1982) own work seems to confirm that visitors may still face certain physiological needs at their destination or during the experience, even if they are ultimately motivated by something else for their fulfilment. Specifically, Pearce (1982) found that when visitors reported positive or the most enjoyable experiences, they were more likely to mention higher needs (e.g. love, inspiration) and did not indicate a concern with lower needs (e.g. safety measures or comfort facilities). Yet accounts of negative experiences were often a result of threats to or lack of fulfilment of lower needs, and/or anger at the efficacy of the lower needs in thwarting higher ones (Pearce 1982; also see Ross 1994).

The notion of a hierarchy of needs in nature-based tourism is relevant to interpretation's role in satisfying visitors (cf. Standard II), in that aspects of the tourism experience corresponding to lower needs can (and should) easily be addressed in promotional and orientative information (cf. Standard VI). When Uzzell (1989c:9) claims that the 'best interpretation in the world' would not compensate for poor facilities or service, he is referring to interpretation in a learning role. However, if interpretation takes the responsibility to warn visitors of a lack of facilities, it may at least assuage a degree of their disappointment through promoting realistic expectations. Previously this type of content may have received less emphasis, have been considered optional, or even deemed unnecessary for interpretation. Yet according to the above theories, visitors who have realistic expectations about the availability of food or comfort facilities, likely weather conditions, precautions necessary for safety, or other such needs may be better equipped to satisfy these concerns and focus on more positive aspects of the experience.

Furthermore, it is possible that the *neglect* of this opportunity for interpretation to address expectations and certain needs within the tourism experience may hinder its role as an educative activity that inspires environmental protection. Several authors note that before the educative topics of interpretation even become an interest or need within the

[14] e.g. duration and pace may relate to fatigue or stamina, cleanliness can be a safety concern.

experience, visitors must be comfortable (physically and socially) (Beckmann & Olsson 1994; Carter 1981; Dunn-Ross & Iso-Ahola 1991; Richie 1995; Uzzell 1989c). Hence a critical implication of the Maslow hierarchy for interpretation is it that the degree to which lower needs are satisfied may either facilitate or hinder the ability of management to address and try to satisfy higher needs. As learning may only be activated as a higher need, the absence of any orientative effort may impede interpretation's objective of engendering environmental protection.

Thus, the theory of Maslow's (1970) hierarchy demonstrates that the promotional and orientative use of interpretation, as proposed by Standard V, is to its own advantage (see Carter 1981). Also, by addressing lower needs within its content, interpretation can generate realistic expectations (cf. Standard VI) about a tourism experience such as whale watching, which ideally facilitates its later efforts to promote learning and the associated environmental benefits. In addition to the considerations based on Maslow (1970), though, it may also be advantageous[15] for orientative interpretation to directly attempt to engender visitor expectations about the educative opportunities of the nature-based tourism experience, and at the same time, promote the credibility of the tour guides (or other interpreters) as those who deliver this service (e.g. Weiler, Johnson & Davis 1992). In this sense, interpretation could appeal to visitor motivations (if learning is already part of their interest, e.g. as part of their travel career), or at least prepare others for the learning opportunity.

The main advantage of interpretation in the guise of promotional/orientation is that by addressing aspects of the tourism experience in its content, it can engender realistic expectations about the tourism experience, and subsequently, these expectations can influence both visitor satisfaction and the protection of tourism's natural resources. In terms of best practice, this use of interpretation prescribes certain topics for incorporation into the content of materials/products, which have been alluded to above.[16] Later discussion returns to important features of interpretive content, but the significance of the above theories and of an expanded role for interpretation in a tourism experience like whale watching is detailed in the next section in terms of the *delivery* of interpretation.

4.3 Conceptualising the Use of Interpretation According to Stages in the Tourism Experience

4.3.1 A Framework for the Practice of Interpretation

The advocation of an expanded role for interpretation in nature-based tourism has implied that the timing and order of its delivery are critical. For example, promotional or orientative information may be of greater use to visitors if it reaches them before they

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[15] in terms of visitor learning

[16] Table 7 in an upcoming section summarises promotional /orientative content for interpretation, in terms of its delivery during particular temporal stages during the tourism experience. Yet regarding Maslow's (1970) hierarchy, topics could directly relate to types of needs (e.g. availability of comfort facilities, food, identification of hazards), as implied in the discussion.

select a whale watching tour/site, depart for the site, and/or begin their viewing (on tour or independently). Maslow's (1970) hierarchy in particular provides reason to consider *ordinal* factors in the delivery of interpretation. If certain topics about the tourism experience (e.g. physiological conditions of the tour or site) are not presented first, or are absent altogether, visitors may be distracted and inattentive to educative information.

Studies described in this section reveal that visitor access to any interpretation (promotional, orientative, educational) can be enhanced according to the temporal and spatial features of a tourism experience. The most salient of these contextual features in respect to interpretation are elucidated within clearly demarcated stages of Clawson's (1963) oft-cited model. According to Clawson (1963; & Knetsch 1966), five stages of the tourism experience correspond to visitor activities and state of mind, in respect to a chronological sequence of their participation in the tourism:

anticipation & decision ➔ travel to the site ➔ on-site experience ➔ travel from the site ➔ recollection of the experience

Several authors demonstrate the application of this model to interpretation in nature-based tourism, and identify its advantages to (1) the promotion of realistic expectations, (2) visitor satisfaction in general and (3) environmental protection (see below). Yet, each author emphasises a different objective for the use of the model (ie. to facilitate visitor satisfaction *or* environmental protection), rather than integrating each within the development and delivery of interpretation. As proposed by Standard II, neglect of certain objectives for interpretation may render it insufficient to promote benefits for all tourism stakeholders.

In her review of interpretation in Australian National Parks, Beckmann (1991) identifies visitor management issues and responsibilities unique to each of Clawson's (1963) stages, and correlates these with interpretive media and techniques appropriate for the tasks. For instance, in an extended model of the visitor experience within a National Parks context (after McMillan 1981), Beckmann (1991) divides the 'travel to' stage into 'pre-arrival,' 'arrival,' and 'reception,' each of which can correspond to different interpretive products (ie. promotional material, printed and face-to-face orientation). In this version of the model, the 'travel from' and 'recollection' stages become 'evaluation'[17], 'departure' and 'post-trip evaluation'. During these stages, 'reinforcement' material such as souvenirs or brochures (and potentially, interpretation) may fortify positive evaluations of the visit, and a favourable conception of the Park (Beckmann 1991:32).

Such an application of Clawson's (1963) basic model emphasises (admittedly, by Beckmann 1991) the advantages of considering the different stages in terms of 'recreational benefits' for visitors. In this case, interpretive goals of each stage

[17]signifying evaluation of the experience by visitors, immediately after concluding their observation of the focal point of the tourism

contribute to visitor satisfaction via promotional and orientative media. Subsequently, Beckmann (1991:30) contends that the value of this application of Clawson's (1963) stage model is its ability to illustrate the legitimacy of interpretation's role in creating realistic expectations and maximising visitor satisfaction. Whilst such a role is advocated in this thesis as well (in Standards V and VI), Beckmann (1991) makes no mention of the ability for the stages to correspond to an environmental protection role for interpretation.

Beckmann's (1991) application of the tourism experience model to highlight 'recreational benefits' is not uncommon.[18] Yet Carter's (1981) earlier application of the concept of stages in a tourism experience (still in a National Parks context) exemplifies the potential for such a stage model to facilitate interpretation's pursuit of objectives for both visitor satisfaction *and* environmental protection (as advocated in Standard II). Although he does not acknowledge Clawson's (1963) model, Carter (1981) also correlates the delivery of interpretation with stages in the tourism experience. However, Carter's (1981) model demonstrates how the function of interpretation varies with the location of the visitor activity (ie. off-site or on-site), rather than their state of mind.[19] For instance, 'off-site' correlates with (1) pre-visit stages, when interpretation is directed toward realistic expectations, as well as (2) post-visit, when interpretation outlines opportunities for visitors to contribute to environmental protection (Carter 1981). Hence this conception of the tourism experience adds a spatial dimension to the temporal stages proffered by Clawson (1963), and thus gives further guidance to the application of interpretation according to the contextual features of a tourism experience.

Application of a similar type of model for the use of interpretation in nature-based tourism is also endorsed for Australian whale watching, where Crabtree & Weiler (1996) and QDEH (1995) urge tour operators to structure their commentary according to the stages of the experience.[20] Crabtree & Weiler (1996) in particular recognise the potential for interpretation to pursue its different objectives according to these stages. For example, visitor satisfaction can be targeted in pre-visit stages via the promotion of realistic expectations about whale activity, whilst whale watching tips (e.g. how to identify whale behaviour) can add to the enjoyment of visitors once whales are encountered. An educative role of interpretation is addressed in the 'contact' stage (ie. during the encounter with the whales) and beyond. Here, the presentation of conservation messages, for instance, can follow the excitement of seeing whales and

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[18] e.g. Cubit & McArthur (1995) apply it for marketing purposes to determine how different media at each stage can aid visitor choice; Hall et al. 1992 (after Fridgen 1984) use the model for planning and for visitor satisfaction as dependent on the behaviour they engage in during different stages.

[19] Though Carter's (1981) stages are demarcated by location, he does still incorporate a temporal and ordinal element in his conception; ie. interpretation delivery on-site proceeds in order according to (spatial) stages

[20] In the case of the QDEH (1995:19), the division of the stages is not necessarily based solely upon temporal/spatial parameters; instead it suggests 'orientation' is an element of a 'complete' whale watching trip, rather than a guise or role *for* interpretation. Nonetheless, the recommended content and timing of delivery correspond to other applications of stage models for the tourism experience.

outline measures for protecting them after the tourism experience (Crabtree & Weiler 1996; also see Forestell 1993).

From these examples it is clear that the consideration of the temporal and spatial stages of the tourism experience (such as that offered Clawson's stage model and subsequent adaptations) is of notable importance to the various objectives and applications of interpretation.

Standard VII

Interpretation should be delivered according to temporal and spatial stages in the tourism experience, in an ordinal manner that corresponds to its use as promotion, orientation and education

The remainder of this section (4.3) further describes how the features proposed by Standard VII for interpretation's delivery can be applied to whale watching, and the necessity and advantages of doing so. In particular, there are specific topics which should be included in interpretative products, and which are best delivered during different stages in this tourism experience. It is also apparent that to uphold the proposed Standard VII, the orchestration of interpretation according to these stages in whale watching should take account of the restrictions presented by the nature of this form of nature-based tourism.

4.3.2 Interpretation within Pre-Visit Stages of the Tourism Experience

According to Clawson (1963; & Knetsch 1966), promotional and orientative information in tourism such as whale watching should be provided early in the experience, although in the case of orientative information, it can be delivered in any of the pre-visit stages (e.g. anticipation/decision, travel to the site, arrival at the site). Whilst this may seem self-evident, the demarcation of these stages within the whale watching experience complicates the task. In the case of boat-based whale watching, the 'travel to' stage can denote the visitor's journey to the departure point of the tours, as well as the time between the departure (aboard the vessel) and the first sighting of the whales. Certain orientative topics are appropriate to each. Features of the tour itself (e.g. duration, refreshments) are suitable to the earlier stages, whereas topics that describe how to whale watch (e.g. how to look for the spout first) or that indicate appropriate behaviour (e.g. do not throw litter overboard) are of greater relevance once en route (Crabtree & Weiler 1995; QDEH 1995).[21]

Educational information can also be introduced during the pre-visit stages, and may prepare visitors for what they will encounter during the whale watching experience (e.g. species of whale, why they are found at the site). Butler (1991) encourages this as a means of familiarising the visitors with the resources of the tourism, and with the subjects of information they may receive during the tour. Butler (1991) also points out

[21]This point does not suggest that the latter topics cannot *also* be addressed in earlier stages, but they are not necessarily important to the visitors' selection of a whale watching site or tour..

that due to the discrete amount of time available during the experience, provision of such material during pre-visit stages takes advantage of an additional educative opportunity.

In respect to whale watching, it may be appropriate for educative materials to be distributed or accessible prior to the arrival at a whale watching site, due to the nature of the experience. For instance, whether the interpretation in pre-visit stages is considered supplementary or essential, the nature of whale watching may hamper its delivery at this point in the experience. In the 'travel to the whales' stage that ensues upon a tour's departure, the time before the first whale is sighted may vary considerably. In Hawaii, for instance, Forestell (1993) found that this effect was exaggerated during the peak of the whale watching season, when whales could be found immediately after departure from the jetty, and thus allowed little time for any interpretation, orientative or otherwise. By contrast, when this stage is prolonged, there is the opportunity to present information on different aspects of the experience to preoccupy visitors and give them a sense of appreciation of the other elements of the marine environment (Crabtree & Weiler 1996). It is also an appropriate time to heighten the excitement of the whale watchers by instructing them on how to search for the whales themselves (Crabtree & Weiler 1996).

4.3.3 Interpretation Provided During and After the Tourism Experience

Whilst tour operators may not be able to predict or govern the location of the whales, they may exercise control over their delivery of interpretation during the experience. Clawson's (1963) model and literature regarding learning theory suggest that within this (single) stage,[22] the order and timing of the provision of educative interpretation is influential to its success in fulfilling its objectives (cf. Standard II). For example, if whales are proving difficult to locate during the experience, the availability of educative interpretation can fulfil its value-adding role, and indeed, may be the primary source of the whale watchers' entertainment (as above; see Crabtree & Weiler 1996), whether they are participants on a tour or independent. Once a whale has been sighted on tour, delivery of particular topics (via verbal commentary) can be adjusted to correspond to the behaviour of the animals, which may be both educative and entertaining (QDEH 1995).

Forestell (1993) describes this opportunity as the 'teachable moment,' when visitor curiosity about the animals can be satisfied through educative interpretation. Similar to Carter's (1981) intentions, Forestell (1993) uses the notion of timing to appeal to visitor's cognitive states, in the attempt to reinforce attitudes about the tourism resources and motivate responsible action toward their protection. Forestell's (1993) suggestions for the use of interpretation in the pre-visit stages mirror those above.[23] Yet his depiction of the 'contact' stage (ie. during the encounter with whales) focuses on the excitement and curiosity palpable within the visitors, which represent a cognitive state

[22] ie. during the experience

[23] and in respect to the visitor state of mind, this has been alluded to above as anticipation and excitement, driven by expectations

that precedes learning. Aspects of learning theory relevant to interpretation are correlated by Forestell (1993) with this stage in the experience, and are discussed in section 4.5. However in terms of the temporal delivery of interpretation, Forestell's (1993) work adds important detail to the premise of Standard VII, by contending that the contact stage is ideal in terms of presenting information about the focal animals which can relieve the visitor's curiosity, and contribute to their basic knowledge and understanding of whales.

Tour operators have a captive audience for such information, and are able to manipulate the interpretation within this stage to some extent (QDEH 1995).[24] However, independent whale watchers control the sequence, timing and amount of information they acquire during this stage,[25] which complicates the fulfilment of Standard VII. In their case, exposure to interpretation is based upon their initiative during the experience, and rather than complementing the focal point of the tourism, access to the information may *compete* with the whales for the visitors' attention (e.g. Speedie 1992). To increase the likelihood of their attention to educative information during the tourism experience, interpretation can be composed in a manner that relays messages quickly or summarises themes, or coincide with travel patterns or movements of visitors on-site (ie. when/where they encounter the interpretation) (McArthur 1993; McDonough 1982; Speedie 1992).[26]

Another possibility to address this problem is alluded to in Standard VII and its premise of a stage model for the delivery of interpretation. A notable value of Clawson's (1963) model (and the applications it inspired within the literature) to the conception of best practice in the current research is that it expands the scope of interpretation's delivery beyond this central stage of the tourism experience. Thus attention to interpretative effort in the pre- or post- stages of whale watching may help to maximise the exposure of independent visitors to pertinent orientative and educative information.

An additional advantage of the 'travel from the site' stage is that it can enable interpretation to review what has been witnessed during the tour, and hence familiarise whale watchers with educative information (or introduce it for the first time if they were not exposed to it during the experience). In respect to visitor satisfaction, travel from the site or post-visit interpretation can encourage them to recall the experience in a positive light (Beckmann 1991; Carter 1981; Crabtree & Weiler 1995; Forestell 1993). If few or no whales were sighted, for instance, their disappointment may be assuaged by interpretation that addresses other features of the tour (e.g. draws attention to other fauna), or recasts the experience as realistic by recalling similar instances (QDEH 1995).

In respect to the environmental protection objective for the use of interpretation (cf. Standard II), the stages that follow contact with whales may in fact be the most advantageous in terms of inspiring visitor interest in further information and

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[24] in accordance with whale behaviour, and the amount of educative material they deliver

[25] of course, the amount of information they *can* acquire depends upon what is available at the site

[26] Additional means to increase attention to interpretation are the subject of section 4.5

environmental action. Forestell (1993) finds that after contact with the whales, visitors are eager to relate the encounter to their own personal experiences (e.g. recall other whale watching experiences, or comment on the personal value of the current encounter). This is an opportune moment to inspire them to consider whales and whale protection in terms of contexts beyond the tourism experience. Forestell (1993) is adamant that because of the apparent receptivity of visitors to broader perspectives during post-contact/post-visit stages of the experience (according to their comments and questions), these stages are most conductive to introducing topics on environmental protection in the *longterm*.

Clawson (1963; & Knetsch 1966) cautions that the 'travel from' stage is rarely the same as the 'travel to', in that visitors may be in a different physical or mental state. If this includes fatigue, their attention to interpretation may wane (Pearce 1988), just when topics regarding longterm protection are delivered.[27] Thus in the interest of maximising the educative opportunity of whale watching, it may be prudent to ensure that interpretation which covers such topics is accessible during additional stages (e.g. in printed material than can be read during the recollection stage; see below).

Upon conclusion of the experience, either travelling from the whale watching site or once at home, recollection of the experience may not be consistent with what actually transpired (Clawson & Knetsch 1966). If visitors are initially disappointed with their personal experience, interpretive material can reinforce a more positive view of the site or tourism activity (e.g. Beckmann 1991), and perhaps promote greater satisfaction overall. Regarding an environmental protection objective for interpretation, Forestell (1993) recommends identifying sources of further information or providing materials during the post-contact/travel from stage, as these can be consulted once visitors return home. Furthermore, 'reinforcement' material, as noted above, can fulfil a visitor satisfaction objective (Beckmann 1991), but also has the scope to refer to environmental protection strategies that can be reviewed at the visitor's leisure after the completion of the tourism.

This section has illustrated the importance of the context of whale watching to the use of interpretation as a management tool, where the adaptation of efforts according to stages in the experience can facilitate the achievement of Standards V, VI and VII, and address all management roles as proposed by Standard II. Table 7 summarises how aspects of interpretation's delivery and content can complement and take advantage of the progression of the tourism experience in whale watching. In effect, the table represents a visual depiction of the premises of Standards V, VI and VII. The utility of this modification to Clawson's (1963) model certainly increases with the interpreters' control over the stages. Nonetheless, even if there are no interpreters to directly impose such organisation on the experience, an orchestrated delivery of interpretation in the manner described above (and in the table) may improve access to information when/where it is most propitious for value-adding and addressing environmental protection.

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[27]In this case, the 'travel from' stage denotes the journey back to the departure point after viewing whales; as in the 'travel to' stage, there is an additional 'travel from' the whale watching site itself.

TABLE 7 Interpretation and Stages in Whale Watching

Delivery of Interpretation*		Interpretation Guise and Content**
Location	Timing (Clawson stage)	
off-site	**Pre-visit:** • Anticipation, Decision	***Promotion*** • Description of the experience***
	• Travel to the whale watching site (region)	***Orientation*** • Whale behaviour, number • Facilities available during the experience • Appropriate behaviour during the experience
	• Arrival at the whale watching site (region)	***Orientation*** • Whale behaviour, number • Appropriate behaviour during the experience
on-site	**During:** • Travel to the whales	***Orientation*** • Whale behaviour, number • Appropriate behaviour during the experience • Whale watching tips ***Education*** • Whale biology, behaviour • Biological, historical features of the region
	• Watch whales	***Education*** • Whale biology, behaviour
	• Travel from the whales	***Education*** • Whale conservation status, protection measures in the longterm
off-site	**Post-visit:** • Travel from the whale watching site (region)	***Education*** • Indepth whale biology, behaviour • Whale conservation status, protection measures in the longterm • Other ways to contribute to environmental protection • Sources of further information
	• Recollection	***Education*** • Indepth whale biology, behaviour • Whale conservation status, protection measures in the longterm • Other ways to contribute to environmental protection • Sources of further information

* These parameters may vary according the platform and area of the whale watching activity; see Chapter Eight for an example of such variation in the Australian whale watching industry.

** Content of interpretation is neither mutually exclusive nor exhaustive, but these categories refer to information which *should* be available at each stage of the experience (see section 4.3).

*** Refers to features of the experience that are relevant to visitor motivation and preferences for the experience; e.g. platform for the activity, whale characteristics (species, number) nature of the site (remote, close to/in a town), tour characteristics (if valid; size of tour, vessel), learning as part of the experience (interpreter characteristics, available information) (see section 4.2).

Sources: Adapted from Beckmann (1991); Carter (1981); Clawson (1963); Clawson & Knetsch (1966); McMillan (1981).

4.4 Educative Interpretation: Addressing the Environmental Protection Objective

4.4.1 A Popular Model for Environmentally Responsible Behaviour

The promotional/orientative use of interpretation as proposed by Standards V, VI, and VII for best practice can prepare a visitor for exposure to educative information. Thus, in addition to the advantages for visitor satisfaction, this use of interpretation is also significant in terms of providing a possible foundation for the use of interpretation to engender environmental knowledge, attitudes and behaviour regarding the resources of nature-based tourism.

Certainly, learning from interpretation can itself contribute to the pleasurable part of the tourism experience, especially if visitors are already interested in information about the focal resources, and topics coincide with their personal preferences. If visitors derive enjoyment from exposure to educative material, tour operators may benefit through favourable word of mouth and/or repeat visitation. However, to yield further benefits for these and other tourism stakeholders (particularly the natural resources), this thesis contends that 'best practice' means visitor learning from interpretation should eventually inspire 'environmentally responsible behaviour', and preferably this would occur both during the tourism experience and in future.

To maximise the potential success and benefits from interpretation as a means of effecting on-site behaviour and educating for the environment, it is necessary to examine the complex relationship between learning, attitudes, and behaviour. The proposed standard for interpretation that arises from this examination refers to aspects of interpretive content and delivery relevant to environmentally responsible behaviour, as supported by educational theory. It is apparent that such theory can and should be applied to interpretation in whale watching, and that this endeavour must proceed cautiously to account for contextual features of the tourism.

In this thesis, 'environmentally responsible behaviour' is intended to denote a contribution to the longterm protection of the tourism resources and toward the environment in general, which also occurs in non-tourism activities.[28] A confounding factor in the use of interpretation in whale watching is that even parent disciplines such as psychology face difficulties in determining the influential factors in environmental behaviour (see Hines, Hungerford & Tomera 1986; Uzzell 1989d). Nonetheless, Hines et al.'s (1986) extensive meta-analysis of the environmental education literature was able to distil factors which may enhance the potential for interpretation to address its environmental protection objective.[29]

Hines et al.'s (1986) endeavour provides the theoretical evidence to shatter the preconception of a linear progression from learning to attitudes to behaviour. Instead,

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[28] as noted in Chapter Three, section 3.2.

[29] Hines et al. (1986) examined 128 studies from the *Journal of Environmental Education*

they suggest that environmental behaviour is an artefact of many interrelating variables, including a combination of personality factors (and other characteristics of an interpretive audience) and specific types of knowledge. Together these factors create an *intent* to act, which is then moderated by situational factors,[30] and has potential to result in environmentally responsible behaviour (Figure 8).

The factors in Hines et al.'s (1986) model illustrate the complexity of how learning might inspire action, but as alluded to in the terminology of this model,[31] their primary advantage is not the *prediction* of environmentally responsible behaviour. Instead, these factors serve as an indication of what educative programs, and hence the use of interpretation in this guise, *can* address in order to maximise the behavioural intent of their audience.

Support for Hines et al.'s (1986) model from other researchers is demonstrated by (1) the advocacy for the reasoned action process that is the premise of the model, (2) the different emphasis on one or several of the variables, and/or (3) the addition of relational variables that may further increase behavioural intent (e.g. Ajzen & Driver 1992; Bardwell 1991; Hungerford & Volk 1990; Iozzi 1989; Prior 1992).[32] Whilst these authors refer to the model's application to environmental education programs, its factors have also been assimilated into interpretive programs for tourism (e.g. Barber 1996; Orams 1994, 1995, 1996). Orams (1994; 1995; 1996) in particular demonstrates how the Hines et al. (1986) factors can be incorporated into an interpretive program for a dolphin-feeding program in Queensland, and finds that this kind of program can result in greater learning, enjoyment, behavioural changes (as indicated by their intent and follow-up confirmation of engaging in particular activities).[33]

Therefore, Hines et al.'s (1986) model is an important contribution to theory regarding the inspiration of environmentally responsible behaviour via environmental education, and is of relevance to the delivery of interpretation in a tourism context.[34] As such, elements of the Hines et al. (1986) model should also be considered within the

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[30] e.g. economic constraints, social pressures, opportunities to act, incentives (Hines et al. 1986) .

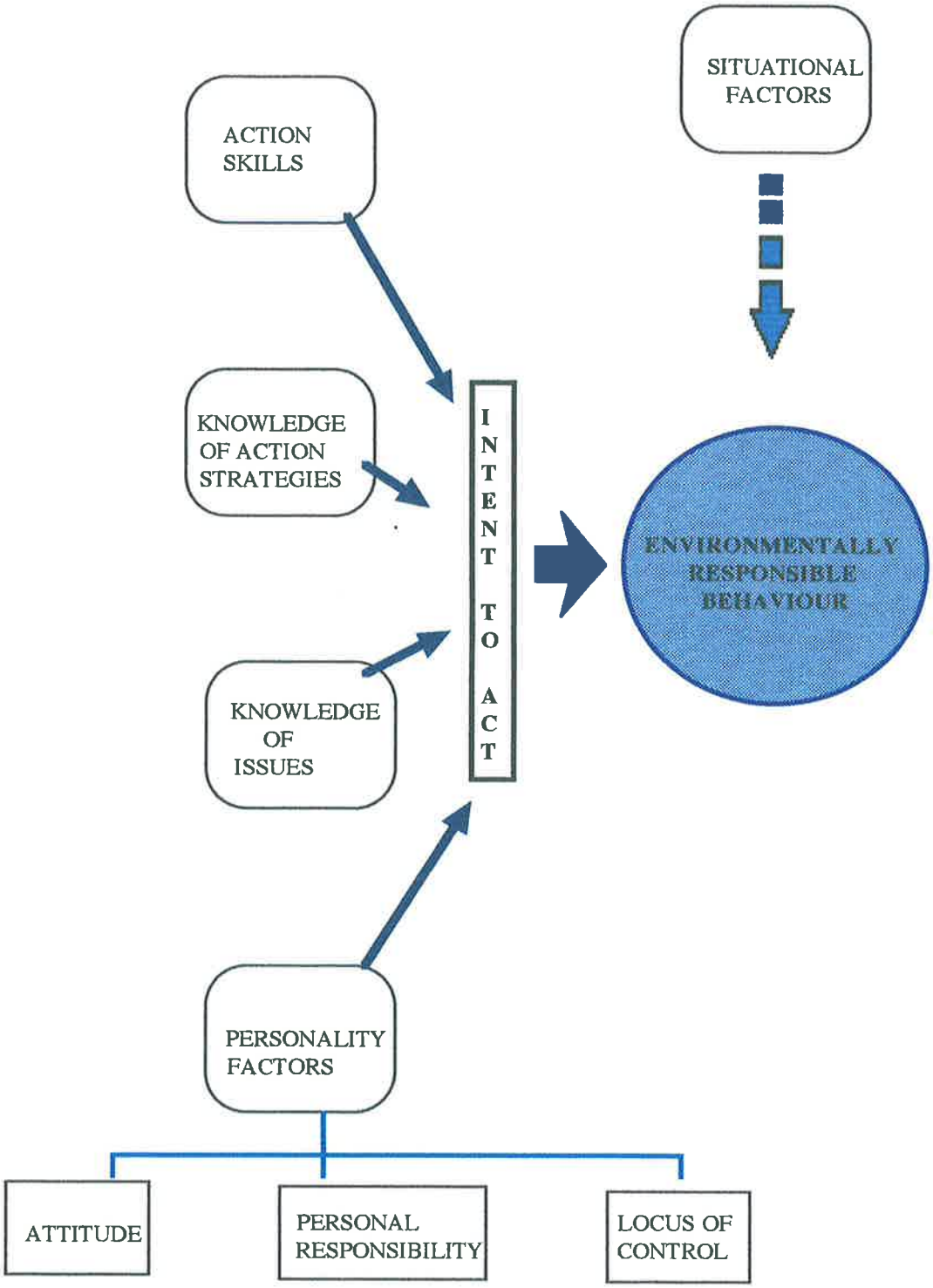
[31] ie. 'creating an intent to act'

[32] These references go into greater depth regarding the relationship between education and environmentally responsible behaviour, develop the features of existing factors in the Hines et al (1986) model and/or provide additional factors. Whilst beyond the scope of discussion, it should be noted that this thesis contains only a cursory treatment of creating an intent to act responsibly, though the detail provided is appropriate as an introduction of the issue to interpretation in whale watching.

[33] Orams' (1994; 1995; 1996) program also incorporates other learning theories with Hines et al.'s (1986) features, which contributed to the success of this interpretation in its particular (guided tourism) context. Aspects of some of the other important features (e.g. cognitive dissonance, appeal to the affective domain) are addressed in section 4.5.

[34] In fact, Hungerford & Volk (1990) illustrate how the *Tbilisi Intergovernmental Conference on Environmental Education* 1978 objectives (introduced in Chapter Two, p. 58) overlap significantly with the variables in their model and Hines et al.'s (1986) model (e.g. awareness, sensitivity, attitudes, skills).

FIGURE 8
A Model for Environmentally Responsible Behaviour



Source: Adapted from Hines et al. (1986)

interpretation for whale watching activities as a means to enhance its potential to meet an environmental protection objective.

Standard VIII

Interpretation should appeal to visitor characteristics and present holistic information which are outlined by a reasoned action model as conducive to environmentally responsible behaviour.

Hines et al. (1986) and their main supporters Hungerford & Volk (1990; see below), share the view expressed in this thesis regarding the use of educative tools like interpretation, in that they contend it *should* try to develop a type of concern & competence in its audience which is specific to intentions for engaging in environmentally responsible behaviour. Elements in their reasoned action model which may be able to help interpretation to achieve this can indeed be translated into topics and style of interpretation used in whale watching.

4.4.2 *Interpretive Content and Factors in the Intent to Act Responsibly*

Hines et al. (1986) admit that some factors in their model are less amenable to educative programs than others. Nonetheless, an emphasis on the *links* between the topics of knowledge and the audience characteristics in the model may increase the potential for interpretation to create an intent to act responsibly amongst visitors (Hines et al. 1986; Hungerford & Volk 1990). Furthermore, this potential may be affected by the notion of priority of certain factors in the model, where specific topics may be of greater importance for inclusion within environmental education programs (or in this case, interpretive content) when time and/or resources are limited (Hines et al. 1986; Hungerford & Volk 1990).[35]

Hines et al. (1986) and Hungerford & Volk (1990) believe that the following factors are the most conducive to being incorporated into educative efforts: knowledge of action strategies, knowledge of issues and (identification of) action skills. These types of knowledge suggest that best practice interpretation (cf. Standard VIII) should directly address several aspects of the desired behaviour, whether this is envisioned as longterm contributions to conservation initiatives or on-site compliance. Specifically, interpretation should outline various strategies or options for taking action, and provide in-depth information about the desired behaviour in order to create knowledge of the relevant environmental issues amongst its audience. Such information could consist of ecological features that are affected by visitor behaviour, the consequences of inaction and subsequent appraisal of the outcome of action (ie. what it should accomplish) (see Hawkins & Vinton 1973; Prior 1992; Stern, Dietz & Kalof 1993).

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[35]The factors in this section are primarily those which Hungerford & Volk (1990) consider to be the most important within Hines et al.'s (1986) model, but these authors should be consulted for further discussion on the priority of these factors.

Hines et al.'s (1986) model also implies that knowledge of these topics may still be insufficient in and of itself, for the required skills for taking action do not evolve automatically from this information. According to the factors of audience characteristics in the model, individuals must have a favourable perception of their own skills and effectiveness (regarding environmental change), and of course, have the desire to act (Hines et al. 1986; Prior 1992). Moreover, these qualities are affected by other personality factors such as an internal locus of control, positive attitudes toward the environment, and a sense of personal responsibility (Hines et al. 1986; Prior 1992). The personality factors of the interpretive audience may be more difficult to influence through interpretation, and more research is needed on opportunities for educative strategies to develop them (Hines et al. 1986; Hungerford & Volk).

Nevertheless, some personality factors may still be targeted by interpretive content; namely the locus of control over an environmental issue. Hines et al. (1986) found that people with an internal locus of control, or the perception that they are able to create change through their own actions,[36] were more likely to report that they engaged in environmentally responsible behaviour. Knowledge (of obstacles to action, of behaviour options) and previous experience determine the strength of locus of control, such that an internal locus of control is unrealistic if one has little information about the desired behaviour (Ajzen & Driver 1992). Again, this suggests that as part of the premise of Standard VIII, educative interpretation should be explicit about the type of behaviour it intends to inspire amongst whale watchers, and why the behaviour is important to the protection of whales and/or the environment.

Further to this last point, the reasons for or importance of environmentally responsible behaviour as presented by interpretative content must be cautious to avoid an indoctrinating tone.[37] Indeed, a sense of personal freedom can be an important factor in environmental behaviour (Iozzi 1989), and regardless of one's knowledge or perception of a specific action, it is still an individual's choice to engage in it. This implies that educative strategies which intend to generate certain behaviour (e.g. compliance or certain behaviour on-site), yet do not attempt to engender favourable attitudes (for instance), may fail because of a perceived denial of the freedom of choice.

Hines et al. (1986) address this point in terms of 'situational factors' in their model, which acknowledge that issues of self esteem, freedom, and (by contrast) social pressure can influence the preparedness to learn, the inclination to take certain action, and the consistency between attitudes and behaviour (Ajzen & Driver 1992; Ajzen & Fishbein 1977 cited by Newhouse 1990; Bardwell 1991; Dick, McKee & Wagar 1974; McInnis 1975; Stern, Dietz & Kalof 1993). Thus to facilitate best practice interpretation according to Standard VIII, it may be important to consider the prior knowledge and

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[36] as opposed to external forces; also see Newhouse (1990)

[37] as argued in Chapter Three, section 3.2.4

attitudes of whale watchers to avoid creating feelings of embarrassment or isolation as reactions to the way 'appropriate behaviour' is presented to them.

Another situational factor which is especially relevant to interpretation in a nature-based tourism context is the time of exposure to information about environmental behaviour (e.g. information on the issue, on action strategies). In the classroom, short term exposure to educative material has been less effective in creating behavioural intent (Hines et al. 1986). In a whale watching experience, the time available for interpretation as learning material is highly variable,[38] and may be brief. In this case, other aspects of learning theory may facilitate the introduction of information cited as important by the Hines et al. (1986) model in a manner that accounts for the limited time available for its acquisition. A later section (4.5) details this learning theory, but first it is necessary to describe a noteworthy interpretive effort which demonstrates the relevance of Hines et al.'s (1986) model to whale watching, and hence supports Standard VIII as pertinent to this tourism specifically.

4.4.3 Creating an Intent to Act Via Whale Watching Guidelines

The *Australian Whale Watching Guidelines* produced by ANPWS (1989) for the nation's industry are an integral part of managing the tourism, and have been discussed earlier in terms of their contribution to the environmental protection objective of interpretation.[39] This section demonstrates that they are also important in that they incorporate critical factors for inspiring environmentally responsible behaviour, as endorsed by Hines et al.'s (1986) model, and hence constitute a means of addressing Standard VIII in the interpretation of current and future whale watching enterprises.[40]

The ANPWS' (1989) guidelines include information relevant to all of the following: an internal locus of control, indepth information on the issues, action strategies, and action skills (Table 8). In terms of engendering an internal 'locus of control' for protecting whales, the guidelines address the audience directly, and appeal to a range of activities in which whale watchers might participate. By doing so, the guidelines have the greatest *potential* to overcome any perceived limitation of their application to a whale watching context alone. That is, the guidelines may convey the notion that no matter how one encounters a whale, he/she is responsible for a specified type of action to ensure their protection.

The guidelines offer reasons for the behavioural requests, which adds to the readers' indepth knowledge of the issues. Explanations of the importance of whale protection range from appeals to instrumental values (ie. legal penalties, personal safety, enjoyment

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[38] as seen in section 4.3

[39] guidelines are also used in some form in many other whale watching industries around the world (Carlson 1995); refer to Chapter Three, section 3.2.2

[40] A complete version of the guidelines as they appear in an ANPWS brochure is found in Appendix 2

TABLE 8 Factors of Environmentally Responsible Behaviour in Whale Watching Guidelines

Hines et al. (1986) *Factors*	Content of the *Australian Whale Watching Guidelines* (ANPWS 1989)
Locus of Control	**Text appeals to:** • the reader, directly (ie. 'do', 'do not') • all types of people who may encounter whales: Boaters, Divers, Pilots, Swimmers
Knowledge of Action Strategies	**Description of:** • limits to approach distances (and their dependence upon the approach methods) • approach methods (direction of manoeuvres, consideration of whale activities and whale groups) • noise constraints and sources of influential noise • limits to numbers of vessels in the proximity of whales
Indepth Knowledge of Issue	**Ecological factors and other information on the resources of whale watching** (included in the brochure): • Reasons for an increasing population of whales • Why whales visit Australian waters and importance (ie. to their life-cycle) • Where to watch whales • Protection of whales by legislation • Relevance of guidelines to small cetaceans **Information on consequences of inaction:** • legal penalty • human safety • loss of tourism amenity • whale disturbance • whale abandonment of area • risk to whale recovery **Appraisal of the outcome of action:** • satisfaction and safety of whale watchers • lack of interference with whales
Action Skills	**Compliance requires ability to:** • judge distances • identify and interpret whale groups and behaviour • be able to contact authorities

Source: Compiled by the author

of whales and the coast) to the implications for the animals in both the short and longterm (e.g. upsetting whales, permanent abandonment of the area). Once armed with the knowledge and motivation to behave according to the guidelines, readers would also find possible action strategies within the text, which comprise the most detailed feature of the guidelines (e.g. 'when aboard a boat, do not come closer than 100 metres to a whale'). Examples of the skills necessary to take action for whale protection are implicit within the guidelines, such as an ability to judge the prescribed approach distances.

There are some apparent weaknesses in the ANPWS (1989) guidelines in terms of their current ability to achieve all aspects of Standard VIII for interpretation in whale watching. For instance, whilst the type of behaviour addressed by the guidelines can be considered 'longterm' in that it is *applicable* to any encounters with whales, [41] the guidelines may not always be *explicit* in their relevance to behaviour in non-tourism contexts. Similarly, descriptions of the consequences for inaction are not as comprehensive as they perhaps could be, in respect to an outline of the implications for the natural resources beyond the tourism activity. Furthermore, information on other ecological features of the whale watching experience is lacking in the guidelines, despite the potential to provide a longterm/holistic perspective of the importance of the desired behaviour to non-human stakeholders *other* than the whales. Thus to address all aspects of an environmental protection objective (Standard II) and best pursue Standard VIII, interpretation which uses these guidelines would need to further develop themes about the broader effects of human behaviour on the recovery of whale numbers,[42] *and* address appropriate behaviour/consequences for other elements of the marine/coastal ecosystem.

Despite their potential shortcomings, the *Australian Whale Watching Guidelines* show that the proposed Standard VIII regarding holistic themes and environmentally responsible behaviour is applicable and advantageous to the interpretation created for this tourism. As with the other standards proposed in the thesis, the greatest advantage which could be gained by pursuing Standard VIII may come from its integration with the other standards, where attention is granted to main points such as making interpretive objectives explicit (Standard II) or the timing of interpretation's delivery (Standard VII). As an example, the *delivery* of the current content of the whale watching guidelines is also an essential consideration (cf. proposed Standard VII, p. 89).[43] Without more information on the Australian whale watching industry, it is not clear when or where tour operators and whale watchers have access to these guidelines, although previous discussion (and common sense) suggests that they should be available to these parties prior to or at the very least during the tourism experience.

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[41] Relevant longterm behaviour can also include the reporting of infringements of the guidelines.
[42] recall Chapter One, section 1.2.2 on the longterm implications of adverse impacts to whales.
[43] e.g. in terms of *when* the visitors receive information on how to behave appropriately in the vicinity of whales

In respect to the integration of best practice standards for interpretation in whale watching, discussion is incomplete without an indication of how to help an interpreter devise an appropriate message or theme (e.g. what should be said about ecology, what is meant by 'in-depth'), or how the different types of knowledge endorsed by a reasoned action model (cf. Hines et al. 1986) might be gained. These features in the development of interpretation can be assisted by ideas from learning theory, and give rise to a final proposed interpretation standard specific to aspects of its style, composition, tone, content and delivery.

4.5 Activating Mindfulness Through Interpretation

4.5.1 A Catalyst to Cognitive Learning

To this point, the proposed best practice standards in this chapter have intimated the types of information which should be addressed by interpretation in whale watching, and how it should be delivered in terms of timing and the tourism experience. Yet as a form of communication, best practice interpretation should also be able to present information in a manner that facilitates its acquisition and retention, before it can be translated into satisfaction or environmental protection.

For guidance on how people gain and use information about the environment, it is advantageous to look to cognitive psychology, which emphasises objectives of attitude change and behaviour related to learning, and which has also been influential to the use of interpretation (e.g. DART 1978; Hooper-Greenhill 1994; Moscardo 1995). One prominent theory from this field to demonstrate great promise for enhancing interpretation in whale watching is the notion of 'mindfulness.'[44]

Langer (1989) describes reactions to information as either 'mindful' or 'mindless', where the audience for interpretation, for example, would either devote their attention to the information (a mindful response) or choose to ignore part or all of what is said or written (a mindless response). Langer (1989) suggests that part of the significance of the theory of mindfulness is the notion that the way information is taken in can affect how it is processed. When an individual is mindfully taking in information, he/she maintains a receptiveness to new ideas and become aware of more than one perspective on an issue (Langer 1989). Hence a mindful state of whale watchers toward interpretation is desirable, because the form of information processing which results from this state of attention may increase the possibility they will be inspired to behave in an environmentally responsible manner.

The state of mind of the visitors and the characteristics of interpretation which indicate, hinder or enhance a mindful orientation toward information can be represented in a

[44] Other theories from cognitive psychology have been applied to the use of interpretation in tourism (e.g. conditioning, observational learning; see Orams 1994; 1996), but the focus on mindfulness in this thesis coincides with the ideology that interpretation is not manipulative, and that information can directly target individuals in its audience.

matrix, as adapted by Pearce (1988) from Langer's (1989) pioneering work.[45] As seen in Figure 9, indicators of a mindful state of visitors are also those which are part of the objectives of the use of interpretation (ie. enjoyment, learning, behaviour), and characteristics of mindlessness must be overcome through the content/delivery of interpretation during the tourism. Aspects of interpretive content that can promote mindfulness are best developed through other ideas from learning theory that represent 'creativity' or an appropriate level of complexity.[46]

The theory of mindfulness can enhance the use of models such as Hines et al. (1986) and Hungerford & Volk (1990) (and thus help to pursue Standard VIII), for it describes how information can be acquired as well as how it is applied toward a particular end. Since reasoned action models in a sense already assume an active information processing state of the visitors, they in fact require the application of mindful techniques to operationalise them. For example, as a complement to Hines et al.'s (1986) work, the theory of mindfulness indicates that interpretation should be constructed and delivered in a manner which motivates visitors to expend the mental effort necessary for learning (S. Carlson 1995:10), otherwise the presentation of information will be sterile. Put simply, if the model of environmentally responsible behaviour depicts 'what information is necessary to create an intent to act', mindfulness suggests 'how this information must be conveyed.' Hence, the theory of mindfulness adds the function to the model for environmentally responsible behaviour by describing ways by which an interpreter can encourage the active processing of information by his/her audience.[47]

In respect to the environmental protection objective of interpretation, mindfulness characteristics within the content can encourage information processing on a higher level, such as the formation of attitudes that can lead to environmentally responsible behaviour (S. Carlson 1995).[48] However, in a tourism context, Pearce (1988:152) and Moscardo (1991) agree that the tendency for visitors to behave mindfully may be dependent in part upon their familiarity with the experience. For instance, those who have previous experience may engage in behaviour patterns which they have come to associate with the tourism or recreation activity, which may render them less receptive to new ideas or information (Langer 1989; Moscardo 1991). Thus a challenge for interpretation is to counter any of the visitors' preconceived ideas of how to behave during the tourism experience if their expectations are inappropriate to the current activity, and again,

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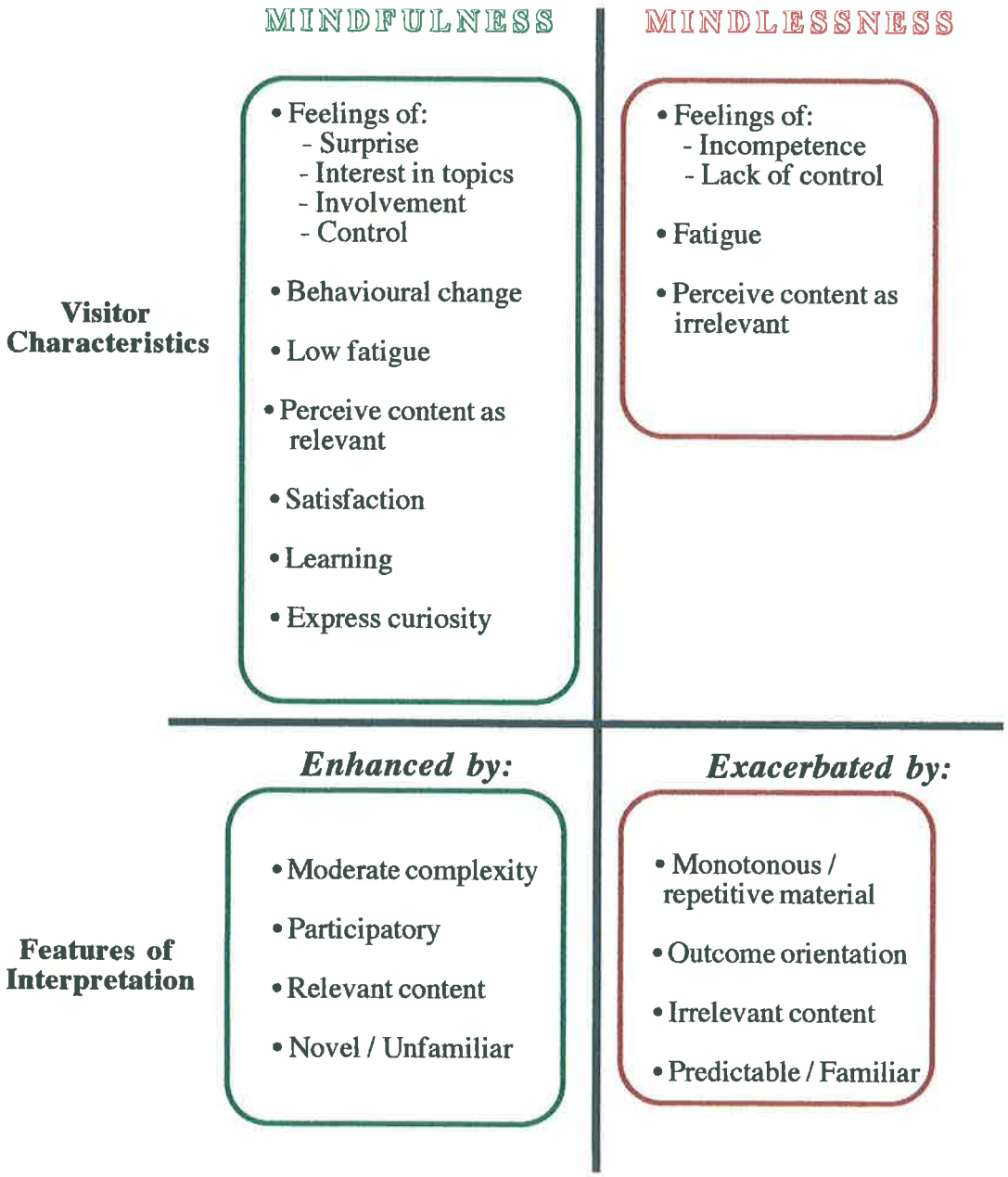
[45]A detailed description of these characteristics of mindfulness and mindlessness can also be found in Moscardo (1988, 1991); Moscardo & Pearce (1986).

[46]discussed in sections 4.5.2, 4.5.3

[47]Also see Petty & Cacioppo's (1986) model of attitude formation, which has been described by Pearce (1988) as analogous to mindfulness, and also bears resemblance to Hines et al.'s (1986) model. Petty & Cacioppo (1986) depict two alternative 'routes' to attitude formation and/or change, where a central route of processing mandates qualities similar to those promoted by Langer (1989) and Hines et al. (1986), whereas peripheral cues (comparable to situational factors) can interrupt the processing of information.

[48]This notion is supported by Petty & Cacioppo's (1986) model of attitude of formation (see above) which finds that attitudes formed from a central route of processing (ie. similar to mindfulness) are more enduring, resistant and predictive of behaviour.

FIGURE 9 A Matrix for Mindfulness Theory



Sources: Langer (1987, 1989); Moscardo (1988, 1991); Moscardo & Pearce (1986); Pearce (1988)

this supports interpretation's explicit delineation of the desired behaviour in accordance with the features of the Hines et al. (1986) model.

A further advantage for the theory of mindfulness illustrates its suitability to the notion of best practice interpretation[49] is that it can also address visitor satisfaction within a tourism context. A mindful response to promotional/orientative information could lead to visitor satisfaction by preparing them for the tourism experience, and also introduce learning as part of the experience, which may in turn result in a more mindful response to educative interpretation (e.g. Moscardo 1991). Furthermore, a mindful response to interpretation can make 'learning' more enjoyable, as suggested by Horne (1996:7) who describes the art of 'attentive looking' as a means for interpretation to create wonder, discovery, curiosity and resonance amongst its audience.

The utility of the concept of mindfulness in addressing all types of objectives for interpretation suggests that the concept is relevant to the best practice of this management tool.

Standard IX

Interpretation should employ techniques within its composition and delivery that are capable of inducing a mindful response from its audience

Though there are sure to be many factors in tourism which affect satisfaction (as noted in previous discussion) and attention to interpretation, best practice of this management tool will still strive to create a mindful response by as many ways as are possible. Aspects of the learning theory presented in the remainder of section 4.5 illustrate how the addition of certain characteristics to the content and delivery of interpretation can facilitate this exercise.

4.5.2 Incorporating Characteristics of Mindfulness Within Interpretive Content and Delivery

An important theory from cognitive psychology which may enhance learning within a nature-based tourism experience is cognitive dissonance, and the associated techniques which can be used within interpretation to create/relieve it. Whilst the original premise of cognitive dissonance as developed by Festinger (1957) can have a negative connotation,[50] it is employed here to signal an opportunity for learning. As such, cognitive dissonance indicates the existence of questions which people are motivated to answer, or a tension which tourists are motivated to reduce. Provision of interpretation can resolve both issues. For example, whale watchers often have questions about the

[49] ie. in light of Standard II for addressing *both* environmental protection and visitor satisfaction

[50] ie. in its original premise, the theory of cognitive dissonance posits that if new information is presented to an audience that disagrees or if it is inconsistent with their present knowledge, the state of cognitive dissonance that ensues is uncomfortable. A person is then motivated to achieve consonance either by ignoring the information or by adding it to their knowledge base and subsequently changing their attitudes to fit the new information (Piaget 1970; Festinger 1957).

whales (and their protection) that can be addressed by interpretation to increase their knowledge and contribute to their satisfaction (Forestell 1993). In the guise of excitement and heightened curiosity,[51] such as when a whale first appears or performs a 'new' type of behaviour during the tourism experience, the whale watchers' cognitive dissonance is a benign but salient opportunity to increase their knowledge about the focal animals (Forestell 1993; Orams 1994, 1995, 1996).

Wildlife tourism such as whale watching is particularly auspicious for this use of dissonance because of the thrill experienced by participants as described above, which is usually fuelled by an inevitable period of anticipation (Forestell 1993; Orams 1994). In this sense, a potential hindrance to conveying information (ie. distraction by whale activity) becomes one of its greatest teaching tools, when interpretation can relay information directly relevant to the witnessed behaviour (Forestell 1993; Kelsey 1991; QDEH 1995). However, interpreters should not forfeit the opportunity for whale watchers to savour the moment, and there is criticism of interpreters who do not know when the best strategy is to say nothing and leave the 'teaching' to nature (Beckmann 1995; Tilden 1977). Hence as a mechanism for learning, techniques such as resolving cognitive dissonance in whale watching are perhaps best used in moderation (Dick et al. 1974; Forestell 1993).

The notion of relieving cognitive dissonance can be of direct relevance to interpretative topics on environmentally responsible behaviour as well. Pennyfather (1975) implies that an interpretive audience can become uncomfortable with the presentation of certain information regarding their own behaviour (particularly for unfamiliar actions or those which they do not currently practice). Pennyfather (1975) suggests that such information be presented in non-confrontational ways such as the use of humour and imagery. Advising whale watchers that 'anyone caught littering in the ocean will be required to retrieve it'[52] may disarm any reluctance to listen to conservation measures. In terms of audience discomfort, proclaiming that 'the choice is yours' and accompanying this statement with vivid imagery of the choices may induce visitors to relieve their own cognitive dissonance (Pennyfather 1975). Such an approach is also in accordance with a non-indoctrinating position advocated earlier.

Another consideration in the use of cognitive dissonance with relevance to the mindfulness of an interpretive audience is the advantage of striking a balance between unexpected and familiar information, whether it be about the focal animals or their protection. In accordance with suggestions in the environmental education literature, interpretation should contain information of high interest but lower familiarity, such that the audience is neither bored nor deluged with information (Lakota 1976; Miles et al. 1983; Stansfield 1981). Learning theory suggests there are limits to the amount of material that an audience can absorb (see Hammitt 1981). Bardwell (1991) contends that

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[51] a form of mindfulness, as noted in Figure 9

[52] paraphrased from one of Pennyfather's (1975) examples

to maintain audience attention, but still enable the incorporation of novelty and the idea of cognitive dissonance, interpretation should be organised in a way which presents information in palatable doses.

Whilst Bardwell (1991) recommends a heuristic measure in harmony with the limits of absorption,[53] a more comprehensive strategy to structuring interpretation entails the use of a flow system to develop themes, concepts, and messages (DART 1978; McArthur & Hall 1996b; Pennyfather 1975; Trapp, Gross & Zimmerman 1994). For instance, one could interpret the migration path of Humpback whales along the east coast of Australia (theme) according to whale activities and their stage in the lifecycle (concept) by discussing where they are believed to mate, give birth, rest and feed (message).[54] When exposed to this information, the necessity of protecting the animals during these important stages in their lifecycle could become more apparent to whale watchers, who may then be inspired to support measures to regulate the industry.

The above techniques from learning theory emphasise the advantages of appealing to the cognitive state of an audience, as part of best practice interpretation proposed by Standard IX. Yet to personalise a topic, interpretation should also consider the role emotions play in judgements, and their influence as part of attitudes and values that contribute to intent to act (Iozzi 1989). The appeal to the affective domain (ie. emotions) as a means of engaging a pupil in the learning process is a familiar feature of the environmental education and interpretation literature,[55] yet Uzzell (1996) finds that most interpretation still tends to be emotionally sterile. Meredith, Mullins & Fortner (1995) blame the neglect of the affective domain in interpretation on the lack of understanding and contention regarding its contribution to learning.[56] Nonetheless, Uzzell (1989b) contends that an appeal to affect is advantageous and appropriate to interpretation, and several authors note its possible benefits for interpretation in wildlife tourism and whale watching in particular (e.g. Barber 1996; Forestell 1993; Orams 1994, 1995, 1996).

Engaging the visitors' affective domain contributes to mindfulness as a means to personalise information, and to instil a sense of responsibility and internal locus of control for conservation issues. Visitors who feel an emotional connection to the whales (from the current experience or previously) may be more receptive to attempts to

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[53]ie. no more than 3 major points within an interpretive product. Bardwell (1991) prefers to err on the side of caution with this heuristic, for other sources from the psychology literature believe the limit of absorption for concepts rests between 5 and 7 , ± 2 (see Hammitt 1981 for a discussion on these limits).

[54]This example is developed according to McArthur & Hall's (1996b) definitions of themes as characteristics of the resource, concepts as the main idea or point of commonality in the information, and messages as what is actually said in the interpretation. It also indicates how an interpreter could create cognitive dissonance if it was unknown amongst the audience that these whales are subject to whale watching along the majority of this migration path (as noted in Chapter One, section 1.2.2).

[55]e.g. Bennett (1974); Borden & Schettino (1979); DART (1978); Hammitt (1981); Iozzi (1989, 1989a); Meredith, Mullins & Fortner (1995); Newhouse (1990); Radbone (1990).

[56]Iozzi's (1989) review of the environmental education literature revealed that the relationship between affect and knowledge is a point of contention; see Maloney & Ward (1973) and Borden & Schettino (1979) for major studies which find discrepancies between ecological knowledge and environmental concern.

personalise conservation issues, which is advantageous for the faceless issues such as marine pollution. In this case, the encounter with the whales provides a living example of what conservation activities seek to protect, and marine pollution can be interpreted as a threat to the very whales witnessed by the participants during the tourism experience.

Techniques such as use of analogy/comparisons, imagery, and storytelling may all serve to personalise information and engage the visitors' affect as a factor in their intent to act in the interests of the whales and environment (Bardwell 1991; Beckmann 1991; Dick et al. 1974; Pennyfather 1975; Regnier et al. 1994). Thus, like the cognitive techniques (e.g. humour, appeals to curiosity, and theme development), the overtures to the affective state of the interpretive audience (e.g. through the personalisation of information, analogies, or emotive text/imagery) should be considered part of the premise of Standard IX for best practice.

In terms of the medium and delivery of interpretation, the mention of this management tool was at one point rarely without reference to the so-called 'interactive' exhibits which were assumed to be superior to passive techniques (Sandford & Kelly 1996).[57] Yet interactive interpretation need not refer only to the medium (ie. as manipulatable components). In the traditional definition of the term, 'interactive' interpretation can seek to develop two-way communication between visitors and interpreters (Beckmann 1995; Pastorelli 1990). For instance, the use of questions is endorsed for both personal and non-personal forms of interpretation, and can prompt or stimulate interest and curiosity, give structure to an interpretation product, and stimulate feedback from the visitors (Oliver 1992; Regnier et al. 1994; Stansfield 1981). This use of questions can promote mindfulness,[58] and in this sense, 'interactive' becomes a technique not a medium, and can avoid the pitfall of distracting from the tourism experience.

In non-personal interpretation (e.g. printed material), questions are still able to induce a thoughtful (though unvoiced) response, and may also be a trick to addressing (or summarising) a great deal of information, where brevity focuses attention on main concepts (Stansfield 1981). Questions in a non-personal form are also unobtrusive, serving more as prompts to focus attention than as a demand for a response.

Another unobtrusive way for interpretation to be 'interactive' (or at least increase visitor involvement with the environment) is the stimulation of senses through prompts. In whale watching, interpretation can draw attention to the smell of the ocean or the sound of a whale song, and guided tours can incorporate the use props such as baleen for

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[57]Some authors are swift to caution that the reliance on gadgetry could detract from the messages within interpretation and from the tourism experience itself (e.g. Beckmann 1991, 1995; S. Carlson 1995; Miles et al. 1988; Tilden 1977). Today the use of 'interactives' is treated with some trepidation by interpretation professionals, but rather than dismiss them entirely, emphasis is on making sure they are justified (e.g. S. Carlson 1995), and whether they work.

[58]ie. in a similar manner to the concept of curiosity and cognitive dissonance cited above; in fact, Forestell (1993) and Orams (1995) consider questions a means of inducing cognitive dissonance, such that an interpretive audience then becomes motivated to seek answers to relieve their curiosity.

handling by visitors. The appeal to different senses focuses visitor attention of specific aspects of the experience, and is advocated as a technique which can contribute to their enjoyment of the tourism experience and can heighten environmental awareness (Brockmeyer, Bowman & Mullins 1982; Crabtree & Gibson 1992; McInnis 1975; Olsson 1985; QDEH 1995). These forms of 'interactive' interpretation as described above are hence part of the premise of Standard IX for best practice, and can support the objectives for interpretation proposed in Standard II.

In terms of mindfulness, there is no agreement upon which (physical) form of interpretation is most favourable to increasing attention to or acquisition of information (see Mahaffey 1970; O'Laughlin 1989; Pearce 1988; Pennyfather 1975). Furthermore, other influences within the tourism context (e.g. staff/financial resources available, platform, visitor preferences) make it difficult to prescribe the 'best' medium for interpretation in whale watching, given the diversity of the industry. Other authors discuss advantages and disadvantages of the different interpretive media at length (e.g. Beckmann 1991; Pennyfather 1975; O'Brien 1988; Sharpe 1976b), but this thesis emphasises the context of a tourism experience as a critical influence on the development and implementation of interpretation (as detailed by the best practice standards).

There is recent advocacy of the incorporation of the types of techniques for creating mindfulness outlined in this section into whale watching interpretation, where they are portrayed as applicable to both commentary and non-personal forms of this interpretation (ie. and hence able to address all whale watching audiences) (e.g. Colgan et al. 1996; Orams 1994, 1995, 1996; QDEH 1995). The techniques receive different emphasis in the literature depending on the author, and it is acknowledged here that the present discussion is not exhaustive in its coverage of all potential means of engendering a mindful reaction to interpretation, of learning in a tourism environment, or of inspiring an intent to act in an environmentally responsible manner. However, the proposed Standards VIII and IX for best practice interpretation *do* incorporate some of the most prominent theories toward these ends. They also highlight techniques which correspond to additional standards (e.g. goals for interpretation), in accordance with the theme that the standards in this thesis are of greatest value to the enhancement of interpretation in whale watching as an ensemble.

4.6 Summary of the Chapter's Standards for Best Practice Interpretation

The standards for best practice proposed in this chapter are summarised in Table 9, and primarily concern the products and practice of interpretation in whale watching. Several correspond to the notion of an expanded role for interpretation in a promotional and orientative capacity, in addition to its traditional emphasis on the provision of educative information. As part of a broader information strategy for whale watching (proposed in

TABLE 9
Summary of Product and Practice Standards for Interpretation

Standard Number	STANDARD FOR BEST PRACTICE INTERPRETATION IN WHALE WATCHING
V	Interpretation should be developed as part of a broader information strategy for whale watching, where its content and delivery extend to promotional and orientative information that can promote visitor satisfaction and environmental protection
VI	In the guise of promotion/orientation, interpretation should generate realistic expectations amongst visitors regarding: (1) features of the tourism experience in general (e.g. whale activity; but also interpretation as *part* of the experience); (2) the potential to address their personal needs and interests within this experience; and (3) appropriate (ie. non-impact) behaviour during the experience
VII	Interpretation should be delivered according to stages in the tourism experience, in an ordinal manner that corresponds to its use as promotion, orientation and education
VIII	Interpretation should appeal to visitor characteristics and present holistic information which are outlined by a reasoned action model as conducive to environmentally responsible behaviour.
IX	Interpretation should employ techniques within its composition and delivery that are capable of inducing a mindful response from its audience

(Source: Author)

Standard V), interpretation can engender realistic expectations amongst its audience regarding the tourism experience. By addressing the types of expectations in Standard VI, interpretation can increase its capacity to satisfy visitors, and facilitate its educative function regarding whale and environmental protection. These roles of interpretation are further enhanced by regard for the timing and location of its delivery, where certain topics are best addressed during specific stages in the tourism (Standard VII).

To fulfil the role of interpretation in promoting environmentally responsible behaviour, Standard VIII suggests that its content should incorporate the primary features of a reasoned action model, such that the knowledge whale watchers gain from interpretation is conducive to their inspiration to take action for whale and environmental protection. Finally, Standard IX proposes that the style of the presentation of information by interpretation be specifically designed to gain a mindful response by its whale watching audience. The use of various techniques from learning theory in the development of interpretive text or commentary may increase its potential to this end, which in turn is important to pursuing the goals and objectives for best practice interpretation.

This point illustrates that the standards for interpretive products and practice in this chapter are also relevant to interpretive processes. Indeed, discussion revealed how the application of several educational and visitor management theories can enable interpretation's content and delivery to complement and operationalise the goals of interpretation from Chapter Three. As such, the standards in this chapter show that efforts[59] toward each interpretive objective can contribute to benefits for all of whale watching stakeholders. Also, the important features of interpretive content and delivery noted by the standards can be first addressed in planning, where they guide the design of the entire interpretive program (ie. interpretative topics and form; when, where, how, by whom it will be delivered). When incorporated into evaluative efforts, the premises of these standards can serve as indicators of interpretive quality (as exemplified in the empirical part of this thesis; Chapters Five through Nine). In addition to particular aspects of interpretation, this chapter revealed several visitor characteristics that are of consequence to the development and implementation of best practice interpretation, and which can also be indicators of its performance in whale watching.

Hence all of the best practice standards developed in the conceptual part of this thesis (Chapters Three and Four)[60] are of value to the creation and implementation of interpretation, as well as to the empirical review of the 'quality' of existent interpretive efforts. To maximise the utility of the standards, and enable a comprehensive approach to the enhancement of interpretation in whale watching, the standards are of the greatest value to both aspects of the research as an ensemble. The task of the next chapter is to translate this set of best practice standards into empirical indicators in order to identify and critique the status of interpretation in the Australian whale watching industry.

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[59] ie. in the implementation of interpretation

[60] and as guided by the conceptual framework detailed in Chapter Two

CHAPTER FIVE
STRATEGIES AND PROCEDURES FOR THE EMPIRICAL ANALYSIS OF INTERPRETATION IN AUSTRALIAN WHALE WATCHING

'(I) caution you about carrying too much baggage...while the moon sails serenely above us and the whales sing freely beneath us. We fuss with tape recorders and cameras, trying to net the image, which, when returned from the processors, can be held in the hand - as if the moon could be held, or the whale's voice carried in a suitcase.'

(McIntyre-Varawa 1991:9)

5.1 Delineating the Empirical Component of Research

For those who do not travel lightly, there is a risk of distancing themselves from the immediacy of the nature-based tourism experience. Whale watchers encumbered with too much photographic paraphernalia, for instance, spend the encounter squinting behind a glass screen which yields an image no greater than that which might have been viewed on a television. By all means whale watchers should bring a camera, but for it to enhance the experience it should be used judiciously and with the knowledge that its product is but one representation of a rich and varied experience. Such a warning to refine the *accoutrements* of the journey should also be heeded by an empirical analysis of the whale watching experience and the use of interpretation therein. This chapter describes a strategic approach to empirical analysis through which the 'netted image' of the status of interpretation in whale watching is not obscured behind a lens of methodological complexity.

The purpose of the empirical evaluation of interpretation within the Australian whale watching industry is twofold: (1) it reveals the current quality of its use of interpretation as a management tool, and (2) it identifies appropriate and priority means by which the industry may enhance its interpretive efforts. In both cases, the empirical analysis is guided by the conceptual framework and standards for best practice interpretation as developed in the previous chapters.

As an ensemble, the proposed standards comprise an original heuristic device for exploration of interpretation in whale watching. They afford meaning to the concept of the 'quality' of current interpretation, as well as give rise to the suggestions for attaining this quality given the nature of whale watching as it is practiced in Australia. The

standards are valid as such a device due to their derivation as either a response to apparent weaknesses in the use of interpretation as a management tool in nature-based tourism, and/or their reflection of significant theories (from education, tourism/recreation, or psychology) which are highly relevant and applicable to the successful use of interpretation. In this chapter, the standards are converted into a useable format for analysis of interpretation in Australian whale watching, which identifies the subsequent targets, procedures and sites of the empirical component of the research.

Like the theoretical component of the research, the empirical evaluation of interpretation employs the conceptual framework developed in Chapter Two for its approach. This framework emphasises the dimensions of interpretation as relevant to the different standards, and defines certain elements of the interpretive setting (the interpreters, audience) and of course the interpretation program itself, as the targets for analysis. The scales for analysis of whale watching include the context of the national industry and a series of case study sites along the southern coast of Australia.

The selection of case study sites is supported by issues arising from the national status, along with additional factors regarding the diversity of site features described in the present chapter. It is appropriate to include both scales of whale watching in this discussion of the empirical strategy, since the same techniques are applied to each scale, including policy, discourse, network and ethnographic analysis. Nonetheless, these techniques vary in their emphasis between the national review and case study sites. The variations are described along with sampling procedures, key populations and interpretive material for each respective scale and site.

5.2 The Use of Interpretive Standards for Empirical Analysis

5.2.1 Hypotheses for Interpretive Standards

Examination of the status of interpretation in Australian whale watching entails comparing the current use of the management tool to best practice standards. In empirical analysis, the primary emphasis for the standards is the dimension of interpretation (process, practice, product), which is a format more conducive to their practical application as an heuristic guide. For the convenience of the reader, Table 10 reiterates the standards for best practice interpretation in their entirety, and according to their most relevant dimension(s) of interpretation.

Null hypotheses (listed on p. 115) are derived directly from these standards, but are also based in part on the issues identified in the available literature about the use of interpretation in nature-based tourism and in other whale watching industries.

TABLE 10 Best Practice Standards for Interpretation; Summarised According to Relevant Dimensions

Standard Number	*Relevant Dimension of Interpretation*	STANDARD FOR BEST PRACTICE INTERPRETATION IN WHALE WATCHING
I	***Process***	The ultimate goal of interpretation in whale watching should be to promote and produce benefits for all of the tourism's stakeholders (human and non-human)
II	***Process***	Objectives for interpretation should be explicit and inclusive of all its potential roles as a management tool (ie. value-adding, on-site behaviour, longterm environmental protection)
III	***Process***	A strategic approach to the development and continued use of interpretation is essential, and should include planning and evaluation activities which are structured, comprehensive and longterm in their perspective.
IV	***Process***	Interpreters should liaise/coordinate efforts with all tourism stakeholders regarding the use of interpretation in whale watching (e.g. policy, issues, materials, delivery), and in particular, pursue opportunities for increasing their own capabilities to produce and implement this management tool.
V	***Practice*** ***Product***	Interpretation should be developed as part of a broader information strategy for whale watching, where its content and delivery extend to promotional and orientative information that can promote visitor satisfaction and environmental protection
VI	***Product***	In the guise of promotion/orientation, interpretation should generate realistic expectations amongst visitors regarding: (1) features of the tourism experience in general (e.g. whale activity; but also interpretation as *part* of the experience); (2) the potential to address their personal needs and interests within this experience; and (3) appropriate (ie. non-impact) behaviour during the experience
VII	***Practice*** ***Product***	Interpretation should be delivered according to stages in the tourism experience, in an ordinal manner that corresponds to its use as promotion, orientation and education
VIII	***Product***	Interpretation should appeal to visitor characteristics and present holistic information which are outlined by a reasoned action model as conducive to environmentally responsible behaviour.
IX	***Practice*** ***Product***	Interpretation should employ techniques within its composition and delivery that are capable of inducing a mindful response from its audience

Null hypotheses regarding interpretation ***process*** standards (I, II, III, IV) for whale watching include:

- Interpretation is only suggested as a means of promoting benefits for human stakeholders.
- The role of interpretation in value-adding receives the most emphasis, and fails to incorporate all objectives as a management tool.
- Interpretation lacks any strategic effort in planning and evaluation, and focuses on implementation.
- Opportunities for enhancing the use of interpretation (e.g. liaison, training) are met with enthusiasm by participants but are not pursued regularly nor representative of all stakeholders.
- Interpreters have experience with tourism and/or the resources of whale watching and enthusiasm for interpretation, but do not have formal qualifications in education or in knowledge on the resources.

Null hypotheses regarding interpretation ***product*** *and* ***practice*** standards (V, VI, VII, VIII, IX) for whale watching include :

- Interpretation is treated as a discrete element of available tourist information and is not pursued through promotional and orientative information.
- The interpretive audience (ie. whale watchers) are not satisfied with available interpretation, nor express an interest in the educative information, or protecting the resources of the tourism.
- Text and images do not portray a realistic experience regarding the nature of whale activity, and omits reference to facilities/amenities and the appropriate behaviour for visitors on-site
- Visitor dissatisfaction is generated by their unrealistic expectations.
- The interpretive audience does not have access to available information during certain stages of the experience
- Selection of the form of interpretation does not account for the contextual variables of the tourism experience
- Emphasis is on entertaining and basic facts rather than the encouragement of specific environmental behaviour after the experience concludes.
- Interpretation centres on the focal animals without reference to additional or more holistic themes and subjects
- Information in interpretation is presented without theme development, and in an arbitrary fashion (in respect to temporal parameters)
- Interpretation text is presented in a passive, fact-based manner that emphasises resource features.
- Content and complexity of interpretation does not account for the audience's demographic and psychographic profile

5.2.2 *Empirical Targets and Tasks*

To test hypotheses about the Australian whale watching industry's processes, practices and products of interpretation, data were collected from four main targets for empirical research. These targets are derived from the structure of the conceptual framework:[1] (1) the interpreters, (2) the audience (3) the (natural) resources for interpretation,[2] and (4) the interpretation program itself. By including all of these targets, evaluation avoids reliance on behaviourist indicators alone to define the status of interpretation in whale watching.[3]

Data collected on the targets of empirical research reveal the degree to which the current use of interpretation in Australian whale watching approximates the best practice standards. Information which would suggest that the current use *does* reflect the premises of the standards is referred to in Tables 11-13 as 'sample indicators' of the interpretive standards. These indicators are the basis for the items addressed by questionnaires and checklists and other techniques for analysis described in the following section. Tables 11-13 display the indicators for interpretive quality according to matrices of the best practice standards (by dimension) and the empirical targets. Indicators overlap, in that they may yield data pertaining to several different standards. Furthermore, as the empirical work is largely exploratory due to the lack of current information on interpretation in Australian whale watching, the indicators 'of ' best practice represent what surveys *seek* within the interpretation efforts, though these qualities may not yet exist.

Also note that the resources for interpretation are portrayed as contextual factors, or features from the setting and focal points of the tourism which create the parameters of the whale watching experience. In this case, the example of the Southern Right whale represents a factor which affects interpretation by its endangered status, on-site behaviour, location (e.g. nearshore; remote area), and duration of presence. These qualities can influence interpretation through choice of content, location and timing of delivery, and scope of the goals for its use. Contextual variables presented by features of the site (e.g. the management regime), setting (e.g. spatial parameters of viewing areas), and resources (e.g. their vulnerability, activity) are considered in the empirical evaluation, and are presented in question form in each of the tables.

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[1] described and depicted in Chapter Two, section 2.4; also refer to Figure 4, p. 40

[2] which in whale watching include the focal animals, marine and coastal environment and flora/fauna, and the history of the site (geological, social).

[3] reminiscent of Mayer's (1995) preference and support for quality indicators rather than performance/behaviourist indicators as a more comprehensive means of evaluating environmental education

TABLE 11 Empirical Targets / Indicators of Best Practice: Interpretation Processes (Standards I - IV)

Empirical Target and Sample Indicator

*	INTERPRETATION**	INTERPRETER	AUDIENCE
I	• The content of interpretation reflects visitor preferences, and contains reference to the protection of whales and the environment.**	• Definitions of interpretation provided by interpreters depict it as a management tool that intends to create benefits for all stakeholders	• They are satisfied with aspects of the tourism experience mentioned in interpretation; and with the available information. • They are compliant with regulations •They express interest, knowledge, & an intent to protect resources
II	• Objectives for the role and purpose of interpretation appear in policy documents • Objectives address the use of interpretation for value-adding and environmental protection (on-site/during the experience and longterm) and specify outcomes for each role.	• Perspectives of interpretation role(s) are consistent with policy documents. • Perspectives express the intent, desire, actual use and outcomes of interpretation as a value-adding and educative tool for environmental protection.	- as above -
III	• Policy documents specify strategies to plan, implement, evaluate interpretation. • Strategies include: a timeline for longterm effects of interpretation; efforts to monitor, modify it; all potential sources (interpreters, locations) for its creation and delivery.	• If explicit policies do not exist, they are able to provide details of planning and evaluative procedures • They acknowledge that audience data is used to aide planning; other sources used; their own role in the procedures. • Staff and resources devoted to interpretation are cited.	• (Indirect); A database of demographic and psychographic information exists that has been used for planning interpretation.
IV	• Policy documents promote liaison between interpreters and other tourism stakeholders. • Opportunities for liaison specify roles, responsibilities for all potential interpreters. • Policy documents represent interests of all interpreters. • Policy documents indicate a commitment to measures (e.g. training, accreditation) to improve the abilities of interpreters.	• Perspectives on the role(s) and use of interpretation are consistent with other interpreters'. • They have regular formal and informal contact with each other and actively seek/exchange information regarding interpretation issues. • They have/seek direct experience, qualifications, and training in communication, biology (or related science), education, tourism.	• (Indirect); Information on the audience is exchanged by stakeholders
	Contextual Questions: • Does the emphasis of interpretation roles vary according to site/setting, whale watching type? • Do objectives mention benefits for particular resources (or the 'environment' in general)? • How does the timeline & spatial use of interpretation vary with setting features and the site's management regime (e.g. budget, staff) • How does the particular management regime of the site coordinate policy for interpretation?		

KEY NOTES
* Standard for Best Practice Interpretation (Table 10, p. 123)
**In this case 'interpretation' can also include policy that discusses interpretive programs for whale watching
*** Other factors in visitor satisfaction, and whale/environmental protection are covered within other indicators.

TABLE 12 Empirical Targets / Indicators of Best Practice: Interpretation Practices and Products (Standards V - VII)

Empirical Target and Sample Indicator

*	INTERPRETATION	INTERPRETER	AUDIENCE
V	• Information is available for each stage of the tourism experience, and covers each potential form (e.g. promotional, educative). • Promotional and orientative information is interpretive.	• Together, all potential interpreters provide information for each stage of the experience. • They consider interpretation to be more than its educative form (e.g. also orientative etc.)	• They receive information at all stages of the tourism and pertaining to all their needs and interests.
VI	• Interpretation as promotion and orientation covers whale activity, physiological needs, comfort, expectations (etc.) and appropriate behaviour on-site • Text and images in any interpretation match the most likely potential for whale sighting; their activity; their likely distance and numbers.	• Any of their commentary reflects the indicators in the 1st column for interpretation (left).	• Their satisfaction is linked to the fulfilment of particular needs mentioned by interpretation (e.g. no disappointment with facilities) and features of the experience. • They are satisfied with features about the tourism experience mentioned in interpretation • Their expectations are consistent with the information from accurate interpretation. • They are compliant with regulations
VII	• Promotional and orientative information is delivered prior to the tourism experience. • Educative information is delivered during and after the experience.	• Together, they contact the audience at each stage to provide interpretation. • They provide appropriate types of interpretation according to the stage when they contact the audience.	• Their travel patterns are conducive to accessing sources of interpretation and/or to personal contact opportunities with interpreters
	Contextual Questions: • What are the spatial boundaries for the availability of each type of information? • During the whale watching experience, when is each type of information received? • Do stages vary according to the type of experience/site, and can they be manipulated? • How do different sites, setting/resource features cater to visitor needs and affect their satisfaction? • Are the resources and setting conducive to the delivery of interpretation in a structured order? • How does the type of whale watching experience affect access opportunities for interpretation? • Are expectations similar for each site/type of experience? • What setting or resource features affect the form of interpretation? • What whale/environmental protection actions are necessary and possible for the setting and resources?		

KEY * Standard for Best Practice Interpretation (Table 10, p. 123)

TABLE 13 Empirical Targets / Indicators of Best Practice: Interpretation Practices and Products (Standards VIII - IX)

Empirical Target and Sample Indicator

*	INTERPRETATION	INTERPRETER	AUDIENCE
V-III	• Topics go beyond factual information on biology/behaviour of the focal species in subject, scale, and style. • Regarding tourism resources, interpretation text promotes ways to protect them; explains their significance and makes the connection between current and *future* behaviour toward them. • Interpretation text: offers incentives to behave in a certain manner; indicates that the audience is responsible for and capable of behaving in this way.	• Any of their commentary reflects the indicators in the 1st column for interpretation (left). • They indicate a perspective that the audience can/should behave in a way to protect the resources of the tourism.	• (Indirect); They indicate, for example, knowledge of both facts and environmental issues regarding the focal animals after exposure to the interpretation. • They behave according to management directives during the experience (identified in interpretation) • They indicate an interest in actively protecting the resources in future, and a belief they can protect the resources (whales / the environment)
IX	• Delivery and text of educative topics: follow a structured theme development; raise/answer questions about the subject; adjust to what is happening in the moment. • Printed interpretation can be manipulated by the audience to yield information; prompts activity or questions they answer themselves. • Information provided by interpretation: is organised into themes; is novel; uses imagery, analogies, emotive issues/words; induces/resolves questions. • (Indirect); In conjunction with the audience, interpretation is of an appropriate level of complexity, readability.	• Any of their commentary reflects the indicators in the 1st column for interpretation (left). • They are aware of /have access to demographic information on the audience relevant to their interests and ability to comprehend interpretation.	• They do not have any remaining questions on specific information covered in interpretation** • They show interest in interpretation and pay attention to it. • They indicate knowledge gained from the interpretation, and enjoyment from it. • Demographic and psychographic information matches interpretation
	Contextual Questions: • What setting or resource features could be included in interpretation? • What longterm actions are necessary and possible for the setting and resources? • What possible themes exist for the site, setting, resources? • Are demographic and psychographic traits consistent between sites? • Does the type of resource or setting influence the visitor's sense of responsibility, control, awareness of appropriate action?		

KEY * Standard for Best Practice Interpretation (Table 10, p. 123)

**Though of course their curiosity regarding additional information can generate questions that are left unresolved during the experience, but which they may pursue later.

5.3 Empirical Targets and Respective Techniques for Their Analysis

Techniques introduced below for data collection and analysis were used for both the national and case study scales of empirical research, although as noted earlier, their emphasis, samples, and sampling procedures varied between scales and between the case study sites. Detailed descriptions of these procedures employed for each scale are reserved for section 5.4.

5.3.1 Data Collection for the Interpretation Program

Data collection on printed interpretation products for whale watching in Australia, such as signs or brochures, first entailed the use of a basic checklist of features (Table 14). Whilst of utility to the descriptive review of interpretation (e.g. Barber 1996; Niedermeyer 1992), use of a checklist alone yields insufficient information and may impose artificial or subjective measures (e.g. scoring) (Norris 1994; Somekh, Davies & MacLure 1994). The current research attributes further meaning to the checklist information by coding it (cf. Weiler et al. 1992) and subjecting its findings to discourse analysis. The interpretative content in particular is analysed according to a deconstructionist approach (see Culler 1982; Eagleton 1983; Peck & Coyle 1984) in order to disclose its conceptual and ideological foundations, language, and ideas.

Regarding the ability of the interpretation to satisfy visitors, for instance, promotional and orientative information serve as their introduction to the whale watching experience. Hence data from the checklist that identifies promotional content is analysed to identify how it portrays the whale watching experience, and the role of learning within the tourism. Data on the distribution of this type of interpretation indicate if visitors are likely to come across it at the appropriate stage during the experience, and the implications of its accessibility for visitor satisfaction. As another example, data on the images of whales can be reviewed in terms of their potential influence over visitor expectations and personal evaluation of the whale watching encounter, and the (conveyed) impressions of whales in general (e.g. as exciting, accessible, entertainers).

Educative interpretation is subjected to content analysis to determine how issues like whale protection are conceptualised (e.g. as something visitors can/should contribute to, or an authority's responsibility). This analysis also reveals whether or not 'resources' of the tourism are portrayed as primarily of value to humans. In a pedagogic sense, data on educative interpretation suggest its potential to generate a mindful response from visitors.

Features of the implementation of interpretation are not the sole basis for discourse analysis in this empirical component of research. The interpretation program as a 'target' for analysis also includes any policy documents which provide directives for the planning and evaluation of interpretation (e.g. Management Plans, where available). Further analysis of this information reveals the intended general direction for interpretation as a management tool in whale watching, its expected benefits, and the expanse of prescriptions for its use.

TABLE 14 Checklist For Data Collection from Interpretation Programs

Distribution parameters:

* Number and type of locations where it is found (e.g. tourist information bureau, onboard whale watching vessel, local shop)
* Distance from the whale watching site (e.g. if beyond the region), and setting (e.g. if in the region but not on-site)
* Position at the setting

Physical features:

• Size (of signs, of portable printed material)
• Materials (e.g. metal or wood signs)
• Appearance (e.g. black & white or colour, dominated by text or images)

Content:

• Promotional/Orientative topics: mention of safety, expectations (e.g. weather conditions, whale activity), equipment (e.g. binoculars), rules/regulations and/or codes of behaviour
• Educational topics: mention of focal animal (e.g. biology/behaviour, conservation status, role in ecosystem), other features of the coastal/marine environment, site significance, history, sources for further information, opportunities for action to protect tourism resources off-site

Delivery:

* Readability[4]
* Accuracy, citation of source of information
• Prompts for action/interaction, attention directing (e.g. questions, use of senses)
* Style of text (e.g. stories, analogies, examples)
* Emotive topics, words
* Identifiable themes and their development

Diagrams/Images:

• Focal animal: species, feature (e.g. body part), activity
• Presence and scale of other natural features (e.g. species, landforms)

KEY: * appropriate for case study sites only; • used in both national and case study reviews

[4] a measure of complexity advocated for interpretation research and relevant to the theory of mindfulness (e.g. Beckmann 1991; Stansfield 1981; Trapp, Gross & Zimmerman 1994), related to the age at which one is expected to be able to comprehend text. See Appendix 3 for formulae to calculate reading age.

5.3.2 *Data Collection for the Interpreters*

As policy documents for interpretation in whale watching represent the culmination of decisions undertaken by relevant stakeholders, policy analysis in the current research also considers the perspectives of those who contribute to the planning, implementation and evaluation of interpretation. To understand policy processes such as decision making, data are required on the organisation of participants in these processes. In absence of a formal structure for the roles and responsibilities of whale watching interpretation stakeholders, analysis focuses on aspects of the informal network of communication between tour operators, resource managers and non-government organisation staff, and addresses such features as:

- structure; in terms of interpreters (groups, individuals, variance), their roles/responsibilities for interpretation in whale watching (e.g. plan, implement), and parameters in their liaison (below)
- liaison frequency and context (e.g. meeting, training program, correspondence)
- differentiation between individual and/or group objectives and alliances that influence the function of network as a means for communication

To generate data on the above, information was collected from the main interpreters through social survey techniques of questionnaires and interviews. Features of liaison and other social survey topics for whale watching interpreters are outlined in Table 15.

Within the surveys, the phrasing and emphasis of these topics varied only slightly according to the different types of interpreters (e.g. tour operators vs. resource managers),[5] and all topics were used for both self-administered questionnaires and as prompts within structured interviews with interpreters (see section 5.4). In general, when these topics were included in questionnaires, they offered a combination of open-ended and closed-ended responses, the latter of which often included the choice of 'other' or the opportunity to clarify and qualify one's response. Questions were pilot tested amongst selected interpreters from case study sites to assess their lucidity, validity and relevance. Interpreter questionnaires appear in their entirety in Appendix 4.

5.3.3 *Data Collection for the Audience for Interpretation*

Techniques for collecting data on the main audience for interpretation, the whale watchers, were exclusively ethnographic, and included a social survey (via questionnaires) and participant observation. Administration of both techniques was designed to be sensitive to the nature of the tourism experience, and to avoid inconveniencing and/or irritating the whale watchers (see Pearce 1988). This was essential to encourage greater response and natural behaviour[6] from the sampled populations, and to gain access to them in terms of being granted permission from the managers/operators of the whale watching experience to conduct research.

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[5] Also, some additional information collected from tour operators: operation details (type of tour, first year of operation, length of tour, passenger numbers).

[6] regarding questionnaires and observation, respectively

TABLE 15 Survey Topics for Data Collection from Whale Watching Interpreters

Their perspective of interpretation as a management tool:

- Their own definition of interpretation
- What they hope to achieve by providing interpretation (their own perspective and the existence of explicit objectives)
- Their opinion of an ideal change to existing interpretation efforts
- What they would find most helpful about a national strategy for interpretation in whale watching

Personnel, resources, and other support for interpretation

- Who provides interpretation (staff position, number, commitment, variance)
- Annual budget for interpretation
- Provision and participation in training opportunities for interpretation
- Frequency, type (formal/informal), and information exchanged during liaison with other whale watching management stakeholders and/or interpreters

Planning, implementation and evaluation of interpretation:

- Procedure for planning their interpretation
- Information sources used for planning interpretation
- Use of different forms of interpretation (e.g. printed, commentary)
- Stimuli for changes to interpretation forms
- Intended audience of interpretation (who, number)
- Topics of educative interpretation
- Involvement in promotion of whale watching
- How they gain feedback on interpretation and the whale watching experience

Efforts to avoid disturbing the tourism experience during the social survey imposed restrictions on the distribution/collection, length and detail of questionnaires, and the nature of participant observation (see below). Nonetheless, the format and topics of the questionnaire and the features for observation discussed in this section were generally consistent between sites.

(i) The Whale Watcher Questionnaire

Self administered questionnaires were provided to whale watcher populations at each case study site, and respondents retained anonymity by returning their completed forms by post or by placing them in collection boxes.[7] Though this precluded the possibility of follow-up contact with respondents, it was considered of great importance that the survey procedure avoided any social desirability bias.[8] Clarity and simplicity were primary factors in the design of questions (see DeVaus 1990), though they covered an extensive range of topics regarding the whale watching experience, interpretation, and environmental knowledge and issues. Only one site (the Head of the Bight) was surveyed over two whale watching seasons, and the format and questionnaire for the initial survey varied slightly from the second (Table 16).[9]

Like the interpreter questionnaire, topics were approached through open-ended and closed-ended[10] questions. The latter allowed respondents greater flexibility in their answers, which were then categorised according to their subject matter. Respondents were also given the freedom to include their own selection for closed-ended questions (ie. in a multiple-choice category of 'other'), and comments were welcomed at the end of the questionnaire. Appendix 5 provides a complete list of questions and the questionnaire layouts for whale watching populations at the different case study sites.

(ii) Participant Observation of Whale Watching Populations

In the current research, actual 'participation' by the author in whale watching activities was minimal, but the position on-site, appearance, and recording of data on visitor behaviour were designed to be inconspicuous and unobtrusive (see Spradley 1980), and to avoid being perceived as an authority figure. Structured observation was utilised at land-based whale watching sites to indicate the use of on-site interpretation (ie. educative signage) and compliance with management regulations (cf. Lime 1988). Data collected regarding the interpretative signs included:

- the proportion of visitors who stopped at the sign compared to the total numbers of people observed during the sampling period
- the amount of time visitors spent in front of the sign (ostensibly reading)
- the period during the experience when visitors stopped at the sign (e.g. before, during, after viewing whales)

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[7] see section 5.4

[8] where respondents answer according to what they believe the administrator of the survey desires (DeVaus 1990; Pearce 1988; Pearce & Moscardo 1985).

[9] In this case, the initial survey served (in part) as a pilot test for certain questions, although the amount of detail collected by the 1995 survey still offers additional insight into that season's whale watchers.

[10] primarily Likert scales, true/false, multiple choice

TABLE 16 Whale Watcher Questionnaire Topics

Nature of their whale watching experience:

- Date(s) of whale watching
- Time spent whale watching (land-based sites only; boat-based participants were asked how much time was spent actually watching whales)
- * Events of the experience (whale activity and proximity)

Personal details:

- Demographics: place of residence, number of people in their group, group type, ages, membership in conservation group
- * Perspectives of their environmental interest, activity, awareness, responsibility on specific issues for whales and the coastal environment

Purpose of their visit to the site (land-based sites only):

- Main reason for travel to the vicinity
- * Why they engaged in whale watching

Previous experience, interest in whales/whale watching:

- Places and number of times they have been whale watching
- * Preferences for specific features/facilities of the whale watching experience/setting
- Interest in potential interpretation topics relevant to whale watching
- Generally preferences for the nature of whale watching experiences

Sources of their information on whales/whale watching:

- Visits to potential/actual interpretation sources (e.g. information centres)
- Source of information on the whale watching opportunity
- Interpretation collected from various sources
- Sources of previous knowledge about whales
- * Type of information desired and sought before the experience

Their evaluation of the experience and of the available interpretation:

- Exposure to and interest in *available* interpretation
- Unanswered questions about interpretation topics
- Degree to which expectations of the experience were met (including particular aspects that impressed/disappointed them
- * Satisfaction with specific features of the whale watching experience/setting
- Current knowledge about environmentally responsible behaviour issues
- Current knowledge about resources at the site
- Knowledge gained from the experience
- * Future interest in whale watching

KEY: * Additional questions appearing in this first survey

Visitor behaviour was observed in terms of their compliance with management directives and guidelines for appropriate behaviour on-site, such as keeping to designated pathways or carparks, remaining a certain distance from cliff edges, or not walking on sand dunes. At structured intervals, data were recorded on the proportion of visitors in compliance with such directives and those breaching them within a discrete spatial area.[11]

5.3.4 Treatment of Results

Many of the results from the empirical component of research yield qualitative information regarding the status of the interpretation in Australian whale watching and its approximation of standards for best practice. As noted above, qualitative data are coded according to their themes and issues, and subjected to discourse analysis as appropriate. Yet quantitative information distilled from these and other data is also advantageous in the discernment of major trends and patterns in the nature and use of interpretation. Statistical analysis reveals the significance of such trends.

Data are primarily treated by descriptive statistics, including frequency distributions, means, cross-tabulations and standard deviation. Where the sample size is sufficient and normally distributed, tests of significance are conducted on data when relevant to hypotheses. Pertinent statistical tests for this research are chi-square and t-tests, and analysis of data was conducted by means of Excel and SPSS computer packages.

Results were compiled into a summary report for each case study site and interpreter type (in the national context) upon completion of the field work. These were made available nationally to respondents who expressed an interest in the summary reports, and were submitted to key stakeholders in the management of case study sites (and in some cases, results were discussed in person). Results were also presented within several publications/reports for distribution to the public (Reid 1995; Reid 1996 unpub.), utilised as part of public submissions to the management activities of case study sites (e.g. for the Great Australian Bight Marine Park management plan), and provided for consultation by parties interested in future management activities at the sites (e.g. planners for the Warrnambool's development of a marine centre). Updates on the use of interpretation at the case study sites as influenced by the results of this research are provided in the final chapter.

5.4 Scales for Analysis

5.4.1 The National Whale Watching Industry vs. Case Study Sites: A Varying Emphasis on Technique and Target

In the evaluation of the status of interpretation in Australian whale watching, both scales for analysis complement each other. Data from the national review illustrate the strengths, weaknesses and main themes for the Australian industry as a whole, and the identification of the national 'status' of interpretation reveals the (intended) source of

[11] Section 5.4 offers more detailed procedures for the observation of whale watchers.

prescriptions and directions for its use at individual Australian sites. Data from case study sites determine if these themes are specifically manifest in or consistent among individual sites, and yield further detail on the status of interpretation than is possible for the broader national scale.

As the national Australian whale watching industry and activities of discrete sites obviously have disparate boundaries (ie. physical, social), the remainder of the chapter discusses features of empirical work distinct to each scale. Firstly, Figure 10 illustrates how the targets for analysis (e.g. interpreters, audience) receive different emphasis between the scales. This is due to logistical factors (ie. the difficulty in surveying whale watcher populations from all sites), as well as experience parameters (e.g. in the case study site of Albany, verbal commentary cannot come under exactly the same scrutiny as immutable printed material). Corresponding procedures for analysis also vary between the national and case study scales, and between the case study sites.

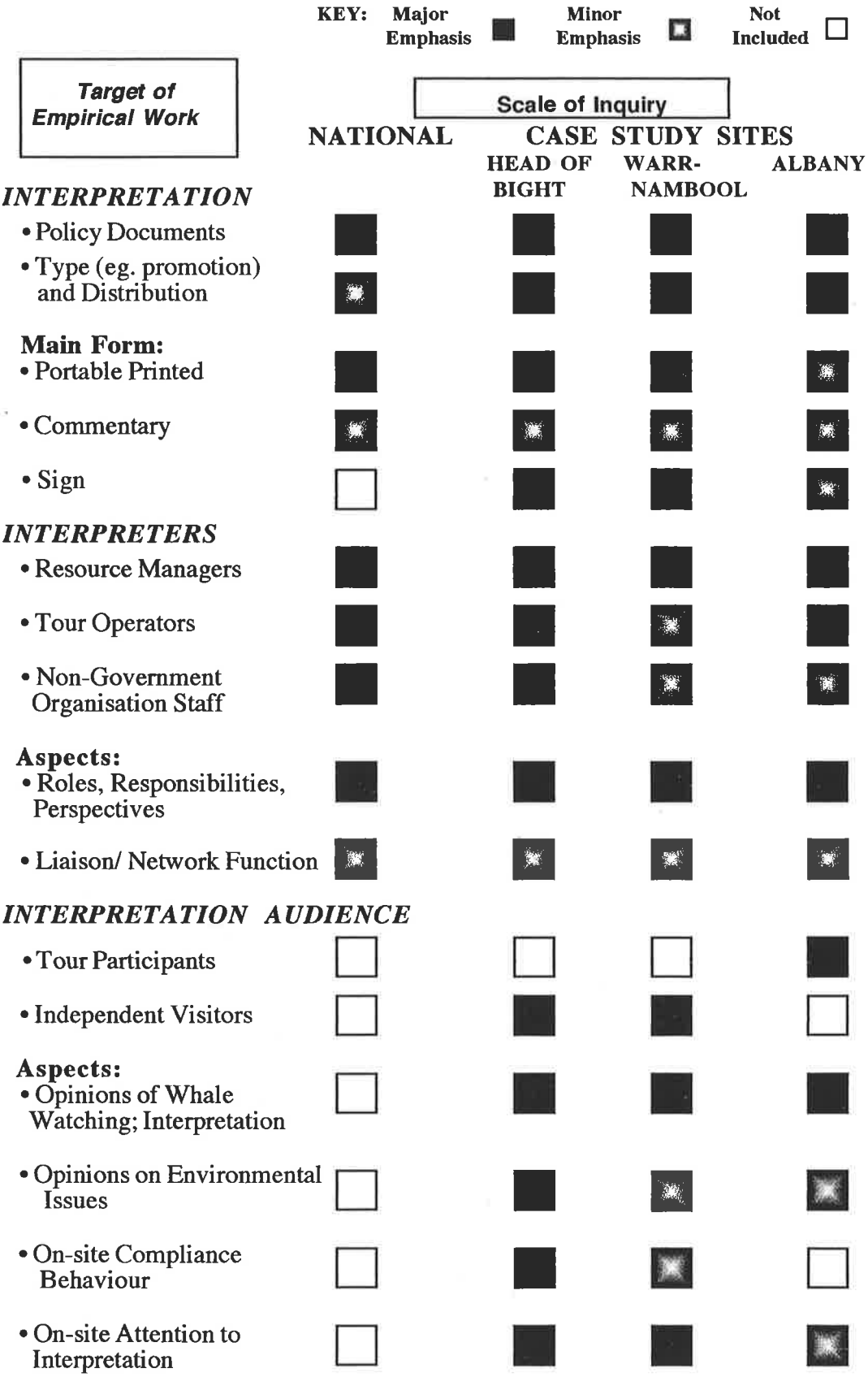
5.4.2 The National Whale Watching Industry: Boundaries and Procedures for Analysis

To evaluate the status of interpretation in Australia's national whale watching industry, the 'human ecosystem' context of whale watching is treated as a phenomenon and a network between stakeholders regarding certain resources, rather than an actual setting. As such, analysis is necessarily more 'human' oriented than that of the case studies, which have identifiable contextual variables relating to the natural resources of the tourism. However, basic features of the resources of the national industry (e.g. common behaviour exhibited by the two main focal species; Humpback and Southern Right whales) are shared between this broader scale and the case study sites, and would affect interpretation in a similar manner.[12] These features and their influence are noted in both scales where appropriate.

In the analysis of the national industry, the primary focus is on the creators of interpretation and interpretive policy, their characteristics, perspectives and use of interpretation. As noted above, such information was gained through their response to a social survey, which was distributed to three main groups of potential interpreters for whale watching: resource management agency (RMA) staff, tour operators, and non-government organisations (NGOs). The sample for these interpreters was derived from sources which indicated their likely responsibility for interpretation (in whale watching specifically and otherwise). For instance, attendance at the *Encounters with Whales* national conference identified key individuals from regional offices of State Environment Departments; guidebooks for Australian whale watching (e.g. Dalton & Isaacs 1992) highlighted each region where the tourism occurs (including those not represented in conferences) and the respective contact agency; tourist information offices of these

[12] Whereas Humpback whales may use different discrete sites for various purposes (e.g. as a nursery area or simply a site along their migratory path), general aspects of their behaviour (e.g. rarely coming very close to shore) are consistent no matter where they are sighted in Australia.

Figure 10 **Scales of Inquiry and Emphasis in Empirical Work**



regions provided lists of local tour operators,[13] and NGOs were selected according to their displayed involvement with cetacean issues.[14]

During July through September of 1996, the self-administered interpreter questionnaires were posted to individuals/organisations identified for the sample. In some cases they had to be redirected if resource management staff or their interpretive duties changed. Certain NGOs responded, but noted that they did not offer interpretation as part of their campaigns for cetacean issues, or not enough of their interpretation related specifically to cetaceans. These organisations did not complete the questionnaire and were not included in sample.

Regarding tour operators, the sample deliberately included all platforms (ie. land-based, boat-based, aerial), and both those operators who focus exclusively on whale watching, and those for whom whale watching is one seasonal product they offer. The questionnaire was directed to the 'tour operator/owner', but a cover letter specified that it required answers about the responsibility for interpretation.

All interpreter questionnaires were accompanied by a similar cover letter which briefly explained the intent of the survey and the issues it covered, but not so that it would be able to induce or lead any particular responses. The questionnaire and letters also requested that respondents enclose relevant printed interpretive material, and examples of promotional and orientative material where appropriate. Follow-up letters were sent as a reminder to those contacts who had not responded after one month, and the sample of questionnaires was finalised at the end of October 1996.

The interpreters who comprise the final sample include the following:

- Government resource management agency staff n = 12 (response rate of 50%)
- Non-government organisation staff: n = 17 (response rate of 53%)
- Whale watching tour operators: n = 30 (response rate of 39%)

This sample was also a main source of interpretation material reviewed on a national scale (ie. that which was returned with the questionnaires), though additional material (and policy documents) were also collected/reviewed independently.

The size of the sampled population of interpreters, in both the national and case study contexts, is limited by those who are involved in such a task for whale watching, rather than the sampling effort. However, response rate is one indication of their interest[15] in contributing to an inventory of current interpretive efforts in the industry.

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[13] many of which were identified by Kaschner's (1993) review; see Chapter One, section 1.3.3

[14] e.g. conservation groups like Greenpeace, museums that published research, tourism associations that advertised whale watching for their state/region

[15] and perceived relevance of a detailed questionnaire for limited interpretive efforts, or their ability to respond to the survey, due to time constraints; see Chapter Six for more comments on the samples.

5.4.3 *A Cross Section of the Industry Offered by Case Study Sites*

(i) Selection and General Features of Case Study Sites

Most information regarding the national Australian whale watching industry refers to the more established sites (ie. mid and south QLD; Perth, WA), to sites focusing on Humpback whales, and to boat-based experiences.[16] Whilst standards for best practice interpretation must accommodate whale watching of this nature (as these types of experiences represent the majority of whale watching activity in Australia at present), there is a significant dearth of information available to guide their application to other types of whale watching in the nation. Data collected from the case study sites compensate for this inadequacy.

Case study sites for the current research include three whale watching regions along south coast of Australia (Figure 11):

• The Head of the Bight, SA; • Warrnambool, VIC; • Albany, WA

These sites represent 2 out of 7 regular land-based sites in Australia, 2 out of 4 aerial sites, and 1 of the 12 boat-based sites.[17] General features of the whale watching experience at each case study site are displayed in Table 17, and described in further detail in sections (ii) - (iv) below.

In addition to a lack of local research effort and representation of these sites in national whale watching discourse, the case study sites also deliberately share a common bond of a focus on the Southern Right whale (*Eubalaena australis*), and represent 3 out of 7 Australian sites where this species is the focal animal of whale watching.[18]

There are certainly some recently developed and under-represented[19] whale watching sites for Humpback whales (e.g. boat-based activity in Northwest Australia; several land-based sites along the West and East coasts of the nation). However, such sites can still benefit from existing interpretation more than those which have a different focal species altogether (e.g. Southern Right whales), and for whom new interpretation materials must be created. Furthermore, the case study sites for Southern Right whales have a discernible and growing whale watcher population conducive to sampling for the current research (ie. there are enough whale watchers to test throughout the season, they visit discrete settings), as well as a recent media push to attract greater participation in the tourism activities.

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[16] in terms of the existing literature at the time of study

[17] 'Land-based sites' in this thesis do not include areas along the coast where whales are *only* sighted opportunistically (e.g. unusual occurrences, sites where whales are occasionally sighted). Instead, the sites refer to discrete locations where whales are nearly always sighted at some point during the whale watching season, and are either resident in the offshore waters or pass by the site regularly. Aerial sites refers to locations where aerial tours were offered in addition to other platforms. For the boat-based site of Albany, all local whale watching boat tours are represented in the results.

[18] Southern Right whales are the focal animal for all sites along the south coast except for Port Phillip Bay, which concentrates on smaller cetaceans. However, this species is occasionally sighted farther north than its usual migratory range, and is opportunistically included in whale watching activities in Perth, Wollongong, and Eden if possible.

[19] in literature and the response to the current research survey

FIGURE 11 Location of Case Study Sites



TABLE 17 Comparative Features Of Case Study Sites

Feature	*CASE STUDY SITE* *HEAD OF THE BIGHT, SA*	*WARRNAMBOOL VIC*	*ALBANY, WA*
General Type of Location	Remote, undeveloped coastal wilderness; population: 0 (except on-site management staff in season)	Coastal resort town; population: 28 000	Coastal resort town; population: 25 000
Platform	Land; Unsealed paths on cliff top; Sporadic aerial tour	Land; Boardwalk/observation deck on foreshore escarpment; Regular aerial tour	Boat; Catamaran Fishing Boats Sailboat
Status of Whale Watching Site	Marine: Great Australian Bight Marine Park Land: Yalata Aboriginal Community Land Lease	Marine: unzoned; Otway ('Shipwreck') Coast (no boat-based whale watching) Land: Council - owned	Marine: unzoned; King George Sound Land: (limited whale watching, but Council-owned vantage points)
Use of site by whales	Consistent nursery area for mothers/calves; pass through area for adults; (up to 60 resident whales at the height of season)	Occasional nursery area for mothers/calves; pass through area for adults;	Primarily pass through area for adults; occasional short term residency for reproductive purposes
Season for Whale Watching	Site open to public from June to early October	Whales present late May to mid-October	Whales present late June to late October
Time Available to Whale Watch	Site is officially open between 8:00am and dusk during the season, with unlimited viewing time during the day	Site is generally open between dawn and dusk, with unlimited viewing time during the day	Tours offered range between 2.5 hours and full day; once or twice daily.
Whale Watchers	Main: • Independent visitors (estimated population = 10,000 per season) Other: • Day tour participants • Extended tour participants	Main: • Independent visitors (estimated population = 10,000 per season) Other: • Day tour participants	Main: • Day tour participants (boat-based) (population varies with tours; up to 1000 per season on largest tour boat) Other: • Independent recreational vessel passengers

As illustrated in Table 17 above, the case study sites offer and emphasise different aspects of the whale watching experience, including the management regimes for the tourism, and parameters (spatial, temporal, social) of the activity. The sites also host distinct whale watching populations whose proportions differ between the 'captive audiences' on tour and independent visitors. These populations vary in size and intent (ie. purposeful vs. opportunistic participation in the tourism) and by the duration of their whale watching experience (fixed or variable). For each case study site, the type of whale watcher population which had the majority of members provided the sample for the social survey, though others were cited informally where relevant.

These general features of the case study sites offer both representative aspects of the national industry, as well as distinguishing characteristics which create idiosyncratic needs for their respective interpretation opportunities. Hence data from these sites reveal means by which standards for best practice interpretation can be applied to common features of whale watching in Australia, as well as highlight the considerations for their adaptation to specific sites. A description of the whale watching experience, its management, and the major human and non-human stakeholders of each case study site are outlined in the following sections.

(ii) The Head of the Bight, SA

Located approximately 1200km from Adelaide,[20] the whale watching site at the Head of the Great Australian Bight presents an unusual opportunity along the otherwise featureless and fairly desolate Nullarbor Plain in South Australia's far west coast. At this unique geographical point, an imposing chain of limestone cliffs intersects a mountainous range of sand dunes (Plates 1 and 2), adjacent to a relatively sheltered bay which hosts the calving activities of Southern Right whales.

This discrete section of coastline is in fact considered one of the most significant calving and nursery areas for the species in the entire Southern Ocean, due to the large and consistent amounts of whales which congregate and take up residency in the area each winter (Burnell 1994).[21] The importance of the site to mother whales and their calves has been a factor in its designation as South Australia's first multi-purpose Marine Park, and though at the time of study the zoning of the *Great Australian Bight Marine Park* boundaries were still under discussion (see Edyvane & Andrews 1995), land-based whale watching activity at the site continued as normal.

The imposing cliffs render the whale nursery inaccessible to tour boats, but vantage points atop the cliffs offer a spectacular views of up to 60 whales at a time during the

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[20] or 200km east from the South Australian / Western Australian border

[21] The majority of resident whales remain within approximately 10 km of coastal waters at this site; Burnell (1994); Edyvane & Andrews (1995).

PLATE 1
Cliff Top Vantage Point at the Head of the Bight, SA



PLATE 2
Remote Coastal Wilderness at the Head of the Bight, SA



height of the season. The whales often venture within a hundred metres of the shore-based viewing area, and the remote and undeveloped surroundings of a coastal wilderness provide a scenic arena for observing their activities (Plate 3).

Whale watchers who visit the site are required to purchase a permit to gain access to the land, which is managed by the Yalata Aboriginal community as part of their 456,000 ha lease (administered by the Aboriginal Lands Trust). The Yalata Land Management Program (YLMP) was developed in 1995 to oversee land management activities at the site, and the YLMP manager and staff who reside temporarily at a 'ranger station' known as White Well Tank (Plate 4) have contact with the whale watchers and develop interpretive programs as part of their duties. At the cliff-top viewing area (approximately 10km from White Well Tank),[22], visitors are unsupervised and can remain watching whales from dawn until dusk. At the time of the empirical work there were no amenities at the site (ie. shelter, benches, toilets), and the viewing area remained unsealed (without boardwalks or platforms) and unbound except by signs identifying restricted areas.

In addition to independent whale watchers, several land-based tours also operate in the area, and range from small group camping excursions that last several days to luxury coaches which make lunch break 'stop-offs' at the site during their journey across the Nullarbor Plain. One aerial tour operated in the vicinity during the time of study, and also included an extended stay with the use of terrestrial vehicles at the site. Tour operators are required to seek permission and coordinate their activities with directives of the YLMP, and though their participants are a discernible presence at the site, independent whale watchers are the predominant population (est. 10,000 per season).

The primary land management issues at the site are chronic, and pertinent to the visitor activity within this fragile and dangerous coastal area (Dubas 1989). For instance, the limestone cliffs can be unstable, and even in the designated viewing area (approximately 2km) the edges can be undercut and prone to dislodgment (Plate 5). Pedestrian traffic at the site is intended to be confined to a select number of unsealed walkways, as marked by a border of white stones. However, the tendency for visitors to clear new paths in the interest of 'short-cuts' and their intrusion into designated 'revegetation areas' have resulted in a scarred landscape in which formerly pristine vegetation has been noticeably damaged (Plate 6). The interpretive efforts at the site correspond mainly to these issues (ie. in engendering appropriate behaviour amongst the visitors), and also include the provision of educational materials regarding the focal animals.[23]

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[22]Detailed site layouts for each of the case study whale watching areas are depicted in Chapter Eight according to the location of interpretation sources.

[23] These are described in Chapters Seven and Eight

PLATE 3
A Close View of the Southern Right Whale at the Head of the Bight, SA



PLATE 4
YLMP's White Well Tank 'Ranger Station' at the Head of the Bight



PLATE 5
Under-cut Cliffs of the Nullarbor Pose a Danger to Unaware Land-based Whale Watchers



PLATE 6
Pedestrian Traffic at the Head of the Bight Has Forged New Paths in the Fragile Coastal Vegetation



(iii) Warrnambool, VIC

Popular as a coastal resort town within a leisurely driving distance from Melbourne, VIC (approximately 260km), Warrnambool is a prominent base for visitors to the 'Shipwreck Coast' along the southeast of Australia. The exposed coast of Warrnambool features a varied landscape of cliffs, headlands and beaches, although it is in proximity to the latter where Southern Right whales are most often sighted. A viewing platform situated atop a large established dune system at Logans Beach (Plate 7) seems ideally located, as many of the whales which regularly visit and occasionally take up residence in the area are often found directly in front of this distinct section of the coast.[24] Adequate views of the animals are afforded by the platform, particularly due to the coastal affinity of this species (Southern Right whale) as noted at the Head of the Bight. As the Logans Beach whale watching platform is set back from the beach, however, binoculars greatly enhance the viewing experience at this site (Plate 8).

Independent land-based whale watchers, like those at the Head of the Bight, have unrestricted access to the site in daylight hours. Again, there are no tourist amenities at the platform itself, although Logans Beach is only several kilometres from the town centre, and public toilets are located within one kilometre at an adjacent beach. The independent whale watching population at the site is estimated at 10,000 although no official records are kept of visitor numbers during or between seasons. Land-based tours have been known to stop at the platform when there is a guarantee of whales in the vicinity, although these cannot be considered 'whale watching tours' and are extremely rare in their visitation. Of greater regularity are the aerial-based tours of the site, where a fixed wing craft and helicopter (two different operations) offer views of the coast and the whales during the season.[25] Nonetheless, as both craft carry only a few passengers, the main tour operators at Warrnambool estimate that their clients represent no more than 10% (at most) of the entire visitor population of whale watchers.

The whale watching platform (approximately 15 metres in length) is located on Council-owned land. Yet as a form of interaction with wildlife, the District Office of the Department of Conservation and Natural Resources oversees the whale watching activity, occasionally sending a District Officer to the platform when large crowds are present, and maintaining interpretive signage located on the platform. A primary management concern is the pressure of pedestrians upon the surrounding dune system. Since the platform area is limited, large crowds may extend beyond the perimeter and use dunes as a vantage point. Also, there is access to the beach below the platform via a stairway, though some visitors risk the steep descent through the dunes. Access to the whales by the whale watchers is possible, as bathers and surfers can venture out toward the animals from the beach below the platform. It is DCNR's responsibility to ensure they comply with guidelines for approach distances.

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[24]Mother and calf pairs may remain in the vicinity for the duration of the season, as 'residency' in an area allows the newborn to gain strength and mobility skills before the journey back to the Antarctic.

[25]ie. when whales are resident, the helicopter passes over the site several times a day

PLATE 7
A Viewing Platform for Whale Watchers at Logans Beach, Warrnambool (VIC)



PLATE 8
Whale Watchers at Logans Beach Spot a Southern Right Whale Breaching Offshore



(iv) Albany , WA

Comparable in size and nature to Warrnambool (ie. a coastal resort town of 25,000 residents), Albany attracts tourists from Perth (410km NW of Albany) and the south coast of Western Australia for its spectacular views, National Parks, town amenities, and historical sites (Plate 9). In reference to the latter, a distinguishing feature of Albany is a disused whaling station at Cheynes Beach.[26] In fact, Albany has the notorious distinction of being the last site in Western society to hunt whales, for its activities endured until 1978. Whilst by that time the sought-after catch was the Humpback whale, the sheltered harbours in Albany host Southern Right whales as the main focal point of its youthful whale watching industry.

Boat-based tour operators in the area have regularly offered whale watching products since the early 1990s,[27] although there were still fewer than half a dozen in operation at the time of study. Tour products range from small groups aboard sail boats and fishing vessels to upwards of 50 people aboard a catamaran, although the frequency of tours vary from occasional (sailing) to twice a day (catamaran). All vessels patronise the same area of the harbour, where the backdrop of cliffs the border King George Sound add to the scenic amenity of the tours (Plate 10), and where sea lions may be sighted in the local waters as well.

The Southern Right whales are infrequently found closer than an hour's (sea) journey from the town jetty, however, lookout points close to the town centre and a public beach are considered reasonable locations for the occasional sighting, and the latter hosts an interpretive sign regarding whales and whale watching .

Tour operators are required by the Department of Conservation and Land Management (CALM) to obtain a permit for their activities, and the major management issue for the District Office of CALM is to ensure that the operations are in compliance with the whale watching guidelines that are part of their permit requirements.

5.4.4 Procedures for Data Collection from the Case Study Sites

For each case study, several interviews were conducted with primary interpreters (who were identified from information about the site and reconnaissance visits) regarding the topics outlined in section 5.3, and many of the sample also completed questionnaires providing standardised information for analysis. The social surveying took place during the 1996 whale watching season for Warrnambool and Albany, and for the 1995 and 1996 seasons at the Head of the Bight (there were personnel changes between these seasons).

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[26] a former rendering plant and departure point for whaling vessels; now a whaling museum open to the public and offering exhibits and guided tours of the facilities

[27] although some tours have been in operation much longer (ie. Southern Ocean Charters; as offering fishing and diving excursions), and pioneered whale watching tourism in the area.

PLATE 9
King George Sound and the Former Cheynes Beach Whaling Station in Albany



PLATE 10
A Scenic Backdrop for Boat-based Whale Watchers in Albany



Interpreters contacted in person most frequently included resource management agency staff and tour operators. Certain non-government organisation staff for the Head of the Bight and Warrnambool were also major contacts for the research, although these interpreters were mostly consulted off-site. When possible, meetings were attended where several interpreters were present, though the agenda of these meetings was not exclusive to interpretation and often covered other whale watching management issues. Data collected from these contacts/sources were subjected to policy and network analysis, and the sample comprised the following distribution of interpreter types:

- Government resource management agency staff n = 6
- Non-government organisation staff: n = 5
- Whale watching tour operators: n = 13

Primary examples of interpretation analysed for the sites included printed products (n= 23) and commentary from all tour operators, as well as policy documents for the use of interpretation. Printed interpretation, when portable (e.g. brochures, booklets), was either provided directly by the interpreter, or collected from other sources where it was available to the public (e.g. tourist information offices, shops). Features of interpretive signage were documented during reconnaissance visits to the sites.

Samples of the interpretive audiences (ie. whale watchers) of each case study site included respondents to the questionnaires (see section 5.3) and those observed on-site. Table 18 lists the sample type, size, sampling time frame and main parameters of data collection for whale watchers.

Whale watchers were given self-administered questionnaires during their experience. At the Head of the Bight, whale watchers received questionnaires (one to a group) as they entered the site and purchased a permit for whale watching from the staff of the Yalata Land Management Program [YLMP].[28] However, they were requested to refrain from completing the survey until after they finished viewing the whales. Completed questionnaires could be returned to the YLMP ranger station on-site, collection boxes off-site (e.g. nearby roadhouses), or posted to the University. A sample of 1500 whale watchers over the 1995 season was deemed appropriate given previous estimates of the annual population (e.g. Josif & Mingatjuta 1993; McKenzie, pers. comm.; YLMP 1993). Of this estimate, 1300 surveys were distributed, with a response rate of 19.2%. As the sampling period was shorter in 1996, 500 questionnaires were distributed, but the response rate was much higher at 78.8%.[29]

In Warrnambool, questionnaires were distributed by the author to whale watchers as they departed the site, sampling one person in every third group. Completed questionnaires

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[28]The original intent for the sampling procedure was to distribute one questionnaire to every other vehicle, but during pilot testing YLMP staff noted that it proved too difficult to keep track of the effort if several vehicles arrived at once.

[29]see results in Chapter Nine, section 9.1.2 for potential factors in the response rates of whale watchers

TABLE 18 Interpretative Audience Samples at Case Study Sites

SAMPLE & STUDY SITE	SAMPLE SIZE	TIME FRAME	DATA COLLECTION
QUESTIONNAIRE RESPONDENTS			**Distributed / Returned**
Head of the Bight *1995*	n = 250	27 July - 14 October 78 sampling days*	all: Manager / Box on-site on-site box off-site post
1996	n = 394	20 August - 10 October 45 sampling days	
Warrnambool	n = 124	31 July - 29 September 19 sampling days	Author / Box off-site on-site post
Albany *Silver Star Cruises*	n = 53	3 August - 9 September 7 sampling days	Tour / Box on-site Operator on-site
Southern Ocean Charters	n = 53	8 August - 3 October 18 sampling days	
ON-SITE WHALE WATCHERS; OBSERVED FOR PATRONAGE OF INTERPRETIVE SIGNS			**Spatial / Temporal**
Head of the Bight	n = 209	21 - 25 September 5 sampling days	1 Discrete / On their area arrival at the sign
Warrnambool	n = 2107	31 July - 9 August 6 sampling days	1 Discrete / On their area arrival at the sign
ON-SITE WHALE WATCHERS; OBSERVED FOR THEIR COMPLIANCE WITH MANAGEMENT DIRECTIVES			**Spatial / Temporal**
Head of the Bight	n = 84 sampling intervals of: 460 vehicles, 947 people total	2 September - 10 Oct. 28 sampling days	Transect / Fixed interval area
Warrnambool	n = 68 sampling intervals of: 2261 people	31 July - 5 August 6 sampling days	1 Discrete / Fixed interval area

* Sampling days were not always consecutive within the time frames

could be returned to collection boxes at various venues in town, or to the postal address. Of the 1000 surveys available (based on estimates of the annual whale watching population by Westhorpe, pers. comm.), 509 were distributed with a response rate of 24.4%.

In Albany, tour operators of two different companies, Silver Star Cruises and Southern Ocean Charters, distributed questionnaires to each passenger on their whale watching excursions.[30] Surveys were completed by whale watchers on the return trip to the landing after viewing whales, and were returned to collection boxes or staff before disembarking. Of the 100 surveys available for Southern Ocean Charters, 55 were distributed with a response rate of 96.4%. On the larger Silver Star Cruises vessel, 150 surveys were available, 92 distributed and a response rate of 57.6%.

Observation of whale watchers only took place at the land-based case study sites (Head of the Bight, Warrnambool), and assessed their compliant behaviour (ie. in accordance with management directives at the sites) and their attention to interpretive signage. Refer to Table 18 for sampling parameters and populations. Visitors to the whale watching platform in Warrnambool were observed systematically by the author to determine whether or not they read the interpretive sign. The total amount of visitors to the platform was recorded on each of the sampling days (n = 2107), as was the number of these visitors who approached the interpretive sign (572). For each group who approached the signs, one member was selected by random to be timed as he/she read the sign. Time spent reading the sign was recorded for a 234 people over a six day sampling period.

At the Head of the Bight, the interpretive sign that was evaluated through observation was located (during the 1996 season) along the approach to the sole carpark in use at the time, requiring visitors to stop in their vehicle to read it. All vehicles which arrived on-site during the sampling days were recorded, including the number of visitors present in each vehicle (n = 209). Data were also collected for the number of people (in their vehicles) which stopped to read the sign (65). The time during which the vehicles were stopped in front of the sign was recorded as the reading period. Similar to the procedure at Warrnambool, each vehicle represented a group of people, and a total of 27 were timed reading the sign over a five day sampling period.

The compliance of visitors at Logans Beach (Warrnambool) to remain within the confines of the platform was recorded systematically as part of a regular count of whale watchers at the platform, during a period of six sampling days. All visitors were in view of the author's position, and the frequency of instances when they ventured beyond the platform boundaries was documented, along with the viewing circumstances at the platform during these events. Sampling intervals consisted of visitor counts and records of their position every half hour during the observation period. An average of

[30] again, stratified samples did not work with operators distributing the questionnaires.

33 people were present during each sampling interval, and a total of 2,261 were counted during the observation period.

At the Head of the Bight, a more strategic method for observing whale watcher compliance was employed during the 1995 season, and accounted for both drivers of vehicles and pedestrians at the site. In 1995, vehicles were restricted to the use of two carparks and approximately 2km of the coastal track, and pedestrians were not permitted to go further east or west than the two carparks.[31] Observations of the whale watcher movements and behaviour covered a 7.7 sq km of the coast, and encompassed areas designated for visitor activity and those of restricted access (west along the cliffs and in the sand dunes to the east). Observation required a transect approach to collect data from all viewing areas and carparks. Hence carparks & walkways were assigned numbers (from east to west) for ease of data collection, and the observation site was divided into six discrete zones to standardise records of pedestrians who left the pathways.

Data were collected for four weeks (two periods of two consecutive weeks) during the later months of the whale watching season (September and October). Sampling intervals consisted of three observation times per day: mornings (10:00-11:00), midday (12:00-13:00), and afternoons (14:00-15:00). The types of information recorded during observation included details of the vehicular traffic,[32] and the location and compliance of vehicles (e.g. in a carpark, off tracks) and pedestrians (e.g. on or off a path). Data collection began at either end of the designated zones, and it would take an average of a half hour to cover the entire transect. Generally, vehicle and pedestrian movement within the site was not frequent enough to make this technique too difficult. However, the same whale watchers/vehicles could be counted twice depending on their length of stay at the site; thus actual numbers remain unknown. A total of 460 vehicles and 947 people were counted during the sampling intervals, with an average of 6 and 11 (respectively) present during each sample.

Comments on the variation between response rates and other aspects of the sampling procedures are provided in the results for the case study sites (Chapter Nine).

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[31] Participants in four-wheel drive whale watching tours were permitted beyond these boundaries, and not included in the sample

[32] primarily for the interest of YLMP, but also to distinguish between independent and tour-based whale watchers. Data included type of vehicle, registration details, miscellaneous details (e.g. if it was towing a caravan or trailer, if it was a commercial vehicle). Only the data relevant to interpretation and/or compliance are reported in the results.

CHAPTER SIX
INTERPRETATION IN AUSTRALIAN WHALE WATCHING: NATIONAL STATUS AND TRENDS

The story of the whale is so remarkable, that were there not so many witnesses, I would not venture to tell it, lest I be accused of exaggeration.

J. Stillman (1850)[1]

6.1 Chapter Themes: Of Whale Tales and Storytellers

Those who venture to tell the story of whales at Australian whale watching sites are a disparate assemblage, though each is likely to be sincere in his/her effort to develop a worthy and cogent tale. To this point, there has been no attempt to discern the nature of the storytellers' efforts, although the expressed enthusiasm of some regarding interpretation as a means of engendering a conservation ethic and behaviour amongst whale watchers[2] has alluded to a possible purpose of their tales. Yet even if such enthusiasm is widely shared within the whale watching management 'community' of (*inter alia*) government staff, conservation groups and tour operators, there is no certainty regarding how or if conservation attitudes (or other objectives) are expressed and pursued through their use of interpretation at present.

This chapter minimises such ambiguity by presenting results of the empirical investigations of major stakeholders in the Australian whale watching industry, who have interest in the tourism's management as well as responsibilities for interpretation. Results from the national social survey reveal the nature of the interpretation within this industry, where the quality of interpretive processes, practices and products of the survey respondents are compared to the best practice standards formulated in the preceding chapters. Trends within the national profile suggest various strengths and weaknesses in the use of this management tool, and are discussed in the final chapter in terms of their implications for the current performance and future potential of the interpretation for Australian whale watching.

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[1] a passenger aboard the *Plymouth* in the mid 19th century; cited in Stewart (1995:5)

[2] see Chapter One, section 1.3.2

6.2 Key Interpreters in Australian Whale Watching: Response Rate, Representativeness, and Interpretive Resources

6.2.1 Government Resource Management Agencies

The survey of resource management staff from targeted state and federal government resource management agencies (RMAs) yielded a 50% response rate (n=12).[3] This sample of RMAs represented a fifth of all types of 'interpreters' surveyed nationally (20.3%, or 12 out of 59),[4] and is sufficiently representative of the RMA head and district offices involved in whale watching management in Australia.

Some questionnaires were returned from RMA offices without being completed, but were accompanied by an explanation that the office's involvement in whale watching was so negligible as to not warrant participation in the survey. This occurred despite the fact that these particular offices were identified by Dalton & Isaacs' (1992) *Australian Guide to Whale Watching* as contacts for prospective whale watchers. In such cases it is possible that the RMAs did not perceive their status as a public contact to be (or have the potential to be) an 'interpretive' activity.[5] Other RMA offices failing to complete the questionnaire were from prominent whale watching sites (e.g. in Queensland) with known interpretive efforts for the tourism. Their lack of participation in the survey despite obvious involvement and experience[6] in the issue of whale watching and interpretation is curious, but could possibly be attributed to the length, detail, or timing of the survey (during their whale watching season).

The final RMA sample used for analysis represents a larger proportion of state government (at head offices and regional centres/district offices) than federal staff: [7]

16.7%	75%	8.3%
State Department Head Office	State Department District/Regional Office	Federal Government

Thus the majority of data on the national profile are obtained from RMA staff who have a more direct role in the management of whale watching. Position titles of the RMA respondents varied, but in accordance with the preceding distribution and the degree of on-site management responsibility, the majority were District Rangers (Table 19, p. 149).

In respect to representativeness of actual whale watching management interest and effort, the sample comprises RMAs from a majority of whale watching sites, which have regular (rather than opportunistic) activity warranting management attention from

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[3] In most cases, one staff member completed the survey on behalf of all staff at a department who had interpretive responsibilities for whale watching. Hence each component of the sample represents a singular government office (regional, state, or federal), and duties of varying staff numbers therein.

[4] Other interpreters surveyed nationally include NGO staff and tour operators, see below. Including the RMA respondents, the total number of national interpreters is 59. Unless otherwise specified, this chapter refers to 'respondents' as representatives of this sample (n=59) of *all* types of national interpreters.

[5] They may also be involved in whale watching management, yet not employ interpretation as a primary tool; see below.

[6] ie. as noted in published contributions in national conferences on whale watching and interpretation, e.g. Colgan et al. (1996), Postle & Simmons (1994), QDEH (1995), among others.

[7] This is reflective of the existent proportion of the RMA offices involved in whale watching in Australia, and as targeted by the survey sampling procedure.

government departments. Exceptions include the above example from Queensland, as well as Exmouth (WA) and Wollongong (NSW). In such cases it could be that the surveys were perceived as inapplicable, because of the research emphasis on *interpretation* as a main management strategy for this tourism. It is possible that RMAs from these sites do not believe the management tool to be a large enough part of their efforts to warrant a reply.[8]

Regarding the commitment of RMA staff to interpretive duties, the total number of staff from respondents' respective offices who had any such duties was nearly four times that of the sample (46 staff out of a sample of 12 offices).[9] Of this total, few (6.5%) staff are responsible for *both* administrative and 'field work' (ie. direct physical involvement at the whale watching site).[10] Instead, most (24 out of 46 acknowledged staff) engage in interpretative field work on a part-time basis; that is, they are permanent staff, but interpretation is only one aspect of their duties. (Table 20)

Responses to open-ended questions confirmed that the most common scenario of RMA staff's involvement in interpretation is on a part-time basis:

> *'[Interpretation is] a component of field staff day to day work. No staff permanently on interpretive function.'*
>
> *'Interpretation is done on a needs basis and can fall on the shoulders of anyone employed in our office'*
>
> *'1 Community Ed. officer; (interpretation is) approximately 1/20 of total work 1 District Ranger; approximately 1/30 of total work.'*
>
> *'These 5 staff are not totally responsible for interpretation. They would spend only 10-50% of their time.'*

One factor in the part-time nature of RMA interpretive duties for whale watching specifically is the seasonal pressure of the tourism. Several respondents (33.3%, representing 4 out of 12 offices) describe how the focus of staff duties (interpretation and otherwise) alters during the whale watching season, and increased time is devoted to issues regarding the tourism. Nonetheless, the influence of seasonal pressures in terms of estimated numbers of whale watchers varies greatly between sites (e.g. ranging from 3000 in Arakoon, NSW to 25000 in Rockhampton, QLD), and the majority of respondents (66.7%) noted that the staff *number* did not change during the season.

Limitations to staff duties for interpretation appear to coincide with financial resources, though fiscal commitment to whale watching interpretation was difficult to determine as only half of the respondents provided budget details. Of those who did, only the

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[8]especially if these district offices are largely reliant upon the head office for materials or direction of interpretation campaigns for whale watching, as is the case for some respondents; e.g. see section 6.3.2.

[9]As mentioned above, respondents were requested to answer questions about the interpretive activities of their entire office, not only their own personal duties or efforts. However, the total does not include volunteers, who engage in part time field work employment, not just part time effort.

[10]Direct involvement at a site is not necessarily restricted to the whale season, the event of a sighting, or a discrete land-based area. Instead, such involvement or other 'field work' in this context can include the creation/installation of interpretive signage at a site at any time, for example, or the monitoring of boat-based whale watching from a department-owned vessel.

TABLE 19

RMA Respondents to the National Survey: Title and Location

POSITION	LEVEL	NSW	VIC	QLD	WA	SA	TAS	ACT
Project Officer (8.3%)	Federal							√
Wildlife Biologist (8.3%)	State						√	
Information Officer (25%)	State, District/Regional			√	√			
District Ranger (41.7%)	District/Regional	√	√			√		
Manager / Operations Officer (16.7%)	District/Regional	√			√			

TABLE 20

RMA Respondents to the National Survey: General Type and Extent of Interpretive Duties

		Full-time	*Part-time*
Total Staff with Interpretive Duties		32.6%	67.4%
Type of Duties*	*Administration*	10.9%	19.6%
	Field Work (on-site)	23.9%	52.2%

*Figures account for the overlap of duties of staff who do both administrative and field work).

representative of the NSW National Parks and Wildlife Service Office in Merimbula was able to delineate the figures apportioned to whale watching specifically: a mere 0.6% ($3,000) of the total budget. In other cases, the finances devoted to interpretation in general were consistently modest, ranging from $2,000-$65,000 (with a mean of $25,166) for the 1995/96 fiscal year, or an average of only 8.6% of the offices' total budget. An exception was the DEH at Rockhampton (QLD), where a third (33.9%) of a budget of $62,000 was allocated for interpretation.[11]

Regarding both financial resources and personnel dedicated to interpretation, the results suggest there are discernible restrictions to the development and implementation of interpretation by RMAs which could be an influence on the extent of current efforts (see sections 6.3 and 6.4), as well as affect the feasibility of any future (desired) changes.

6.2.2 Non-Government Organisations

The response rate of the surveyed non-government organisations was 53.2% (n=17), and this sample of NGOs involved in whale watching interpretation represents 28.8% of the entire national survey respondents. Again, some targeted NGOs failed to return the questionnaires despite their known involvement in cetacean issues and high profile public education campaigns (e.g. Greenpeace), and were not swayed by reminder letters which were sent a month after the original surveys.

Within the NGO interpreter sample, respondents included those for whom the proportion of their interpretation dedicated to cetacean issues varied from 'most or all' (25.3%) to 'a small amount' (29.4%).[12] It is interesting to note that in the case of the latter, these five NGOs (mostly conservation groups) believed that their whale watching interpretation efforts, though admittedly meagre, could still inform discourse and research on the issue.

Caution was taken when deciphering the representativeness of the NGO interpreter sample. Because this social survey employed 'NGO' as an umbrella category, the types of organisations included in the sample were subsequently quite diverse, and it is acknowledged that other samples of NGOs may have been more or less selective. For instance, other conceptions of 'NGO' could challenge the inclusion of museums,[13] or the exclusion of certain conservation groups with more explicit, holistic agendas (e.g. Coastcare) which could still ostensibly be involved in interpretive activities relevant to whale watching. However, the present NGO sample is not severely restricted in its parameters, since respondents represent a variety of other cetacean conservation issues in addition to their whale watching and interpretation interests. Respondents in this sample are/were involved in campaigns for major legislation regarding cetacean protection in

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[11] of course, the size of the budgets also corresponded to the type of office (ie. state vs. district)

[12] The NGOs' interpretation on cetaceans includes, but is not limited to, the topic *of* whale watching.

[13] SA Museum is included in the sample despite being a government organisation, for its activities for cetaceans (e.g. curating and live research) differ from those typical of the departments included in the resource management agency sample, while its interpretation has more in common (activities, audience contact) with NGOs. Other museums failed to respond to the survey.

general (e.g. *Whale Protection Act 1980*), cetacean issues unrelated to whale watching (e.g. drift nets), research for Marine Parks, and the development of ecotourism policies.

As seen in Table 21, conservation groups and visitor centres were represented most often (52.94% and 29.41% respectively) in the NGO sample. Table 21 also reveals that South Australia was the most frequently occurring state of origin of respondents, followed by Western Australia and Queensland. This is somewhat unexpected in consideration of the greater whale watching effort of the latter two states. The result may be due in part to the fact that the researcher had met personally with many South Australian respondents at some point prior to the survey period, whereas initial contact with NGO personnel from other states was primarily by phone, email or post. The representativeness of the NGO sample in terms of state of origin is still satisfactory, as at least 50% of all surveyed NGOs from each whale watching state responded to the survey.

Staff commitment to interpretive duties resembled results for the RMAs, for most NGOs (69.2%; 9 of the 13 who answered this question) indicated that staff had part-time responsibilities for the management tool. However, the total number of staff within these organisations ranges from one (Marine & Coastal Community Network, NSW branch) to 900 (Sea World), with an average of five staff engaged in the interpretation of cetacean issues. The proportion of the organisations' budgets allocated to interpretation is slightly higher than the RMAs (although only two NGOs provided exact figures). Over a third of NGOs (5 of the 13 who answered this question) apportion 10% or less of the budget for interpretation, and nearly two thirds (8 out of 13) allow up to 20% of the budget for this purpose. Two NGOs (both conservation groups) claimed that more than 50% of their budget went toward costs of interpretation.

As with the RMAs, these basic features of the NGOs in the national survey depict staff and budget traits which may shape the current and future use of interpretation in whale watching. The circumstances of the Australian whale watching tour operators may vary slightly from the above types of interpreters, since the operators all pursue profits and are occasionally sole proprietors. Nonetheless, the next section illustrates that this diverse sample of whale watching operators within the national survey may also be subject to certain resource restrictions in their use of interpretation.

6.2.3 Tour Operators

A response rate of 39% was attained (n=30) by the survey of the whale watching tour operators of Australia, with this sample of interpreters representing approximately half (50.9%) of all of interpreters surveyed nationally (n=59 in total). Responses from tour operators within each whale watching state varied from 14.3% of NSW whale watching operators participating in the survey, to 70% of those from SA. An average of 42% of an individual state's operators are included in the final sample of 30. Tour operators from Western Australia made up the largest proportion of this final sample (43.3%),

TABLE 21
NGO Respondents to the National Survey: Type and State of Origin

	State of Origin					
	SA	VIC	WA	NSW	QLD	
Type of NGO						**Totals: NGO Type**
museum	•					5.9%
Tourism Association	•				•	11.8%
Visitor centre / marine park	•	•	•	•	•	29.4%
Conservation Group	•	●	●	●	•	52.9%
Totals: State of Origin	23.5%	17.7%	17.7%	23.5%	17.7%	

Key: • 5.8% ● 11.8% ● 17.7%

followed by SA (23.3%) and Queensland (20%). A generally poor result from Queensland operators may be due to the timing of the survey (ie. during their whale watching season). In terms of the value of their contribution to the survey, it is unfortunate that this segment of Australia's whale watching tour operators is under-represented in the sample. As the largest (and for some, longest serving) group of whale watching operators, Queensland respondents were expected to provide an abundance of information and demonstrate a greater amount of experience with the use of interpretation in this type of tourism. Nonetheless, the response by lesser-known and newer operators compensates in part for this deficiency, with the diversity of operator characteristics, locations and activities adding to the robustness of the survey as a depiction of the Australian whale watching industry.

The sample's lack of domination by Queensland operators may also explain the discrepancies between it and other databases on the commercial whale watching operators. A significant difference was found in the state of origin of whale watching tour operators between this sample and those attending the 1995 national conference on the management of this tourism ($X^2 = 19.38$, df = 4, $p < 0.001$), as well as with Kaschner's (1993) compilation of these Australian operators ($X^2 = 15.29$, df=4, $p < 0.005$). Tour operators in attendance at the 1995 conference contribute to national policy on whale watching management, and those in Kaschner's sample were used to represent the Australian industry in the IWC international survey on the tourism.[14] However, each are comprised largely of Queensland operators who offer boat-based whale watching tours. Hence the current sample of whale watching tour operators is likely to be *more* representative of the current industry, as Queensland characteristics are for once not depicted as illustrative of the entire commercial whale watching effort in Australia.

It is possible that the current sample also accounts for changes to the commercial industry (e.g. an increase in tour activity in states such as SA and VIC) since 1993 and 1995. This seems likely given that there is a significant difference between the *platforms* in the current sample and Kaschner's (1993) compilation ($X^2 = 26.13$, df=2, $p < 0.001$), such that an increase of land-based sites and aircraft are represented in the present research.

Figures 12 to 14 illustrate the profile of whale watching tour operators within the national survey in terms of characteristics of the tourism opportunities they offer. Overall, the largest groups of whale watching tour operators in the sample (n=30):

- ran boat -based tours [15] (63.3%)
- began their tours in the 1990s (60%),
- are from Western Australia (40%),
- carry 1000 passengers or less in a season (53.3%)

[14] see Chapter One; section 1.3.3

[15] including dolphin watching as a main feature; whales as the exclusive focal animal = 53.3%

FIGURE 12
Tour Operator Respondents to the National Survey: Platform & State

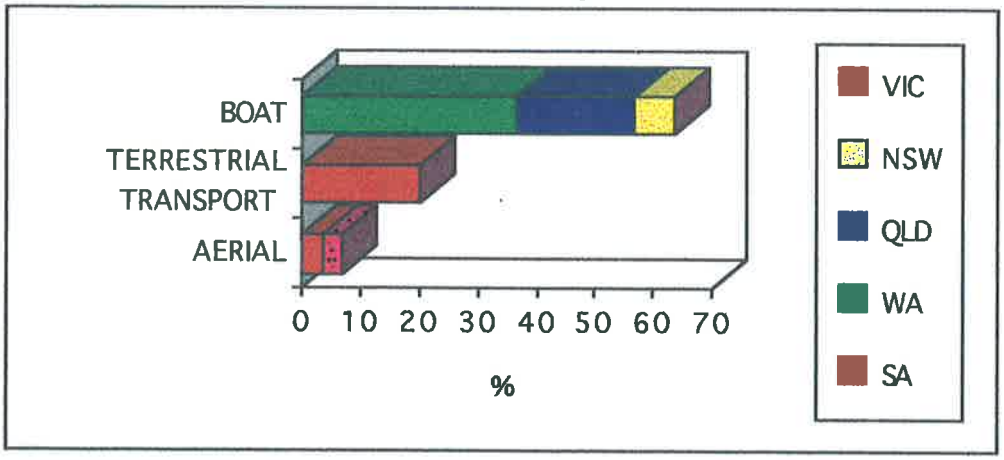


FIGURE 13
Tour Operator Respondents to the National Survey: Start of Business

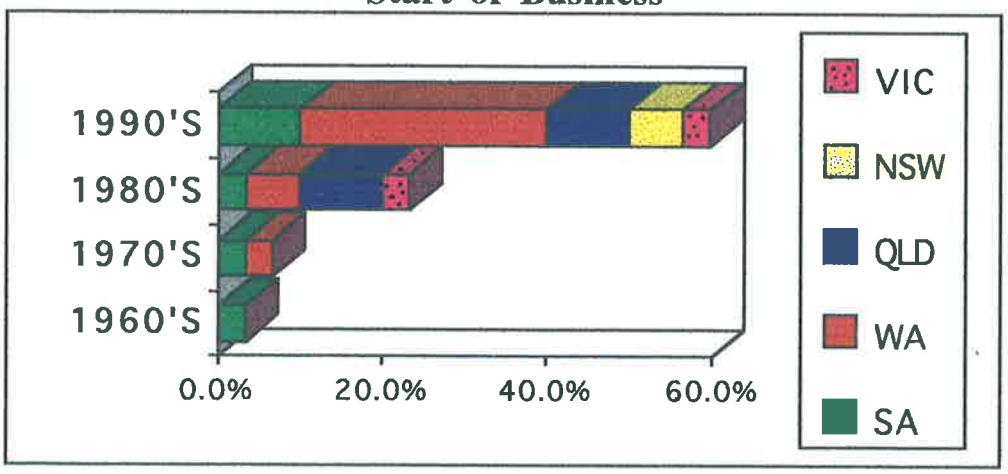
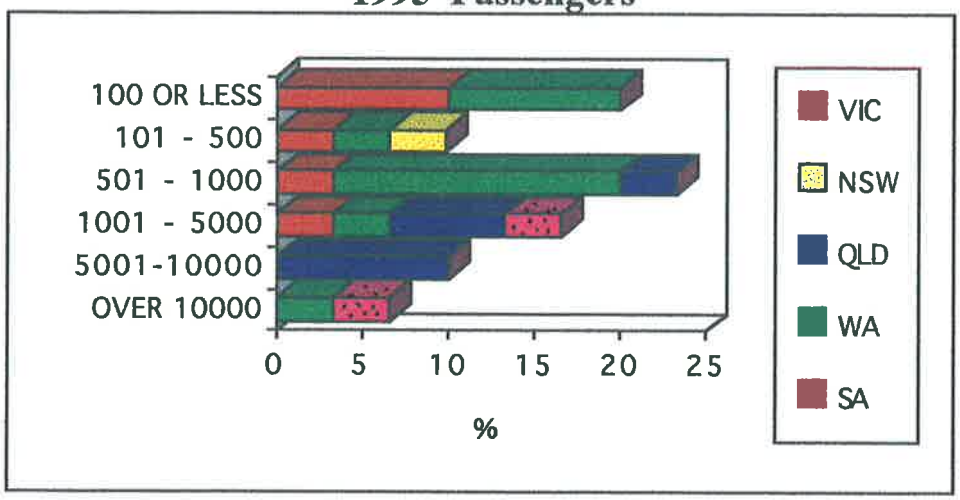


FIGURE 14
Tour Operator Respondents to the National Survey: 1995 Passengers



Only 10% of the tour operations in the sample employed a staff member expressly for the purpose of interpretation, whereas nearly half (46.7%, or 14) claimed that the tour leader or vessel/vehicle driver solely provided interpretation. The remainder delegated or shared the responsibility with crew members, although one did employ the services of conservation group members (ie. the Pacific Whale Foundation). Correspondingly, the majority of the whale watching tour operators (53.3%) only employed one *full-time* staff dedicated to interpretation (ie. the tour leader). However, 40% of this sample of operators (12) also had at least one part-time staff member with interpretative duties, and one Queensland operator claimed to have four full-time staff just for interpretation.[16]

The most frequently cited 'background in interpretation' was simply a (self-proclaimed) extensive local knowledge and experience with whales (53.3%). Those operators with more 'formal' backgrounds (7 out of 30) either held tertiary and postgraduate degrees in biology or tourism studies (including 3 with backgrounds in ecotourism courses), had cetacean research experience (2), or had prior employment as RMA wildlife officers (2). All such backgrounds are relevant to the knowledge of whales and the marine environment, yet no respondents indicated any specialist training or history in education or communication which would be ideal for the creation/delivery of interpretation.

The results from this section (6.2) reveal the diversity of the types of interpreters represented within the total national sample (RMAs, NGOs and tour operators), but one aspect that these interpreters appear to share to some degree is the limited availability of resources for interpretation (financial and personnel). As suggested above, such limitations may hinder their current interpretive efforts and the ability to alter them in future. Of course the status of interpretive resources is an important indication of what aspects of current program are in need of enhancement, and can signify the perceived priority of interpretation as management tool for whale watching. However, there is a need for caution when construing the above results in this manner. The availability of staff and financial resources is not necessarily reflective of RMA, NGO or tour operator *interest* in the use of interpretation. As illustrated in the remainder of the chapter, the interest of the national survey respondents in whale watching interpretation is evident.

6.3 National Perspectives and Processes of Whale Watching Interpretation

6.3.1 Interpretation Definitions and Objectives

According to the proposed best practice Standards I and II for interpretation in whale watching, an ultimate goal for its use should be to promote and produce benefits for all of the tourism's stakeholders (human and non-human), and its objectives should be explicit and inclusive of all potential management roles (ie. value-adding, on-site

[16]Budget details were not collected from tour operators, as a pilot test indicated that respondents were too reluctant to reveal fiscal information.

behaviour, longterm environmental protection).[17] An assessment of the current use of interpretation according to such standards is offered by the national survey respondents' own definitions and objectives for it. Elements of their definitions and objectives are categorised into recurring themes to enable analysis of the open-ended responses, and the conception of and intent for interpretation are often intertwined. On occasion, respondents' definitions of interpretation include their idea of what it should accomplish, and their interpretive objectives correspond to particular stakeholder benefits.

Of all the respondents to the national survey, most (52 out of 59) provided a definition of interpretation in their own words, although a larger proportion of NGOs failed to define the term (23.5% of these interpreters). As depicted in Table 22, the most frequent item cited in the definitions of interpretation was 'factual information' (appearing in 25.4% of the definitions), and respondents often specified aspects of whales and whale watching to be included in the content (e.g. information *about* whale conservation status, migration, breeding). Similarly, respondents were also likely to define interpretation in a passive sense, such as the provision of information via descriptions or explanations, rather than as 'communication' or the interaction between interpreters and their audience:

> '*Information explaining the environmental significance of a topic, specific quantitative facts on a topic, information regarding government policies*' (NGO staff)
>
> '*Explanation of whale biology & behaviour, methods of identification with examples*' (tour operator)
>
> '*The conveying of information from one source to another in a manner that is understandable by all sources.*' (RMA staff)'

Any use of 'active' terms in reference to interpretation tended to be implied:

> '*The imparting of knowledge in a shared experience*' (tour operator);

and only one definition was explicit in its portrayal of interpretation as an active form of communication:

> '*Facilitating the understanding of environments and issues through hands-on participatory activities.*' (NGO staff)

There were no significant differences between the type of interpreter (NGO, RMA staff or tour operator) and the tendency to define interpretation in an active sense,[18] even though tour operators would have a more direct opportunity to communicate with their interpretive audience during their delivery of commentary.

With the depiction of interpretation as a straightforward presentation of facts, there is a risk of that it will be (or is) delivered only in a dry, lecture style. As such it may not be sophisticated enough to address the more challenging objectives for interpretation (e.g. encourage environmental protection), or to even entertain whale watchers. Nonetheless, these types of definitions do appear to coincide with the majority of the objectives for

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[17] a complete list of the standards is located in Chapter Five (p. 114) and can be used as a reference for the empirical chapters.

[18] $X^2 = 2.69$; df = 2; $p < 0.5$

TABLE 22
National Respondents' Definitions of Interpretation

	Tour Operators	**Resource Management Agencies**	**Non-Government Organisations**	**TOTALS** (all interpreters)
'***Interpretation includes...***'*				
Communication	6.7%	0	0	**3.4%**
Descriptions & Explanations	20%	16.7%	17.7%	**18.6%**
Interaction between the audience & interpreter	6.7%	0	11.8%	**6.8%**
Easy to understand information	6.7%	25%	0	**8.5%**
Factual information	26.7%	33.3%	17.7%	**25.4%**

* Categories are derived from open-ended responses of national interpreters. They are not mutually exclusive, nor inclusive of all answer categories.

interpretation as cited by respondents. The most popular task for interpretation (noted by 49.2%, or 29 respondents) was simply to generate 'understanding' of the information provided (Figure 15). Hence definitions which portray interpretation as the transmission of factual information in order to generate this understanding are consistent, if unambitious.

In several instances (7 respondents; 11.9% of the total), the intent for interpretation to create 'understanding' was accompanied by a specified purpose or type of knowledge. Such qualifications did envision a greater role for interpretation than the acquisition of facts about whales. For instance, some respondents believed interpretation should be used to promote:

> '*greater understanding and affinity of [whales]*' (tour operator)
>
> '*...understanding of the importance to protect and preserve [the] wonderful privilege we have of seeing [whales] at such close quarters.*' (tour operator)
>
> '*...whale conservation by increasing awareness and understanding of temperate marine environments.*' (NGO staff)

Furthermore, a notable amount of interpreters in the national sample illustrated an even broader perspective for the use of interpretation, as approximately one third (19 out of 59) believed that it should be used specifically to encourage protection of the environmental resources of whale watching:

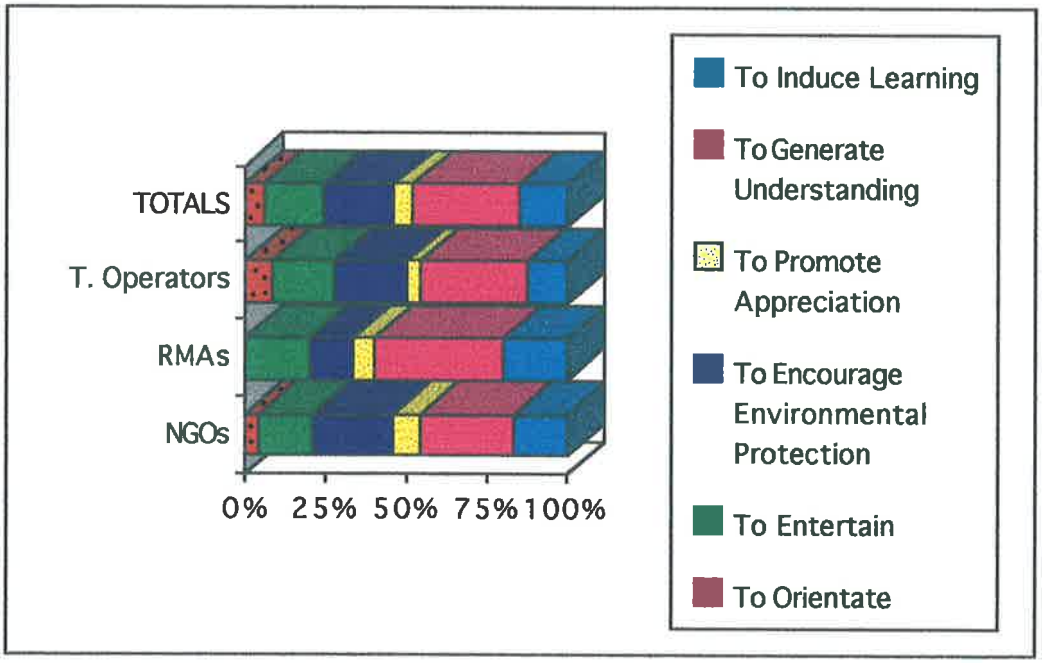
> '*....By encouraging interest in whales [through our interpretation] the hope is as humans [whale watchers] will think of their impact on the environment as a whole and adjust [their] lifestyle.*' (tour operator)
>
> '*We hope to enhance the visitor's experience by providing information and to nurture an interest in the environment. Hopefully this will encourage the newly informed visitor to extend this interest and concern to other environmental issues.*' (tour operator)
>
> *[Our interpretive goal is] 'For passengers to be concerned about the welfare of whales and the environment and that each and everyone can contribute to protecting the wellbeing of same'* (tour operator)
>
> *[Our interpretive goal is] 'Greater awareness as to the plight of the whales and positive action on whaling and ocean environment issues.'* (NGO staff)

Though not the majority's opinion, this type of answer was only second in popularity to the use of interpretation for 'the creation understanding' (noted above), and featured more frequently in answers than the objective to entertain whale watchers (27.1%). In several cases (6), respondents specified whales as the sole (intended) beneficiary of protection, although slightly more (7) claimed interpretation should lead to the protection of *both* whales and the 'environment' in general. Either way, results show that at least one third of respondents have a broader perspective for the intent of interpretation, and approach the premise of Standard I regarding mutual benefits for tourism stakeholders.[19]

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[19]However, the respondents' objectives for interpretation are not necessarily inclusive of all potential roles (cf. Standard II); see below.

FIGURE 15
National Respondents' Objectives for Interpretation



Tests of independence found no significant differences between categories of objectives and the type of interpreter, however a higher proportion of both tour operators (36.7% of 30) and NGO respondents (35.3% of 17) listed environmental/whale protection as an objective than RMA respondents (16.7% of 12).[20] This result is interesting in that 'resource protection' would be a primary mandate for the RMA staff, though it is possible that they consider this to be implicit and thus find no need to mention either whales or the environment specifically in their responses.

Respondents' objectives also reveal how interpretation is (or is not) perceived as part of a broader information strategy for whale watching. The potential advantages of using interpretation to orient visitors to a tourism experience like whale watching are addressed within Standards V-VII, though it should be kept in mind that the use of interpretation in this way ultimately contributes to its roles in value-adding and environmental protection (cf. Standard II). Only five (8.5%) of the national survey respondents listed 'orientation' as a use for interpretation, and all but one of these respondents were tour operators.[21] Data from the case study sites (Chapters Seven through Nine) provide more details on the nature and implications of this scenario, but the national results reveal a missed opportunity for interpretation to fulfil all of its management roles to the best of its ability. Moreover, this omission in the use of interpretation may risk disappointing the interpretive audience (ie. the whale watchers), or failing to prepare them for learning during the tourism experience.

Perhaps more surprisingly, fewer than one quarter (22%) of all respondents mentioned 'learning' as a specific intent of interpretation. Again, this might be considered implicit, and/or their strong support for the objective of 'understanding' and 'protection' may imply that they view 'learning' as an inadequate *endpoint* of interpretation, which should evolve into more applied knowledge through understanding and action. However, only 11.9% of respondents stated that interpretation should result in both learning and enjoyment, and even less (6.8%) said it should lead to both enjoyment and environmental protection. A mere 3.4% (2 respondents) mentioned interpretation's orientative role along with its role in environmental protection. Overall, few respondents (15.3%, 9 total) included more than one kind of role for interpretation in their own definitions and objectives, and no one respondent included all potential roles.

The national interpreter questionnaire did not provide a list of possible objectives or roles for interpretation in order to avoid prompting certain responses, although in some cases the objectives were sourced by respondents from official policy, and thus not likely to be swayed by any such list. A notable amount of RMA and NGO staff (50%, 41.2% respectively) did claim that they had 'explicit' objectives for whale watching

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[20] significant at $p < 0.5$

[21] The remaining respondent was an NGO representative, and the orientative potential of interpretation was not cited by any RMA respondents.

interpretation, which were derived in part from such policies as:

RMAs:
- *National Park & Wildlife Service Act (SA) 1972*
- ANPWS *Whale Watching Guidelines* (1989)
- *Wildlife Conservation Act (WA) (1950)*
- Marine Mammal Interaction Guidelines (WA)[22]

NGOs:
- mission statements (in public and internal publications)

The objectives actually found in these documents and legislation are not necessarily specific to *interpretation*; often they are indirect and imply that interpretation should contribute to the broader goals for the management of whale watching. For instance, an intent to 'avoid loud disturbing noises near whales' (in the ANPWS *National Whale Watching Guidelines* ; 1989) is a management objective which relies on interpretation to create awareness of the appropriate behaviour around whales.

Other than the above, the majority of objectives (78%) were based on respondent opinions which were only voiced when requested from these interpreters, and thus primarily reflect what the national sample of interpreters personally believe about interpretation and its use. In theory, the various definitions and intentions for interpretation revealed here should provide the foundation for the respondents' own application of this tool in management efforts for whale watching. The degree to which the respondents' expressed intentions are in fact consistent with their efforts to design and implement interpretation for whale watching is a theme addressed repeatedly throughout the remainder of this chapter.

6.3.2 Planning and Evaluation of Whale Watching Interpretation

To help fulfil their goals and objectives for interpretation in whale watching, more than half of the national respondents claimed to engage in at least some planning (64.4%; or 38 out of 59) and evaluation (83.1%) of their interpretive efforts (Figure 16). Though this is an encouraging result (in terms of Standard III), more detailed data indicate that such percentages may overestimate the quality and extent of strategic effort that the current planning and evaluation activities entail.

There were differences between the types of interpreters and their tendency to undertake either activity;[23] but in all cases, results were most likely to be influenced by the respondents' perceptions of what constitutes 'planning' or 'evaluation.' For 40.7% of all respondents, and particularly for tour operators and NGO staff (45.5%, 42.9% respectively), 'planning' denoted a fact-finding exercise to develop the content of their interpretation, in which 'reading as much as possible' constituted the primary strategy:

'*Read local / nature books & videos*' (tour operator)

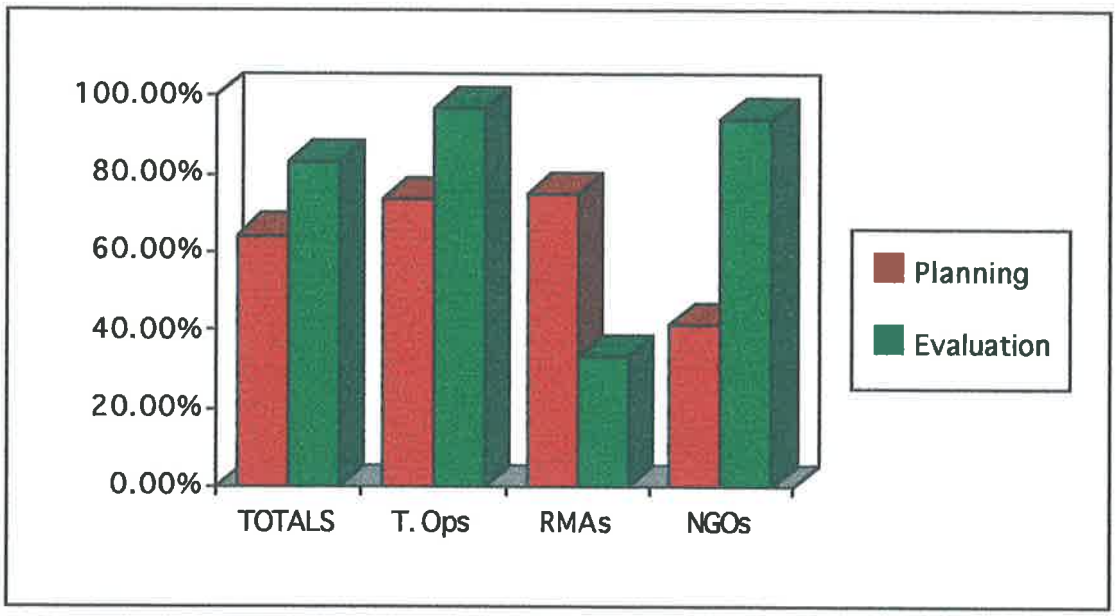
'*Research local whale population and behaviour (species of whale), consult CALM, marine biologists.*' (tour operator)

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[22] included in the conditions for a Marine Mammal Interaction Licence

[23] A smaller proportion of NGOs (41.2%) planned their interpretation, and there was a significant difference between the types of interpreters who evaluated their efforts: only a third (33.3%) of RMAs compared to nearly all of tour operators (96.7%) and NGO staff (94.1%) (X^2 =34.99, df=2, $p < 0.001$).

FIGURE 16
Planning & Evaluation Efforts by National Respondents



Less than one fifth of all respondents (18.6%) referred to planning in terms of how they, as interpreters, explored ways or techniques to be able to interpret effectively:

> '*Gathered as much information as possible, tried to work out the best way to present this information to passengers.*' (tour operator)

> '*Basically we focused on the average person, what they wanted to learn and how best to present the information.*' (NGO staff)

An even smaller portion of national respondents (15.6%) revealed any greater sophistication to their methods of planning, such as the adjustment of material and delivery according to the time/nature of the tour or to the audience, or the use of separate stages in the planning process:

> '*Got together a steering group of local conservationists, whale researchers, youth groups, community groups, and historical groups; put together all our knowledge and looked at other models of interpretive programs e.g. other whale centres and commercial whale watch operators* (NGO staff)

> '*1. Defined objectives in relation to the vision*
> *2. Conducted an intensive research program to provide resource material and related information.*' (NGO staff)

Even those who expressed an interest in a more extensive role for interpretation in whale watching failed to demonstrate any remarkable strategic effort undertaken to fulfil their intentions for the management tool. That is, only three respondents did more to 'plan' interpretation than gather factual information from various sources. Overall, none of the respondents described 'planning' activities which resembled all of the tenets of Standard III (ie. that signify their efforts are structured, comprehensive, *and* longterm in vision).

Though most planning consisted of gathering information on whales, the sources that NGO and tour operator respondents consulted for such information were diverse and somewhat extensive, considering their apparent lack of interest in other planning efforts. These two types of interpreters, which make up 47 of the 59 national respondents in the survey, used an average of 6.7 different types of sources in their planning activities. Amongst the most popular were books (78.7%; 37 out of 47), research scientists (61.7%), and interpretive centres (53.2%) (Table 23).[24] For those NGO and tour operators who specified that they were involved in planning the *delivery* of interpretation (ie. not just gathering whale information; 8 respondents), the favoured sources were books and RMA staff (3 respondents for each source).[25]

Planning activities for interpretation are more insular for RMA respondents. According to the majority of these interpreters (8 out of 9 who answered the question), at least some form of planning was undertaken by the head office (ie. state government) of their respective departments. In nearly half of these cases (4), *only* the head office held this

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[24]journals were in fact the most popular for NGOs (84.6%), although these were not examined for tour operators, and no operator mentioned them in the 'other' category.

[25]categories are not mutually exclusive; 50% did not list any *preferred* sources

TABLE 23
Sources Consulted By NGOs and Tour Operators During Interpretation Planning

Information Source	Tour Operators (n=30)	NGO staff (n=17)	TOTALS (n=47)
Books	83.3%	92.3%	78.7%
Magazines	50%	46.2%	44.7%
Newspapers	36%	46.2%	36.2%
Television	40%	38.5%	36.2%
Word of Mouth	43.3%	61.5%	44.7%
Teacher Guides	6.7%	23.1%	10.6%
Interpretive Centres	53.3%	69.2%	53.2%
Tourism Associations	16.7%	--	
Research Scientists	56.7%	92.3%	61.7%
Other Tour Operators	33.3%	--	
Brochures	43.3%	38.5%	38.3%
RMA staff	50% (State/Region) 30% (Federal)	58.4%	38.3%
Journals	--	84.6%	
Conservation Groups	33.3%	--	

Note: categories are not mutually exclusive; some categories were not included in the different interpreter surveys.

responsibility, whereas the remainder stated that planning activities are divided between regional, branch and/or head offices.

> '*Policy and development through the head office and Region. On ground at the district office.*'

> '*Most planning for activities is at branch office level, with basic guidelines regionally achieved and spread to branches.*'

Results from this sample are inconclusive as to the detail and strategic nature of RMA staff planning, since limited data were provided by RMA respondents other than the division of general responsibilities, or the specification of existent materials (e.g. a brochure planned by the head office and distributed throughout the state).

Two thirds of all RMA respondents (8 out of 12) did not evaluate their whale watching interpretation at all, and amongst the excuses were prohibitive cost (4 respondents), insufficient time (2) and lack of perceived necessity (2). Cost and expected rigour of the process may have also influenced the choice of methods of those RMA respondents who *did* evaluate interpretation, as they primarily engaged in informal (and inexpensive) forms of acquiring feedback such as whale watchers' comments (all 4) and casual observation of their behaviour (1 respondent). Only two RMA respondents used formal questionnaires in the evaluation of their whale watching interpretation.

Evaluation of interpretation by tour operators and NGO staff was similarly low-key, although they were asked about 'feedback' on interpretation rather than 'evaluation' due to a poor response and confusion over the latter term during questionnaire piloting. Nonetheless, 23.3% of tour operators and 38.5% of NGO staff who evaluated their whale watching interpretation claimed to have used 'formal questionnaires.' Other popular sources of feedback for both interpreter types were guest books (36.2%; 17 out of 47) and question/answer sessions with the whale watching audience (21.3%). No respondents specified that they employed feedback from previous audiences to change their interpretation, though such a result does not reject the possibility that this still occurs. Also, 39.2% of 28 tour operators who claimed they altered their commentary did so according to the perceived interests of their current audience.

The majority of all national respondents (66.1%) engage in *both* planning and evaluation of their whale watching interpretation, and it is somewhat noteworthy that nearly one-third (30.5%) of these interpreters use more than the most informal methods for either.[26] Yet one cannot draw the conclusion that any such activities are necessarily strategic or extensive, and again, none approximate the characteristics cited as integral to best practice interpretive 'planning' or 'evaluation' by Standard III.

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[26]ie. plan their interpretation by doing more than reading *as well as* evaluating this interpretation by more than acquiring informal comments by the audience

6.3.3 *Liaison Between Key Interpreters and the Enhancement of Interpretive Skills*

Several types of communication and correspondence were explored between the surveyed interpreters, from their general liaison during and after the whale watching season, to their attendance and/or participation at more formal gatherings such as workshops and conferences. Standard IV contends that interpreters in whale watching should liaise/coordinate efforts with all tourism stakeholders regarding the use of interpretation in the tourism (e.g. policy, issues, materials, delivery), and in particular, pursue opportunities for increasing their own capabilities to produce and implement this management tool. The following results reveal the nature of the current interaction between national whale watching interpreters in terms of the frequency and type of opportunities for information exchange.

A majority of tour operators (60%; 18) claimed to have 'frequent' contact with RMAs, though RMA respondents did not confirm this result. Instead, most RMAs (58.3% ; 7) believed they had more 'occasional' contact with the operators. NGO respondents were also inclined to liaise with RMAs on an 'occasional' basis (61.5%),[27] but overall, the frequency of contact did not vary significantly by interpreter type or state of origin.

With the exception of applying for/granting whale watching permits,[28] the most popular reason for liaison between tour operators and RMA staff was the provision of information on whale watching trips (ie. logs) by the operators (Table 24). Yet one half of RMA staff (50%) and over one third (36.7%) of tour operators do claim to exchange advice/materials regarding interpretation specifically. The nature of this contact is unclear, and thus it cannot be determined whether 'advice' entails discussion on delivery of interpretation, or just information for inclusion in content (e.g. regarding recent whale sightings). The provision of interpretive materials by RMAs is, however, a favourable contribution to the quantity of the tour operators' interpretive efforts (ie. as additional to verbal commentary), and likely to maintain the accuracy of whale information.

Whilst information exchange for interpretation need not be formal to be of utility, the contact between tour operators, RMA and NGO staff at workshops and conferences can expose them to detailed information on interpretive techniques, current practices, and theory. Over half of tour operators and RMAs claim to meet together under such circumstances (56.7%, 50% respectively), and workshops held pre-season were most popular (in respect to being offered and patronised; refer again to Table 24). These particular gatherings may or may not have involved the face to face discussion of

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[27] this result is according to NGO respondents, but RMAs were only questioned on their interaction with tourism bureaus, with whom they had mainly 'occasional' contact (41.7%).

[28] 76.7% of tour operators liaised with RMA staff for this reason, though permits are not always required for land-based tours.

TABLE 24
Liaison Between Tour Operators and Resource Management Agency Respondents

	Interpreter	
Type of Liaison	**Tour Operators** (n=30)	**Resource Management Agency Staff** (n=12)
Advice on Use of Interpretation in Whale Watching	Requested by 36.7%	Provided by 50%
Exchange of Interpretation Materials	(Not specified by any tour operators)	Provided by 50%
Workshops or Meetings on Whale Watching	Attended by:	Hosted/attended by:
• *In general*	56.7%	50%
• *Pre-season*	53.3%	41.7%
• *During whale watching season*	23.3%	33.3%
• *Post-season*	26.7%	16.7%
Exchange of whale - related information	Provided by 66.7%	(not measured)

Categories are not mutually exclusive.

interpretation between parties, but the management tool is becoming a featured topic in the proceedings of the national conference series on whale watching management in Australia.[29]

Presentations regarding interpretation at the *Encounters With Whales* conferences were witnessed by 69.5% (41 out of 59) of the national sample of interpreters, and RMA and NGO respondents had the most experience in the conference circuit (Table 25). Slightly less than half of RMA respondents (5 out of 12) and just over half of NGO respondents (9 out of 17) in the national sample were delegates at either the 1993 or 1995 conference. Only a fifth (7 out of 30) of tour operator surveyed attended either one of these seminal conferences, although respondents in this current sample did make up over half of the tour operators present at the 1995 conference.

Similar discrepancies between interpreter types were found at the conferences themselves, as the proportion of tour operators, RMA & NGO staff in attendance changed over the years. In 1993, most delegates (65%, or 13 out of 20) to the *Encounters With Whales* conference were RMA staff, but at the much larger 1995 conference (with 111 delegates), the majority was represented by NGO staff (54.1%) (refer again to Table 25). This profile is significantly different ($X^2 = 70.99$, df=2, $p < 0.001$) between the two years, but tour operators were in the minority on both occasions.

Hence according to the both current sample and amongst the delegates to the national conferences, whale watching tour operators did not take great advantage of a significant opportunity to exchange ideas on the management of the tourism in general, nor on the use of interpretation in particular. The poor conference attendance by tour operators does not necessarily reflect their interest in the series, due to its location and timing.[30] Yet in both cases (ie. at conferences and other liaison opportunities), the knowledge shared and recommendations developed by NGOs and RMAs on interpretation have had a more limited audience amongst those who would have the most direct involvement with whale watchers (ie. tour operators).

In addition to the wisdom gained by attendance of the *Encounters with Whales* conference series, RMA staff may also find opportunities to enhance their interpretive knowledge and skills within their own respective agencies. Slightly more than half of the RMA respondents (58.3%) in the national survey sample claimed that their agency/department offers training for staff involved in interpretation. These respondents variously described training programs as those which are conducted 'occasionally' and on a 'department-wide basis', or which were limited to seasonal or new staff. Just two

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[29] in terms of formal presentations exclusive to whale watching interpretation; the discussion of interpretation at these conferences increased from one in 1993, to three in 1995, in addition to being a workshop/discussion group topic as well.

[30] ie. held in Queensland both years, and during the whale watching season (July and September) for most Australian sites.

TABLE 25
Major Whale Watching Conference Attendance by Key Interpreters in General and National Survey Respondents

Interpreter Type	*Distribution of Delegates by Interpreter Type*		*Distribution of Current Sample by Interpreter Type*
	1993 Conference	*1995 Conference*	
Tour Operators	5%	14.4%	50.9%
RMA staff	65%	31.5%	20.3%
NGO staff	30%	54.1%	28.8%

	% of '93 Delegates who are in the Current Sample	*% of '95 Delegates who are in the Current Sample*	*% of Current Sample who attended either conference*
Tour Operators	0%	58.3%	23.3%
RMA staff	5%	11.4%	41.7%
NGO staff	0%	40.9%	52.9%

of the RMA respondents said that the interpretive training was specific to whale watching, with one implying that only content was relevant to this tourism. This respondent was also the only one to specify whether or not training pertained to factual information or delivery of interpretation:

> *'Rangers and contract staff have training in content information about the environment - less training in delivery of information and interaction with whale watchers.'*

Though it appears that this is typical of the RMA training opportunities for interpretation (according to the nature of the open-ended responses), more information is required to confirm this suspicion. At the very least, RMAs who offer training do not provide regular opportunities for full-time staff, and rarely relate the sessions directly to whale watching.

The results pertaining to liaison between national interpreters reveal that those interested in interpretation and management within the whale watching community are not isolated *if* they so choose. Yet they do not take full advantage of the current opportunities to participate in frequent discussion with other interpreters regarding the use of this management tool in whale watching. Though occasions exist in both the national arena and 'locally' to liaise (and to develop a knowledge base and skills) in respect to interpretive efforts, there is no current evidence to suggest that the majority of whale watching interpreters at present pursue these opportunities regularly, frequently, or attempt to coordinate their efforts amongst the various parties (cf. Standard IV).

6.4 National Practice and Products of Whale Watching Interpretation

6.4.1 General Forms of Interpretation

The 'material' created for interpretation includes physical items such as signage or publications as well as commentary delivered on whale watching tours. The latter was of course the most popular amongst tour operators (and provided by all 30), and three-quarters (76.7%) of the operators also relied heavily on brochures for conveying information to their passengers.[31] Other forms of interpretation (and props for it) utilised by tour operators in the national sample are listed in Table 26, which also illustrates the nature of the interpretation products found on tours of different platforms, locations and sizes.

The use of videos for interpretation varied significantly with the both the state of origin and 1995 passenger numbers of the whale watching tours (X^2 =13.59, df=4, $p < 0.01$; X^2 =7.97, df=3, $p < 0.05$ respectively), as did the use of hydrophones (state: X^2 =20.01, df=4, $p < 0.001$; 1995 passengers: X^2 =13.4, df=3, $p < 0.005$).

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[31] It is possible that some respondents were confused about the inclusion of 'brochures' in a question about interpretation. Whilst some RMAs and NGOs produce interpretive material in this format for use by operators, respondents may have mistaken the term for referring to promotional material only. Nonetheless, some promotional brochures *contain* interpretation as well; see below.

TABLE 26
National Tour Operator Respondents' Use of Interpretation

	Type/Prop of Interpretation					
	Com-mentary	Video	Audio	Hydro-phone	Booklet	Brochure
TOTAL Frequency of Use	**100%**	**26.7%**	**40%**	**23.3%**	**40%**	**76.7%**
Tour Characteristics						
State						
NSW	•	•	•	•	-	•
QLD	••	••	••	••	••	••
WA	●●	•	••	-	••	●
SA	●	•	•	•	•	••
VIC	•	-	-	-	-	-
Platform *Boat*	●●	●	●●	••	●●	●●
Terrestrial	●	•	•	•	•	••
Aircraft	•	-	-	-	-	-
1995 Passenger Numbers *0 - ≤ 1000*	●●	•	••	•	●	●●
1001 - ≤ 5000	••	•	•	•	•	••
5001 - ≤ 10000	•	•	•	•	•	•
10000 +	•	•	•	•		•
Start of Business *1980s or earlier*	●	•	••	•	••	●
1990s	●●	••	●	••	●	●

Key: • 1-3 tour operators •• 4-6 ● 7-9 ●● 10-12 ● 13-15 ●● 16-18

Note: This table depicts the distribution of sample in that there were, for example, a greater number of boat-based tour operators within the sample. Tests of significance (reported in the text), however, reveal the most reliable nature of the correlations between tour characteristics and interpretive products/props.

In each case, large[32] boat-based tours from Queensland were more likely to employ the use of either of these materials (5 tours each). This could be due to factors such as the length of their involvement in the industry (compared to more recent sites), or their access to such materials (e.g. if produced more often in Queensland; if the size of the tour makes such materials more economically feasible to acquire). Another possibility is that there are greater numbers of Queensland whale watching operators than in other states, and hence there may be increased competition amongst those from the most popular sites (e.g. Hervey Bay). These operators may acquire interpretive props to increase the attractiveness of their tours.

Whilst educative printed material (ie. other than brochures) was not made readily available to whale watchers by the majority of tour operators, 40% (12) still had either a library which could be accessed by on-board passengers, or had booklets/material from other sources (e.g. whale watching guides published by RMAs) which were complimentary or could be purchased. Of these operators, 40% claimed to automatically distribute 'printed material' to their passengers, rather than simply encouraged them to obtain it (26.7%) or just mentioned its existence (13.3%). It is likely that several of these operators are referring to material which includes or is limited to their own brochures. Nonetheless, some operators do provide educative information on whales in their own promotional material,[33] and in accordance with Standard V, the active distribution of brochures with educative information could certainly increase the tour participants' access to whale and whale watching information.[34]

As the RMA and NGO respondents have less obligatory contact with whale watchers during the tourism experience, their use of interpretive products was not compared to the tour operators. There were, however, some discrepancies in the various forms of interpretation between these two types of interpreters. An example is signage, whose provision varied significantly between RMAs and NGOs ($X^2 = 5.15$, df=2, $p < 0.05$) (Table 27). RMA respondents were more likely than NGOs to produce interpretive signage and to have informal contact with whale watchers 'on-site' (5 out of 12 for both forms of interpretation).[35] NGO respondents claimed to provide guided tours or interpretive commentary more frequently than RMAs, although it is possible the NGOs misinterpreted the question, as most who claimed to offer such tours or commentary were from interpretive centres (4 out of 6).[36] Two NGOs who provided commentary did so aboard whale watching vessels. Other popular forms of interpretation offered by

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[32]ie. 5001-10000 passengers in 1995

[33]see section 6.4.2

[34]Of course, if they refer only to promotional material *without* educative information, such an opportunity is neglected.

[35]during the whale watching experience; this can mean contact with land-based or boat-based independent whale watchers as well as contact with tour groups on either platform.

[36]and thus could have been referring to their centre and not to the 'whale watching site' as requested; the RMAs surveyed did not have interpretive centres specific to whale watching.

TABLE 27
National RMA & NGO Respondents' Use of Interpretation

Type of Interpretation	Interpreter Type: **RMA** (n=12)	**NGO** (n=17)	Statistical difference between interpreters
Guided Tours	8.3%	35.3%	Not Significant; $p < 0.1$
Signage	50%	11.7%	**Significant;** $X^2 = 5.15$, df=1, $p < 0.05$
Informal Contact On-Site	50%	23.5%	Not Significant; $p < 0.5$
Brochures	83.3%	52.9%	Not Significant; $p < 0.1$
Informal Contact Away from the Site	58.3%	35.3%	Not Significant; $p < 0.5$
Booklet	41.7%	35.3%	Not Significant; $p < 0.9$

Note: other types of interpretation products offered by NGOs alone are not presented here.

NGO respondents (and not listed by RMA respondents) included public lectures on whales/whale watching (8 out of 17), exhibits (7), and newsletters (5).

Overall, NGO respondents provided the most diverse array of interpretation for whale watching,[37] and most of their offerings (described above) would only be available off-site. Standards V-VII imply that the availability of whale watching interpretation 'off-site' can be a desirable part of an interpretation program which is part of a broader information strategy for the tourism, and can be a preparation for or supplement to the on-site experience. More information is necessary regarding whale watcher patronage of the NGO venues (e.g. interpretive centres) and/or their perception of the NGOs' materials as whale-related information sources before one could suggest the interpretive efforts are integrated into a *whale watching* experience.[38] Interpretive products such as public lectures, newsletters or exhibits are of course important opportunities to provide potential whale watchers with pertinent information on the experience and/or focal animals, particularly during the pre- or post-visit stages. Nevertheless, the lack of coordination or liaison between interpreters noted earlier may suggest that these efforts are not yet deliberately used to enhance any particular whale watching experiences.

A few NGOs (2) do have some degree of informal contact with an interpretive (whale watching) audience on-site who are not on tour, and together with RMA respondents, 27.6% of these types of interpreters (or 8 out of 29) thus offer an additional interpretive opportunity for *independent* whale watchers. Significantly, this informal contact may be the only such opportunity for independent whale watchers which would be both on-site and assuredly interactive, although the interpretive nature of the contact is unknown.

It is impossible to generalise the 'interactive' nature of all other forms of interpretation cited by national respondents without data on the specific wording of its content and style of delivery.[39] Similarly, analysis of the interpretation according to standards for theme development, mindfulness features, and audience sense of responsibility (cf. Standards VIII and IX) would also require access to the interpretation material itself, rather than summary features about it. Signage and commentary were not possible to review on a national scale, and too few respondents overall (8 out of 59 respondents) provided samples of their (educative) printed interpretation to justify quantitative analysis. Other aspects of the national respondents' material, including main topics and the guise of the information (orientative, educative), do reveal the general nature of the content and function of their interpretive products, and these features are reviewed in the next section.

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[37]This is not entirely unexpected, since NGOs represented several different institutions whose participation in the whale watching community would vary; see section 6.2.2

[38]These issues are considered in Chapters Seven to Nine in respect to the NGOs associated with the case study whale watching sites.

[39]ie. printed material or commentary can include prompts for action or directly question the audience

6.4.2 Interpretation and Promotion/Orientation

Promotional material, supplied by nearly two-thirds of the 30 tour operators in the national sample, was subjected to quantitative and discourse analysis of its textual and other features (ie. content, images and appearance). Results indicate how this material portrays the whale watching experience, which is noted by Standard VI as influential to the creation of the participants' expectations. Standards V and VII suggest that the nature of these expectations can be a potent factor in whale watcher receptivity and their attention to other forms of interpretation during the experience. Hence early (e.g. pre-visit) exposure to orientative and educative interpretation through promotional material can be a valuable part of the tour operators' efforts. The inclusion of educative information within the promotional material is also examined, and results illustrate how this common practice of tour operators (ie. provision of brochures) does not often take caution with nor full advantage of its interpretive opportunities.

Not surprisingly, characteristics of the focal animals of whale watching were a prominent part of the text and images of the promotional material, and amongst the most common were whale activity (e.g. types of behaviour, how active they are likely to be), proximity to the tour vessel, and general biological/behavioural features of the animal. The appearance of the promotional material varies,[40] but whether the brochures are small and monochrome with diagrams or large and glossy with photographs, many (14) boat-based tours contain the image of a whale (or whales) breaching.[41] Slightly less than half (6) of these boat-based tour brochures contained images of whales close to the whale watching vessel (Figure 17). The text of more than half (10) of the sample brochures also mentioned aspects of whale activity:

> '*During the winter months Humpback Whales....offer spectacular viewing as they breech (sic) from the surface crashing into the depths below.*'

> '*To see their antics as they beat the water with their tails or flippers, roll on their side to feed, dive deep and leap high into the air, is a sight to be savoured.*'

The mention of this topic varies significantly between the type of tour platforms (X^2 = 16.19, df= 4, $p < 0.005$), and the specific claim that whales would be seen breaching was made by eight boat-based tours, one land-based tour, and one aerial tour.

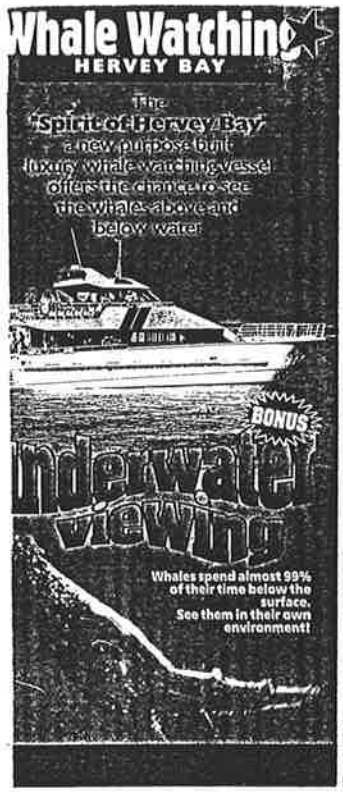
These provocative images and descriptions of whale activity are used to generate expectations of the tour product, and if unfulfilled, may lead to disappointment that might not have occurred otherwise (cf. Standard VI). Few of the operators' brochures attempted to strike a balance between attractive promotional topics and a realistic portrayal of the whale watching experience. Only three of the sample brochures qualified their claims/imagery by stating that dramatic whale activity (or even the animals' presence

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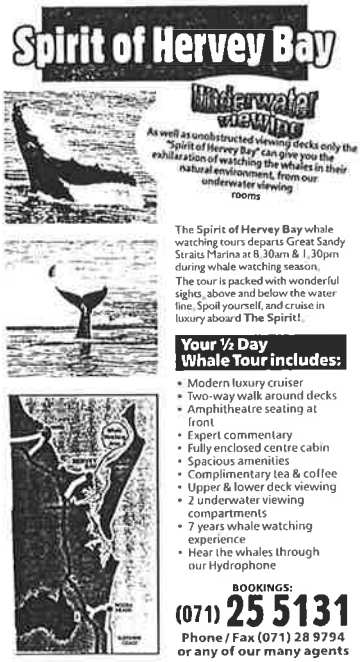
[40] significantly, regarding state of origin and size of the material (e.g. A4, fold-out brochure): $X^2 = 9.71$, df = 3, 0.025; see the previous comment about competition between Queensland operators.

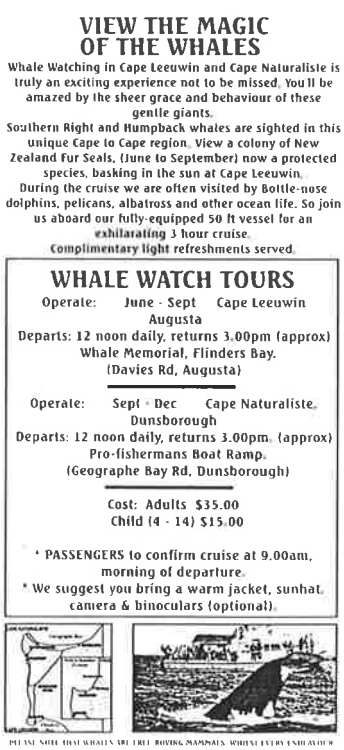
[41] one of the more spectacular, though not necessarily common, forms of whale behaviour

FIGURE 17
Sample Whale Watching Promotional Material









at all) was not *guaranteed.*

> '*To see these and other behaviour patterns takes lots of time and patience...*'
>
> '*Please note that whales are free-roving mammals, whilst every endeavour is made to find whales, sightings cannot be guaranteed.*'

Aside from whale activity, other elements of the tour mentioned by the promotional material include the potential weather conditions (42.1%), and the availability of comfort facilities (36.8%) and refreshments (73.7%). In accordance with Standard VI, such topics are important in aiding whale watchers to meet their physiological needs before they are required to pay attention to educative material. However, as these topics were included in less than half of the material (with the exception of refreshments), both visitor satisfaction and their attention to other interpretation are at increased risk, especially if the whale watchers do not have prior experience with the particular tour (corresponding to the brochure) or this type of tourism in general.

Another means of preparing the whale watchers for educative material is the mention of interpretation as *part of* the tour product (cf. Standard VI). Slightly less than half (47.4%; 9) of the brochures stated there would be (educative) interpretation during the tour in the form of commentary, though more (57.9%) mentioned props which could be used to enhance the delivery of this commentary (e.g. hydrophones).

> '*Expert commentary, entertaining yet educational*'...*your crew will give an informative talk about the whales and dolphins you are about to meet.*'
>
> '*Whale information and video*'
>
> '*Full commentary with experienced personalised service*'

Just four brochures mentioned the qualifications of guides regarding the delivery of of interpretation, and these emphasised their local or practical experience rather than educational credentials.

> '*The say he has salt water coursing through his veins! ... He knows where the whales go and the secrets of the sea are locked in his heart.*'
>
> '*Four years whale watching experience.*'

All of these examples might reflect the tour operators' perspectives of interpretation as a means of competition through a value-added tour product, rather than their opinion that is should be appreciated by whale watchers as an important part of the experience. Nonetheless, mentioning interpretation at all does prepare the whale watchers for the educative opportunity during the experience.

A premise of Standard V suggests that a more direct way to achieve this preparation for the learning part of a whale watching experience is to use promotional material as a medium *for* interpretation about educative topics such as whale biology or conservation status. These topics were addressed by one quarter (26.3%) of the tour operators' brochures, though the purpose of their inclusion was to describe the tour product (ie. which whales will be seen, what they will be doing; see above), rather than directly

educate the audience about the animals. The information can of course contribute to knowledge about whales, and it is interesting to note that two operators used an interpretive style[42] to present the information:

> '*Imagine a beast as big as a house propelling itself almost entirely out of the water, then rotating and crashing on its back in a thunderous explosion of water.*'
>
> '*To see them... leap high into the air is a sight to be savoured. Are they really dancing for us?*'

In the latter example, the imagery used to describe whale behaviour attaches instrumental value to the experience. Whilst not necessarily undesirable,[43] the choice of words might undermine or hinder any later efforts (e.g. in commentary) to promote the intrinsic values of the whales, as it may be inferred that the animals are there to perform for the whale watchers. It is not clear whether or not the tour operator's commentary also presents whales in this light, but this example does illustrate the need to consider the interpretive program in its entirety (cf. Standard V) such that its information and themes complement each other. As noted in the next section, many tour operators and other interpreters in the national sample do reflect a concern for the protection of the animals and convey this to their passengers through their interpretive efforts, and this is generally restricted to their educative (rather than promotional/orientative) materials.

6.4.3 Topics of Educative Interpretation

An average of 11 whale or environment-related topics[44] were addressed by the interpretation material of the national survey respondents, although the popularity of the topics varied from 23.7% to 76.3% (Figure 18). In many cases, the emphasis on certain topics exceeded what might be expected, given the priorities (ie. goals and objectives) for whale watching interpretation cited by the national survey respondents in section 6.3.1. For instance, nearly a third (32.2%) of the respondents originally specified that interpretation should contribute to whale and/or environmental protection. Yet at least half and up to 74.6% claimed that the content of their interpretation includes *all* topics (listed in the questionnaire) which are relevant to whale and environmental protection (these topics are highlighted in Figure 18). The majority of each *type* of interpreter (ie. RMA, NGO, tour operator) also addressed these whale and environmental protection topics in their interpretive efforts.[45]

The manner in which such topics were addressed, such as the style, breadth and depth of their coverage in the interpretation, remains unknown. Moreover, the discrepancy between results for interpretation topics and objectives may reflect the style of questions. Each interpretive topic was listed amongst answer choices in the questionnaire, and this closed-ended style was deliberately chosen in order to detect the diversity of the topics.

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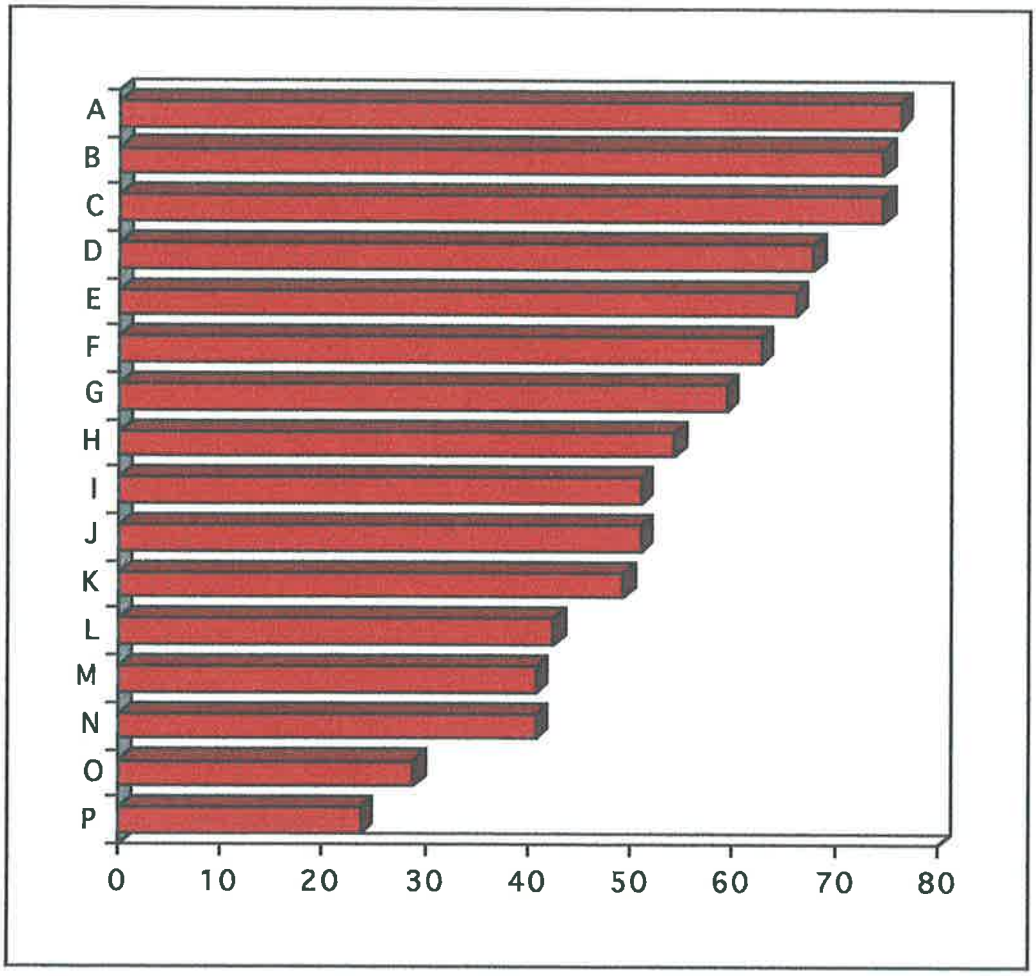
[42] ie. employing techniques for mindfulness such as imagery and prompts; cf. Standard IX

[43] see Chapter Three (section 3.2) regarding value theory and interpretation.

[44] from a selection of 17 in the questionnaire

[45] e.g. overall, most national respondents included protecting whales (67.8%), but within the sample of tour operators alone, 80% included this topic; see Table 28, p. 181

FIGURE 18 National Respondents' Topics of Whale Watching Interpretation



KEY to Interpretation Topics:

*** = distinct topic on whale or environmental protection**
(though note that other topics below could also include these as themes)

A	Whale migration
*B	Whale watching regulations/guidelines
C	Whale social behaviour
*D	Protecting whales
*E	Threats to whales
F	Whale biology
*G	Protecting whales' environment
H	Other plants/animals in the area
*I	Human impact on the marine environment
*J	What individuals can do to protect whales
K	Whale research
L	Coastal/marine ecosystems
M	European history
N	Human use of the coastal environment
O	Sources of further information
P	Indigenous history

Note: topics are not mutually exclusive

This may have prompted respondents to select topics they might not have mentioned otherwise. By contrast, the use of open-ended question regarding interpretation objectives was designed so that it minimised social desirability bias (see Pearce & Moscardo 1985). Perhaps there would have been even more explicit interest in whale and environmental protection as objectives for interpretation if that question had been closed-ended. Given the professed content of the interpretive efforts, such interest is at least implicit amongst the respondents.

Interpretation can pursue objectives for environmental or whale protection through topics like coastal and marine ecosystems, other flora/fauna, whale research or human use of the coastal environment. Each of these can assist the development of themes and the provision of a more holistic perspective of the issues, as proposed by Standard VIII. However, these topics were amongst the least popular (see Figure 18), as only flora/fauna was included in at least half of the respondents' interpretation. Indeed, the only topics to be included in less of the interpretation than 'human use of the coast' were sources of further information (28.8%) and Indigenous history (23.7%).

Some of these generally unpopular topics, though, were more likely to be addressed by tour operators than other interpreters, and in fact, the inclusion of many types of topics varied between interpreter type. Table 28 reveals the significant differences found between tour operators, NGOs and RMA respondents regarding their interpretative topics of:

(1) more detailed whale information (e.g. migration, social behaviour, research);
(2) whale watching regulations; and
(3) holistic themes (e.g. other flora fauna, ecological significance, and cultural heritage of the site).

These results could be explained by the nature of the interpreters' contact with whale watchers. For instance, tour operators have a greater opportunity to cover different aspects of whale behaviour due to their captive audience and the presence of the whales themselves, which could draw attention to several aspects of behaviour that might not seem to be a priority in, for instance, printed material. Promotion of whale watching regulations would (or at least should) seem important to conservation groups, but other types of NGOs with more peripheral access to whale watchers (e.g. interpretive centres) may find other information more pertinent. RMA respondents appear to be more focused on whales than other features of the environment encountered during whale watching, but for RMAs which correspond to boat-based sites this would indeed be a priority.

In reference to Standard VIII, each type of interpreter could enhance their own efforts through a greater diversity of topics, particularly those which provide a more holistic coverage of the whale watching experience and the resources involved in the tourism.[46]

[46]e.g. this can be achieved through techniques like theme development, as suggested by Standard IX

TABLE 28
Topics of National Respondents' Whale Watching Interpretation According to Interpreter Type

Topic	Tour Operators	RMA staff	NGO staff	Statistical difference between interpreters
A	96.7%	58.3%	52.9%	**Significant**; $X^2 = 14.16$; df=2; $p < 0.001$
B	86.7%	83.3%	47.1%	**Significant;** $X^2 = 9.6$; df=2; $p < 0.01$
C	96.7%	41.7%	58.8%	**Significant;** $X^2 = 16.82$; df=2; $p < 0.001$
D	80%	66.6%	47.1%	Not Significant; $p < 0.1$
E	76.7%	58.3%	52.9%	Not Significant; $p < 0.5$
F	70%	66.6%	58.8%	Not Significant; $p < 0.5$
G	66.6%	50%	52.9%	Not Significant; $p < 0.5$
H	70%	16.7%	53%	**Significant;** $X^2 = 9.86$; df=2; $p < 0.005$
I	60%	33.3%	47.1%	Not Significant; $p < 0.5$
J	56.7%	33.3%	52.9%	Not Significant; $p < 0.5$
K	63.3%	8.3%	52.9%	**Significant;** $X^2 = 10.51$; df=2; $p < 0.01$
L	46.7%	16.7%	52.9%	Not Significant; $p < 0.5$
M	60%	33.3%	15.4%	**Significant;** $X^2 = 10.82$; df=2; $p < 0.001$
N	50%	16.7%	41.2%	Not Significant; $p < 0.5$
O	23.3%	25%	41.2%	Not Significant; $p < 0.5$
P	36.7%	0	23.1%	**Significant;** $X^2 = 6.85$; df=2; $p < 0.05$
Q	23.3%	16.7%	52.9%	n/a *

Note: topics are not mutually exclusive

Key to Interpretation Topics:

A	Whale migration	*J*	What individuals can do to protect whales
B	Whale watching regulations	*K*	Whale research
C	Whale social behaviour	*L*	Coastal/marine ecosystems
D	Protecting whales	*M*	European history
E	Threats to whales	*N*	Human use of the coastal environment
F	Whale biology	*O*	Sources of further information
G	Protecting whales environment	*P*	Indigenous history
H	Other plants/animals in the area	*Q*	Names of whale-related conservation groups (for NGO surveys, this question was: Role of the organisation in whale conservation)
I	Human impact on the marine environment		

The popularity of some these topics within the current interpretation (e.g. protecting whales and their environment) is especially critical if there is a general lack of coordinated interpretive effort at whale watching sites, and subsequently the whale watchers may not have access to all available materials from different sources. Furthermore, whale watchers who are not on tour may have less enforced contact with a large range of information (as provided by operators), and thus the nature of the RMA and NGO material becomes of great importance.

Too few examples of printed educative material were returned with the national surveys to warrant analysis of the style and composition *vis a vis* Standard IX (or to review their consistency with topics that respondents claimed they included in that material). In a national context, it is likely that such material would not be representative of the majority of any of the tour operators' efforts, in light of their emphasis on commentary. RMA and NGO usage of signs, booklets and brochures as primary types of interpretation would have allowed examination of the exact nature of the topics they provide for whale watchers *and* for the tour operators. This examination is undertaken in respect to the case study sites where there was more comprehensive access to interpreters' efforts.

Whilst printed materials are perhaps less likely to be altered on a regular basis, more than half of NGOs (10 out of 17) still claimed to occasionally change their interpretation, due to circumstances such as the receipt of updated information. Several tour operators (8 out of 30) claimed that their interpretation also changes at least occasionally, and twice as many (17; 56.7%) said it changed often. Tour operator interpretation was most flexible with regard to accommodating whale behaviour that occurred during the whale watching experience (18; as mentioned above), and/or the audience's profile and questions (11). Given this flexibility, interpreters may be more receptive to altering their interpretation based on deliberate efforts to evaluate it.[47]

6.4.4 Perspectives on Improving Interpretation

Although the theme of this section relates to interpretive processes (ie. ideas that could be incorporated into future plans for interpretation), many of the desired improvements to whale watching interpretation expressed by national survey respondents relate to aspects of its practice and products. For instance, a two-thirds majority of RMAs (8 out of 12) were able to cite at least one example of what they perceived to be an ideal change to their own efforts, and most of these respondents (5) listed a form of interpretation or topic they would prefer to add to their current efforts:

> '*Emphasis on cetaceans as part of the marine ecosystem rather than seeing whales in isolation.*'
>
> '*Have someone in uniform to provide info on site.*'

Half of all RMA respondents also requested greater liaison to enhance the coordination of

[47] if encouraged to do so on a more strategic basis; review section 6.3.2

their interpretation efforts, and a quarter desired more resources to put toward interpretation products. These issues were cited in response to previous results as a significant means of enhancing the current whale watching interpretation by RMAs as well as by NGOs and tour operators. Some of these types of desired improvements also reflect receptivity by the RMA respondents to basic premises of certain best practice standards (ie. Standards IV, VIII).

Similar desires to the above were expressed by all types of interpreters in respect to ways the *National Education Strategy* for whale watching could best assist them in their interpretive efforts.[48] The most frequent request (32.2%; 19) was for the Strategy to provide specific information for use in interpretation, including topics such as whale biology, information on how whale watchers can protect whales, and ways to distinguish between sighted species. Some respondents (7) displayed an interest in a broader scope of whale watching information, since they felt certain topics were marginalised by the current whale watching policies (e.g. dolphins, Southern Right whales, land-based platforms, public input).

Several respondents (5; all tour operators) asked that any interpretation provided by the Strategy be:

'brief,' *'clear and basic,'* *'attractive, affordable,'*
'up to date,' and *'given by naturalists qualified to do so.'*

This is another indication that some tour operators are receptive to the provision of additional *materials* by other sources (ie. instead of just information on topics to be used in their commentary).[49] These requests also reflect how other aspects of best practice interpretation (e.g. holistic information [Standard VIII], and qualities for encouraging mindfulness [Standard IX]) must first accommodate the interests, needs and circumstances of the interpreters within the context of whale watching.

Only a few respondents requested improvements in the delivery or quality of interpretation, such as training to improve interpretation skills (4 respondents), standardising guidelines for interpretation (3), or accurate promotion of the tourism (4). Whilst it is important to acknowledge what is considered by national respondents as a 'priority' for enhancing their whale watching interpretation (ie. to ensure the interpreters' interest in any assistance toward such changes), the less popular requests are still salient. Indeed, simply *because* they are not foremost on the interpreters' agenda does not mean that interpretive skills or accurate promotion (*inter alia*) would not benefit from further attention or improvement.[50]

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[48] As cited in Chapter Three (section 3.4.3), this strategy was proposed by delegates of the 1995 *Encounters With Whales* conference as a means of managing Australian whale watching activity.
[49] prior indications are the type of liaison they currently have with RMAs (section 6.3.3), and their provision of printed material other than brochures on tour (section 6.4.1).
[50] in fact, certain results in this chapter suggest otherwise; e.g. section 6.4.2 regarding promotion of the whale watching experience.

6.5 Chapter Summary

Table 29 summarises the main points from the national survey results and identifies trends within the Australian profile of interpretation in whale watching. Where there is less of a distinct trend (ie. exhibited by a majority), the most prominent or informative results are presented. It should be noted that important exceptions to these trends exist in each case (as cited in the text), though all major findings illustrate specific areas where the quality of interpretation could be improved according to best practice standards.

Stakeholders in Australian whale watching who participated in the national survey reflect a conception of and interest in the use of interpretation as an important management tool for the tourism. Their perceptions of interpretation's utility may not integrate all of its possible roles in the tourism, yet survey respondents do intend for it to contribute to more than visitor enjoyment alone, and many focus on its educative potential. Furthermore, whilst it is difficult to discern the underlying motive for the use of interpretation to 'generate an understanding' of whale information, this does not preclude the possibility that interpretation is expected to influence the translation of the knowledge gained into an interest, concern and/or action for the whales' wellbeing. Indeed, a notable portion of the national respondents made this intention explicit. The use of interpretation for entertainment did not dominate the objectives, despite great proportion of interpreters with commercial interest in the sample. However, the weakest point of interpretive objectives is that they did not specify that interpretation should encourage whale or environmental protection to continue in a non-tourism context.

The whale watching 'interpreters' from this survey have disparate backgrounds and functions in the management of the tourism, and whilst there is scope for greater contribution by some,[51] they demonstrate the potential to take advantage of their current liaison as part of a national industry as a means to further develop their interpretive efforts. Few seek direct assistance from other interpreters regarding their use of interpretation, although their interest in securing greater information on whales is reflected in the variety of topics relating to the focal animals within their existing materials/commentary. Most agree that increased availability of resources (staff, financial, time) for interpretation would enhance their efforts and enable them to pursue their desired changes to these in future.

A more widespread practice by all interpreters of strategic endeavours to plan and evaluate the success of their current efforts would contribute to the validity of their assumptions about the interpretive audience (e.g. interests, any understanding gained by interpretation). It could also draw attention to the types of weaknesses alluded to by their pursuit of topics such as 'whale protection' by means of passive presentation of information (ie. their definition of interpretation). Their current proclivity for engaging in information gathering exercises as their primary (or sole) 'planning' activity perhaps

[51] e.g. NGOs, such as the interpretive centres' links to the tourism *in situ*, other types of organisations and their provision of information/materials

TABLE 29 National Trends in Interpretation within the Australian Whale Watching Industry

Theme; Relevant Standard for Interpretation	Trends / Major Results
PROCESS STANDARDS	
Definition of Interpretation **I**	• Primarily factual/ passive, definitions did not portray interpretation as a form of communication or an opportunity for 'discovery', nor characterise it as a management tool that provides benefits for tourism stakeholders. • Definitions were not influenced by the type of interpreter.
Objectives for Interpretation **I, II**	• The objective to promote understanding of whale information was common, whilst intentions to use interpretation for both visitor satisfaction *and* environmental protection were rare. • One third of interpreters did intend for interpretation to contribute to 'whale or environmental protection' although the extension of this toward longterm attitudes or behaviour is inconclusive.
Strategies for Planning and Evaluation **III**	• Informal effort to create and review interpretation was frequent, but there was a lack of strategic activities toward this end, and dearth of explicit policies to implement interpretation. • There was interest in accessing information (for content of interpretation) from a variety of sources. • Resources (time, staff, funding) available to support the creation or implementation of interpretation were limited.
Interpreter Activities, and Interest **IV**	• Liaison between interpreters was occasional and mainly for reasons other than interpretation, although liaison to access to information for use in the content of interpretation was not uncommon. • Opportunities for liaison on a national level were not pursued by the majority, yet local workshops/meetings between interpreters (on whale watching) were hosted/attended by half of interpreters. • Those with interest in changing interpretation claimed to be hindered by limited resources, but 'ideal changes' mainly included increased access to information and liaison to coordinate efforts.
PRODUCT AND PRACTICE STANDARDS	
Content of Promotional and Orientative Interpretation **V, VI**	• The orientative role for interpretation was overlooked in most current promotional material, or presented a risk of false expectations regarding the focal animals. • Educative information was rarely contained within promotional material, although nearly half of the examined materials suggested there would be a learning opportunity during the tourism
Content of Educative Interpretation **VIII**	• Tour operators presented the most diversity within educative topics of interpretation, though all interpreters emphasised basic information on whale biology and behaviour. • Protection of whales and their environment were claimed to be popular topics, though a more holistic perspective of human use and of features (biological, cultural) of the coastal area was generally uncommon (yet varied between interpreter types) • Tour operators change the content of their commentary opportunistically during the experience, and according to visitor interest. • All types of interpreters were interested in acquiring greater information about the focal animals for inclusion in their current efforts.

Note: Aspects of Standards VII, IX (and some details of V and VI) were not able to be covered in depth as part of the national survey of whale watching interpreters.

suggests that their presentation of information may not be of the style (in composition) which deliberately attempts to create a mindful response by its audience. Further information on their educative interpretation is necessary to confirm this potential risk.

There appears to be limited deliberate use of interpretation as part of a broader information strategy which could orient whale watchers to aspects of the experience, although the promotion of learning as an opportunity during the tourism is not completely overlooked. Where the features of whale watching are described in orientative material (mainly by tour operators), there is a risk of creating false expectations amongst potential participants in respect to whale behaviour, and whale information used primarily for promotional rather than educative purposes. Educative topics contained in interpretation available/delivered during the whale watching experience do exhibit a degree of diversity regarding the focal animals, although a holistic perspective of the marine/coastal environment encountered during the experience is rarely embraced. Again, this may compromise intentions to encourage longterm environmentally responsible behaviour.

This summary and the information in Table 29 allude to opportunities for the national industry in terms of how it may enhance its interpretation efforts *vis a vis* the proposed best practice standards, and in particular, how specific improvements can target interpretive dimensions of its processes, practices and products. Recommendations and discussion, including themes of the strengths and weaknesses of the national profile, are reserved for Chapter Ten, which gives further attention to the significance and implications of the national results. In that chapter, results from the national profile are amalgamated with those from case studies in order to identify and address the most salient issues affecting interpretation in Australian whale watching.

CHAPTER SEVEN
A PROFILE OF INTERPRETERS AT CASE STUDY SITES FOR AUSTRALIAN WHALE WATCHING

'The first time I saw a whale, I looked into its eye and saw myself reflected.
Gilders (1995:xi)

7.1 Chapter Themes and Samples

7.1.1 A Reflection of Interpreter Intent and Interest

If one is has the rare opportunity to peer into the eye of a whale, what is reflected by its glossy lens will be coloured by the personality and perception of the observer. It may also be shaped by any interpretation provided before and during the encounter, which in a sense provides a filter through which an audience 'sees' the whale and attributes meaning to the event. To 'interpret' the experience, tour operators, National Parks Rangers, conservation group members or other interpreters, offer a reflection of themselves as well. Their words and efforts are derived from conjecture and/or fact, from knowledge and/or sentiment, from a professional and/or personal agenda. This chapter provides insight into how interpreters at the case study sites of Albany (WA), Warrnambool (VIC) and the Head of the Bight (SA) perceive, devise and guide what their whale watching audience 'sees' in the tourism experience via interpretation.

The profile of RMA, NGO and tour operator interpreters which emerges from the results depicts the intent and preparation of the respective interpretive programs, and portrays the general nature of interpreter efforts in terms of the themes and roles embodied by this management tool. Features of the case study interpretation content and delivery are reserved for Chapter Eight, whereas the following results pertain to the interpretive *processes* conducted at the case study sites and their approximation of best practice standards. Data include similar themes to those covered in the national survey of interpreters, although the case study context affords a more detailed examination of these processes and the parties involved defining, planning, evaluating and discussing whale watching interpretation. Information is derived from survey techniques of interviews and questionnaires, and discussion refers to the similarities and differences between the interpreters and their efforts, as well as the salience of contextual factors at the case study sites (e.g. management regimes).

7.1.2 Samples of Interpreters at the Case Study Sites

Table 30 lists the interpreters sampled for each case study site. As in the national scale of analysis (Chapter Six), an 'interpreter' is a single representative of a resource management agency (RMA; ie. government department), NGO, or tour company who participated in this research, though more than one staff member in each organisation may have interpretive duties.

'Primary' interpreters are those identified at the case study sites who have significant involvement in the whale watching activity, and whose interpretive efforts are directly relevant to at least one stage in the tourism experience,[1] rather than principally aimed toward the general public. Other organisations may still be sources of information on whales or whale watching, yet they are more peripheral to the tourism experience. For instance, some interpretive centres produce information relevant to the whale watching case study sites, but are located too far from the sites to be considered part of the tourism activity that occurs there, nor does their information target *whale watchers* on their way to/from that site. Certain individuals may offer interpretive commentary to whale watchers on-site, but this is either not officially endorsed by the management authority of the site (e.g. in Warrnambool), and/or is only opportunistic and available to certain tour participants (e.g. at the Head of the Bight). In such cases, these peripheral contributions to interpretation are acknowledged (in Table 30), but are not subjected to critical scrutiny for the purpose of this research.

In the case study sample, RMA representatives from government departments include those from both head (state) and district offices, in accordance with what interpretation was available at the case study sites.[2] Most primary NGOs of the sample comprise local tourism associations, with two exceptions. An additional NGO at the Head of the Bight is the Yalata Land Management Program (YLMP), whose staff have resource management responsibilities which they pursue in part through interpretation. As the whale watching site management body, the YLMP sources interpretative materials from other parties and engages in its own on-site interpretive and visitor management activities. At Warrnambool, the local printed media is considered a primary interpreter, as it annually produces major whale watching publications used as part of the main information campaign of the site. For all sites, peripheral NGOs are represented by a diverse array of organisations, such as the aforementioned interpretive centres, as well as research institutions and printed media.

The tour operators of the case study sample represent each type of whale watching platform, which is essentially divided between case study sites: land-based tours at the Head of the Bight, aerial-based at Warrnambool, and boat-based whale watching at

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[1] ie. pre-visit, during, post-visit; refer to Chapter 4, section 4.3

[2] In some cases, interpretive materials developed by head office staff are not exclusive to particular sites, but are still accessible during the experience there. That is, some interpretive publications available at a site were also distributed throughout a state as part of a larger whale watching education program.

TABLE 30 Interpreters at Case Study Sites

Site	Type	INTERPRETERS: PRIMARY	INTERPRETERS: PERIPHERAL
HEAD OF THE BIGHT	RMAs	• Department of Environment & Natural Resources (DENR) HEAD & DISTRICT Offices	• South Australian Research & Development Institute (SARDI)
	NGOs	• Yalata Land Management Program (YLMP) • Eyre Peninsula Tourism Association (EPTA)	• South Australian Whale Centre (SAWC) / Whale Information Network (WIN) • South Australian Museum • S.Burnell (researcher, U. Sydney)
	Tour Operators	• Eco Interactions • Goanywea Camel Safaris • Great Australian Bight Safaris • AAT Kings • Holidaymakers • Nullarbor Adventure Tours • Whales & Wildlife Eco Tours	
WARRNAMBOOL	RMAs	• Department of Conservation & Natural Resources (DCNR) HEAD & DISTRICT Offices	• Warrnambool City Council
	NGOs	• Warrnambool Tourist Information Centre • *The Standard* (local newspaper)	• Giants of the Deep Exhibit • Flagstaff Hill Maritime Museum • R. Ullmann (commercial artist)
	Tour Operator	• Helicopter Operators Australia	• South-West Aviators[3]
ALBANY	RMAs	• Department of Conservation & Land Management (CALM) HEAD & DISTRICT Offices	
	NGOs	• Albany Tourism Association	• Whale World • *The Weekender* (local newspaper)
	Tour Operators	• Silver Star Cruises • Southern Ocean Charters • Shalimar Charters • Spinners Charters • Albany Sailing Academy	

n = 24 Primary 'Interpreter' organisations/companies represented in the case study sample

[3]This tour operator claimed that verbal commentary was unnecessary, and that for the passengers, simply viewing whales during his aerial tour was 'enough,' and thus is considered to not be a major *interpreter* at this stage.

Albany. In addition to the platform, other characteristics of the tours also vary, such as the spatial coverage of the case study site, the frequency and duration of tours, and type of charter. (See Appendix 6 for further details on these whale watching tours).

In Albany, five out of six of the local tour operators who run boat-based whale watching tours are included in the case study sample, and each began their whale watching charters in the 1990s (ranging from 1990 to the year of the survey, 1996). Several of the vessels are fishing boats, but also included are a sailboat and catamaran. Seasonal passenger numbers vary accordingly,[4] though most operators offer a 3 hour voyage on a daily basis (weather permitting) during the season.

Warrnambool's aerial tours run regularly, though the 10 minute helicopter flights are more popular (and frequent) than the 30 minute fixed wing tours. When whales are resident at the site, the helicopter makes several trips daily to the area adjacent to the whale watching platform, and carries approximately 1000 passengers a season.

At the Head of the Bight, the tour operators (primarily) share a land-based platform, although there is a great diversity in terms of their tour products and subsequently, interpretive opportunities. Between them, the tours last from between 20 minutes to 12 days, carry 12 to 1000 passengers per season, and entail modes of transport from luxury coaches to four wheel drives to camels. The smaller operators, who host between 6-20 whale watchers, often include camping as part of their itinerary. By contrast, larger bus tours, which are increasing in their frequency,[5] may have upwards of 50 passengers who are treated to a brief visit to the Bight (e.g. for a 20 minute lunch break) as part of a longer journey across the Nullarbor. Two such companies are represented in the current sample, though regular patronage of the site by large bus tours was not able to be determined. Many of those contacted failed to respond to enquiries, possibly because they consider the site to be a 'stop-over', and not a 'whale watching experience.'

Further to this last point, one aspect of commonality between the tours at this case study site is that the majority of operators do not limit their activities to the discrete whale watching viewing area. For instance, the camel tour offered at the Head of the Bight may begin its trek several days journey from the whale viewing area, and several four-wheel drive tours take passengers to other natural and historical features in the vicinity (e.g. limestone caves, historical ruins). Furthermore, whale watching is only a seasonal opportunity for most of these tours (and for those at the other case study sites), and they take advantage of other products and locations during the summer months. It is acknowledged that additional research is required to directly address the differences between tour operator characteristics and the most influential factors in their use of interpretation, in relation to whale watching and other forms of nature-based tourism.

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[4] e.g. from 50 to 500-600 in mid size fishing vessels, to 1000 for Silver Star's catamaran

[5] It is now common to have several coaches stop by the site each day. YLMP (1993) has noted its concern about the bus traffic, and at the time of study was beginning negotiations with the Ceduna Tourist Information Office to identify major patrons and attempt modify scheduled arrivals.

7.2 Goals and Roles for Whale Watching Interpretation

Goals for whale watching interpretation at the case study sites are apparent within the definitions and objectives offered by RMA staff, NGOs and tour operators. These interpreters reveal which stakeholders in the tourism are intended to benefit from the use of this management tool, and what roles interpretation can embody in its pursuit of these benefits (cf. Standards I and II for best practice interpretation).

7.2.1 Interpretation Definitions

Similar to the results of the national profile, a trend in the case study site interpreters' definitions of interpretation was their view of the management tool primarily as the passive provision of factual information. Most respondents (14, or 58.3% of all primary interpreters) believed that interpretation is an explanation or description of some kind, and the same amount also cited the precise topics (e.g. whale species, their habitat, history of the area) that should be 'explained.' This result was most prominent amongst the tour operators, where over three-fifths (61.5%; 8) of the case study site operators[6] referred to interpretation as a type of 'explanations,' and nearly half (6) equated 'interpretation' specifically to their verbal commentary.[7]

> '*full commentary of all sights including marine life - whales, dolphins, seals & fishing industry and historical events and buildings*'
>
> (Albany tour operator)

RMA respondents also preferred to cite specific examples of interpretative products as part of their definitions of the term. Two thirds of the RMAs' definitions (4 out of 6 in the case study sample) referred to items of printed information which they made available to whale watchers, such as brochures, booklets, and signage.[8] In both the RMA and tour operator definitions, the interpretive products (physical items or commentary) referred to in the definitions of interpretation may be indicative of the types of contact that these interpreters have with their audience at the case study sites.

NGOs were reluctant to offer a discrete definition of interpretation, but of the two who did, one listed examples of their existing interpretive products (as above), and the other equated interpretation with the organisation's 'charter' of promoting tourism in the region. According to the Eyre Peninsula Tourism Association (EPTA; associated with the Head of the Bight), interpretation *is*:

> '*in our case, the use of whales for marketing and promotion of the region - whether it be in ads, brochures, videos, or on-site signage.*'

The only exception to these kinds of answers (for all types of interpreters), was offered by an SA tour operator, who insisted that interpretation goes beyond description to include the transfer of feelings and emotions, and can utilise written material, 'found'

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[6] representing a third (33.3%) of the total interpreter sample

[7] These tendencies were not mutually exclusive; two operators defined interpretation as an explanation *through* commentary.

[8] see Chapter Eight (Table 34) for the specific interpretive products offered by these respondents.

items, and photos. In addition to portraying interpretation as information that addresses the affective state of its audience, this particular definition also voices what other tour operators might consider implicit; that is, props may be thought of as an integral part of conveying information about the resources encountered during a tourism experience.[9]

Most of the case study site interpreters' definitions give no indication of any intended benefits of interpretation to the various whale watching stakeholders (as proposed by Standard I) beyond the acquisition of knowledge, nor do they offer any roles of interpretation in terms of value-adding or contribution to environmental protection, as suggested by Standard II. A single RMA definition qualified that the provision of information (as interpretation) should be conducted in an 'interesting, fun way,' ostensibly for the enjoyment of the audience. Greater insight into the perceived purpose of interpretation is found in the next section, but it should be kept in mind that definitions of interpretation which largely consider it to be merely a specific product may foreshadow problems in achieving certain objectives for this management tool.

7.2.2 Objectives for Interpretation

Objectives for interpretation depict RMAs', NGOs', and tour operators' perceived purpose(s) of its use as a management tool. It is therefore not surprising that case study site interpreters who were asked to describe what interpretation was intended to accomplish regarding whale watching often answered according to their foremost management responsibility or interest in the tourism activity.

RMA interpreters primarily cited objectives for interpretation which coincided with their resource protection duties, and the most common answer amongst these respondents (5 out of 6) was that interpretation should be used to ensure compliance with whale watching guidelines. Unlike the national results, objectives from RMA staff at the case study sites were likely to also feature a specific resource (e.g. 'whales', sand dunes at land-based sites) which interpretation should help to protect. The district office of DCNR in Warrnambool in particular envisioned goals for interpretation which incorporate topical issues at the site:

> '*(Interpretation should) explain why (whale) identification flights are valuable*' and '*dispel myths e.g. interference (with whales) from pro-fisherman.*'

This intended use of interpretation is directed toward the general public, but also toward land-based whale watchers who often witness aerial survey activity and fishing vessels in the vicinity of whales.

In contrast to the specificity of interpretive tasks cited by other RMA respondents, DENR's district office in Ceduna (SA) referred only to objectives for interpretation as those sanctioned by official policy; in this case, the *National Parks & Wildlife Act of*

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[9] cf. Chapter Six; section 6.4.1l; although this particular definition does not necessarily suggest interpretation is *interactive*.

1972. Obviously the types of broad objectives for the use of information in visitor management within this Act are not exclusive to whale watching activity at the Head of the Bight, or adjacent sites within the district office's jurisdiction (e.g. Nullarbor National Park). However, the reliance on the Act's management ethos rather than site-specific objectives may be due to the fact that the land-based activities at the Head of the Bight whale watching area do not fall within DENR's sphere of duty. Instead, the area is governed by the YLMP, who source interpretative materials and advice from DENR but are responsible for their own interpretive and land management strategy.

In any case, the RMAs from case study sites gave no (explicit) indication that they intended interpretation to contribute to *longterm* protection of any whale watching resources. Like the national profile, it is possible that they considered such an objective to be implicit (or noted within official policy, as exemplified above), due to their obvious responsibility for environmental protection. Also, their mention of interpretation's role in relation to enforcing whale watching guidelines may reflect their recognition of the longterm potential of this management tool.[10]

Interestingly, the respondent from the DENR district office in Ceduna, whilst vague in terms of the environmental protection role of interpretation, was one of only two RMA representatives to describe its value-adding potential. Although this was noted in the definition of interpretation (cited above) rather than the objectives, the respondent did suggest that interpretation must be 'interesting' and 'fun' as well as 'easy to understand.' A concern for audience interest and needs was also demonstrated by the representative from SA's head office of DENR, who remarked that much of the office's interpretation is 'customer-driven' in terms of the information whale watchers request on whales.

NGOs relevant to the case study sites also displayed an interest in the value-adding role of interpretation, possibly because of their function in tourism promotion. Like the previous examples, these interpreters were not always direct in their depiction of this role. According to the Warrnambool Tourist Information Centre, for instance, objectives for interpretation include its use to increase accuracy regarding the sightings and other information about the focal animals of whale watching. Such objectives can contribute to both visitor satisfaction and education, but it was not clear if either purpose was intended by the Centre. Most of the NGOs (3 out of 5), however, were clear in their interest in the entertainment value of interpretation for whale watchers and the general public. One also suggested that interpretation could yield benefits for other stakeholders. EPTA, who is responsible for the entire Eyre Peninsula in SA, believed that their provision of interpretation was able to

> '*assist tour operators to package "ecotourism" or nature-based products.*'

This role of the association depicts an important form of liaison regarding the coordinated use of interpretation management tool.

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[10]Chapter Eight, section 8.3.2 describes the relation of the guidelines in use at the case study sites to the longterm protection of whale watching resources.

Given their commercial interests, one might expect tour operators to acknowledge the value-adding role of interpretation, yet only one third of those from the case study site sample cited its use to entertain whale watchers (4 responses; see Table 31). In fact, slightly more (5) believed that an objective of interpretation was to encourage long-term environmental attitudes/behaviour amongst its audience. For instance, several tour operators believed interpretation should:

'*hopefully help conserve the environment*' (Albany tour operator)

'*(enhance) conservation knowledge and general support for the whales*' (Albany tour operator)

'*(lead to) preservation of marine life*' (Head of Bight tour operator).'

It must be noted that references to such 'longterm environmental goals' for interpretation are vague, broad-scale and tend to employ over-used terms. Nevertheless, it is significant that these operators, like a notable proportion of the national sample, recognise their opportunity to pursue such objectives through the use of this management tool. Indeed, it was a case study site tour operator (at the Head of the Bight) who offered more details on intended outcomes of interpretation regarding environmental protection. This operator believed interpretation should lead to the promotion of :

'*an environmental ethic...and recruitment of active cetacean conservationists.*'

This is the only instance in the empirical work[11] where an interpreter displayed an intent to pursue the most holistic and longterm benefit of interpretation's use in environmental protection: a conservation ethic. These sentiments, along with those expressed by the national sample, should allay some concern (e.g. Beckmann 1988) that the commercial interests of these tourism stakeholders might overshadow their potential use of interpretation beyond a means of entertainment.

Similar to the national profile of whale watching interpreters, the majority of those in the case study sample failed to acknowledge the orientative value of interpretation in terms of facilitating either the value-adding or environmental protection role (cf. Standards V-VII).[12] Only one NGO and two tour operators noted that interpretation could function in a promotional capacity, and the specific intent to use interpretation to create accurate expectations of the tourism was lacking in any respondents' objectives.

Another similarity to the national profile concerns a lack of comprehensiveness amongst the objectives for interpretation. Whilst all potential roles of interpretation (outlined in Standard II) are covered within the case study site sample, few respondents of any interpreter type (4 overall) made it explicit that their own interpretation should fulfil objectives for *both* value-adding and resource protection (through orientation or

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[11] ie. in both national and case study contexts, for all types of interpreters

[12] It could be conceded that the Warrnambool Tourism Information Centre implies that interpretation corresponds to accurate expectations about whale watching and its focal animals (see above). Also, the interpretive products and practices of these interpreters do display some orientative capacity and function, as discussed in Chapter Eight.

TABLE 31
Objectives for Interpretation According to Case Study Site Tour Operators

'The purpose of interpretation is to...'

TOUR	promote whale watching	orientate	induce learning	generate under-standing	promote appreci-ation	entertain	encourage com-pliance on site	encourage long term environ-mental attitudes, behaviour
1				√				
2			√			√		√
3				√				
4				√				√
5						√		
6				√				
7	√							
8				√	√			√
9	√					√		
10			√					√
11			√			√		√

1 AAT Kings (SA)
2 Eco Interactions (SA)
3 Great Australian Bight Safaris (SA)
4 Goanywea Camel Safaris (SA)
5 Holidaymakers (SA)
6 Whales & Wildlife EcoTours (SA)
7 Helicopter Operators Australia (VIC)
8 Silver Star Cruises (WA)
9 Shalimar Charters (WA)
10 Spinners Charters (WA)
11 Albany Sailing Academy (WA)

(Three tour operators did not respond to this question: Southern Ocean Charters [WA], Nullarbor Adventure Tours [SA], South-west Aviators [VIC]).

education). Three of these respondents pertain to the Head of the Bight: the district office of DENR, a tour operator (both cited in examples above); as well as the primary (NGO) management authority of the site, YLMP.

The YLMP is an NGO with interests in both commercial tourism and specific resource protection (ie. private land) at this whale watching site. Accordingly, it referred to interpretation objectives for both interests, though answers varied slightly between its own sources. Within early policy and plans for whale watching activity at the Head of the Bight, as recommended by Josif & Mingatjuta's (1993) report on the tourism feasibility and land management in the area, the general use of information (e.g. printed materials, an interpretive centre) was intended as part of the Yalata community's tour products available to potential whale watchers. Consistent with this report, the YLMP staff surveyed during the research emphasised the use of interpretation to satisfy visitors to the area, as well as to entice further visitation by promoting the area as a desirable whale watching destination. However, the manager of the YLMP at this time (B. McKenzie, pers. comm. 1995) maintained that an important function of interpretation was to orient visitors regarding safety issues, and to protect the fragile vegetation and cliffs of the coastal site.

These types of objectives also exist within recent draft management policies at the Head of the Bight, which would eventually obligate these and other stakeholders at the site to a formal strategy for interpretation. After extensive consultation with management stakeholders, representatives from the South Australian Research Development Institute (SARDI; Fisheries branch) created a *Draft Management Plan for the Great Australian Bight Marine Park* (Edyvane & Andrews 1995). A unique addition to this Plan was a section on prescriptions for land-based activities on the Yalata land adjacent to the marine zones of the (then) proposed Park. Amongst these prescriptions are specific objectives for interpretation, which is intended to be used as a means of providing an enhanced recreational experience *and* as a means of educating visitors, the general public and significantly, commercial tour operators, about :

- the natural, cultural and heritage *values* of the region;
- human impacts on the region and appropriate behaviour
- conservation needs and strategies for flora and fauna of the area
- the interests of other user groups in the area.

(see Edyvane & Andrews 1995).

At the time of study, such policy and plans existed only as a point of discussion (ie. they were not yet adopted). The 'current' use of interpretation was based upon general perceptions and interests of the YLMP management team, as derived originally from the Josif & Mingatjuta (1993) report as noted above. However, when entrusted into a final Management Plan, SARDI's original objectives would incorporate the opinions and interests of the local tour operators, and RMA and NGO stakeholders, and represent the most comprehensive set of explicit objectives identified for any of the case study sites.

7.3 Development of Interpretation: Strategic Effort and Resource Commitment

Standard III for best practice interpretation proposes that objectives for the intended use of interpretation in whale watching should be incorporated into any structured and strategic efforts to plan and develop the management tool. Accordingly, allocation of sufficient resources (staff, financial) will assist interpretation's creation, application and evaluation of its performance. In the case study context, data from the different types of interpreters and their respective agencies/organisations depict the nature and quality (*vis a vis* best practice standards) of their official and informal efforts toward this end.

7.3.1 Interpretive Planning Efforts

The sole official policy to address interpretive planning at the case study sites is the *Draft Management Plan for the Great Australian Bight Marine Park*, noted previously as one of the few formal policies to concern the management of whale watching (in general) at any of the sites. Within this Plan, recommended strategies for enacting interpretive objectives for the Head of the Bight include measures relating to:

(1) interpretive products, e.g. the development of themes for the region; and
(2) interpretive processes, e.g. training staff, liaison with tour operators to distribute material, evaluating interpretation's performance.

The timeline for addressing these strategies is imprecise, with the *Draft Management Plan* merely stating that developing interpretation in general is of 'medium' priority amongst the necessary management activities of the whale watching site. In the meantime, intentions for the development and use of interpretation at the site are not formalised and as noted above, depend on the interests of the YLMP manager and management team.[13]

RMA staff of all case study sites appear to share similar planning measures, and their activities resemble results of the national scale of research in terms of the bureaucratic division of responsibilities. Specifically, the respective head offices of state environment departments are responsible for the coordination and development of major interpretation campaigns and materials, which are then made available for distribution by district offices. District office staff at the case study sites had little input regarding the direction of the state-wide campaigns, nor did they engage in extensive planning of their own current efforts. Instead they continue to rely principally upon ad hoc activities during the season, or general proposals to conduct minor modifications at an indefinite point in future. As an example, DCNR's District Officer expressed interest in modifying and updating its whale watching signs at Logans Beach Platform (Warrnambool), yet he had no completion date in mind, nor was he able to outline any distinct alterations except the need to update addresses for relevant contacts referred to on the sign.

One exception to this type of planning arrangement is found at the Head of the Bight, where an Education Officer from DENR's district office in Ceduna was engaged in planning a 'Whale Information Kit' for use at the site in subsequent whale watching

[13]and approval by Yalata Community Council, whose permission is required for on-site works

seasons. This information kit was being designed to complement the whale watching which occurs at the Head of the Bight, and hence address the primary management concerns of the YLMP. A template for the kit is the head office material ('*Welcome to Whale Watching*' loose-leaf A4 pages), currently available for distribution as part of the state-wide whale watching interpretation campaign.[14] The planning efforts at the district office entail the adaptation of the content of the kit to the primary management concerns for whale watching along the Nullarbor Plain (in both the Nullarbor National Park and at the Head of the Bight).[15] The impetus for this change is a perceived need, as inspired by the increasing visitation to the area and the Marine Park issue, rather than the result of evaluation of the performance of current material which could outline specific needs for improvement (see below). Nevertheless, development of this information kit is significant in that this strategic planning effort by an RMA seeks to adapt general whale watching material to a particular site, and therefore heeds the contextual features presented by the local tourism activity.

Whilst the planning activities noted by the case study site RMAs are somewhat internalised within their respective departments, other interpreters seek their assistance in developing their own materials. The most popular sources amongst the case study sites' tour operators and NGOs when developing their commentary or other interpretation, were books[16] and contact with RMA head and district offices. A majority of the 13 NGOs and tour operators who provided a response to this question on planning sources (84.6%) claim to have contacted at least one RMA office to help plan their interpretation, and more than three quarters 76.9% also sought information from museums and interpretive centres.

In respect to other non-RMA sources used by NGOs or tour operators, Albany's Whale World is a museum devoted to the whaling history of the area, and all five tour operators from this case study site claimed to have consulted it for information. The South Australian Whale Centre (SAWC), though across State from the remote Head of the Bight,[17] has occasional contact with tour operators and has negotiated with the YLMP regarding the possibility of provisioning the site with printed interpretation. A more accessible source for Head of the Bight tour operators, however, is the SA Museum, whose publications on whales and whale watching and cetacean research are widely distributed and familiar to both the site's tour operators and NGOs.

Though various parties were consulted as part of the case study site tour operators' and NGOs' interpretative planning efforts, it seems that the nature of information they sought

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[14] including at the Head of the Bight, although its content is not adapted to any particular site (as described throughout Chapter Eight).

[15] unlike the Head of the Bight, the Nullarbor National Park does not offer consistent sightings of whales, although they may occasionally appear in proximity to the Park's coastal lookouts/picnic areas.

[16] Written material in general (e.g. magazines, newspaper articles) was popular, though natural history books were used by 92.3% of the tour operators and NGOs in their planning efforts.

[17] The SAWC is located in Victor Harbor, SA, a coastal resort town ~80km south of Adelaide, and more than a 14 hour drive from the Head of the Bight.

from the above sources was *about* whales for use in their interpretation, rather than information on good interpretive techniques. This does not necessarily mean these interpreters were not in need of such information, but it did not rate highly as a priority, an interest, or (perhaps) a perceived necessity regarding the development of their interpretation. Furthermore, like the national sample, the professed 'planning' activities of most case study site tour operators and NGO respondents consisted of this 'fact-finding' type of consultation alone. Hence any effort toward achieving the interpretation goals described in the previous section entailed the simple compilation of information about whale watching resources.

Despite such an emphasis, contact between interpreters is still pursued by the majority, and as a type of liaison it represents an opportunity for greater consultation between interpreters regarding other aspects of their efforts. Also, there were a few exceptions to this trend of simply gathering facts as the major task of interpretive planning. One WA tour operator noted that she specifically took into account the timing of her cruise and the audience characteristics when planning her interpretation. Another tour operator (from VIC) described how regular liaison with government departments was a large part of his planning, in his effort to maintain a consistent and up to date approach to information about whales.[18] It is possible that other operators who might engage in similar activities do not conceive of this as part of 'planning', and consider it part of their implementation of an interpretation program. Further information is required to confirm this possibility.

7.3.2 Evaluation of Interpretation

Though case study site interpreters did not indicate any extensive/strategic planning for their current efforts, several expressed an interest in enacting some changes to their interpretation in future. Comments by tour operators and NGO respondents noted that they generally favoured an increase in the quantity of available interpretive materials (e.g. 5 made such comments on the questionnaire) whilst RMA respondents were particularly vocal in their demands for better quality interpretation and resources to support it. According to these (4 out of 6) RMA interpreters, 'ideal' changes included the development and use of more interactive forms of interpretation, and in particular, increased funding to:

(1) expand the distribution for printed campaigns (DENR district office);
(2) update current materials (DCNR district office); and
(3) create additional high quality printed materials to make available to the public and tour operators (CALM district office).

These preferred changes represent a commitment to enhancing interpretation if possible. However, the proposed alterations were based on respondents' opinions, rather than their evaluative efforts. Indeed, RMA interpreters collected only irregular and informal feedback from whale watchers, such as casual observation of visitors at land-based sites

[18] the latter of which signals a flexibility toward the alteration of interpretive efforts

(mainly numbers; DCNR district office), and keeping track of the quantity of materials distributed (DENR head and district offices). Whilst these methods could inform their interpretation efforts, additional or different priorities might arise from evaluating the interpretation in terms of visitor satisfaction, knowledge, attitudes, or behaviour.

NGOs and tour operators were also reliant upon general (and largely unsolicited) comments from whale watchers, and/or basic data from broad-scale tourism surveys. Two thirds of NGO respondents conducted surveys of visitors to their respective regions at least occasionally, though such surveys yielded information which was neither specific to whale watching nor interpretation. All tour operators from the case study sites received informal feedback from their participants, and three sought written comments in a guestbook. However, specific information about the interpretation (instead of the whale watching experience in general) was not requested by these interpreters.

Without more structured or comprehensive methods to evaluate their interpretation, the case study site interpreters would be largely unaware of the achievements of this management tool regarding any of their own objectives for its use. Moreover, it would be difficult for these interpreters to confirm the need for their desired improvements to interpretation, and hence they could risk enacting inefficient or low priority measures in future. For instance, expanded distribution of interpretation (as requested by RMA respondents) would be more efficient if based on the knowledge of whale watcher travel patterns, and even 'greater quantities' of materials could be more effective if they covered topics of particular interest or necessity[19] for the interpretive audience.

7.3.3 Financial and Staff Resources for Interpretation

The cursory nature of evaluation by case study site interpreters may not be entirely representative of their level of interest in the task. In fact, lack of available funds was cited by all RMA interpreters as a factor in their (restricted) evaluation of interpretation. Half of these interpreters also noted that time constraints were a hindrance to their efforts. Further details on the minimal amount of financial or staff commitment to interpretation appear to confirm the professed lack of resources available for strategic effort toward this management tool.

Only the district office of DENR was able to cite an exact figure for an interpretation budget, which is 4.8% of the total, or $5,000. Other RMA interpreters explained that funds for interpretation, whale watching or otherwise, were either too small to be acknowledged or too difficult to tally because they were accessed on a needs basis. Staff commitment to interpretation resembled results from the national profile, in that interpretation (on any topic) was only a minor part of the job for RMA and NGO staff (e.g. '1/20' of the job; DENR district office), most of whom were employed on a part-

[19] e.g. evaluation could reveal topics which whale watchers need to know to facilitate the resource protection objective (cf. Standard VIII), but which are perhaps not being currently retained or accessed.

time basis (Table 32). In the instance of tour operators, none employed staff whose exclusive responsibility was interpretation. Instead, in all cases the captain, pilot or vehicle driver was the primary interpreter (though in two tours he/she was also occasionally assisted by other full-time crew members).

In accordance with the trend of informality in interpretive planning and evaluation efforts, the 'qualifications' of most tour operators and NGO respondents in the case study sample consisted of their general experience and knowledge about whales and whale watching, rather than training or professional development of skills for interpretation as a form of educative communication. Seven (out of 18) of these types of interpreters claimed to have extensive experience with the local area, and a third (all tour operators) had research experience with cetaceans, from a postgraduate level to former involvement in museum and government department research.

Whether their backgrounds entailed experience, employment and/or schooling, these interpreters would ostensibly be well-positioned to offer a breadth of topics regarding whales and/or the local area. Nonetheless, their ability, interest or opportunities to foster communication skills valuable to the delivery of interpretation are unclear. As depicted by the opinions and activities of the case study respondents, the main contribution to the planning/development and implementation of interpretation at their respective whale watching sites accentuates content, rather than delivery. Furthermore, there is no guarantee that without specific knowledge of key theories, this content will incorporate information or techniques outlined by Standards VIII and IX as critical to the educative function of interpretation (for the environment or in general).[20]

Similar to tour operators and NGO respondents who may have to rely on their own initiative to attend (or locate) opportunities to advance their interpretive skills, training opportunities were rarely mentioned by RMA respondents (2 out of 6) as part of their offices' regular or priority activities for staff. In fact, the limited support for interpretation skills appears to agree with the notion that factual knowledge is sufficient:

> *'Rangers and contract staff have training in content information about the environment (with) less training in delivery of information and interaction with whale watchers.'* (DENR head office).

> *'If new staff arrive in the area, they are given information from local staff.'* (DCNR district office)

'

The inattention to training demonstrated by all types of interpreters is perhaps a product of low priority and impracticality (ie. limited staff or financial resources). Whilst there is little evidence to suggest commitment to formal methods of enhancing interpretive skills, the nature of liaison between interpreters discussed in the following section indicates that there are other important opportunities for the exchange of knowledge and advice amongst the case study site interpreters.

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[20] e.g. topics central to Hines et al.'s (1986) model of environmentally responsible behaviour, style of wording that provokes a mindful response by the audience.

TABLE 32

Employment Details for Interpretation Staff at Case Study Sites

Interpreter Type	*Average Number of Staff with Interpretive Responsibility*	*Employment Contract*
RMA staff	4	18.8% full time
NGO staff	2	34% full time
Tour Operator	1	64% are full time

7.4 Coordination of Interpretation

Standard IV for best practice interpretation encourages interpreters to liaise with all tourism stakeholders, which can facilitate the coordinated use of the management tool as well as enhance their own knowledge and skills. Unofficial networks are in existence between interpreters at the different case study sites, and several individuals also take advantage of national opportunities for discussion and input into the management of whale watching in Australia (through interpretation and otherwise). The type and frequency of stakeholder interaction in both contexts are illustrated by results below.

7.4.1 Liaison at Case Study Sites

In all respects, liaison between the different types of interpreters at the case study sites was somewhat irregular, though not necessarily infrequent. The two most prominent patterns consistent amongst the sites pertain to the frequency of contact between RMAs and other interpreters. Firstly, contact between the RMAs' district offices and the local tourism associations only occurred on an 'occasional' basis, which could hinder the coordination of interpretation as part of a broader tourism strategy for the site. With merely occasional contact, it is possible that promotion of the whale watching opportunities (scale, nature) through the NGOs' interpretive efforts may conflict with resource protection priorities as identified by RMAs (see below).

Secondly, most tour operators (at least half of the tour operators at each site, and approximately 2/3 of tour operators in the entire case study sample) believed they had 'frequent' contact with RMA district offices, although just one of the RMA respondents agreed. Instead, RMA respondents suggested their contact with tour operators was more accurately described as 'occasional', which may signify a discrepancy in the judgement of the two types of interpreters regarding what is 'frequent.' Perhaps RMAs, for whom whale watching management is a minor part of their responsibilities, consider their contact with whale watching tour operators to also be minor, in light of their other duties.

More informative results on liaison arise from analysis of the social interaction amongst interpreters of a particular case study site, where the management regime for whale watching and the nature of the tourism experience appear to influence their contact. In Warrnambool for instance, the impetus for liaison between any of the interpreters is usually the sighting of whales, as this is unpredictable during the season unless a mother and calf are resident in the vicinity.[21] Relations between Warrnambool's Tourist Information Centre and tour operators at that case study site are infrequent otherwise, but in the event of a sighting it is the tour operators (all aerial-based) who provide the Tourist Centre with the whale details. In this case, liaison between interpreters suggests some degree of coordinated effort to manage the tourism which can indirectly affect the use of

[21]Southern Right whale mothers and calves will stay resident in their calving areas for most of the winter months to allow the calf to gain strength for the journey back to the Antarctic. By contrast, adult whales searching for mates are more likely to spend less time (e.g. from hours to a few weeks) in an area before moving on along the coast. For this reason, adult sightings are less predictable in frequency and duration, hence tourism stakeholders are particularly interested in gaining information about the nature of these sightings when they do occur.

interpretation. That is, information on whale sightings could be used by the Tourist Centre to promote the experience and orientate potential whale watchers to the site.

The DCNR district office in Warrnambool and tour operators at the site liaise more frequently regarding the location and numbers of whales. The aerial tour operators have research and former employment connections with the office, and are obliging to DCNR with their current information on whales in the area. DCNR utilises this information for whale research and monitoring purposes, but it is also judicious in its treatment of sightings if they occur in the proximity of sensitive coastal areas (ie. other sites along the coast where dunes are not protected by a viewing platform or boardwalk). In the event of such a sighting, DCNR may delay its updates to the Tourist Centre and local media until the whale/whales have ventured to a more appropriate location for whale watching.

Similar to Warrnambool, the most frequent exchange between the district office of CALM and the boat-based tour operators in Albany relates to whale sightings, though some operators have notably more contact with CALM than others. The longest running tour company, Southern Ocean Charters, is the main source of sighting information for the district office and also has regular contact with the media and the Albany Tourism Association regarding such information.

Though Southern Ocean Charters now has greater competition in the site's fledgling industry, relations amongst the tour operators is described by CALM's District Officer (and confirmed by most operators) as notably amicable thus far (e.g. they help each other locate whales during tours). Competition is not rife regarding access to whales or promotion to whale watchers, which is possibly aided by the fact that each tour is distinct in its product.[22] With no current plans to increase the number of available permits, the nature of these relations may endure, and ideally avoid the scenario described by Forestell & Kaufman (1994) in Maui, in which tour competition can lead to marginalisation of interpretation in favour of other less savoury methods of attracting business (ie. jostling for a closer view of the animals). Regarding other forms of contact between Albany tour operators, all claim to attend annual workshops hosted by CALM, which is the only RMA in the case study sample to offer such an opportunity for liaison.

In terms of this last point, it must be noted that discussion at these workshops is largely concerned with encouraging appropriate operations (ie. following whale watching guidelines) and other issues (e.g. sharing jetty space) which are unrelated to interpretation efforts. In fact, it is significant that the majority of occasions and reasons for liaison cited for either Warrnambool or Albany are *not* for the express purpose of enriching, changing or even discussing whale watching interpretation (particularly in its educative capacity). This corresponds to the result in the national profile, where it was suspected that 'exchange of interpretation' actually denoted information about whales,

[22] e.g. whale watchers can choose amongst a sailing trip, large catamaran, or smaller fishing vessels which varying degrees of other products on offer; noted in Appendix 6

rather than the coordinated use or discussion of interpretation materials or techniques. Nevertheless, the regularity of contact, and the cooperative nature of the stakeholder interaction, provides opportunities through which the interpreters (as a coordinated exercise) could produce or increase access to information which could then be used for commentary, and/or promotional/orientative purposes.

An example that approximates this type of information sharing is the direct use of CALM's interpretive material by Southern Ocean Charters, where the text from the head office brochure '*Watching Whales*' is (barely) paraphrased in the tour operator's promotional brochure. Discussion returns to this point in Chapter Eight's examination of this material, but here it should still be acknowledged that information sharing is not a common trend at the site. Instead this example reflects the initiative of this single operator (and his interest in this educative information), for no others in Albany imitate or utilise CALM's interpretation within their own printed material.[23]

Whilst the majority of liaison between interpreters in Warrnambool and Albany concerns the timing and location of (unpredictable) whale sightings, the basis for contact between interpreters at the Head of the Bight was somewhat different (though still reflective of the management issues at the site). The Head of the Bight is Australia's largest nursery for Southern Right whale mothers and their calves, and sightings of whales are virtually guaranteed between June and September (Burnell 1994). There is an exchange of sighting details between RMAs and NGOs in terms of updates on the numbers of whales in the vicinity, but there is little urgency to this information. Instead, the main issue to precipitate liaison amongst these stakeholders at the site (during the time of study) was the management of the Great Australian Bight Marine Park.

During the sampling whale watching seasons (1995, 1996), the Marine Park remained a proposal, and prior to its proclamation (late 1996) there were frequent negotiations between stakeholders regarding management responsibilities, access to the area, and zoning issues. In the process of developing the draft Management Plan for the Marine Park, SARDI staff consulted a variety of interested parties, though discussion at a series of meetings centred on management responsibilities and (non-interpretive) protection measures for coastal and marine resources within the Park's proposed boundaries. Consultation included many of the NGO and RMA interpreters representing this case study site in the current research, and several tour operators whose activities centre on whale watching in the area.[24]

As noted earlier, interpretation was included within the *Draft Management Plan of the Great Australian Bight Marine Park* (Edyvane & Andrews 1995) as an important

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[23]although they are likely to use the information for their commentary, given that CALM is acknowledged as a source for their interpretive planning, and their professed educative topics delivered during the commentary (see Chapter Eight).

[24]ie. large tour bus companies who pass through the area were not active within these negotiations, whereas camping tours or those with a long history of patronage of the site were more forthcoming with their input into the Marine Park issue.

management activity, whereas discourse *about* interpretation during negotiations for the Park's management was minimal. Instead, other issues (e.g. zoning, permitted commercial activities) were perceived at that point to be a higher priority in discussion than interpretation, or even the land-based tourism at the site.[25] The draft Plan does encourage greater liaison in future between RMAs and tour operators in particular, such that the latter are ensured of having access to accurate and current information for use in their interpretation. Also, the issue of the Marine Park itself became a potential subject *of* interpretation, and some RMAs and NGOs prepared public information on the Park which could also be included in interpretation that occurs during the whale watching experience.[26]

Not all liaison between interpreters at the site relates to the Marine Park, and in fact the issue was somewhat peripheral to the relationship between (most) tour operators and DENR at the time of study. Comparable to results for the other case study sites, these interpreters each described the nature of their contact differently. Tour operators already believed they had frequent contact with DENR's district office, though the staff from this office labelled the contact as more 'occasional.' Whilst both head and the local district offices of DENR claimed that they provided advice and/or interpretive materials to the operators, the tour operators did not acknowledge this support. Tour operators of course had frequent contact with YLMP, as they were all required to purchase a permit from the YLMP staff in order to gain access to the site. However, once on site, there were no conditions set for the tour operators' interpretative efforts, nor did they have an avenue for input into the current interpretive activities carried out on site by YLMP.

The YLMP is interested in maintaining a 'good working relationship' with the DENR district office (see also YLMP 1993), and potentially will have joint responsibilities for coastal management according to the GABMP *Draft Management Plan*. The two enjoyed frequent contact at the time of the survey, although DENR acted only in an advisory manner (when solicited) regarding interpretation and other land and visitor management issues. In earlier seasons, DENR had supplied interpretive signs for the site, but a dispute over the content and placement led to their removal. In the 1996 season, printed material originally conceived by the head office was provided (via the district office) to YLMP for their distribution to whale watchers. Signage in place for this season was provided by EPTA, who also had a history of frequent liaison with YLMP, and had once produced the whale watching permits used on site. Following the instalment of the signs, liaison became more occasional, possibly due to the distance of EPTA's main office,[27] and a lack of perceived necessity.

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[25]Nonetheless, Yalata representatives were involved in all discussions (and their concerns were acknowledged as significant), and invariably pursued their interest in land management of the whale watching site as an integral part of the Park's management.

[26] Printed interpretive information on the Marine Park was produced by SARDI but aimed at the general public, as were a series of lectures in Adelaide by a U. of Sydney researcher and a SA Museum cetacean researcher. Chapter Eight discusses how the Marine Park issue was (and was not) incorporated into the interpretive content of the case study interpreters' material.

[27]in Pt. Lincoln on the Eyre Peninsula; approximately 800km from the Head of the Bight

The nature of liaison (in general and regarding interpretation) at the Head of the Bight is certain to change in future with the final Management Plan for the Marine Park, and at present, the issue and the general management of the site still dominates the interaction between many interpreters. Regardless of the different management contexts and issues, though, liaison at all case study site is characterised by irregular and specialised contact amongst a few types of interpreters, rather than periodic contact and coordinated interpretive efforts between tour operators, RMA staff and NGO staff alike (as recommended by Standard IV).

7.4.2 National Liaison by Case Study Site Interpreters

The communication lines established between case study site interpreters have the potential to be used for greater discourse on the use of interpretation at the whale watching respective sites in future. In the meantime, the *Encounters With Whales* series of national conferences provides these interpreters with additional and accessible avenues for information exchange beyond their own sites. Not only do the conferences offer current data on Australian whale populations (which section 7.3.2 indicated may be a desirable type of information for the interpreters), but they have also begun to include interpretation as a significant topic for whale watching discussion (noted in Chapter Six).

In spite of the potential value of attending the *Encounters With Whales* series to the case study site interpreters (e.g. in terms of enhancing interpretative skills and knowledge), representatives of only four organisations/tour operations within the entire sample (n=24) were present at either the 1993 or 1995 conference. Representatives were from WA and SA (2 each), and no one related to the Warrnambool (VIC) whale watching site attended the conferences. Staff from CALM and DENR's head offices attended both the 1993 and 1995 conferences,[28] and also presented papers to the delegates, which is a valuable contribution to the nation's knowledge on the nature of south coast whale watching.[29] Interestingly, their presentations only briefly mentioned the Head of the Bight and Albany as whale watching sites, and instead focused on more popular whale watching sites in their respective states (ie. Perth, WA and Encounter Bay, SA). Hence an opportunity was missed to contribute to others' knowledge of the whale watching experiences at the case study sites and their particular needs regarding the coordination of management efforts like interpretation.[30]

In terms of other types of case study interpreters who attended the *Encounters With Whales* series, a single tour operator from Albany attended the 1995 conference as a representative of the town's Chamber of Commerce rather than his own company. The

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[28]although for DENR, the staff members in attendance differed between the two conferences.

[29]another part of the conference's significance is that it is the only national liaison opportunity for whale watching interests specifically (refer to Chapter Three); but as noted in national profile, representatives are mainly from more established sites. Thus attendance by representatives from these case study sites is critical to further the utility of the conference in directing and informing interpretation (and general whale watching management) policy and activities.

[30]e.g. as presented by land-based sites, or sites with Southern Right whales as the focal animals.

Yalata Aboriginal Community was represented by three members in attendance in 1995, two of whom have on-site roles in the management of whale watching at the Head of the Bight (ie. as part of the YLMP team). These delegates did not present a paper to their colleagues, although their attendance signifies their interest in the discussion of whale watching management and the promotion of their respective sites as offering important and unique tourism experiences.[31]

Regardless of whether or not they attended the conferences, over half of interpreters from the case study sites were forthcoming in their suggestions for future opportunities to liaise about interpretation via one of the series' products for the industry. In reference to the *National Education Strategy* for whale watching proposed at a 1995 *Encounter With Whales* conference workshop, most suggestions for improvements to the use of interpretation in Australian whale watching were offered by tour operators and RMAs in the sample (a total of 14). More than one third (5) of the tour operator sample from the case study sites expressed an interest in the Strategy's provision of interpretive materials. Suggestions from Albany and Head of the Bight tour operators included the production and distribution of whale-related 'information packs' and videos for their own use.

A further five of the tour operators who had an opinion on the Strategy recommended that it be used to 'educate' the tour operators themselves, either by

- enforcing and promoting consistent whale watching guidelines,
- encouraging accurate promotional material, or
- engendering an appreciation of cetaceans as more than a means of profit-making.

Two RMA interpreters also desired a uniform approach to whale watching guidelines, and the DCNR district office suggested that the Strategy tap into information networks (ie. not limited to conference delegates) to promote best practice interpretation.[32]

Though many of these suggestions resemble the interpreters' desired changes to their own efforts (e.g. expansion of interpretive materials/products; see section 7.3.2), their overall interest in the *National Education Strategy* is significant (cf. Standard IV). It illustrates their recognition of liaison and nationally coordinated efforts as a means to enhance the use of interpretation as a management tool for the tourism. Greater participation by these interpreters in the national conference series would help to ensure that their needs and interests are in fact considered by such strategies, and made known to other stakeholders in the management of whale watching who may be in a position to assist with their desired improvements to interpretation.

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[31] Interestingly, members of two SA NGOs attended the 1995 whale watching conference (Marine & Coastal Community Network, Threatened Species Network), though these same members did not respond to the present research survey, claiming that their interest in whale watching *interpretation* was negligible. Both have active roles in the promotion of the GABMP (e.g. through the media).

[32] Although apparently the office did not perceive local whale watching stakeholders to be included in such networks, given the nature of its current liaison concerning interpretation.

7.5 Summary of Chapter Results

Table 33 summarises the main points from the results and identifies trends within the profile of interpreters from the three case study sites and their professed interest in and use of interpretation in Australian whale watching. Exceptions to these trends have been acknowledged in the main text, and the implications of the particular strengths and weaknesses of the profile, as well as comments regarding the consistency of the results with those of the next two chapters, are reserved for later discussion.

In many cases, results from the case study interpreters resemble those from the national industry, and in particular parallels can be drawn between the different interpreters in this chapter's sample and their national counterparts regarding the nature of their interpretive processes. For instance, the advantages of interpretation as a means of inspiring whale protection was a notable theme in respondents' objectives for the use of interpretation in the tourism, though again, few interpreters addressed all of interpretation's potential roles within their own objectives. Also similar to the national profile, case study site interpreters' strategic efforts are typified by cursory attempts to plan/evaluate interpretation, and may be hindered by resource scarcity.

Although planning and evaluation of interpretation were informal and largely insular, liaison regarding other whale watching management issues presents avenues for increased attention to the strategic efforts. An impetus for communication between interpreters at Albany and Warrnambool is created by whale sightings, and the nature of the current information exchange highlights the value of greater coordinated use of interpretation as a management tool for these sites. At the Head of the Bight, the proposed Marine Park is at the forefront of recent liaison between stakeholders at the site, but could also present a forum for discussion for future interpretive efforts.

The salience of social and other contextual features of the case study sites over interpretive efforts is most apparent in the results regarding the liaison between the interpreters of case study sites. In addition to the subjects of communication, the type and frequency of interpreter interaction also appear to vary according to the management regimes and the nature of the whale watching experiences of the respective sites. Some discrepancies have been noted between the different *types* of interpreters (RMA, NGO, tour operators), particularly in terms of the specific approaches to strategic efforts. However, basic characteristics of interpretation goals, planning/evaluation (e.g. general lack thereof) and resources seem to transcend boundaries of the case study sites.[33] Finally, at all sites, and for all types of interpreters (particularly tour operators and NGOs), there is greater scope for liaison at national level in respect to whale watching management and the use of interpretation.

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[33] ie. are shared by interpreters of each location

TABLE 33 Trends in Interpretive Processes at Whale Watching Case Study Sites

Theme; Relevant Standard for Interpretation	Trends / Major Results
PROCESS STANDARDS	
Definition of Interpretation **I**	• Not only were definitions primarily factual/ passive for all types of interpreters, many simply identified examples of available products.
Objectives for Interpretation **I, II**	• Emphasis on objectives for interpretation varied to some degree according to the type of interpreter and their main responsibility for whale watching. • The use of interpretation for 'whale or environmental protection' was more likely to be mentioned by RMA and tour operator respondents • Objectives for both visitor satisfaction *and* environmental protection were rare
Strategies for Planning and Evaluation **III**	• All sites exhibited a paucity of specific or explicit policies to create & review interpretation, although RMAs & NGOs involved in whale watching at the Head of the Bight engaged in the most planning activity • RMAs were the most popular source of information for interpretive content. • Informal evaluation was prominent amongst NGOs and tour operators; RMA efforts, though more likely to be formal (at the district office level), were also more limited • Resources (time, staff, funding) available to support the creation or implementation of interpretation were limited.
Interpreter Activities, and Interest **IV**	• RMAs had more contact with tour operators than NGOs, although liaison was irregular (except for Albany) and largely unrelated to interpretation. • Reasons for liaison correspond to main management issues of whale watching at the respective case study sites. • Participation in a national forum for liaison was demonstrated mainly by RMAs and NGOs from Albany & the Head of the Bight • Training opportunities were minimal for RMAs. • Ideas for changing interpretation varied between interpreters, with RMAs interested in improving quality and distribution, whilst tour operators & NGOs preferred greater quantities of interpretation

CHAPTER EIGHT
MAJOR INTERPRETIVE EFFORTS AT CASE STUDY SITES FOR AUSTRALIAN WHALE WATCHING

'Canst thou draw out leviathan with a hook?
... will he make many supplications unto thee?
will he speak soft words unto thee?
...shall not one be cast down even at the sight of him?
Job 41

8.1 Chapter Themes and Sample

8.1.1 Drawing Out Leviathan

When humans and cetaceans meet in the context of whale watching, interpretation can take on the role of a lure or 'hook', employed to capture both the essence of leviathan and the imagination of its audience. Through narratives, images, prompts and dialogue, interpretation can supplement any awe created in the presence of the great beasts, and charge the emotions of those who are drawn to the mystery of the encounter. This chapter presents a more detailed investigation of the interpretation produced and delivered by the primary interpreters at the whale watching case study sites of Albany (WA), Warrnambool (VIC) and the Head of the Bight (SA). Analysis of their interpretive materials and strategies reveal the performance of the interpreters' efforts to 'draw out' leviathan for their whale watching audience.

The profile of interpretation which emerges from the results offers insight into the consistency between the interpreters' products/practices and their expressed goals and developmental activities (as highlighted in Chapter Seven). The profile also reveals notable features of the respective case study sites (e.g. social, logistical, geographical) which influence the nature and performance of the whale watching interpretation. As in the previous chapter, implications regarding the 'quality' of the interpretation are (briefly) drawn from comparisons with best practice standards, although major trends are afforded further discussion in Chapter Ten.

8.1.2 Sample of Key Interpretive Products at Case Study Sites

Table 34 presents the major interpretation efforts reviewed in the research, as offered by all types of (primary) interpreters identified for each case study site. These products represent a manifestation of the interpreters' goals, planning activities and liaison, and

TABLE 34
Interpretation Efforts and Target Audiences at Case Study Sites

Interpreter	Main Interpretation Product Form : *Title*	Target Whale Watchers A	P	I	T
(All sites)					
Tour Operators	• **Brochure:** misc. (tour names) • **Commentary:** (n/a) • **Audio/visual:** various	√			√ √
(Head of Bight)					
DENR (State) (District)	• **A4 pages:** *'Welcome to Whale Watching'* (4pp) • **verbal information**[1]: (n/a)	√	√		
Yalata Land M'gmt Program	• **sign:** *'Head of Bight'* • **verbal information:** (n/a) • **brochure:** *'Head of the Bight Enterprises'* (1p)	√ √		√	√
Eyre Peninsula Tourism Assoc.	• **visitor guide booklet:** *'Eyre Peninsula ; A Breath of Fresh Air'* (76pp) • **verbal information:** (n/a) • **sign:** *'Great Australian Bight'* • **sign:** *'Southern Right Whale'*	√ √	√	√	√
(Warrnambool)					
DCNR (State) (District)	• **booklet:** *'Whales in Victorian Waters'* (16pp) • **brochure:** *'Whale Watching in Victoria'* • **sign:** *'Logans Beach Viewing Platform'* (2 panels) • **verbal information:** (n/a)	√ √ √		√	
Warrnambool Tourist Info. Centre	• **visitor guide booklet:** *'Warrnambool Visitors Handbook'* (48pp) • **verbal information:** (n/a)	√ √			
The Standard	• **visitor guide booklet:** *'The Whales at Warrnambool'* (40pp) • **visitor guide booklet:** *'The Great South-west Tourist News'* (80pp)	√ √			
(Albany)					
CALM (State) (District)	• **brochure:** *'Watching Whales'* • **brochure:** *'Watching Whales in Albany'* • **verbal information:** (n/a) • **sign:** *'Watching for Whales and Dolphins; Caring for Stranded Whales and Dolphins'*	√ √	√ √	√	
Albany Tourism Association	• **visitor guide booklet:** *'The Albany Experience'* (104pp) • **verbal information:** (n/a)	√	√		

KEY **A:** All Whale Watcher Types
I: Independent Whale Watchers*
P: Potential/Post Whale Watchers (Pre/Post experience)
T: Tour Participant Whale Watchers* (note: these only include primary types of tours at the sites)

* During their experience

[1] verbal information refers to advice, directions, instructions, etc; not commentary

are borne of the resources they have at their disposal.[2] Though small, the sample of interpretation efforts is representative of the use of this management tool at the whale watching sites. In fact, due to the limited amount of offerings, the performance of each interpretive product is important, as it may be the only exposure whale watchers have to information about their focal animal and setting.

Interpreters from the case study sites offer several types of interpretive products, from the passive and printed to the (inter)active and verbal. As noted in Table 34, the majority are directed toward whale watchers of all kinds, whilst others target a more specific audience (e.g. independent whale watchers, those on tour, those who are in the decision making stage of their experience, or any whale watchers after their experience). In all cases, though, it appears that the nature of the interpreters' contact with whale watchers is a key factor in the form of interpretation they make available at the case study sites.

As an example, commentary was (of course) the main interpretation product offered by all tour operators, and was available only to tour participants at each site. In Albany, commentary is of greater significance as an interpretation product due to the large proportion of the whale watching population who are confined to guided activity.[3] By contrast, tour participants in Warrnambool comprise approximately one tenth of the total whale watching population, and hence commentary (though important to those on tour) is not as cogent an interpretive product at this site. Printed forms of interpretation feature prominently at the Head of the Bight and Warrnambool, in accordance with the large populations of independent land-based whale watchers.

The above differences in the use of interpretation correspond to the nature of the contact between interpreters and their audience, but more specifically, they can be attributed to the effects of the whale watching platform on this contact. Similarly, a pattern in interpretive products also emerges amongst the types of interpreters, as each consistently favours a specific form of interpretation conducive to their access to whale watchers. Both RMA and NGO respondents provided printed materials as their main interpretation effort at all sites, which coincides with their lack of direct contact with whale watchers during the experience.[4] It was uncommon for these types of interpreters to have face to face contact with whale watchers, except in the capacity of offering verbal advice and (perhaps) orientative information about the sites.[5] Hence unlike the national profile, none of the NGOs and RMAs at the case study sites provided guided tours.

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[2] according to results from the national survey of whale watching interpreters in Chapter Seven

[3] The 'significance' of the commentary does not imply that tour participants won't have access or be exposed to printed material; indeed, the interpretation sample is comprised of both types of efforts in Albany. Nonetheless, these whale watchers do not rely on printed interpretation as their only source of whale watching-related information, as they will all be exposed to commentary.

[4] an anomaly to this is the YLMP, see below

[5] This verbal information is only available from staff at the local *district* offices of RMAs and NGOs, and is dispensed either in person or via the telephone.

The printed material from RMAs comprised both signs and portable materials (e.g. brochures, booklets), although a discrepancy can be found between head and district offices and their favoured interpretive items. Head offices of DENR (SA) and DCNR (VIC), for instance, create booklets for a state-wide distribution which are also available at the case study sites. By contrast, it is more common for district offices (of DCNR and CALM [WA]) to create signage for their respective whale watching sites. One exception to this trend is found in the efforts of the district office of DENR, which no longer provides signage for the Head of the Bight, and does not have jurisdiction over the area where the land-based whale watching activity takes place.[6] In Albany, CALM's district office produces other interpretation in addition to its signage, but instead of relying on any state-wide booklets, it adapts the general content of such material to the nature of the local whale watching.[7] No RMA offices have (enforced or frequent) direct contact with whale watchers on-site, but their interpretive products perhaps reflect their authority and/or familiarity with the whale watching activity at the sites.[8]

At the Head of the Bight, NGOs (YLMP and EPTA) are responsible for signage, for similar reasons as the RMAs (ie. limited on-site contact).[9] YLMP also had enforced contact with whale watchers upon their arrival at the Head of the Bight since visitors are required to purchase a permit, and the nature of this contact also includes the dissemination of orientative information about the site. However, once visitors continue on to the viewing area, they do not (regularly) encounter YLMP staff.

Most NGOs from the case study sample favoured more portable interpretive materials regarding whale watching in order to reach a broader audience. For example, a common practice by NGO tourism associations at each site was the production of a visitor guide for the site (and region). In addition to the tourism association, Warrnambool's local print media (*The Standard*) also creates a guide booklet, although it places more emphasis on (educative) whale information.[10] Together, NGOs of this site offered the greatest number of guide booklets, with three separate guides produced annually. An important aspect of the guide booklets at each site is that due to their size, they offer large amounts and potentially a greater range of information (e.g. more than brochures; refer to Table 34, p. 212) to all whale watchers.

There are advantages and disadvantages to the use of any of these interpretive products within whale watching at the case study sites, and implications of their form, content and

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[6] as noted in Chapter Seven, section 7.4.1

[7] One possible reason may be that most of WA's whale watching (and subsequently, interpretive material) features Humpback whales, whilst Southern Rights are the focal species in Albany. In addition to its brochure, CALM provides 2 full pages of information which are printed in the Albany Tourism Association's booklet. The implications of the content, source and distribution of interpretive products are discussed in further detail throughout the chapter.

[8] e.g. district offices must ensure that the placement and content of signs are appropriate to the local tourist activity; head offices must make sure their efforts are relevant to state-wide activity.

[9] EPTA has no management jurisdiction at the whale watching site on Yalata land, but the YLMP sources interpretive materials from the Association (as it does from DENR, as well).

[10] See sections 8.2 and 8.3 for details about the content of interpretive materials.

delivery are illustrated by further analysis in this chapter according to best practice standards. However, any future efforts to encourage the application of best practice standards to whale watching interpretation must acknowledge and consider the interpreter preferences and precedents regarding the different products identified within this sample.

8.2 Topics Within Interpretive Products

According to Standards V, VI, VIII for best practice interpretation, certain topics must be present within the content of any of these types of interpretive products in order to maximise their potential to achieve objectives of satisfying, educating and encouraging longterm environmental attitudes or behaviour amongst whale watchers. The sample of printed interpretive material from each case study site,[11] as well as the commentary of tour operator respondents from these sites, demonstrate an emphasis on particular educative topics concerning basic whale facts.

8.2.1 Promotional and Orientative Topics

According to Standards V and VI , a meaningful part of any whale watching interpretation program[12] is how it introduces whale watchers to the site and to the tourism experience, since this may affect their level of satisfaction and ultimately, their attention to educative material. In their entirety, the promotional and orientative topics found in the printed material (as both text and images) of the interpretation sample (n=23) would have the potential to shape whale watcher expectations of the experience, in terms of their preparation for and understanding of:

- measures for their comfort/safety,
- factors that enhance the experience,
- whale activity likely to be seen, and
- appropriate behaviour during the experience.

However, results show that the emphasis placed upon these different topics within the interpretation varies between the types of interpreters (ie. RMA, NGO or tour operator). Also, no single type of interpreter included all possible orientative topics within their own current interpretative efforts.

Table 35 illustrates that features of the experience which address whale watcher comfort were addressed most frequently by tour operators, whose promotional brochures often described facilities and potential weather conditions.[13] Whilst popular amongst at least 4 out of 7 tour operator brochures from the case study sites, information about facilities and weather was found in only 17.4% and 30.4% (respectively) of the total sample of

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[11] Printed materials the comprise the sample are identified in Table 34 for RMAs and NGOs, and including 7 of the tour operators' brochures (n=23). Not all tour operators provided/had promotional material with relevant information; e.g. SA bus tours do not specify whale watching, the VIC Helicopter Operator only cited the tour name and contact number, EcoInteractions (SA) only has promotional material for its dolphin-viewing tours.

[12] 'Program' refers to the total amount of materials, verbal information available at a site; although the term 'program' should not signify that these efforts are necessarily coordinated between interpreters.

[13] facilities referred to in brochures denote those provided by the operator, not those available at land-based sites the operator may visit.

TABLE 35

Promotional and Orientative Topics in Case Study Site Printed Interpretation

	Interpreter			
Promotional / Orientative Topic	**RMA**	**NGO**	**Tour Operator**	**SAMPLE TOTAL**
Directions	14.3%	55.6%	28.6%	**34.8%**
Safety	57.1%	22.2%	28.6%	**34.8%**
Facilities	0	0	57.1%	**17.4%**
Weather	14.3%	0	85.7%	**30.4%**
Whale watching tips/equipment	71.4%	33.3%	42.9%	**43.5%**
Whale activity, numbers	100%	55.6%	71.4%	**73.9%**
Interpretation as part of the experience	0	11.1%	42.9%	**17.4%**
Appropriate environmental behaviour	85.7%	44.4%	0	**43.5%**
Number of printed materials reviewed	7	9	7	n=23

available printed material. NGO tourist guides instead focused on directional information and descriptions of the experience in terms of whale numbers and activity, and all neglected to warn potential whale watchers of the lack of facilities at the land-based sites. This latter topic was conspicuous in its absence, as no interpretation at the land-based sites mentioned the status of the facilities or physical features of the experience.

Warnings regarding the absence of facilities or nature of the sites are a significant omission by the interpretation for these sites. Neither Warrnambool's whale watching platform nor the Head of the Bight viewing area have toilets, shelters, food, or benches, and the weather at these sites can be fiercely cold and windy in winter months (ie. during the whale watching season). Although Warrnambool whale watchers can seek temporary refuge in the nearby town if they become uncomfortable, the Head of the Bight is too remote for any brief retreats for respite.[14] Furthermore, at the Head of the Bight, the unsealed access road is closed during inclement weather, though no warnings of this possibility are found in any printed material for the site. Hence physical discomfort and lack of advance warning for site closure (at the Head of the Bight) are likely to be major issues in visitor satisfaction and attention to other information at the sites (cf. Standards VI and VII).[15]

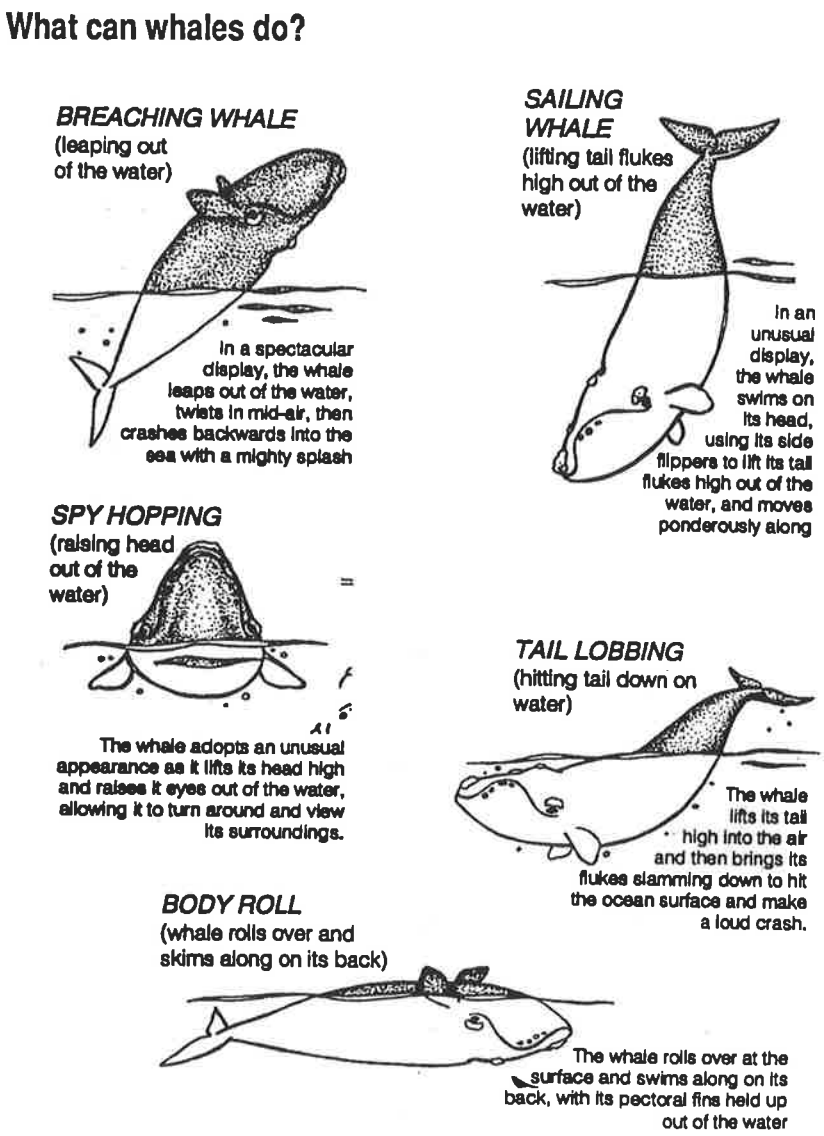
The provision of whale watching tips is another promotional/orientative topic which could contribute to visitor satisfaction during whale watching. Citation of favourable times and methods of whale spotting through interpretation can be of interest to visitors in terms of finding whales and understanding their behaviour,[16] and according to Standards VI and VII, such information is ideally presented before the experience (in promotional material), or at least during the experience. These tips were included in less than half of the current sample of the printed interpretive material (43.5%; 10), and thus it is possible that whale watchers who are not experienced with the activity may be unprepared or unable to spot whales easily if they rely on these printed efforts.[17] Even if a lack of reference to whale watching tips does not result in their overall disappointment with the experience, such interpretation still does not maximise its value-adding opportunity.

Of those who do address this topic, RMA respondents offered the most detailed descriptions of whale watching tips within their printed interpretation, as five (out of 7) of their printed materials described how to identify the species or behaviour of the whales, and most (4) also supplied a diagram (or portions thereof) to facilitate this exercise (Figure 19). In a printed form, such information is particularly beneficial to the independent whale watchers who do not enjoy commentary on the whale behaviour as it

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[14]Section 8.4 details the locations of the sites in respect to their proximity to different facilities.
[15]This is evaluated in Chapter Nine in respect to whale watcher profiles.
[16]as noted in Chapter Four; sections 4.2 and 4.3
[17]and are exposed to any of the 56.5% that do not contain whale watching tips

FIGURE 19 **An Example of Whale Watching Tips: How To Identify Whale Behaviour**



Note: Other examples of the sample printed material which include whale watching tips in a diagram either use a variation of this particular design, or create one with similar themes and drawing.

Source: *Warrnambool Visitors Handbook* (1996)

occurs, and it was available from interpreters at each land-based site as either signage and/or portable material.

Several (6 out of 23; still only a quarter) of the printed efforts by interpreters specifically informed whale watchers that the use of binoculars can greatly enhance the experience, although this seems somewhat contradictory to the information the interpreters generally supply regarding the proximity of whales. For example, a total of 39.1% of the sampled material from all interpreters noted that Southern Right whales are often in close proximity to the shore, and indeed it is their coastal affinity which makes them ideal candidates for land-based whale watching. Only the RMAs' material qualified this point by saying the whales 'can' be close, whereas the tour operators' brochures were more likely to exaggerate, describing the whales as:

> *'playing metres away'* (Head of Bight tour operator);
> *'seemingly just beneath your feet'* (Head of Bight tour operator);

and that they

> *'come up to the boat and have as much of a look at us as we do of them. Sometimes they even give the boat a nudge!'* (Albany tour operator)

Other whale behaviour was described in a similar manner by most of the tour operators' material in the sample (6 out of 7); and instead of following the lead of the RMA material and cautioning that whales have:

> *'occasional periods of incredible activity'* (CALM district office);

the operators instead made such claims as:

> *'it all happens daily'* (Head of Bight tour operator)

and there is

> *'plenty of action for us to watch.'* (Albany tour operator)

In reference to Standard VI, the tendency to imply any regularity or frequency of certain whale behaviour has the potential to create unrealistic expectations amongst whale watchers, particularly those who participate in the tours.[18] These results for the case study interpretation sample show that, like the national sample, this is a salient risk for a notable amount of printed whale watching interpretation.

Images within the printed material can also influence whale watcher expectations about the focal animals' behaviour, although those within the case study sample were more modest than the text (as above), and the images in the national sample. In fact, all but three examples of the printed material (visually) depicted whale activity in a realistic manner. This was achieved either by avoiding the use of images that displayed uncommon behaviour, or by using images of whale behaviour to *identify* the activity,

[18] ie. since usually have a very limited time in which to witness all such behaviour, whereas independent whale watchers can ostensibly spend all day engaged in the activity. Of course, some land-based tours span a period of days, as noted in Chapter Seven, and Appendix 6.

rather than to imply that this activity is a frequently occurs during any whale watching experience. Exceptions were an NGO tourist guide's photograph of a whale within metres of a tour boat, and two tour operators who illustrated whales breaching as a promotional image. Though such behaviour is neither outlandish nor extremely rare , again, the suggestion that it *will* occur can lead to disappointment.

Expectations that should be created by the interpretive material include the promotion of learning as a (fun, interesting) part of the whale watching experience (cf. Standard VI), but just four items of the current sample of printed materials included any reference to learning opportunities. No RMAs note that whale watchers are able to learn about whales during the experience, although this may be because their material itself could be considered part of this learning (see below). Nearly half[19] of the tour operator brochures in the sample did acknowledge learning as part of their product. Two of these operators also attempt to create a sense of interpreter credibility by mentioning qualifications, but these were either vague (ie. guides are 'experienced') or of greater relevance to other issues (e.g. 'a practising veterinarian' with cetacean research experience).

One NGO's tourist guidebook (produced by the Tourist Information Centre in Warrnambool) mentions that an interpretive sign is available at the whale watching site, yet this is not commonly practiced by the interpreters who produce the majority of the case study site signage. EPTA's tourist guidebook encourages visitation at the Head of the Bight, but does not promote the Association's interpretive efforts (two signs) found there. In Albany, CALM's brochure directs visitors to a potential land-based *site* (ie. Middleton Beach) where it has a sign that could enhance the whale watchers' experience, but the presence of the sign is ignored by the text in the brochure.[20]

Perhaps the most curious effort in terms of promoting interpretation as part of the whale watching experience is the Warrnambool Tourist Information Centre's guidebook that *does* mention the on-site interpretive sign. This booklet implies that DCNR's sign is more important for those who miss seeing the whales whilst at the platform, rather than for the interest of all whale watchers:

> '*Visitors who miss these mammoth mammals can read the information board at Logans Beach and learn about their habits.*'

Certainly, it is important that the sign is mentioned by the guidebook (and it is the only instance where it is acknowledged at all).[21] The booklet even suggests a visit to the platform is of value even if one doesn't see a whale, *because* he/she can still learn about the animals. However, if interpretive signs are promoted at all, it should be

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[19]although only 3 out of 7

[20]Reference to the sign is also omitted in CALM's submission to the Albany Tourism Association's booklet.

[21]Also, the author's interpretation of this reference to the sign admittedly emphasises how it might be misunderstood, rather than suggesting that its publishers deliberately intended to suggest only those who miss seeing whales should read the sign.

unambiguous and encourage all whale watchers to read them as a means of enhancing their experience.

Finally, orientative topics regarding safety and appropriate behaviour during whale watching were covered at all sites, although by less than half of the printed material (34.8% and 43.5% respectively) and primarily by RMAs and NGOs. Of these interpreters, most of their printed materials (9 out of 16) cover safety and behavioural issues by repeating the whale watching guidelines either in their entirety (and often accompanied by a diagram; refer to Appendix 2), or at least in general terms.[22]

RMA printed material relevant to the land-based sites at Warrnambool and the Head of the Bight also makes reference to appropriate visitor behaviour along the fragile coastline, except (significantly) for the sign at the Logans Beach platform. At the latter site, the DCNR head office's brochure is displayed on the sign and covers approach distances to whales for boaters, swimmers and aircraft; but does not outline what is appropriate behaviour for *land-based* whale watchers at the site. Due to the physical boundaries created by the platform, it is possible the Department does not consider visitor presence to be a notable risk to the surrounding dune system.[23] Nonetheless, it misses an opportunity to outline behaviour for the protection this type of coastal area which could be relevant to other sites along the local coastline, at other land-based whale watching sites or for dune systems in general.

8.2.2 Educational Topics

Interpretation with educative content available at whale watching sites consists of NGO and RMA printed material (e.g. guidebooks, signs), and tour operator commentary. As in the national results, commentary is again the primary interpretive contribution of the tour operators, although some operators also include topics of whale biology, behaviour and conservation within their printed promotional brochures (7 of which are included in the current analysis). Trends in educative topics of the case study site interpretation concern the degree of diversity (or repetition) in topics, and differences between interpreter types and case study sites. In particular, many of the primary interpreters did attempt to address their professed environmental protection objective via their educative interpretation, though there are notable omissions in the types of topics used for such a purpose (cf. Standard VIII).[24]

Of the total amount of printed interpretive material that contained any educative content (19 out of 23 items), a majority included basic facts regarding the following six topics

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[22]section 8.3.2 provides further detail on the presence of topics relevant to environmentally responsible behaviour.

[23]By contrast, other NGO material for this site does instruct whale watchers to keep out of the dunes; see section 8.3.2

[24]as expressed in Chapter Seven, section 7.2.2; section 8.3.2 also cites other attempts to address this objective within the current case study site interpretation

related to Southern Right whales:

- calf growth and development (89.5%)
- migration patterns (73%)
- typical behaviour (73%), and
- conservation status (79%)
- physical features (73%)
- historical use by humans (68.4%).

The mention of the history of whaling in educative material is an important opportunity for theme development,[25] and it was a popular topic amongst all interpreters (68.4%). Discussion of whaling often covered reasons for targeting the species, the life of whalers, nature of the hunt, and decimation of whale populations, yet these aspects were primarily addressed in general terms. For instance, despite the lengthy history of whaling in Albany (and its distinction as the last Australian site to cease the activity), as well as the proliferation of the activity along the Victorian coast near Warrnambool, none of the printed interpretive material from these sites referred specifically to former activities of the local industries.

Commentary by several tour operators in Albany did draw such parallels in respect to whaling. Three operators claimed they often incorporated the visual 'prompt' of the Cheynes Beach Whaling Station (now a museum, Whale World), which they passed en route, into their discussion of the history of the area regarding whales. This vivid example of the past industry can make whaling more of a reality in the minds of the whale watching audience, rather than an activity that took (and takes) place elsewhere, and hence can become a segue into current whaling and whale protection issues.

Whales are not the only feature of interest to visitors at the case study sites, yet other flora and fauna, or historical features of the region (other than the above example) were largely overlooked as either educative or promotional topics within the case study site interpretation. Only a quarter (26.3%) of the printed material with educative content mentioned that other flora and fauna were part of the ecosystem of the area, or even that they might be sighted during one's whale watching efforts. This is inconsistent with the respondents' professed 'environmental protection' objective for interpretation; or it implies that they were largely referring to whales alone (rather than the broader ecosystem) after all. Although these interpreters might consider this particular objective to be fulfilled by their other efforts or topics (e.g. whale watching guidelines), the need to incorporate an ecosystem point of view into protection issues (cf. Standard VIII) may be unrecognised.

In a similar manner, a topic curiously absent in the interpretation at the Head of the Bight is the Great Australian Bight Marine Park issue. SARDI's printed material on the need for the Park (and hence, the significance of the area for whales) was not available on site, and could only be found several hours away in the district office of DENR in Ceduna.[26]

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[25] ie. regarding whale protection; theme development and other techniques for creating mindfulness through interpretation are noted in the next section

[26] The material occasionally appeared in other venues such as local roadhouses or tourism offices, but this was highly irregular, meagre and inconsistent throughout the season.

None of the major printed material about the site referred to the issue, and few offered more details about the site's global significance as a Southern Right whale nursery than, for example, the simple fact that

> '*Whales migrate here to give birth or mate*' (NGO; sign on-site); or
> '*...most (Southern Right whales in Australia) go to the Head of the Bight.*'
> (Head of Bight tour operator; brochure).

This point is significant in that a major opportunity is lost to enhance the conservation knowledge of whale watchers at the site, in terms of the vulnerability of the whales and what measures can be taken to protect them in the longterm (ie. by supporting the Park).[27] This omission could be due to the political sensitivity of the issue at the time.

Whilst *specific* examples of whale conservation issues may be lacking in the whale watching printed interpretation, most of interpreters' material did address the topic of 'whale protection' in general terms. Figures 20 and 21 depict the differences between interpreters and case study sites in terms of the appearance of information relevant to protection of whales and the coastal environment.[28] As indicated in Figure 20 (and stated previously), most interpreters' printed material makes reference to the vulnerability of whales to extinction, due to previous over-harvesting. A majority of RMA material refers to environmental and whale protection (5 and 6 out of 7 items, respectively) through the mention of appropriate whale watcher behaviour. Also, over half of the NGOs' and RMAs' printed interpretation with educative content (8 out of 14) directs interested whale watchers to sources of further information which may address these subjects.

Despite the oversight of the GABMP issue, printed interpretation on-site at the Head of the Bight acknowledges the Southern Right whales as vulnerable to extinction. Yet Warrnambool is the only case study site in which *all* printed interpretation notes this fact. It is also ironic that more of Warrnambool's printed material refers to environmental behaviour than the Head of the Bight, even though the primary means of interpretation on-site (ie. the sign at Logans Beach) fails to include the topic. Warrnambool's tourist guides and RMA booklets are forthcoming in their citation of further sources of information, which can direct interested whale watchers toward topics of greater depth,[29] even though these booklets are already quite lengthy and extensive themselves.[30]

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[27]For instance, at the time of study, the zoning of the Marine Park was incomplete. Interested parties had the opportunity (through a public consultation period) to encourage managers to instigate larger and/or stricter 'sanctuary' zones, which would restrict all human activities and offer protection to the whales and to their habitat within the zones.

[28] In these examples, it should be noted that 'environmental and whale protection on site' covers similar themes to 'appropriate behaviour' discussed in the previous section on orientative information, and that which is covered in 8.3.2. In the present context, however, such information can be considered educative in the sense that it addresses topics on factors that disturb whales or threaten the environment, the vulnerability of these resources to certain types of human behaviour, and the immediate and longterm consequences of negligent behaviour.

[29]ie. to maintain an interest in whales and the environment off-site/after the experience

[30]as noted in Table 34, p. 212

FIGURE 20
Pro-Environment Topics in Printed Material as Offered by Different Interpreter Types

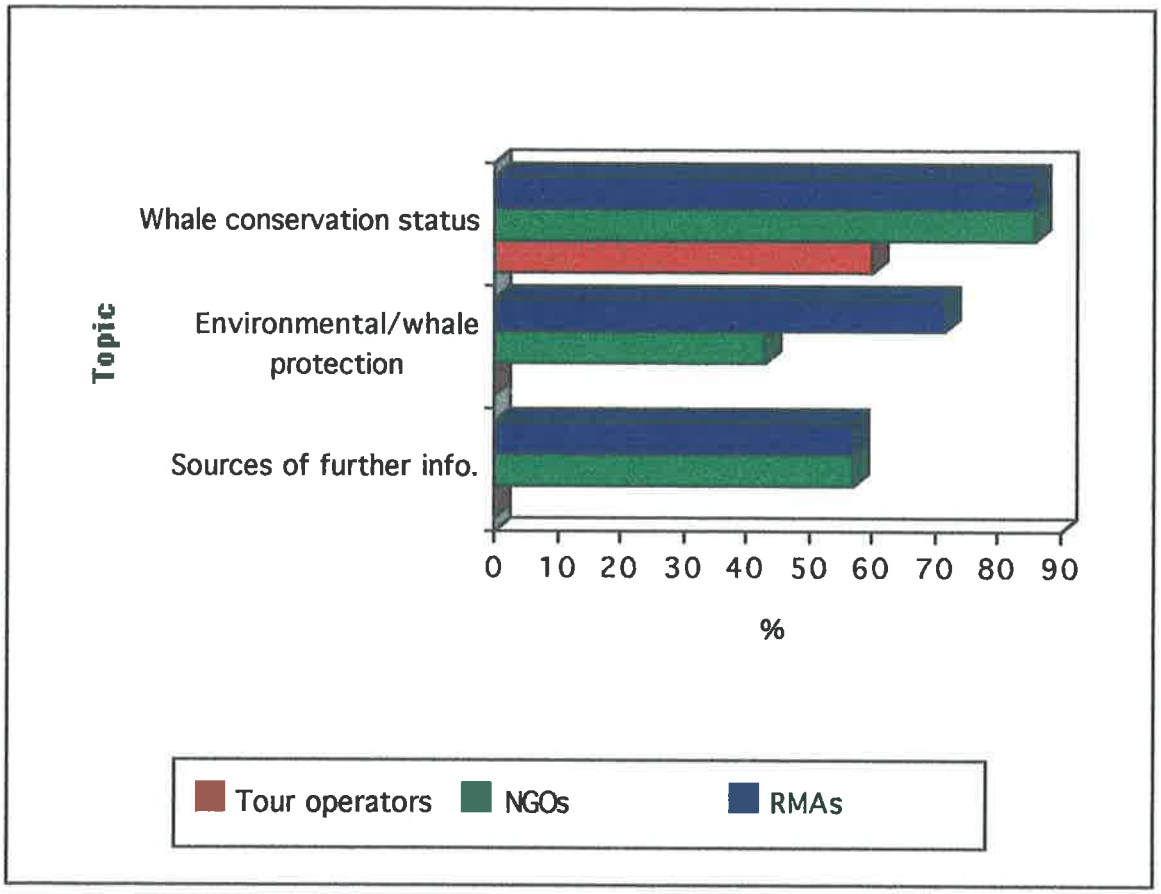
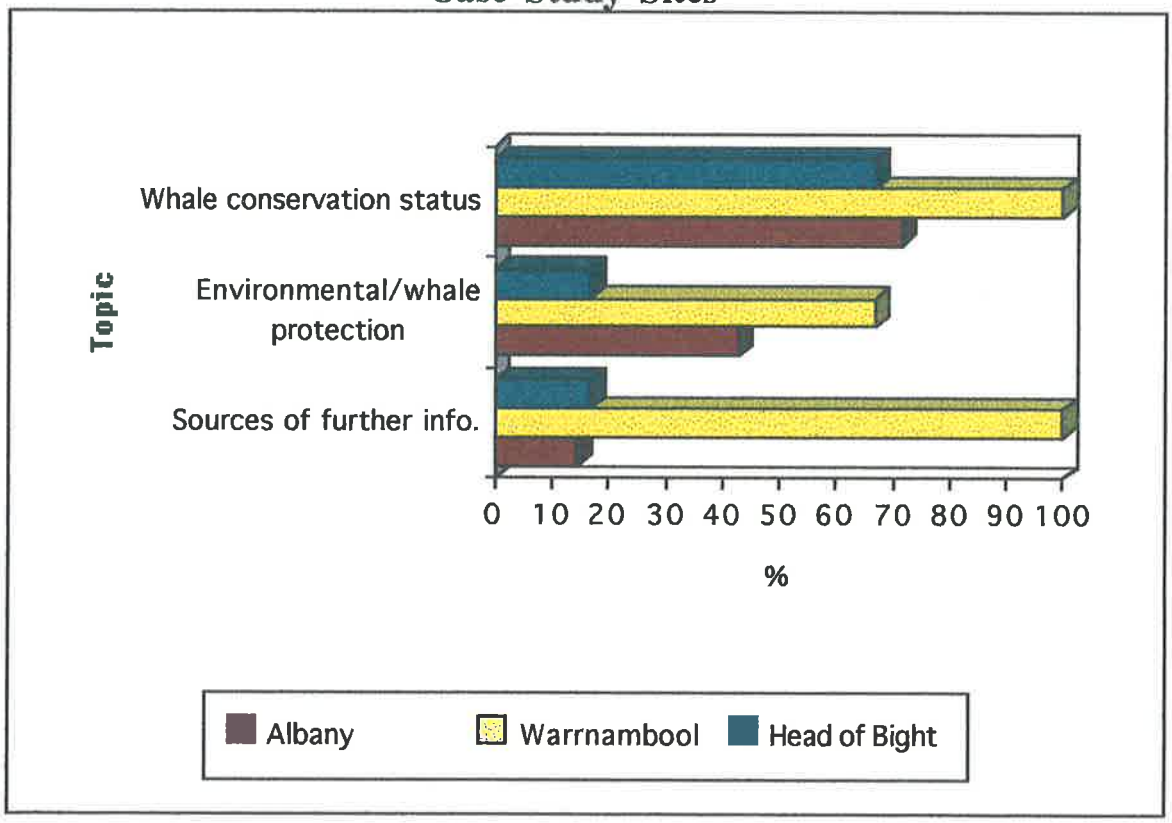


FIGURE 21
Pro-Environment Topics in Printed Material as Offered at the Case Study Sites



Lest it appear that the tour operators in the sample perform poorly in their inclusion of environmental topics, it should be acknowledged that most of these interpreters reserve this information for their verbal commentary, rather than include it within their own printed materials.[31] When queried about their commentary, the provided list of topics in the questionnaire may have prompted the tour operators' responses. Nonetheless, results remain indicative of the information they *perceive* to be important, whether or not they actually do include it in the commentary for every excursions.

A notable majority (ie. at least 10 out of 12) of case study site tour operators claim to have incorporated the following topics into their commentary:

- whale social behaviour,
- whale and environmental protection,
- threats to whales, and
- whale watching guidelines/regulations.

Slightly fewer, though still a strong majority (at least 8 out of 12), said their commentary referred to: human use of the coast, human impacts to the coastal environment, and measures that individuals can take to protect whales.

At the very least, the presence of these topics in the interpretation sample might increase the knowledge of whale watchers, and the diversity of educative topics is promising in terms of the coverage of environmental themes. Further examination of the content of the printed material offers additional insight into its potential to attract and/or interest the whale watchers, and to produce any longterm benefits for the tourism's focal animal and the environment.

8.3 Style of the Interpretive Content

In addition to the fundamental importance of the presence of certain educative and other topics within interpretation as discussed in the previous section, Standards VIII and IX contend that the style in which this information is presented (whether written or expressed verbally), is critical to interpretation's success. The premises of these standards, as derived from educational theory,[32] state that especial characteristics of the content of interpretation are required to (1) interest whale watchers in the tourism's natural resources, (2) facilitate their acquisition of knowledge and skills relevant to the protection of these resources, and (3) engage their thoughts and actions beyond the whale watching experience. Results in this section indicate the extent to which the content and style of the interpretation at case study sites contribute to such efforts.

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[31] although the inclusion of educative information within their printed efforts is also encouraged, as part of the premise of Standards V, VI, and to some extent, VIII.

[32] e.g. a model for environmentally responsible behaviour based on environmental education, developed by Hines et al. 1986; Hungerford & Volk 1990; and Langer's (1987) theory of mindfulness. See Chapter Four, sections 4.4 and 4.5.

8.3.1 Interpretive Techniques Conducive to Mindfulness

Table 36 depicts how frequently the characteristics for promoting mindfulness were incorporated by case study site interpreters into their educative printed material (n=19), and highlights which interpreters and sites were most likely to employ these characteristics. Overall, greater effort was noted in the use of structural techniques (e.g. dividing information by sections, developing certain themes within information), than of techniques for composition (e.g. novel information, imagery). RMA respondents' materials used mindful techniques more frequently than other interpreters, with the exception of analogies and imagery which were favoured by tour operators. Yet even the most popular technique (ie. division of text) amongst RMAs (and amongst the entire sample) was only found within approximately a third of the RMA's material (36.8%).

The least popular technique for promoting mindfulness in an interpretive audience amongst the printed sample was the use of prompts.[33] Since prompts or questions can deliberately promote the discovery of information by the whale watchers themselves, it appears that much of the printed material fails to take advantage of one of its only opportunities to extend beyond a completely passive form of interpretation. RMA and NGO interpreters, who largely rely on printed efforts for the interpretation at the case study sites, were more likely to include prompts than tour operators;[34] but this technique was still only practiced by 5.3% of their material. Verbal commentary may have used prompts or questions more often than is noted by results, and indeed, half of all tour operators in the case study sample (7) claimed to alter their discussion according to what whales were doing at the time.[35]

Three (out of 5) examples from the tour operators' printed materials contained analogies or comparisons that presented facts in a manner which could familiarise them for the audience of whale watchers. Tour operators were more likely than the other interpreters to take advantage of this informal style of presenting facts, particularly in reference to the whales' physical dimensions:

> *'This animal is bigger than 5 dinosaurs and heavier than 25 elephants!'*
>
> (Head of Bight tour operator)[36]

The common name of the Southern Right whale was even used as a basis of comparison, in terms of the animals' popularity as a whaler's prize; three items of the operators' material (42.9%) specifically referred to the reasons why the species was the 'right' whale to hunt.[37]

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[33] e.g. appeals to the reader's use of sensory information; text phrased as questions

[34] though this comparison refers only to tour operator brochures

[35] e.g. enabling them to describe what is seen during the experience, direct whale watchers' attention and prompt their thoughts according to visual, aural, or other sensory stimuli

[36] Of course, whilst this example represents a good intention, the use of the general term 'dinosaurs' may not be a valid comparison considering their variation in size.

[37] e.g. it was slow-moving, floated when dead, exhibited high site fidelity

TABLE 36 Characteristics For Creating Mindfulness Within Printed Interpretation from Case Study Sites

Characteristic	**TOTAL*** for sample of printed material with educative content (n= 19)	*Most frequent use of the mindful characteristic by:* **Interpreter type**	**Case study site**
Analogy / Comparison	**36.8%**	Tour operators; 21.1% of total	Albany; 15.8% of total
Appeal to the Affective Domain	**57.9%**	RMAs; 26.3%	Albany; 26.3%
Prompts	**10.5%**	NGOs and RMAs; 5.3% (each)	Warrnambool and Head of Bight; 5.3% (each)
Novel information	**47.4%**	RMAs; 26.3%	Warrnambool; 26.3%
Imagery	**31.6%**	Tour operators; 21.1%	Albany and Head of Bight; 10.5% (each)
Theme development	**63.2%**	RMAs; 31.6%	Warrnambool; 26.3%
Division of text by titled section	**68.4%**	RMAs; 36.8%	Warrnambool; 31.6%
Use of pictures**	average #:		
photos	**1.6**	RMAs; 3	Warrnambool; 5.8
diagrams	**3.5**	RMAs; 5.7	Albany; 5.3
Readability (by reading age)***	range: **13.4 to 17.5 years** average: **15.1 years**	highest average: RMAs; 15.4 years	highest average: Warrnambool; 15.3 years

* 'Total' refers to appearance of any of these characteristics within the material at least once, *not* the frequency of use within the material (e.g. such as '3 analogies' within one visitor guide book)

**Derived from total number of each (photo/diagram) per interpretive item.

*** See Appendix 3 for the formula used in calculating readability.

Imagery within the printed material was largely employed for the specific topic of whaling and aspects of the whale watching experience itself. In one example of the latter, imagery in the text represented a prompt as well, since an Albany tour operator challenged readers to imagine what it is like to 'feel the wetness' of a whale's blow during an encounter on tour. Appeals to the affective domain or emotions of the reader also frequently pertained to topics of whaling and the whale watching experience, and in general this technique of creating mindfulness was attempted by more than half of the interpreters' material (11 out of 19). NGOs' material primarily employed emotive words regarding the history of whaling, such as in descriptions of the 'death flurry' of whales at the end of an exhausting struggle against whalers. Tour operators' printed material was more likely to use emotive phrases or words in regards to whale watching:

> '*Prepare yourself for a heart-warming and exciting experience.*'
>
> (Head of Bight Tour operator)

RMAs' printed interpretation also described whales with emotion, but usually in reference to the consequences of harassment, when whales are 'distressed' or 'upset.'

The breadth (and overall length) of Warrnambool's printed interpretation could be a factor in the site's use of novel information as an interpretive technique. The novelty was found not so much in the topics about whales but in the reference to a particular (real) whale dubbed 'Wilma.' Descriptions of Wilma's apparent affinity for this section of Victorian coast could help to personalise general facts about Southern Right whales, and cast this information in a 'new' light that accounts for a discernible context.[38]

From these results it seems that techniques for promoting mindfulness within the interpretation sample were employed most often in reference to basic whale information, rather than for subjects which could inspire environmental behaviour or whale protection. This trend is also apparent in use of the technique of theme development, which was popular amongst all interpreters (nearly two thirds of the sample) and amongst RMAs in particular (6 out of 7 of their materials featured it, or 31.6% of the total sample). In almost all instances (10 out of 12), theme development was apparent in the progression of ideas about the purpose of migration and whale activities in Australia, or the birth and development of calves.[39]

However, an important exception (found in 7, or approximately a third of examples) was the explanation that effects of whaling created a need for whale protection, which was then followed by the discussion of whale watching guidelines and what individuals can do to help protect whales. Such cases within the interpretive products are not necessarily significant in numbers (ie. in terms of their frequency in the sample), but as an illustration of how information *about* whales was developed into information *for* whales

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[38] This adult female is seen on a regular basis at the site, and has calved there in previous years.

[39] As stated above, figures denote the use of a technique for mindfulness at least once in an interpretive product, and as such, the use of 'theme development' can be in reference to more than one subject within a product.

(in terms of their protection), in accordance with the premise of environmental education.[40]

Inaccuracy of any topic of educative information was not a problematic issue within the interpretive material, nor was the use of unrealistic or exaggerated photographs or diagrams.[41] Regarding accuracy, the only factual errors in the text of the interpretive printed materials were misspelled words (2 examples). An obvious mistake in the use of an image appeared on a YLMP sign at the entrance to the Head of the Bight (Plate 11), which contained a painting of a Humpback whale. The significance of this error is that the site is in fact a globally renowned nursery for Southern Right whales (whose image does not appear on the sign), and whilst there have been sightings of Humpbacks in the vicinity, they are relatively rare (Burnell, pers. comm.). The YLMP sign is already of limited utility as an interpretive device due to its placement and content,[42] and the fact that accuracy is maintained in most cases within the interpretation sample may help to promote the credibility of sources (ie. interpreters). Of course, more information is required about non-printed interpretation, such as the tour operators' commentary or other verbal advice, to assess its accuracy. Since this type of interpretation is likely to change somewhat with each delivery, it was not feasible to measure its accuracy for the current research.

Finally, the appearance of the interpretive material in the case study sample varied greatly,[43] though the common use of titled sections would facilitate reading, as would the generally low reading age of the text. Only one item (a tour operator brochure) was considered at a college reading level,[44] though RMA material had a higher average reading age than most (15.4 years old). These results indicate that the level of complexity of the printed material accommodates young adults, and though this might risk being too difficult for children or less challenging for other adults, the compromise seems appropriate for the profile of whale watchers as discussed in Chapter Nine.

8.3.2 Encouragement of Environmental Behaviour

Features of interpretive content which can encourage environmentally responsible behaviour on site and/or in the longterm (cf. Standard VIII, derived from Hines et al. 1986; Hungerford & Volk 1990) are found within the sample printed material from RMAs and NGOs. Reference to such behaviour is made primarily via whale watching guidelines. Nearly half (47.4%) of the total printed materials with educative content contained a version of the guidelines, comprising 6 out of 7 items of RMA interpretation,

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[40]refer to Chapters Two through Four for reasons why environmental education principles are a suitable part of a premise for the use of interpretation in nature-based tourism.
[41]already reviewed in terms of promoting realistic expectations, in section 8.2.1
[42]which briefly introduces the site as managed by Yalata, but makes no reference to whales.
[43]e.g. from A4 size booklets with colour photographs to one page text-only brochures on recycled paper.
[44]ie. above 18 years of age; Stansfield 1981

PLATE 11
YLMP's Welcome Sign at the Entrance to the Head of the Bight



and 3 out of 7 NGO material.[45] The whale watching guidelines, originally conceived for Australia by ANPWS (1989), delineate the acceptable behaviour in the proximity of whales (e.g. approach distances), and can be considered 'longterm' in perspective in that they are applicable to any encounters with whales (ie. beyond the whale watching experience). In their entirety, the whale watching guidelines incorporate several elements of a reasoned action model for environmentally responsible behaviour.[46] Hence in terms of best practice, it is consequential that nearly half of the sample utilises these guidelines as a means of addressing an environmental protection objective for interpretation.

A unique addition to the use of such guidelines is their adaptation to issues relevant to land-based whale watching activity in a fragile coastal environment. In three instances (two RMA materials and one NGO tourism booklet),[47] the guidelines for this tourism appear in the form of an 'environmental code' of behaviour (aspects appear in Figure 22, discussed later in the section). Interestingly, two of the three examples of the environmental code are located in materials from Albany, where land-based whale watching is secondary to guided boat tours. Though it is possible to occasionally view whales from several vantage points along the Albany coast, these opportunities are certainly less predictable or regular than those at Warrnambool or the Head of the Bight. Nevertheless, it is significant that the source of this information (CALM's district office) still perceives the protection of the coastal environment to be an important enough issue to direct its interpretation toward the site's potential independent whale watchers.

It must be conceded that in the current sample of interpretation, issues of appropriate behaviour are occasionally mentioned in very general terms, and in some cases, a single sentence:

> *'Coastal vegetation is fragile so please keep off the dunes and use the viewing platform and stairs provided.'* (Warrnambool NGO)

Since this example does not constitute a variation of the environmental codes or guidelines, it is not included in the percentages above. Nonetheless, in terms of promoting environmentally responsible behaviour, it is undoubtedly better to include such text than to omit it altogether at the whale watching sites, and it of course relates to the same theme as the environmental code. Yet reasoned action models like Hines et al.'s (1986) contend that the manner in which this type of information is addressed is especially salient in terms of generating environmentally responsible behaviour,[48] and in respect to best practice, phrases like the above may be greatly improved if they were heedful of Hines et al.'s (1986) characteristics for creating an intent to act. Specifically,

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[45]Also note that whale watching guidelines were popular within the commentary of tour operators according to 86.7% of these interpreters.
[46]as discussed in Chapter Four, section 4.4.3
[47] although CALM is actually the source of the information in the latter; refer to footnote 7 above.
[48]see Chapter Four, section 4.4

these phrases should, like the guidelines, complement such simple directives with additional text that addresses more of the features of a reasoned action model.

Information presented as a version of the whale watching guidelines or environmental code within the sample varies in style, and though much of it is somewhat 'dry,'[49] this may be appropriate for clarity as long as qualified by additional text as described above. Occasionally the material is expressed in a negative manner (e.g. 'Do not separate mothers and calves', 'Keep off the dunes'), but some incarnations of the information are deliberately phrased to be more encouraging. For example, rather than admonish whale watchers with a list of 'Do Not's', the set of guidelines and code as part of DENR's '*Welcome to Whale Watching*' pages (distributed by YLMP at the Head of the Bight) encourages specific attitudes about what is considered appropriate behaviour in a coastal zone, and presents a more positive and responsible image of whale watchers (also see Olesinski 1994; Hearne 1996).

Figure 22 presents an excerpt of the environmental code's content and style[50] which would enable this interpretive material to be a valuable model for other whale watching sites, particularly those which are land-based. Versions of this environmental code for whale watchers are available throughout South Australia, and it was first developed for Encounter Bay, where it appeared as part of an information kit launched for the site in 1993. Adapting the code's information to local features/issues is advantageous so that its audience discerns it relevance to a particular whale watching platform.[51] Nonetheless, the code in its present form also has longterm value for environmentally responsible behaviour beyond a single whale watching experience, in that its content covers different scenarios one may encounter at other whale watching sites or coastal recreation areas.

The whale watching guidelines and environmental code found in the interpretation sample refer to appropriate behaviour during and after the whale watching experience. However, there is still no mention of *other* kinds of behaviour which could contribute to whale or environmental protection within the printed sample of interpretation. In particular, additional means of whale protection in reference to (current) whaling are overlooked. Certainly there is a proclivity to include 'whaling' as an educative topic within the interpretation sample, and on occasion, it is used as part of the theme development for whale watching guidelines.[52] Yet the interpreters do not suggest to their audience that they could join or support campaigns to cease whaling activities that continue elsewhere in the world. It is possible that the political and moral standpoints of the modern whaling issue are considered too controversial to discuss, although it would

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[49]e.g. the action strategy portions of the text: 'Within 300 metres of a whale, move the vessel at a consistently slow, "no wake" speed'

[50]focusing on its action strategies as found in DENR's pages

[51]e.g. The code mentions appropriate behaviour around sand dunes, but not all land-based sites have such features. Hence there is a risk that the audience will ignore or dismiss the code if they find it irrelevant to their current experience (ie. if these features are absent). This risk must be balanced against the value of a code that incorporates features of different sites; see below.

[52]as noted in sections 8.2.2 and 8.3.1 respectively

FIGURE 22

'An Environmental Code for Whale Watchers'

Welcome to whale watching

Whale watching is an exciting, environmental and educational experience. Whales are regularly seen in South Australian waters between May and September.

The Southern right whale is the whale you are most likely to see along South Australia`s coast. These whales willingly swim in shallow waters close to shore. You can easily see them from headlands, cliffs and beaches.

This magnificent spectacle attracts more and more visitors to the coast each year. You are asked to take care and not degrade the environment and spoil the experience for others.

This whale watchers code will help you to share the experience and the appeal of the coastal environment with other visitors and local residents.

An environmental code for whale watchers

• ***Care for the dunes*** - Coastal vegetation is fragile. Dunes, and the plants on them, are a vital part of the beach system. Please do not watch whales from the sand dunes. Use walkways to get to the beach and park in car parks provided. Please use the beach and viewing areas provided to watch the whales and let our sand dunes "live".

• ***Look after yourself*** - Cliffs are great look out points but they can be dangerous. Please take care and watch your footing as well as the whales. Parents, please keep a eye on young children, especially on clifftops.

• ***Surf safety*** - Freak waves occur along this coastline. Please keep well clear of breaking surf and be especially careful where waves can surge up sloping rocks. In case of emergency swim away from the rocks and wait for help.

• ***Think of others*** - Especially the locals. Please consider private property next to whale watching areas. Respect fences and take your rubbish home with you.

• ***Welcome the whales*** - Loud and unexpected noises may alarm whales and encourage them to leave. Please be quiet when they are close to shore.

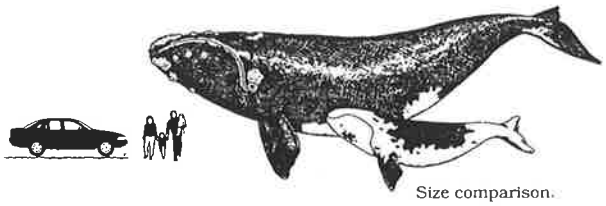
• ***Leave the whales alone*** - Southern right whales are protected. Swimmers, divers, boats and aircraft must keep well clear of whales so as not to disturb them.

You can help ensure the recovery of these endangered whales by respecting these rules and reporting any infringements to National Parks staff.
To assist in research, please report whale sightings to the South Australian Museum.

For further information contact:

Department of Environment
and Natural Resources
Far West District Office
11 McKenzie Street
Ceduna SA 5690
Telephone: (086) 253 144

Yalata Land Management Program
Yalata Community
via Ceduna SA 5690
Telephone (086) 256 865



Size comparison.

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Source: DENR (1993)

then be ironic that the *history* of whaling is still portrayed in a (strongly) negative light by these interpreters.

Other issues pertaining to whale and environmental protection which may not be as contentious as modern whaling, such as marine pollution, are also lacking amongst the printed interpretation. This issue has the potential to be incorporated into guidelines for appropriate behaviour during whale watching and beyond (ie. and thus become part of a reasoned action model, cf. Standard VIII), but this opportunity is not grasped by the current printed materials at the case study sites.

Analysis has focused on available printed materials, as these are somewhat immutable and their depiction of various whale watching topics is lucid. Tour operator commentary may also address important issues of environmental protection, and cite the whale watching guidelines themselves. In fact, results in section 8.2.2 indicated that most (10 out of 12) of the case study site operators do mention the guidelines and 'threats to whales.' By including these topics in their commentary, these operators address issues of relevance to their audience during and *after* the current experience.[53] One tour operator (from Albany) specified that whale watchers are told they can address the issue of marine pollution during the tour by not discarding trash overboard. This is pertinent to longterm behaviour as there are numerous ways to help prevent this particular threat to whales and the marine ecosystem after the whale watchers return home.

Although the tour operators would be currently responsible for adhering to guidelines during the experience, it is pertinent that they mention the guidelines to their participants since they may across whales whilst aboard private vessels in future. The operators can also set a good example through their own behaviour during the tour. Greater detail is required in terms of the specific issues addressed by the tour operators and the ways in which this information is presented in the commentary (e.g. if they address the audience's locus of control, or give reasons why certain behaviour is important, as suggested by Standard VIII).

8.4 Access to Interpretation at Case Study Sites

Neither the presence of important topics in whale watching interpretation, nor the quality of their composition, ensure that interpretative material will be sought, located, acquired, and/or gain the full attention of its intended audience. As proposed by Standard VII, the delivery of interpretation is critical in terms of the timing and order in which whale watchers have access to different types of information. Specifically, it is advantageous[54] for each stage of the whale watching to coincide with the availability of a particular topic of interpretation (e.g. orientative, educational). Results in this section identify the factors

[53] ie. since the whale watchers participating in a tour would not be in charge of manoeuvring the vessel
[54] in terms of interpretive objectives for visitor satisfaction and environmental protection

in the accessibility of interpretation available at case study sites, and illustrate several opportunities where interpreters could facilitate exposure to/acquisition of their printed and/or verbal efforts.

8.4.1 Access to Interpretation and Spatial Features of the Case Study Sites

Figures 23 to 25 depict the locations of interpreters and/or their material relative to the whale watching activity at the case study sites. Note that the location of many sources of interpretation varies greatly in terms of its proximity to the precise area where the tourism takes place (ie. the coastal cliffs of the Nullarbor and Head of the Bight, SA; the Logans Beach viewing platform in Warrnambool, VIC; and aboard tour boats in Albany, WA).

At each of the case study sites, RMA and NGO respondents primarily provide interpretation for whale watchers 'off-site.' In the coastal resort towns of Albany and Warrnambool, the material (and verbal information) of these interpreters can be collected from their local offices or centres, either prior to or after visitors see the whales. The reception areas of DCNR and CALM district offices are open to the public and provide displays of interpretive material for purchase or *gratis*.[55] Several peripheral interpreters are also contactable in the towns, particularly local interpretive centres and newspapers which feature general whale information.

In Warrnambool and Albany, relevant RMA and NGO venues are positioned within several kilometres of the whale watching areas, and each requires visitors to drive/make an additional stop during their journey. Once in the towns, only the tourism information centres are within easy view of a main road and/or are centrally located (ie. within walking distance of popular tourist attractions of the towns). The locations of the RMA and NGO venues are consequential in that any interpretation located off-site requires the initiative of the whale watcher for mere exposure to it. Hence access to materials found only at these venues is not guaranteed, and would be further hindered if interested parties were unaware of either (1) the locations, which may be the case for any RMA offices not on main routes through the towns, and/or (2) that certain interpretation is in fact available from these offices.

Information chiefly restricted to the RMA (district) offices includes several printed materials produced either locally (e.g. CALM's brochure) or by the head offices (e.g. DCNR's booklet). In this sense, 'restricted' means that such materials are most likely to be found only at these offices at the sites. RMA interpreters acknowledge that these materials are occasionally found at other venues (e.g. tourism information centres), but supply is limited and the items are highly prone to scarcity. Furthermore, if neither of these types of venues is visited by whale watchers, the material is unlikely to be accessed by its target audience at the case study sites.

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[55] e.g. *Whales in Victorian Waters* (a glossy booklet) is available for purchase; brochures are generally free of charge.

FIGURE 23 Location of Interpretation Sources at the Head of the Bight

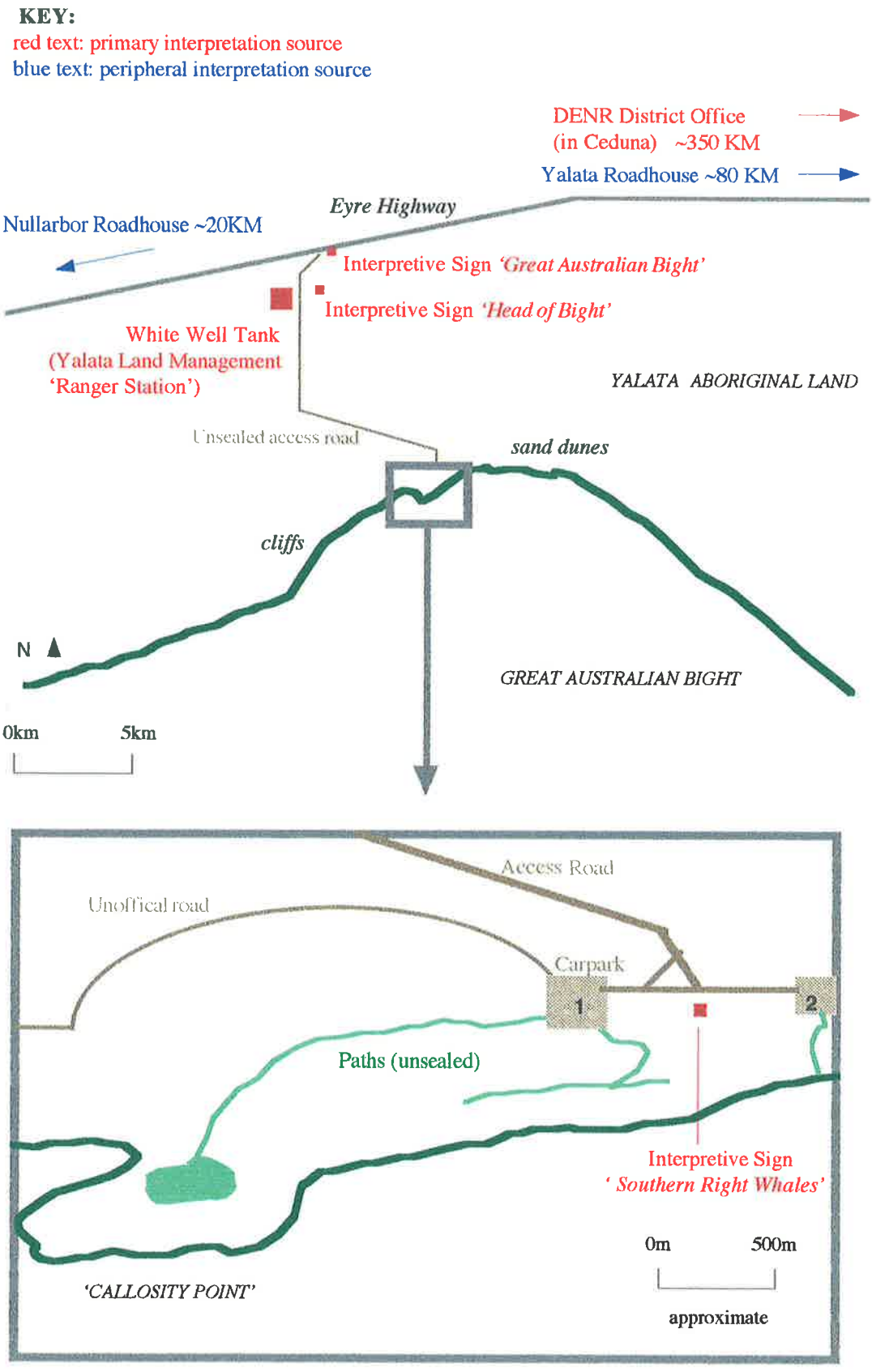


FIGURE 24 **Location of Interpretation Sources in Warrnambool**

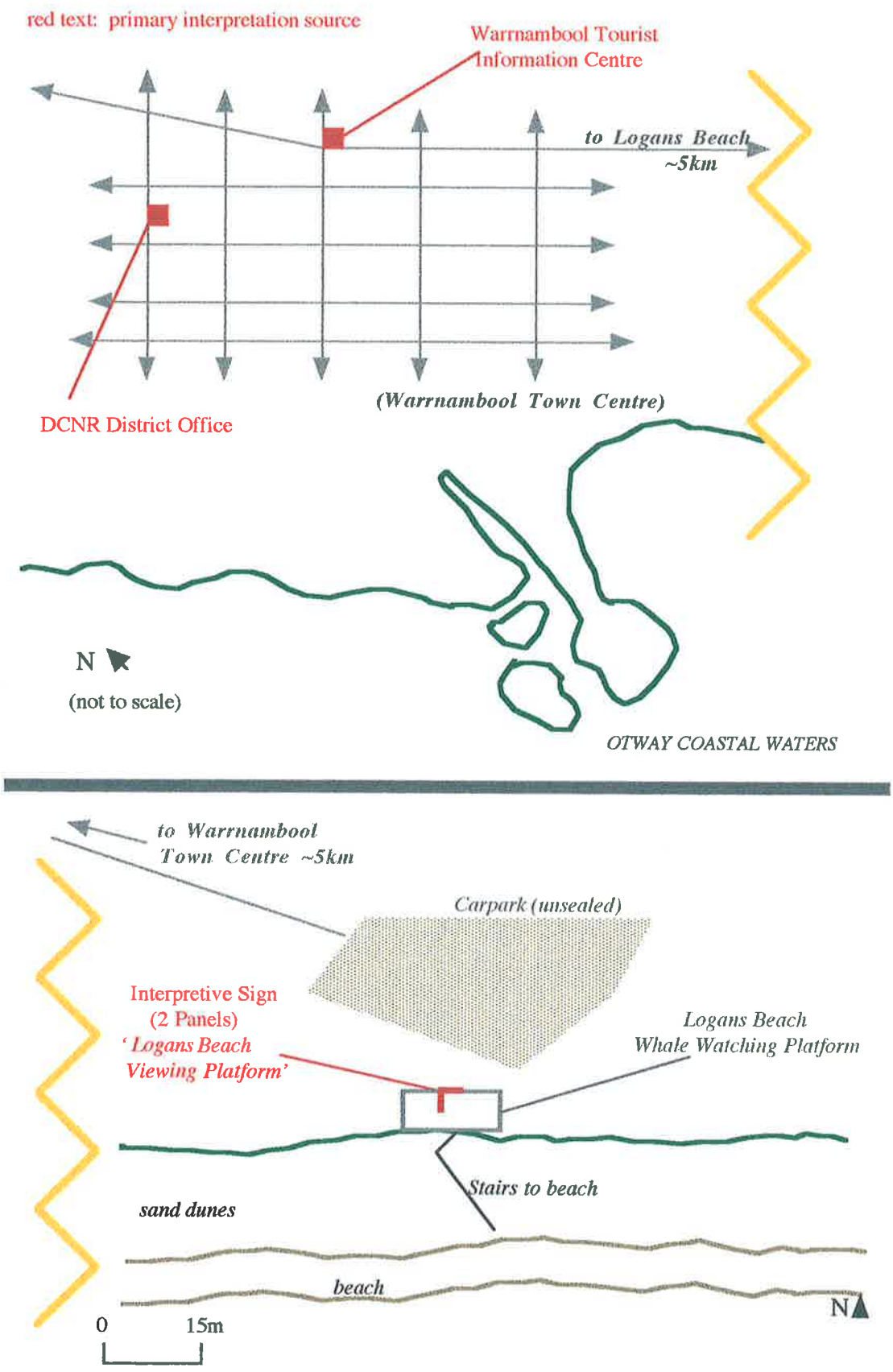
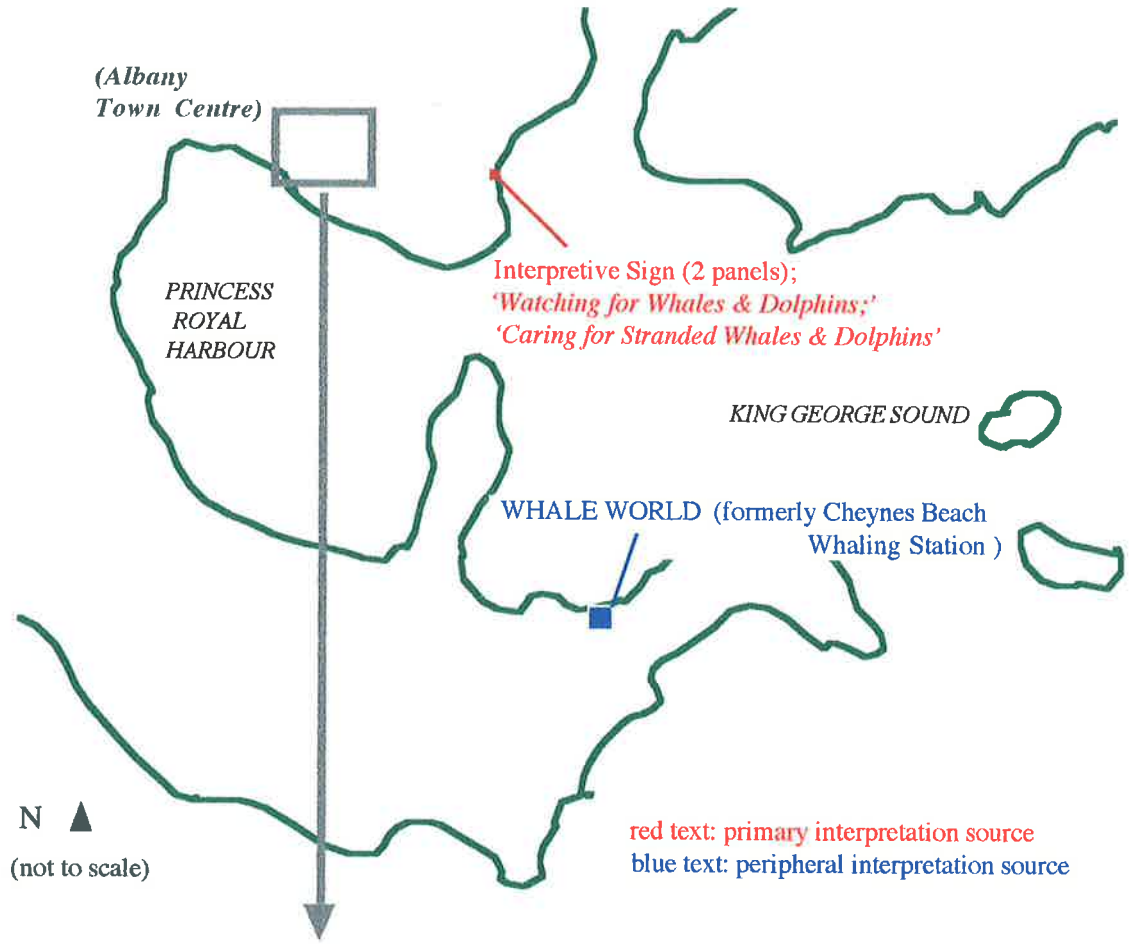
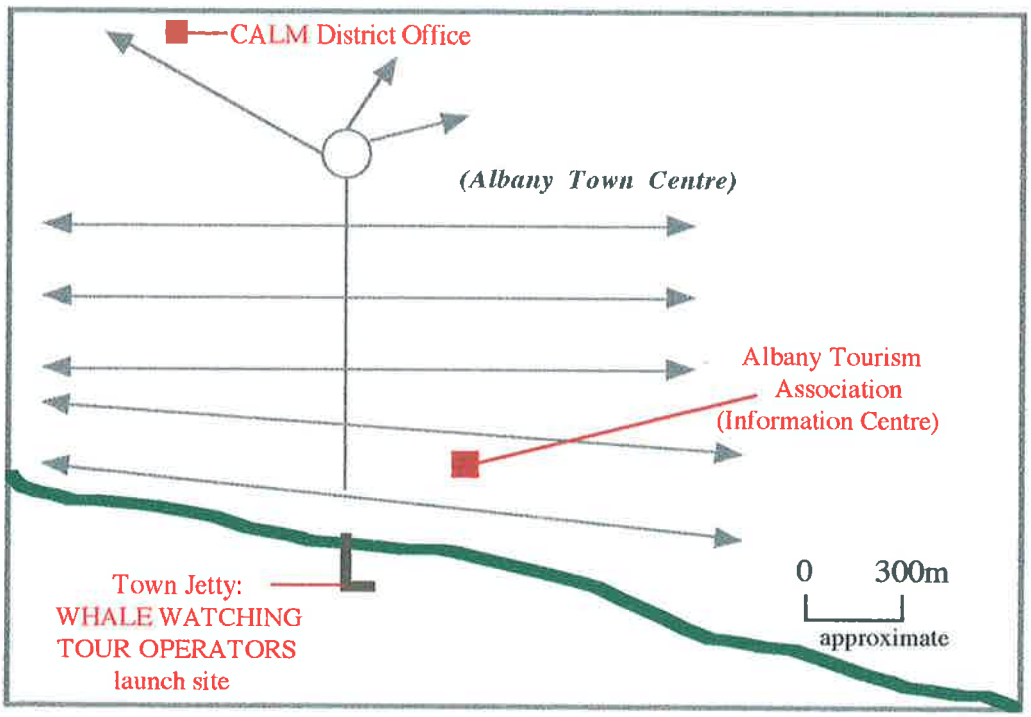


FIGURE 25 Location of Interpretation Sources in Albany





At the Head of the Bight, both RMA and NGO centres are a much greater distance from the actual whale watching site, which may be a factor in their popularity as sources of interpretation.[56] In this case whale watchers must be also be travelling in a certain direction (ie. from east to west) in order to access material in Ceduna before their visit to the Bight. However, roadhouses closer to the site also distribute various examples of the printed interpretation material (especially EPTA's booklet). Whilst whale watchers might not be aware of such an opportunity (ie. and deliberately search for information there), they are still more likely to come across printed material/verbal information at these roadhouses than DENR's district office or a tourism information centre.[57]

At the highway turn-off to the Head of the Bight, whale watchers can choose to stop at EPTA's educative sign on the Great Australian Bight (Plate 12), although there is room for only three to four vehicles to park at this point without blocking the access road. A short distance later (~1km), visitors arrive at White Well tank (YLMP's 'ranger station'),[58] and must make a mandatory stop to secure a permit. Here, they are greeted by YLMP's welcome sign[59] and staff on duty, who provide verbal information and printed materials. This enforced contact exposes visitors to orientative information about the site, and provides an opportunity to collect educative printed materials before their viewing experience. It also comprises one of the only face-to-face or interactive encounters that independent whale watchers can have with interpreters at this site. No other sites have enforced contact between interpreters and independent whale watchers, and hence their visitors must be motivated to seek exposure to interpretation.

At the Head of the Bight, the length of the unsealed access road from White Well to the cliff-top viewing area (~10km) provides a chance for visitors to read any acquired printed material before reaching the whales (when they are potentially distracted). Once on-site at the cliffs, the only available interpretation is the second of EPTA's signs, '*Southern Right Whales*', which stands at an intersection between the access road and the road to the main carpark (Plate 13; refer also to Figure 23, p. 236).[60] In this position, the sign is too far (approximately 500m) from the carpark for people to easily walk over to see it, and in a location that would take them in the opposite direction of the whales. Whale watchers who stop to read it whilst in their vehicles (either on the way to or from the site) block the way for the rest of the traffic on the primary access road. Also, the sign may be missed altogether, as an unofficial but traversable 'short-cut' bypasses the

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[56] This is evaluated in Chapter Nine

[57] EPTA's office is actually located in Pt. Lincoln at the southern point of the Eyre Peninsula, although Ceduna's local tourism office provides its printed material.

[58] refer to Plate 4, p. 136

[59] also depicted above in Plate 11, p. 230

[60] the main carpark is marked number '1' on Figure 23. Carpark '2' was not in use during 1996 when the sign was erected, but is included on the figure due to its relevance to 1995 whale watcher observational data reviewed in Chapter Nine.

PLATE 12
EPTA's Interpretive Sign on the Great Australian Bight at the Entrance to the Whale Watching Site



PLATE 13
EPTA'S Interpretive Sign on Southern Right Whales at the Head of the Bight



intersection. Thus access to the only guaranteed printed interpretation available on-site at the viewing area of the Head of the Bight may suffer from the position of the sign.[61]

Access to the interpretive sign at Warrnambool on-site at the Logans Beach viewing area (Plates 14 & 15) is much easier as it stands on the 15 metre viewing platform (also shown in Figure 24, p. 237). A potential problem with its position, however, is that one panel[62] faces the sea and thus requires visitors to relinquish any chance of sighting whales if they turn their full attention to the sign.[63] Perhaps a more salient problem with its position is that the sign is the only form of partial 'shelter' at Logans Beach, and is used as a windbreak by whale watchers who then obstruct the view of the sign.[64]

Since the majority of Albany's whale watchers are participants in guided tours, they have enforced contact with interpreters aboard the vessels, and therefore have access to the signage available at the site is not as crucial in terms of their exposure to (any) interpretation. Nonetheless, the location of CALM's interpretive sign (Plate 16) in Albany could be an issue for independent whale watchers[65] or those seeking additional information. As illustrated in Figure 25 (p. 238), CALM's interpretive sign stands at Middleton Beach, several kilometres from the town centre and main jetty where most whale watching tours depart. Whilst Middleton is a popular beach noted in local tourist guides, the sign itself is not advertised as a source of whale watching information, and thus it may be overlooked by visitors.

8.4.2 Access to Interpretation According to Stages of the Whale Watching Experience

The whale watching experiences at the Head of the Bight, Warrnambool and Albany are divided into stages in Tables 37 to 39 (from p. 245), according to the ordinal progression of the tourism activity.[66] The tables depict how the availability of or access to certain orientative and educative topics within the current interpretation coincide with the stages of whale watching. This correlation indicates whether or not the interpretive audience is likely to come across this information at the most opportune time.

Aspects of the first stage in the whale watching experience ('making the decision to whale watch') are common to all of the case study sites, where potential whale watchers have access to promotional information if they request it from relevant tourism offices.[67]

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[61] Although DENR's pages are intended to be distributed by YLMP at White Well, their supply is inconstant, and results from the whale watcher profile confirm that access to this material is not guaranteed; see Chapter Nine, section 9.4.2.

[62] Panel 2 in Plate 15

[63] Of course, if the upright sign was positioned directly in front of whale watchers, it would either block their view and/or impose on the aesthetics of the site.

[64] also see Chapter Nine, section 9.4.2

[65] ie. those who are opportunistic, and fortunate enough to be in the vicinity during occasions in which whales are visible from shore.

[66] adapted from Clawson's (1963) stages, as discussed in Chapter Four, section 4.3

[67] Tour promotional literature is not necessarily restricted to those who visit the nearest whale watching site, as several operators in the present sample advertise nationally.

PLATE 14
Panel 1 of DCNR's Interpretive Sign at Logans Beach Whale Watching Platform, Warrnambool

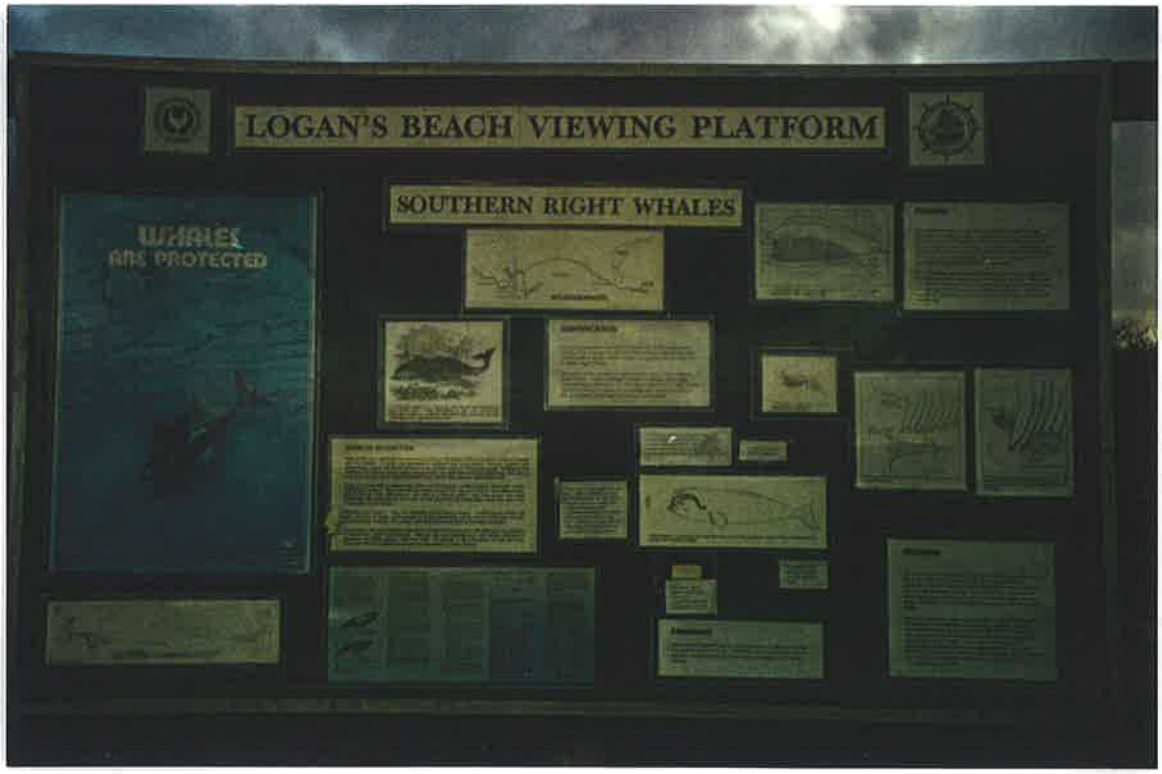


PLATE 15
Panel 2 of DCNR's Interpretive Sign at Logans Beach Whale Watching Platform, Warrnambool



PLATE 16
Position of CALM'S Interpretive Sign at Middleton Beach, Albany



Depending on their place of residence, whale watchers may also have the option of calling in to RMA's state or district offices to acquire printed information containing both orientative and educative topics (as discussed above). Verbal information from these interpreters is always an option via telephone.

Once whale watchers are in transit (ie. embarking on their journey to a whale watching town/area), factors of location introduced in the previous section are likely to affect both the duration of the tourism stages and access to interpretive topics at the case study sites. As an example, the Head of the Bight is a four hour drive from Ceduna, and a twelve hour journey from SA's capital (Adelaide). Printed interpretation secured during this stage has ample time for review, even if collected from the nearest roadhouse to the Head of the Bight (20km away). Upon arrival at the site, there is the additional stage of travelling to the cliffs (noted above), immediately after whale watchers obtain orientative and educative material from White Well tank. This type of stage of 'travelling to' the whale watching area would not necessarily be as long for whale watchers in Albany and Warrnambool, unless they deliberately spent more time in the townships.

Travel time to (and from) whales is likely to be most variable aboard Albany's whale watching vessels, for it is never known when or where the first animals will be sighted. Interpretive commentary (topics and length) may have to be altered according to the timing and duration of the trip's sightings, although unlike land-based whale watching, the entire time available to receive educative information during viewing on tour is limited by a strict schedule. The order of topics within the tour operators' commentary in stages of travelling to/from and viewing whales was not addressed in detail in this study, although three of the five tour operators from Albany did intimate that they adjust their commentary according to the stage of experience.

Presentation of educative topics and themes during land-based (independent) whale watching is less structured, both ordinally and temporally. Whale watchers visiting Warrnambool or the Head of the Bight would decide which printed information they are most interested in reviewing at any time during the experience, provided they have already collected any portable materials before arrival at the whales. Of the interpretive signs at these sites, however, only the one at Logans Beach, Warrnambool contains information on both educative topics about whales *and* (some) orientative topics (e.g. how to watch for whales and identify certain behaviour). Whale watchers who failed to collect other printed materials prior to their arrival at this site would thus still have access to information which might enhance their experience (cf. Standards VI and VII).

At the Head of the Bight, the interpretive sign may be limited in scope, but the portable printed material collected from White Well tank *is* inclusive of these important topics (above), and could be reviewed during the experience if carried by the whale watchers. Given the size of this viewing area, this form of interpretation may be a more suitable

TABLE 37 Whale Watching Stages and Access to Interpretation at The Head Of Bight

Stage of whale watching	**Salient Contextual Factors** (Temporal , Spatial, Social)	**Accessible Interpretation** (Major)
PRE-VISIT Decision	--	• own initiative: 1, 2, 3, 4, 5
Travel to site	• Remote site; hours of travel time • 4 hours from major town with tourism office • On arrival, mandatory contact with YLMP to collect permit • Signs at arrival can only be safely viewed from vehicle	• own initiative in transit: 1, 2, 3, 4, 5 • own initiative on arrival: 6, 7 • automatic on arrival: 1,4 • automatic on tour: 8
DURING Travel to whales	• At least 15 minutes to drive to coast • Unsealed access road may flood; access to the site may be denied • Sign at arrival can only be safely viewed from vehicle	• own initiative in transit (if already collected): 1, 3, 5 • own initiative on arrival: 9 • automatic on tour: 8
Watch whales	• Independent visitors able to watch any length of time in daylight hours; tour participants limited to tour time • Independent visitors restricted to a 2km area; tour participants can go out of bounds by prior arrangement	• own initiative in on site (if already collected): 1, 3, 5 • automatic on tour: 8
Travel from whales	• Visitors may call in at the Ranger Station, but it is not mandatory upon departure	• own initiative in transit (if already collected): 1, 3, 5 • own initiative on departure: 9 • automatic on tour: 8
POST-VISIT Travel from site	(see 'travel to site' stage) • Sign at Ranger Station faces away from departing vehicles • Sign at site entrance arrival can only be safely viewed from vehicle • Visitor feedback only on tours	• own initiative in transit: 1, 2, 3, 4, 5 • own initiative on departure: 6 • automatic on tour: 8
Recall trip	--	• only previously collected printed matter: 1, 3, 5

KEY **Interpretation**	**Main topics (promote/orient/educate)**	**Original source**
1 - *'Welcome to Whale Watching'* pages	O, E	DENR state office
2 - Verbal information/advice	O, E	DENR district office
3 - *'Eyre Peninsula - A Breath ...'*booklet	P, O, E	EPTA
4 - Verbal information/advice	P, O, E	YLMP
5 - Promotional literature	P, O, ~E	Tour operators, YLMP
6 - *Great Australian Bight'* sign	E	EPTA
7 - *'Head of Bight'* sign	O	YLMP
8 - Verbal commentary	O, E	Tour operators
9 -*'Southern Right Whale'* sign	E	EPTA

TABLE 38 Whale Watching Stages and Access to Interpretation at Warrnambool

Stage of whale watching	**Salient Contextual Factors** (Temporal , Spatial, Social)	**Accessible Interpretation** (Major)
PRE-VISIT ***Decision***	--	• own initiative: 1, 2, 3, 4, 5, 6 7, 8
Travel to site	• Upon arrival in Warrnambool, the local newspaper is available for orientative and promotional information on recent whale sightings	• own initiative in transit and and on arrival: 1, 2, 3, 4, 5, 6, 7, 8
DURING ***Travel to whales***	• Travel from the town centre to the whale watching platform can entail stops at peripheral interpretation sources which have whale-related material: Flagstaff Hill Maritime Museum, Giants of the Deep	• own initiative in transit (if already collected): 1, 2, 5, 6 7, 8 • own initiative in transit: 3, 4 • own initiative on arrival: 9 • automatic on tour: 10
Watch whales	• Independent visitors able to watch any length of time in daylight hours; tour participants limited to tour time • On occasion, a local resident is present at the platform and offers impromptu commentary on whales	• own initiative on site (if already collected): 1, 2, 5, 6 7, 8 • own initiative on site: 9 • automatic on tour: 10
Travel from whales	(see 'travel to whales' stage)	• own initiative in transit (if already collected): 1, 2, 5, 6 7, 8 • own initiative on departure: 9 • automatic on tour: 10
POST-VISIT ***Travel from site***	(see 'travel to site' stage) • Visitor feedback only on tours	• own initiative in transit: 1, 2 3, 4, 5, 6, 7, 8
Recall trip	--	• only previously collected portable printed matter: 1, 2, 5, 6, 7, 8

KEY Interpretation	Main topics (promote/orient/educate)	Original source
1 - '*Whales in Victorian Waters*' booklet	O, E	DCNR state office
2 - '*Whale Watching in Victoria*' brochure	O, E	DCNR district office
3 - Verbal information, advice	O, E	DCNR district office
4 - Verbal information, advice	P, O, E	WTIC
5 - '*Warrnambool Visitors Handbook*' booklet	P, O, E	WTIC
6 - '*Whales at Warrnambool*' booklet	P, O, E	*The Standard*
7 - '*Great South-West Tourist News*' booklet	P, O, E	*The Standard*
8 - Promotional literature	P	Tour operators
9 - '*Logans Beach Viewing Platform*' sign	O, E	DCNR district office
10 - Verbal commentary	O, E	Tour operators

TABLE 39 Whale Watching Stages and Access to Interpretation at Albany

Stage of whale watching	**Salient Contextual Factors** (Temporal , Spatial, Social)	**Accessible Interpretation** (Major)
PRE-VISIT Decision	--	• own initiative: 1, 2, 3, 4, 5, 6
Travel to site	• Upon arrival in Albany, the local newspaper is available for orientative and promotional information on recent whale sightings	• own initiative in transit and and on arrival: 1, 2, 3, 4, 5, 6
DURING Travel to whales	• Travel from the town centre to the whale watching tour boat jetty or land-based lookouts can entail stops at a peripheral interpretation source which has whale-related material: Whale World • Travel time to the whales aboard tour boats varies according to when the animals are sighted	• own initiative in transit (if already collected): 1, 2, 5, 6 • own initiative in transit: 3, 4 • own initiative on arrival (land-based lookout): 8 • automatic on tour: 7
Watch whales	• Independent visitors able to watch any length of time in daylight hours though whales are not often resident or easily seen from land; tour participants limited to tour time • Topics and order of tour commentary can be adjusted to correspond with whale activity and encounters with other fauna, or features of the area	• own initiative on land-based site (if already collected): 1, 2, 5, 6 • own initiative on land-based site: 8 • own initiative on tour: 1, 2, 5, 6 (depending on the library of the tour operator) • automatic on tour: 7
Travel from whales	(see 'travel to whales' stage) • Route taken on return to jetty by tour boats depends on the daily sighting, but can involve passing by sites/features that can be added to commentary	• own initiative in transit (if already collected): 1, 2, 5, 6 • own initiative on departure from land-based site: 8 • automatic on tour: 7
POST-VISIT Travel from site	(see 'travel to site' stage) • Visitor feedback only on tours	• own initiative in transit: 1, 2 3, 4, 5, 6
Recall trip	--	• only previously collected portable printed matter: 1, 2, 5, 6

KEY Interpretation	Main topics (promote/orient/educate)	Original source
1 - '*Watching Whales*' brochure	O, E	CALM state office
2 - '*Whale Watching in Albany*' brochure	O, E	CALM district office
3 - Verbal information, advice	O, E	CALM district office
4 - Verbal information, advice	P, O, E	ATA Centre
5 - '*The Albany Experience*' booklet	P, O, E	ATA Centre
6 - Promotional literature	P	Tour operators
7 - Verbal commentary	O, E	Tour operators
8 - '*Watching for Whales & Dolphins....;*' sign	O, E	CALM district office

means of exposure to the information during the tourism experience.[68] Also, the orientative information within the printed material is supplemented by identification signs on-site which demarcate dangerous and revegetation areas.[69]

Travel from the whales and from each of the case study sites in general provides access to the same interpretive material as before the journey, and again this material is available to the motivated whale watcher. During recall of the experience (ie. at home), only printed material acquired previously is available for immediate consultation/review. Though an ideal time to review information pertaining to longterm environmental action (cf. Forestell 1993), there is no certainty that such issues will be addressed by whale watchers during this stage, even if the materials contain such topics. During the pre/post stages of whale watching, however, the current scenario at the case study sites suggest that improved access to certain (printed) interpretation which addresses responsible behaviour could be able to assist the attainment of environmental protection objectives.

8.5 Chapter Summary

Table 40 summarises the major trends in the results of the analysis of interpretive efforts from the three case study sites. The consistency of these results with the primary interpreters' intentions for their use of the management tool has been referred to briefly; but is also a matter for further discussion in Chapter Ten, along with the strengths and weaknesses of the current interpretation in terms of its review and access by whale watchers at the respective sites.

Examination of the content of interpretive materials and commentary offered at the case study sites reveals a breadth of topics relevant to environmental and/or whale protection. The most popular topics emphasised basic facts about the focal animals (e.g. behaviour, biological characteristics), although the specific use of whale watching guidelines to address the desired behaviour of whale watchers and pursue a whale protection objective was not uncommon. Interpretation rarely adopted a holistic perspective of the marine environment, and overall its coverage of environmental and whale protection remained somewhat vague and limited in scope (ie. directed toward on-site/during the experience rather than the longterm).

Results indicate a tendency for printed interpretation to omit key orientative topics that could facilitate the achievement of interpretive objectives. In particular, there is a paucity of information on site features for land-based whale watching which may affect visitor satisfaction, and details regarding appropriate behaviour at these sites were contained within few products. Whilst images within the interpretation depicted other aspects of

[68]The viewing area is approximately 2.5km in length (refer to Figure 23, p. 236); thus whale watchers might have to travel great distances to view any one sign.
[69] These signs are considered 'supplemental' rather than interpretive themselves, as they simply identify the areas without explanation of the reasons for appropriate behaviour, or what behaviour is expected.

TABLE 40 Trends in Interpretation Products and Practices at Whale Watching Case Study Sites

Theme; Relevant Standard for Interpretation	Trends / Major Results
PRODUCT AND PRACTICE STANDARDS	
Content of Promotional and Orientative Interpretation **V, VI**	• Some promotional and orientative topics were addressed by all interpreters, but land-based sites still omitted important features of the experience, and tour operators emphasised whale activity. • Text was more likely than images to promote unrealistic expectations, and tour operators rarely qualified their statements. • Interpretation was mentioned as part of the experience primarily by tour operators, and NGOs rarely cited specific *materials* available at the sites (no RMAs promoted interpretation in existence at the sites).
Access to Interpretation **VII**	• Location of interpretation sources off-site affected access within pre-visit stages, although the duration of these stages varied greatly according to the case study site. • Access to signage at the Head of the Bight could be hindered by its placement, although enforced contact with YLMP increases access to some printed and verbal information • RMA offices in towns were not as accessible as NGO centres in terms of centralised locations or proximity to the viewing site. • Orientative information is available prior to the experience at all sites, but not all such topics are available at the main viewing areas of land-based sites.
Content of Educative Interpretation **VIII**	• Most often, interpreters emphasised basic whale information and whaling; few included other ecosystem features, although it was more common to offer whale watching guidelines and cite the conservation status of the focal animals • Guidelines/behaviour codes were available at all sites, and in their entirety comprised important factors in environmentally responsible manner.
Style of Interpretation **IX**	• Land-based sites provided the most printed material (with the majority available off-site at Warrnambool and on-site at the Head of the Bight) • Several products featured theme development on whale protection; and generally the style of interpretation favoured structural techniques rather than innovative composition to create mindfulness

the whale watching experience (e.g. whale behaviour, proximity) in a generally realistic manner, the text of tour operators' promotional material often failed to qualify its claims.

The most potentially accessible interpretation (ie. in terms of likelihood of exposure) was that which is delivered on-site/during the experience, and efforts to make pre/post-visit materials available to whale watchers was only strong at one of the three sites. The educative and orientative potential of interpretation during these (off-site) stages of the experience was undeveloped, but more so in respect to delivery than content. That is, topics for both were available within printed materials, but the location of these products may hinder access to them by whale watchers.

The composition of printed interpretation varied greatly, though there were several notable attempts to incorporate techniques that can inspire a mindful response by the audience. Results illustrate a preference for structural methods of organising information, with basic whale-related facts receiving this treatment more often than environmental protection themes. Nonetheless, theme development regarding whale protection was rather prevalent, and often employed 'whaling' as a segue topic.

Discrepancies between trends in results as influenced by the types of interpreters and the different case study sites were most evident in respect to the delivery of interpretation. Factors in the accessibility of interpretation include (1) variations in the timing of stages in the land-based and boat-based whale watching experiences, (2) the layout of sites and proximity of viewing areas (or departure points) to other interpretive venues, and (3) the nature of contact between the types of interpreters and the whale watching populations. These contextual factors at each site (temporal, spatial, and social) manipulate the duration of stages of the experience and the nature of whale watching activity, and in several cases may hinder access to interpretive efforts and/or topics (e.g. educative or orientative). The implications of these factors, in terms of the extent to which current interpretation *is* accessed by the sites' whale watchers, are highlighted in the following chapter.

CHAPTER NINE
WHALE WATCHER PROFILES AT CASE STUDY SITES

'I looked directly into [the whale's] eye, and she looked directly back at me, as we hung in the water, studying each other. "I wish you well," I thought....I did not imagine she could decipher words, but many animals can sense fear in humans. Perhaps they can also sense other emotions.'
Ackerman (1995:48)

9.1 Chapter Themes and Samples

9.1.1 Encounters with Whales

The intimate contact with whales described by Ackerman (1995) is a rare and privileged experience that can fill whale watchers with awe. Nevertheless, such an emotion-charged reaction is not invariably the case in whale watching. For some, the tourism experience may represent merely another 'purchasable commodity' (McIntyre-Varawa 1991:50), where intrusion into the whales' environment is perceived as a right, and where exaggerated expectations or apathy can reduce the extraordinary to the mundane. In the course of the current research the author witnessed a wide range of peoples' reactions to whales, from those reminiscent of Ackerman's (1995) encounter to instances when whale watchers were clearly left unmoved by the presence of the great animals. These types of whale watcher viewpoints, in conjunction with their interest in other aspects of the experience, are developed in this chapter into visitor profiles from the case study sites. Inferences are drawn from the profiles regarding interpretation's performance as a management tool for the nature-based tourism, in terms of its ability to reach, interest, satisfy and influence the opinions, and to a lesser extent, knowledge and behaviour, of whale watching audiences.

Each section of this chapter compares whale watcher data to results for the interpretation currently available at the respective case study sites (from Chapter Eight). Data were collected from the primary whale watching population for each site, through methods of social surveys and structured observation.[1] To emphasise the role and function of interpretation in the visitor experiences at each site, results are presented in accordance with the major stages of whale watching (e.g. pre-trip, during, post-trip). The central themes of the profiles arising from the data pertain to the nature of the whale watchers'

[1] as detailed in Chapter Five, section 5.4.4.

participation in the tourism, their evaluation of the experience and of the available interpretation, and any influence interpretation had on their experience. Comparisons are also made between the profiles of whale watcher populations of each site, with reference to the implications of results in terms of best practice standards for interpretation.

9.1.2 The Whale Watcher Samples:

(i) Questionnaire Respondents

Table 41 presents the whale watcher questionnaire samples for the Head of the Bight, Warrnambool, and Albany, and depicts the variation in response rate and representativeness of these samples. Representativeness is difficult to determine since precise seasonal numbers of whale watchers are unavailable. Key interpreters of all sites were only able to estimate the populations from their observations at land-based sites or during tours.[2] Between 5-10% of the seasonal population were targeted by the survey, although factors such as the length of the season and level of assistance from case study interpreters meant that the final questionnaire respondent samples for each site ranged from approximately 1% to 15% of the total population of whale watchers.[3]

Discrepancies between the response rates of different questionnaire samples may be the result of sampling effort, such as the intensity and variation of distribution/collection methods for each site. Other factors in the response rates could include elements of the whale watching experience which were conducive to answering an attenuated questionnaire, or those where time restrictions limited the opportunity or inclination to respond. For instance, at the Head of the Bight, most visitors were guaranteed a lengthy car ride from the remote location, as well as a 10km trip to and from the viewing area at the cliffs. During these times they could attend to the questionnaire, and correspondingly, there was a high response rate in 1996 (78.8%). In fact, 87.8% of respondents returned the questionnaire immediately after their experience by placing it in a box at the YLMP ranger station as they departed the site. The disparity between this and the 1995 questionnaire response rate (19.2%) could be due to the greater length and complexity of the earlier questionnaire.[4]

In Warrnambool, there was a smaller response rate (24.4%) than the other sites, though it is certainly acceptable for a social survey (see Heberlein 1973). The result could be

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[2]Though technically possible to calculate visitor numbers at the Head of the Bight from permit distribution, and Albany tour participants from ticket sales, interpreters at these sites were reluctant to divulge such information, and preferred instead to provide general estimates. Reasons for this reluctance are unclear, although it is possible that such information would divulge financial details that the interpreters/managers of the sites wish to remain unspecified.

[3] Warrnambool's season depends on the appearance and residency of whales; the Head of the Bight was closed for weeks at a time due to rains which made the access road impassable. Assistance in distributing surveys at the Bight and Albany was fairly regular, but according to log sheets maintained by the interpreters, it was also occasionally inconsistent, in that some days were missed.

TABLE 41
Whale Watcher Questionnaire Samples from Case Study Sites

Case Study Site	Sample Size[5]	Response Rate	Representativeness	
			estimated whale watching population (people per season)	percentage of respondents from the seasonal population
Head of the Bight				
1995	n = 250	19.2%	10000	2.5%
1996	n = 394	78.8%	10000	3.9%
Warrnambool				
(1996)	n = 124	24.4%	10000	1.2%
Albany				
(1996)				
Silver Star Cruises	n = 53	57.6%	1000	5.3%
Southern Ocean Charters	n = 53	96.4%	350	15.1%

[4] To maintain consistency in comparisons between site samples, the 1996 sample is primarily used in reference to results for the Head of the Bight. Data from the 1995 sample are specified if they offer additional information (e.g. greater depth about a topic, or data only collected during that year).
[5] refer to Chapter Five, section 5.4.4 for number sampled and sampling procedures

due to the method of sampling, where whale watchers received the survey as they departed the site and were required to post or return it to a local RMA or NGO office. Travel time to their final destination would vary, but unlike the Head of the Bight, there was no enforced part of the journey in which they would travel from the viewing site to a location where they could immediately deposit the questionnaire. Hence, Warrnambool whale watchers could easily put the survey aside at the end of their whale watching experience.

Whale watching tour participants in Albany received their questionnaires during the return trip to the jetty. If little else occurred during this stage of the journey, the surveys could be given their full attention, and were to be returned to a box aboard the vessels. Response rates were high for both tour companies (57.6% Silver Star; 96.4% Southern Ocean Charters). Obviously, these whale watchers has a discrete amount of time in which to complete their questionnaires, although due to the style of questions for all sites, the types of answers are not expected to vary significantly with the means of collection. For example, most questions regarding interpretation asked whether or not the whale watchers had read certain items or visited particular venues, and thus greater time to respond to these questions should not greatly affect the answers.[6]

Throughout this chapter, two consecutive percentages (or other figures) are often given for 'Albany' whale watchers. Unless otherwise specified, the first refers to results from respondents aboard Silver Star Cruises' catamaran, and the second represents those aboard Southern Ocean Charters' fishing vessel. A distinction is made between respondents of these two cruises due to the potential influence of the respective features of each whale watching tour, including vessel type (affecting speed and views), length of tour (varying by 1/2 hour), or crew (a captain and crew vs. captain only). Significant differences between the results for these tours are cited in the text. However, results from these tours (together) can also represent the influence of the platform/site (ie. boat-based whale watching in Albany), and/or tour participants (vs. independent whale watchers), in contrast to the conditions of the other case study sites.

(ii) Whale Watchers Observed On-Site

Regarding the observation of land-based whale watchers in respect to their patronage of interpretive signs on-site, samples were taken from all of those in attendance at the Head of the Bight and Warrnambool viewing areas during the sampling period. Table 42 lists the total number of whale watchers recorded at the Head of the Bight and Warrnambool (n = 209, n= 2107 respectively) during this period, as well as the proportion of those who approached and read the signs. From the latter, one person per group was

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[6]unless, of course, the visitors have very poor memories, or are unsure of the identification of certain items when out of context. Also, it is conceded that opinions on their whale watching experience could change over time, and the nature of sampling effort as it effects these answers should be considered by further research. In the current research, collection methods were largely determined by site parameters and logistical factors relating to the different whale watching platforms.

TABLE 42
Samples of Land-based Whale Watchers Observed On-Site

TYPE OF OBSERVATIONAL DATA COLLECTED	*Case Study Site*	
	Head of the Bight	***Warrnambool***
Patronage Of Interpretive Signs		
# of whale watchers observed on-site	**n = 209**	**n = 2107**
Representativeness of seasonal population	2.1%	21.1%
# of whale watchers who approached/read the on-site interpretive sign	65	572
# of whale watchers timed reading the sign	27	234
Compliance With Management Directives		
# of time intervals when behaviour was recorded	**n = 84**	**n = 68**
# of whale watchers / vehicles observed during all intervals	947 people 460 vehicles	2261 people n/a vehicles
Average # of whale watchers / vehicles observed per time interval	11 people 6 vehicles	33 people n/a vehicles

(randomly) selected to be timed as he/she read the interpretive signs, as it was not possible to record the time for each individual.

Sampling for compliance with management directives at the land-based sites entailed time interval counts of the people/vehicles in an area, noting their position on-site and whether or not they were in compliance.[7] The amount of time interval counts conducted at the Head of the Bight and Warrnambool is listed above in Table 42. During the time interval counts, 460 vehicles and 947 people were observed at the Head of the Bight; and 2261 people at Warrnambool. These figures refer to the cumulative counts taken during each timing interval, since whale watcher numbers, turn over and movements across the viewing areas prevented sampling from accounting for total numbers present on the sampling days (ie. without repeated counts of the same visitors). Hence the above figures may represent vehicles/people who remained at the sites during more than one interval. Results for this type of sampling refer to the proportion of the observation time in which whale watchers were in compliance, and in the case of the Head of the Bight, average numbers of people/vehicles recorded in various locations within the viewing areas are presented.

9.2 Notable Whale Watcher Characteristics

Because of the dearth of existent profiles, whale watcher information of all kinds is of value to the case study site managers and interpreters who promote the tourist activity, and who wish to maximise their ability to meet visitor needs and interests. The following discussion emphasises characteristics relevant to the use of interpretation as a management tool in both a promotional/orientative and educational capacity. These characteristics include demographic profiles of whale watchers, as well as their level previous whale watching experience and preferences for certain aspects of the tourism activity. Results demonstrate the importance of the use of interpretation as part of a broader information strategy.

9.2.1 Demographics

The most frequent age group of whale watchers from Warrnambool and Albany was 31-55 years.[8] An older population visited the Head of the Bight, where approximately half (49.6%) of the whale watchers were over 55 years old. Any elderly visitors amongst these may warrant more attention to facilities such as benches and level paths, which could then be noted within interpretive material they can access before the experience to enhance their comfort (cf. Standards VI and VII). Also of consequence to interpretation

[7] e.g. those in breach of management directives were located within revegetated areas, parked inappropriately, and/or venturing into restricted areas.

[8] In this case, the questionnaire requested the ages of each group member (not just the respondent), and n= 1533 for all sites in total; percentages of the most frequent age group (31-55 years old) for sites other than the Bight are as follows: Warrnambool: 41.9% (sd ± 42.8); S. Ocean Charters: 42.8% (sd ± 16.6); Silver Star Cruises: 38% (sd ± 21.6)

is the population of children, of whom there was a minority at all sites. As the largest proportion of those under 15 was only 16% (at Warrnambool), the average reading age of the printed material available seems on target (ie. 15.1 years; refer to Table 36, p. 227)

In respect to visitor state of origin, results from the Head of the Bight varied from the other sites again by encompassing a more equal distribution of whale watchers from all over the country, rather than a clear majority from one particular state. In both Warrnambool and Albany (for both tours), the greatest number of whale watchers lived in the same state as the site, with 82% of Warrnambool whale watchers resident in Victoria, and between 46-49% of Albany whale watchers resident in Western Australia. By contrast, Victoria was the most frequent state of origin for visitors to the Head of the Bight (a South Australian site), though only by a small margin (25.1%, sd ± 5.6).[9] This has implications for the promotional effort of NGOs and tour operators in relation to where they may best concentrate their efforts (ie. within their own state). Such information could be of interest to RMA staff as well (also see O'Laughlin 1989), in terms of their dissemination of pre-trip educative material (e.g. in state-wide campaigns) which could orient whale watchers to the experience in general and to appropriate behaviour for the sites (cf. Standard VI).

Respondents who are from the same town as the whale watching site would have greater access to interpretive material which is only available locally, yet residents of Albany (13.2% - 5.6%) and Warrnambool (8.8%) who whale watch do not seem to take great advantage of this opportunity.[10] The only significant difference between the residents and non-residents of the sites in terms of access to interpretation was found in the results for one of Albany's tour boats. Of the whale watchers aboard Silver Star Cruises, more residents of Albany than those from anywhere else had read both the whale watching sign of the town ($X^2 = 11.01$, df = 1, $p < 0.005$), and the local tourism booklet, '*The Albany Experience*' ($X^2 = 10.55$, df = 1, $p < 0.005$). Regardless, only a small portion of the questionnaire respondents in general were residents of the whale watching sites of either Albany or Warrnambool.

9.2.2 *Interest in Whale Watching*

(i) Previous Whale Watching Experience

A total of 50.5% of respondents (or 315) from all case study sites had participated in whale watching at some point prior to their current trip (Table 43). The level of previous experience, however, varied significantly between land-based (53.7%) and boat-based (34.9%) platforms ($X^2 = 12.7$, df = 1, $p < 0.005$). Also, there were large discrepancies between case study site samples regarding whale watchers who had participated in the experience *more* than once. For instance, aboard Silver Star Cruises, only 11.8% (or 2)

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[9] In the 1995 sample, 38.9% were from SA.

[10] there are no residents at the Head of the Bight

TABLE 43
Whale Watchers' Previous Experience with the Tourism

WHALE WATCHER SAMPLES **Platforms** and *Case Study Sites*	Proportion with previous whale watching experience
TOTAL (all samples; n=624)	**50.5%**
Land-based Whale Watchers (n=518)	**53.7%**
Head of the Bight (n=394)	*53.1%* * 28.7% of these have participated in whale watching more than once
Warrnambool (n=124)	*54%* * 65.7% of these have participated in whale watching more than once
Boat-based Whale Watchers (n=106)	**34.9%**
Silver Star Cruises (Albany) (n=53)	*32.1%* * 11.8% of these have participated in whale watching more than once
Southern Ocean Charters (Albany) (n=53)	*37.7%* * 45% of these have participated in whale watching more than once

of those with prior experience had been whale watching more than once, compared to 65.7% (or 44) of the experienced whale watchers from Warrnambool.[11]

Overall, visitors to the case study sites had more whale watching experience than those sampled in other Australian research by Goyne (1995; 15% had previous experience, n=1454) and Neil et al. (1996; 18%; n=341). However, the respondents' whale watching experience was more likely to be gained from different sites than those where they were surveyed in the current research. For instance, only a fifth of the 211 respondents from the Head of the Bight with previous whale watching experience (19.9%, 42) had previously participated in the tourism at that particular site.

The importance of previous experience with whale watching, whether gained from the case study sites or elsewhere, is that it may contribute to preconceptions regarding features of the tourism such as whale activity and proximity, the availability of interpretation during the experience, and even facilities visitors expect to find at land-based sites. Though whale watcher expectations are in part dependent on the nature of their other trips (e.g. whether or not they had a favourable time), the experienced visitors might have realistic expectations about the activity. By contrast, those who are new to whale watching could be more reliant upon promotional/orientative information to shape their views. Hence boat-based whale watchers in Albany, as the newest to the experience, have the potential to be the most influenced by promotional efforts.

A later section (9.5) reveals the level of disappointment and satisfaction of the whale watchers, with reference to their previous experience. At this stage, it can be pointed out that whale watchers in Albany have the potential to access promotional/orientative topics in some form within the efforts of all types of interpreters (ie. RMA staff, NGO personnel and tour operators), and for RMA and NGO materials, the information is fairly realistic.[12] There was a discrepancy between individual tour operators and their emphasis on whale proximity and activity within promotional material in general (see section 8.2.1); but the brochures from the two tours whose whale watchers were surveyed, Silver Star Cruises and Southern Ocean Charters, did contain at least some qualifications to their claims, and referred to the proximity of whales in respect to the coastline rather than to the vessels:

> '*[Southern Right whales] <u>can</u> be found very close inshore*'
>
> (Silver Star Cruises; emphasis added)

> '*[Southern Right whales] occasionally go through bouts of incredible activity.... sometimes within 50 metres of shore*'
>
> (Southern Ocean Charters)

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[11] Significant differences between these figures could not be calculated due to the varying (and sometimes vast) amounts of respondents who did not specify the number of previous whale watching experiences; e.g. 101 of the 209 experienced whale watchers at the Head of the Bight failed to provide a number.

[12] as noted in Chapter Eight, section 8.2.1

Whilst whale watchers at the land-based case study sites were more experienced than their boat-based counterparts, slightly less than half of those visiting either Warrnambool or the Head of the Bight were in fact first-time participants in the tourism. These whale watchers would find little interpretation available for the land-based sites that would orient them to the nature of the local experience (cf. Standard VI), especially in terms of facilities. Promotional/orientative materials from all types of interpreters omitted the types of facilities found on-site, such that visitors without experience at Warrnambool or the Head of the Bight were likely to be unprepared for the lack of toilets, shelters, or refreshments.

The acquisition of any promotional/orientative material or information by whale watchers, and the degree to which their expectations were matched, are discussed later in the chapter. Nonetheless, it is clear at this stage that the accuracy and availability of promotional/orientative interpretation at the case study sites is crucial (cf. Standards V and VI), in light of the proportions of respondents who are in fact first time participants in whale watching, and others who are still unfamiliar with the experiences offered by the case study sites.

(ii) Preferences for the Whale Watching Experience

When questioned about specific features of the whale watching experience, at least three quarters of respondents from each case study site sample claimed to desire a peaceful experience in an unspoilt or natural area.[13] Though answers may have been influenced by the style of question,[14] a few land-based whale watchers from Warrnambool (7) and the Bight (34) offered additional, unsolicited comments elsewhere on their questionnaires which noted their preference for maintaining a natural character to the sites. Results from the 1995 Head of the Bight survey, which inquired about larger number of features of the experience, also confirm these types of results (at least for whale watchers of that site). In this survey, a peaceful atmosphere was rated amongst the highest in importance for their whale watching experience (an average score of 4.49 out of a scale of 5), as was the preference for smaller crowds (4.25 out of 5).

In addition to informing site managers of the style of whale watching experience preferred by participants, the significance of these results also pertains to the promotional/orientative content of interpretation at the sites. The remoteness of the Head of the Bight, for instance, could be promoted as an attractive feature of the site through off-site interpretive material. Rather than a hindrance to the tourism activity (ie. because of the distance of the location or lack of facilities), the remote and undeveloped nature of the site could be described as part of what contributes to a sense of peacefulness of the

[13]Interest in a peaceful atmosphere was indicated by the following percentages of whale watchers: 92.5% from the Head of the Bight, 81.5% from Warrnambool, 90.6% from Silver Star Cruises (Albany) and 90.6% from Southern Ocean Charters (Albany). Interest in an unspoilt whale watching site was expressed by: 88.1% from the Head of the Bight, 83.1% from Warrnambool, 77.4% from Silver Star Cruises (Albany) and 94.3% from Southern Ocean Charters (Albany).

[14]ie. closed-ended, limited to only a few features

whale watching experience. Currently, the nature of the site in these terms is only mentioned by one tour operator (from those sampled) of the area, despite the apparent interest of whale watchers and the subsequent potential to address their expectations and satisfaction with the experience (cf. Standard VI).

Interpretation promoting the Logans Beach whale watching platform in Warrnambool appears to be prudent in respect to visitor numbers, which may be conducive to the expressed interest in a peaceful atmosphere at the site. Whilst visitor guide books and RMA publications mention that the site attracts 'international attention,' these materials appear to be careful to avoid depicting great crowds at the site, through either their text or images.[15] All photographs of whale watchers at the site appearing in this printed material depict fewer than thirty people watching the whales.[16]

According to Standard VI, the opportunity to learn should also be mentioned as part of the whale watching experience by pre-visit material, and it seems that most whale watchers from the case study sites would be interested to know about such an opportunity given their professed interest in interpretation. Interpretation as part of the whale watching experience is considered important by more than 80% of respondents from each case study site, with a maximum of 94.3% of whale watchers from Southern Ocean Cruises. There were no significant differences between the samples ($X^2 = 4.24$, $df = 3$, $p < 0.95$), nor between land-based (85.5%) and boat-based (91.5%) whale watchers ($X^2 = 2.74$, $df = 1$, $p < 0.95$) regarding the professed interest in interpretation. However, results in Chapter Eight illustrated that few materials available before the experience actually promoted available educative interpretation (e.g. commentary, signage on-site).[17] Thus even if a majority of whale watchers would at least be receptive to the presentation of information during their experience, currently they would be unable to select amongst the case study sites based on any promotion of interpretation as part of whale watching.

9.3 Pre-trip Preparation and Activities

In a temporal sense, best practice Standards V and VII for interpretation imply that whale watchers should acquire both orientative information on the nature of the tourism experience,[18] as well as educative information that introduces the focal animals and setting, prior to their engagement in the activity. This section explores the pre-visit stage

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[15] as seen in DCNR's booklet (*'Whales in Victorian Waters'*) , and both booklets by *The Standard* (*'The Whales at Warrnambool,' 'The Great South-west Tourist News'*).

[16] This is similar to the average amount of visitors at the site at any one time (30.3), according to results of observations conducted in the field work (see section 8.4.3). However, on several occasions (8.9% of observations), more than 70 were present at the platform, and the number of visitors reached 159 on one occasion. Each of these occasions corresponded to weekends rather than weekdays, so it is reasonable to expect (and DCNR staff acknowledge) that such times will attract larger crowds.

[17] 17.4% of the printed sample mentioned interpretation as part of whale watching or referred to a particular interpretive product on-site; see section 8.2.1

[18] e.g. as influenced by the platform, available facilities, area, focal animals

of whale watching, in respect to (1) the degree of exposure whale watchers have to this material (much of which is located off-site); and (2) the influence (and implications) of the access and materials on their tourism experience.

9.3.1 The Decision to Whale Watch

Despite the questionnaire respondents' interest in and preference for certain features of the whale watching experience as described above, results illustrate that for some visitors to the case study sites, their decision to go whale watching in the first place was rapid and/or insouciant. At the Head of the Bight, a large majority (88.6%, or 349 out of 394) of respondents did not travel to the remote Nullarbor area *specifically* to whale watch, and were instead 'passing through' when they learned of the opportunity. Of these respondents, several (48) made their decision to whale watch immediately upon seeing the sign at the turn-off to the site from the highway.[19] Aside from happening upon the site, another informal (and more popular) way in which respondents learned of the Head of the Bight was through word of mouth (47.2% of those who made unplanned stops, or 41.2% of the total sample for this site).

Whether prompted to whale watch by the turn-off sign or by word of mouth, these travel patterns are important to promotional and orientative efforts at the Head of the Bight. It is not clear whether whale watchers who were reliant on word of mouth would be getting accurate information, and certainly those who opportunistically visit the site would have little chance to acquire promotional or orientative information before the experience. Hence the information (verbal and printed) which is available at the White Well Tank (YLMP ranger station) is of particular value as both an educational and orientative pre-visit opportunity and introduction to the site.

Respondents from the other case study sites also appear to be informal and spontaneous in their preparation for the whale watching experience, once they have arrived in either Warrnambool or Albany. For those interested in visiting Warrnambool's Logans Beach platform, there is no guarantee that whales will be found there on any particular day of the season. Yet nearly half (49.2%, 61) of the respondents for this site took the risk and went to the platform without first making any attempt to confirm a sighting (ie. by contacting or visiting the Tourist Information Centre). Since the platform is not far from the town centre (refer to Figure 24, p. 237), one who is unsuccessful in sighting a whale there has not invested an immense amount of time to reach the viewing area; if no whales are in the vicinity, the town itself hosts several other major tourist attractions to entertain visitors. Nonetheless, this (first) point assumes that whale watchers were already in Warrnambool (as residents, or visitors who did not travel there only to see whales).

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[19]This is a notable decrease since Josif & Mingajtuta's (1993) tourism feasibility study for the Yalata Community, where 58% of survey respondents claimed whale watching as their main purpose in visiting the Nullarbor. It is difficult to determine the factors for this decrease, although the sampling technique may be one source of the discrepancy. Josif & Mingajtuta (1993:33) do not provide a sample size in their study, although they describe their sample as 'small.'

Additional information about whale watcher travel patterns (e.g. length of stay in the area) would offer further insight into their investment and risk of disappointment with the experience at this site.

The implications (in terms of interpretation) of any spontaneous decisions to whale watch concern the level of experience that participants have with the tourism, and in particular, the site itself. Without prior knowledge of the nature of whale watching in Warrnambool, visitors forego the chance to learn before their arrival (1) what is appropriate behaviour on-site, (2) what facilities are (or are not) available on-site, or (3) even the likelihood of seeing a whale. Each of these should be addressed by interpretation which whale watchers receive before the activity commences (cf. Standards VI and VII). In the latter two examples, lack of exposure to orientative interpretive opportunities risks whale watchers disappointment with their experience. Regarding the former, there may be an increased risk of damage to the local sand dunes, as interpretation currently available at the viewing platform does not cover orientative information that prepares visitors for appropriate behaviour in a fragile coastal environment.

In Albany, respondents from both samples mainly selected their respective whale watching tour by either visiting the Tourist Information Centre (20.8% - 34%), or by consulting other sources of word of mouth (e.g. accommodation, 18.9% Southern Ocean Charters; friends or locals 17%, Silver Star Cruises). Several respondents (5) from Silver Star Cruises specifically mentioned the acquisition of promotional material as a means of making their selection, but the same amount also claimed to choose the tour upon their arrival at the jetty. Only one respondent from Southern Ocean Charters acknowledged this company's brochure as a source of their information on the experience. This indicates that most whale watchers miss the opportunity to access the brochure, which is also modelled on CALM's detailed whale watching information, as a source of (a great deal of) orientative and educative material.[20]

Of course, orientative information (e.g. regarding the nature of the experience in terms of sightings, facilities, educative topics to be discussed) can be covered in tour operator commentary prior to departure and whilst travelling to the whales. Nevertheless, if their promotional efforts do not cover such information or are not widely accessed, the potential for companies to *attract* whale watchers based on their tour features may be compromised. Furthermore, whale watchers who do not collect these materials miss exposure to some of few printed interpretive efforts (ie. which are able to be taken home) at the case study site.

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[20] refer to Chapter Seven, section 7.4

9.3.2 *Venues Visited by Whale Watchers*

The primary venues at the case study sites[21] to offer whale watching interpretive material are the tourist information centres and RMA district offices. These were visited by no more than half of the respondents from each sample, although the level of visitation varies between the sites (Table 44). Tourist information centres were visited by approximately one half of whale watchers in Warrnambool (50%) and Albany (47.2%, 64.2%), but only 17.8% (70) of whale watchers at the Head of the Bight. In the latter case, the nearest Centre was more than 300km from the site, and visitors travelling east would not encounter it until after their whale watching experience. At all sites, however, it appears that these information centres are not an invariant part of the whale watching tourism experience, at least in terms of guaranteed access to their printed materials.[22]

Patronage of RMA offices was even less popular amongst the whale watchers, with fewer than 10% of the sample from any of the sites visiting the local district office. Again, the DENR office in Ceduna faced a similar problem to the tourist information centre, as access to it is hindered by its location (ie. a great distance from the whale watching site). Nonetheless, there was no significant difference between the amount of respondents visiting this office and those who visited the RMA offices at the other whale watching sites.[23] Whilst the whale watchers might be unaware that additional interpretation is available at these offices, the result could also reflect a lack of initiative on their part, as a visit to the district RMA office requires a separate stop during the whale watching journey (ie. during pre- or post-visit stages). Furthermore, the RMA offices from Warrnambool and Albany are not centrally located in the small towns (illustrated in Figures 24 and 25, pp. 237-238), nor are they close (ie. within walking distance, or 1km) to the whale watching activity.[24] Without visiting these Centres or the RMA offices, whale watchers would be more reliant upon interpretation available on-site, or peripheral sources encountered opportunistically.

Other venues located at the case study sites, such as interpretive centres and museums, can serve as peripheral interpretive sources on whales and whale watching for visitors to the area. Permanent venues of this kind in Warrnambool (Flagstaff Hill Maritime Museum) and Albany (Whale World) both offer detailed information on the history of whaling, and a travelling exhibit in Warrnambool at the time of the study ('Giants of the Deep') covered many aspects of whale behaviour and biology and also contained many interactive displays. These venues were visited by approximately 50% of whale

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[21] or in the vicinity, for the Head of the Bight

[22] At the Head of the Bight it is not as much of an option to visit the Tourist Centre in Ceduna; but if this site is omitted from analysis there was still no significant difference between respondents from Warrnambool or the Albany tours and their tendency to visit the local tourism office ($X^2 = 3.8$, df = 2, $p < 0.95$).

[23] $X^2 = 0.72$, df = 3, $p < 0.95$

[24] ie. Logans Beach Platform in Warrnambool, the departure point of the jetty in Albany

TABLE 44

Primary RMA and NGO Venues at Case Study Sites Visited by Whale Watchers

Whale Watcher Sample	Visited RMA (District) office	Visited Local Tourism Information Centre
Head of the Bight	6.4%	17.8%
Warrnambool	7.3%	50%
Silver Star Cruises	9.4%	64.2%
Southern Ocean Charters	7.6%	47.2%

watchers from both Warrnambool and Albany (both tours), a similar amount to those who visited the general Tourist Information Centres at these sites.

Although these venues were not as popular amongst respondents as one might expect,[25] whale watchers who did visit them would have access to a greater amount of information on whales than others, and the information available at these venues certainly complements the other interpretive efforts at the case study sites. Since approximately half of whale watchers were exposed to additional interpretive opportunities at these peripheral venues, there is scope for the museums/exhibits to provide more information on whale watching in particular, and to develop links between their themes and the opportunity to see live whales in the vicinity. An example of this potential is found in Encounter Bay (SA), where the South Australian Whale Centre offers up to date sighting information for the local area (and beyond).[26] It also provides exhibits and other detailed interpretive materials on the focal animals (e.g. local history of whaling, whale/environment protection themes). This type information is unavailable to whale watchers whilst engaged in the tourism on-site (ie. at the coastal viewing areas) in Encounter Bay, and thus can enhance their experience.[27] In the case study site samples, the respondents' visitation of peripheral venues for whale watching also suggests that these venues could become a potential source for the collection of current interpretive materials, which are less likely to be acquired otherwise (e.g. booklets presently located at RMA offices).

No interpretive centres exist in the proximity of the Head of the Bight,[28] but as noted in Chapter Eight, the roadhouses along the Eyre Highway are known to offer interpretive materials (ie. EPTA's '*Eyre Peninsula: A Breath of Fresh Air*', occasionally DENR's '*Environmental Code of Behaviour for Whale Watchers*') as well as verbal advice on whale watching. These roadhouses are popular amongst whale watchers from this site, with 92.4% (364) visiting at least one of the five within 300km of the site, and 63.2% stopping at the Nullarbor Roadhouse (the closest to the site, approximately 20km).[29] Considering their patronage, regular availability of a greater range of printed interpretation at the roadhouses would enhance the interpretation effort for the site.

One problem with the results of this section is that it is unclear when whale watchers visited any of the venues, and hence their exposure to the available interpretation could

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[25]given that Flagstaff Hill, Whale World and Giants of the Deep (at the time of study) are promoted as major tourist attractions of the sites and contain whale-related information

[26] the SAWC informs visitors and callers to its sighting hotline of the status of whales state-wide; this includes the Head of the Bight, and hence the SAWC has regular contact (over the phone) with the site managers (YLMP).

[27]see Dirga (1993) for a detailed account of the interpretive efforts of the SAWC and other whale watching stakeholders in Encounter Bay.

[28]though Yalata has expressed interest in developing a centre at its roadhouse (Josif & Mingajtuta 1993; McKenzie, YLMP Manager, pers. comm.)

[29]Roadhouses referred to in the questionnaire include those at Eucla, Border Village, Nullarbor, Yalata, Nundroo, all of which have the potential to provide additional whale watching interpretive materials.

have occurred before or after their whale watching experience.[30] Visits to the venues after the experience are still valuable in terms of access to printed material which contains detailed educative information on whales (see section 9.5), and any indication of patronage of the venues is important to the potential availability of interpretation in the future.

9.3.3 Acquisition of Interpretation

Amongst the case study sites, a common result was that consistently few respondents to the whale watching questionnaires obtained any of the printed interpretive material which was available pre- (and post-) visit. As implied previously, this generally limits their exposure to interpretation to that which is available on-site/during the whale watching experience. Such interpretation varies in type and quality between the case study sites.[31]

At the Head of the Bight, there is not a vast selection of printed interpretive material from which to choose, and overall, only 14.5% of whale watchers had read the visitor booklet produced by EPTA. Most of these respondents either failed to identify where they collected this booklet, or did not get it from any of the venues listed on the questionnaire. However, a few (9) did specify that they acquired it from the Yalata Roadhouse. Yalata Roadhouse and Nullarbor Roadhouse were more popular as sources of verbal information on the site, and of all the off-site venues where a total 69.5% (274) of respondents received verbal information, these two roadhouses assisted 67 and 85 whale watchers (respectively). The content (and quality) of the verbal information sought and received en route was not tested, but the roadhouses do receive regular updates from YLMP on the status of the whales at the Head of the Bight, and staff were witnessed offering this and other orientative information about the nature of the experience (e.g. cost of entry, condition of the access road).

Pre-visit verbal information was already shown to be somewhat under-utilised by whale watchers at Warrnambool and Albany, and the acquisition of pre-visit printed material was also infrequent. The most popular item collected by the whale watchers was *The Standard's 'Whales at Warrnambool'* booklet, of which only 22 (17.7%) of respondents from this site had obtained a copy. Coincident with the rarity of visits to the DCNR's local office, less than 10% of whale watchers had viewed either the Department's brochures or booklet (4.8% to 8.9% respectively).

Whale watchers aboard Silver Star Cruises in Albany were no more likely to have been exposed to printed interpretive material than those from the other sites, as approximately 10% of them had seen the Albany Tourism Association's major publication, *'The Albany Experience'* or CALM's brochure, *'Watching Whales.'* By contrast, the number of participants in Southern Ocean Charters with this material (20.8% for both items) was

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[30] Prior visits may also have taken place during other journeys (ie. months or years before the current whale watching trip).

[31] as described throughout Chapter Eight

nearly double that of the other tour.[32] Though it is not clear where whale watchers obtained these materials, it is possible that they were available more often *during* the Southern Ocean Charters tours, as part of the vessel's on-board library.

In most instances, the majority of whale watchers had not read any of the (portable) printed interpretation available for the case study sites, and very few had read more than one of the materials (Table 45).[33] A significant difference was found between boat-based and land-based whale watchers in terms of their exposure to printed interpretation, indicating that tour participants in Albany (50% total) were more likely than independent visitors to Warrnambool or the Head of the Bight to read least one item.[34] However, the most popular form of this interpretation also varied between the platforms, with boat-based participants favouring the tour brochures and the land-based visitors preferring NGO publications (shown in Table 45). With the exception of Southern Ocean Charters participants, RMA publications were the least popular[35] amongst respondents at the case study sites, with less then 10% (and as few as 2.8%, at the Head of the Bight) reading the materials available from these interpreters.

In Albany, the local RMA's (CALM) sign was accessed more often by whale watchers than its brochure. The whale watching sign at Middleton Beach (Plate 16, p. 243) could be viewed either before or after the tour, and 22.6% of the participants in each tour took advantage of this opportunity. Readers of this sign would be exposed to whale watching tips that could enhance their experience aboard a tour vessels, especially if they have failed to acquire other interpretive materials prior to the tour. At the Head of the Bight, the only sign visible prior to the whale watching experience is produced by EPTA, which introduced nearly two-thirds (65%) of visitors to '*The Great Australian Bight*' as they entered the site (Plate 12, p. 240). The popularity of EPTA's sign is of particular importance considering the whale watchers' lack of exposure to other pre-visit materials, although its content could have incorporated additional topics that would have been of interest to visitors and of value to an environmental protection objective.[36] Other signs viewed 'during' whale watching are discussed in a later section (9.4.2), but at this point, it should be noted that these signs could play an important role in an broad information strategy for the respective sites (cf. Standard V).

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[32] there was no significant difference, however, between these tour samples and their exposure to these materials: '*The Albany Experience*' $X^2 = 2.6$, df = 1, $p < 0.5$; '*Watching Whales*' $X^2 = 1.8$, df = 1, $p < 0.5$.

[33] The exception was the sample from Southern Ocean Charters, although nearly half (47.2%) of these whale watchers still did not read any materials.

[34] Only 27% of land-based whale watchers read at least one item; $X^2 = 21.7$, df = 1, $p < 0.005$

[35] in terms of acquisition, not necessarily interest in or enjoyment of the material

[36] ie. describe the nature of whale watching at the remote site; or highlight appropriate behaviour in relation to the geographical features currently described in the content, such as the need for caution in the vicinity of the limestone cliffs.

TABLE 45

Whale Watcher Exposure to (Portable) Printed Interpretative Materials Available Pre/Post Visit

Whale Watcher Sample	Number of Printed Materials Read			Most Popular Item
	NONE	ONE ONLY	MORE THAN ONE	
Head of the Bight	**73.9%**	**20.1%**	**6%**	EPTA's *'Eyre Peninsula ; A Breath of Fresh Air'* (14.5%)
Warrnambool	**70.2%**	**25%**	**4.8%**	*The Standard's 'Whales at Warrnambool'* (23.4%)
Silver Star Cruises	**52.8%**	**30.2%**	**17%**	Tour brochure (30.2%)
Southern OceanCharters	**47.2%**	**26.4%**	**26.4%**	Tour brochure (34%)

9.4 During the Whale Watching Experience

The activities of visitors and the nature of whale watching at the case study sites can affect their exposure to and enjoyment of different interpretive products available during the tourism experience. Data from questionnaires and observations of whale watcher behaviour on-site reveal visitor characteristics that are conducive to particular interpretive strategies and content. On occasion, the current delivery of interpretation (e.g. when, where) at the case study sites may hinder access to information relevant to objectives of both whale watcher satisfaction and environmental protection (cf. Standards V, VII).

9.4.1 Length of Visitation

Whereas the time spent whale watching as a participant of a tour is restricted to a schedule, independent visitors to the land-based whale watching sites can extend their stay for as long as they wish in daylight hours. For whale watchers at both Warrnambool and the Head of the Bight, an hour (approximately) seemed to be all the time they required or desired for the activity (Table 46).

According to questionnaire results, the time that respondents spent whale watching in Warrnambool was shorter on average than the time spent by those at the Head of the Bight. However, Warrnambool whale watchers were likely to extend their stay over several days, and return to the viewing platform more than once during their journey to the area. One third of whale watchers at this site (42; non-residents) were visiting Warrnambool for more than one day *and* went to the viewing platform more than once during their stay. Not surprisingly, there is a significant difference between time spent whale watching at the platform and length of stay in the vicinity.[37] Other results are more interesting in terms of the nature of the visitor activity and the time available for them to be exposed to on-site interpretation. Most of the 59 whale watchers who only spent one day engaged in the activity at Warrnambool often allowed less than half an hour for the experience (57.6%; sd ± 12.9), and of all who specified the time they spent at the platform (102 out of 124), 61.5% stayed less than one hour.

The range of time spent at both land-based sites (see Table 46) indicates that whilst some whale watchers were willing to stay for an afternoon or morning, or even all day, others were content to spend only 10 minutes viewing the whales. This seems extraordinary for visitors to the Head of the Bight, considering there is a cost to access the site,[38] and it could take longer to travel the 10km unsealed (and rough) road from White Well to the cliffs than the time these visitors claimed to devote to watching the whales. In some cases, length of stay at the land-based sites may be influenced by the lack of comfort facilities (see section 9.5), and at Warrnambool, the visibility of whales may be poor, if

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[37] ie. one or more days vs. one or more hours; $X^2 = 23.6$, df = 1, $p < 0.005$. A larger amount of whale watchers who were in Warrnambool for more than one day spent longer than one hour engaged in the activity (21.8%) , compared to those who were only visiting for a day (8.1%). The most common pattern was for whale watchers to visit the platform on one day and spend up to one hour engaged in the activity (39.5%).

[38] This admission cost varies annually, but in 1996 it was $A 7.00 per adult

TABLE 46
Time Spent by Whale Watchers at the Land-based Sites

SITE	TIME SPENT AT THE SITE		
	AVERAGE	RANGE minimum / maximum	MODE
HEAD OF THE BIGHT			
	1 hour 23 minutes	10 minutes / 8 hours 30 minutes	1 hour
WARRNAMBOOL			
	1 hour 9 minutes	10 minutes / 4 hours	30 minutes

t-test of the average times; significant difference between sites:

$t = 1.94$, $df = 458$
$p < 0.02$

they are present at all.[39] At the Head of the Bight, whales are always present during the season, although they could have been further out to sea during the visits of questionnaire respondents who only stayed 10 minutes.

Regardless of the reasons, one implication of any short time spent whale watching is that it limits the whale watchers' opportunity to view interpretation which can be accessed on-site (e.g. signs at the land-based sites). Though whale watchers who spent 30 minutes or less at the Head of the Bight only comprised 12% (or 39) of the respondents, the most popular visit of an hour's length is still not a significant amount of time to spend following the access road and footpaths to the coast, locating and watching whales, *and* reading interpretive material during the experience. In fact, it is possible that land-based whale watchers afford themselves even less time to view the animals and to consult available interpretation than people on scheduled tours (although the for the latter, exposure to interpretation is not entirely by choice).

On tour, access to the main form of interpretation (ie. commentary) is predetermined, and ostensibly could continue for the entire duration of the tour. More realistically, commentary on tour can be delivered in the presence of the whales and direct attention to their behaviour as it happens. The extent of the commentary in Albany was not measured in these terms, but all whale watchers estimated their whale viewing time to be between 1 1/2 to 2 hours. Commentary may not have been delivered throughout the entire time that whales are sighted,[40] but even if it is estimated that the delivery continued for just one quarter of the shortest viewing time (e.g. 22 minutes), the commentary is likely to be longer than the time spent by land-based whale watchers acquiring/reading information during their experience.

9.4.2 Access to On-site Interpretation

(i) Commentary and Portable Printed Material

The previous section commented on the automatic exposure of whale watching tour participants (in general) to commentary during their experience, though it is of course their choice to attend to the information. Half of the questionnaire respondents from the tours in Albany (47.2%-50.9%) do claim to listen to the entire commentary, and a further 22.6%- 35.9% listen to 'most' of it. Whale watchers who were less interested comprised a minority, for a single person (for both tours) admitted to not listening to *any* of the commentary, and just four (out of 106 total in Albany) claimed they 'did not pay much attention to it.' Hence the majority of whale watching tour participants in Albany are exposed to and interested in verbal interpretation available during their experience.

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[39]As noted above, several whale watchers went to the viewing platform without first confirming there was a sighting.

[40]nor should it, in the sense of allowing whale watchers the opportunity for personal discovery (see Forestell 1993).

Whale watchers in Warrnambool will not find any portable printed material available at the viewing platform itself, and those who do not collect booklets or brochures prior to their arrival on-site are reliant on DCNR's sign for whale-related information (see below). By contrast, visitors to the Head of the Bight are supposed to receive printed material (DENR's '*Welcome to Whale Watching*' pages) as they purchase a permit at White Well (as discussed in Chapter Eight). These whale watchers of course have the freedom to read or to not read the material, but results from the questionnaire suggest that a more immediate problem is in fact whether they actually receive it or not. A mere 2.8% (11 respondents out of 394) claimed to have read this material.

It is possible that this result means whale watchers acquired DENR's printed interpretation and did not in fact read it, but a more likely explanation is that the material was not consistently available or disseminated at the site. As the material is supplied mainly by DENR's head office in Adelaide, the remoteness of the Head of the Bight (1200km away) could hinder the frequency and size (ie. amount) of its delivery. Another possibility is that staff on-site (of which there is a high turnover) are not consistently trained or asked to automatically disseminate the information. The manager of the YLMP at the time of study confirmed that the availability of DENR's pages was inconsistent and somewhat unpredictable, and that maintaining a constant supply was not a high priority amongst their land management responsibilities.

Failure to distribute this particular information to the whale watchers at this site neglects a major opportunity for orientation to the experience (e.g. how to identify whale activity), and for outlining appropriate behaviour on-site critical to visitor safety and environmental protection. Such information can be provided verbally by staff at White Well,[41] but an advantage of the printed material is that it can be referred to at the cliffs, where it would complement and add meaning to existing identification signs for revegetation areas and hazards. Furthermore, the material contains additional, educative information on whales which is not available at the cliffs (or material produced for this site by other interpreters). Without DENR's material, a major opportunity to expose visitors at the Head of the Bight to interpretation during their whale watching experience is forfeited, especially in light of results in the next section regarding current patronage of the on-site interpretive sign.

(ii) Signage at Land-based Sites

Access to interpretation at the Head of the Bight cliffs, ie. EPTA's sign '*Southern Right Whales*' (Plate 13, p. 240), is not only voluntary, but also requires the initiative of whale watchers to stop in their vehicles before or after the experience in order for them to acquire its information. Regarding the success of this sign and DCNR's sign at the Logans Beach platform in Warrnambool (Plates 14 & 15, p. 242) in attracting whale watcher attention during the experience, results indicate that fewer actually see/read these

[41] and this has been witnessed by the author

signs than claim to in the questionnaires (Table 47). Whale watchers at land-based sites who were observed to express interest in the signs did not spend an extended amount of time reading/looking at the material.

At both the Head of the Bight and Warrnambool, more than half of the questionnaire respondents (56.6%, 70.9% respectively) claimed to have read the signs. Less than a third of those in attendance at the sites (32.9%, 33.3% respectively) were observed doing so (Table 47). Of course, these are different populations of whale watchers, and thus correlations between intent and action are impossible. Nevertheless, a possible reason for such a result is that the whale watchers with most interest in the activity and/or interpretation completed the questionnaire, whereas those only observed on-site were a more valid representation of the whale watching population in these terms.

The numbers of whale watchers who were observed reading[42] EPTA's sign at Head of the Bight (65 out of 209; 31.1%) were larger than would be expected in light of the placement of the sign at crossroads en route to a carpark. Yet it is likely that even more visitors would have approached the sign and/or spent greater time reading it if it had been placed in an area easily accessible to pedestrians. In fact, several questionnaire respondents (10) commented specifically that the sign should be moved to the carpark where they would have spent a longer amount of time reading it. On occasion, readers of the sign were interrupted by the presence of other traffic. Whilst stopped in front of the sign, they would block access to and from the main carpark; thus the approach of other vehicles may have forced interested whale watchers to abandon their efforts to read the sign sooner than they might have otherwise, or prevented them from stopping in the first place.

More visitors stopped at the Head of the Bight sign upon their arrival at the cliffs (rather than on departure), and greater time was spent reading it at this point.[43] This result could be influenced by the fact that the sign might be the only interpretation available to many whale watchers,[44] and hence they take immediate advantage of gaining information on the experience and its focal animals. Also, they cannot yet see the whales (from the sign's location on-site), and therefore would not be distracted by this prospect. Regardless, the sign's information is not *essential* to have prior to watching the whales, in terms of orientation to the experience or site. Instead, the text describes general features of whale behaviour/biology, which may add value to the experience both before and after viewing.

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[42]To maintain consistency, this section refers to those observed 'reading' the signs. Whilst some may have simply glanced at the signs without reading, this could not be measured through observation.

[43]though time spent reading on arrival was not significantly different to that on departure ($t = 1.02$, $df = 27$, $p < 0.15$)

[44] since questionnaire results indicate that many do not pick up EPTA's tourist booklet, nor receive DENR's material. Though different samples, questionnaire respondents are more likely to overstate their interest in interpretation, and their acquisition of this material is still infrequent.

TABLE 47

Whale Watcher Interest in Land-based Interpretive Signs On-site

SIGN DATA	*Case Study Sites* HEAD OF THE BIGHT	WARRNAMBOOL
Questionnaire respondents		
Proportion of whale watchers who claimed to read the on-site signs	**56.6%** (n = 394)	**70.9%** (n = 124)
Whale watchers observed on-site (total)		
Proportion of whale watchers observed reading the on-site signs	**31.1%** (65) (n = 209 people observed on-site)	**27.1%** (572) (n = 2107 people observed on-site)
When whale watchers on-site viewed the sign:		
Only on arrival	50.8%	12.9%
Only on departure	40%	16.4%
On both arrival and departure	9.2%	0%
During*	0%	70.1%

* 'during' means whale watchers interrupted their viewing to read the sign and then resumed viewing

The majority of whale watchers who read DCNR's sign at Logans Beach platform in Warrnambool did so in the middle of their experience (73.3%). According to results for both the proportions of readers and the time spent reading (see below), there is less interest in the sign upon arrival and departure at the site. When arriving at the platform the ocean can be viewed immediately, and perhaps the anticipation and excitement of viewing whales supersedes the information on a static sign (even though it offers information to aid their viewing). Part of the sign's content directs interested parties toward sources of further information, although in light of the observation results regarding the timing of their access of the sign, few would acquire such information at the end of their whale watching experience (refer to Table 47). Therefore the availability of portable, printed material at Warrnambool is of notable importance, since it may have a greater potential to orient visitors and reinforce their interest in whales after the experience.

In terms of whale behaviour and biology, much of the content of the interpretive sign and the printed material at Warrnambool is the same, yet the sign does offer information not found elsewhere. For example, it mentions that the frequent visitor to the site, the Southern Right whale 'Wilma', is identifiable by a large section missing from her tail fluke. Previous discussion already noted that the use of this particular whale may personalise the information on the species, such that the abundance of general facts become more meaningful. Whale watcher interest in this or other topics of the sign is presented in a later section, but those who rely on DCNR's on-site sign to learn about whales are not faced with a paucity of information.

Similar to the Head of the Bight, factors in the placement of the interpretive sign in Warrnambool may influence whale watchers' attention to it. For instance, when larger crowds of whale watchers are on the platform (ie. those standing at the rails are more than three people deep) they can obscure the sign. Also, since there is no shelter at the site, whale watchers have been observed deliberately standing in front of the sign in order to use it as a windbreak. On such occasions, casual observation indicated that few others would approach the sign to try and read it. Finally, when crowds are at their peak at the platform, whale watchers have climbed upon the signs to use them as vantage points for a more satisfactory view (Plate 17).

Whereas the above results depict the power of the on-site signs in attracting an audience, the 'success' of these interpretive products can also be measured by the amount of time that whale watchers who did approach the signs spent reading the information. Results for the average time spent reading signs are outlined in Table 48, where it should be noted that figures for reading times represent the sample taken from the total number of whale watchers who were recorded viewing the signs.

PLATE 17

An Ideal Perch: The Impact of Crowding on the Interpretive Sign at Logans Beach, Warrnambool



TABLE 48

Average Time Whale Watchers Spent Reading Interpretive Signs at Land-based Sites.

	Case Study Sites	
SIGN DATA	*HEAD OF THE BIGHT*	*WARRNAMBOOL*
Whale watchers timed reading the signs		
Number in sample	**27**	**234** of these, 25.6% read Panel 1 only 18% read Panel 2 only 56.4% read both panels
Proportion of the total observed reading the signs*	41.5%	40.9%
AVERAGE time spent reading the signs		
Overall	1 minute 24 seconds (n=27)	1 minute 40 seconds (n=234)
On arrival	1 minute 21 seconds (n=14)	1 minute 25 seconds (n=23)
On departure	1 minute 10 seconds (n=10	1 minute 15 seconds (n=37)
On both arrival and departure	1 minute 10 seconds per stop; 2 minutes 20 seconds total reading time (n=3)	0
During	0	1 minute 47 seconds (n=174)
Per Panel	n/a	Panel 1: 1 minute 13 seconds (n= 192) ** Panel 2: 54 seconds (n= 174)**

* See Table 47 above

** Includes times for those who only read one panel, and for those who read both

In nearly every instance,[45] and at both land-based sites, whale watchers read the on-site interpretive signs for less than two minutes. Furthermore, the average times for sign reading at the Head of the Bight were consistently shorter than those of Warrnambool in all cases, including the overall average (1 minute 24 seconds at the Bight vs. 1 minute 40 seconds at Warrnambool). The discrepancy between sites is not surprising, in light of the position of each sign (e.g. en route vs. on a viewing platform), and the fact that DCNR's sign at Warrnambool contains a greater amount of text and images (and has two separate panels). Nonetheless, there were no *significant* differences between the sites regarding average times spent reading signs.[46]

At both sites, whale watchers took longer to read signs upon their arrival than they did as they departed. Again, there were no significant differences between these times within the sites,[47] but whale watchers may be anxious to leave when they have finished their viewing experience. Neither sign attracted many whale watchers more than once (ie. before *and* after whale viewing), but the three visitors to the Head of the Bight who did stop at EPTA's sign twice spent an average of more than two minutes (total) reading the information (see Table 48).

Due to the location of DCNR's sign on the viewing platform in Warrnambool, whale watchers at this site are able to read the material during their experience. In fact, the majority chose to interrupt their whale watching to access the interpretation (see Table 47, p. 275). Furthermore, whale watchers who did interrupt their experience to read the interpretive sign spent significantly more time reading its content (1 minute 47 seconds) than those who viewed it upon their arrival or departure.[48] Another significant difference was found between the average time whale watchers spent reading the two separate panels of the sign at Warrnambool. As depicted in Figure 24 (p. 237), these panels are positioned at right angles to each other, such that 'Panel 1' is perpendicular to the view to the ocean, and 'Panel 2' stands behind those watching whales. Slightly more than half of those who read the sign looked at both panels (56.4%), but when only one was read, Panel 1 was slightly more popular than Panel 2 (25.6 %, 18% respectively).

The result may be due to their position, but Panel 1 also has a larger content and diversity of information, including whale behaviour, biology, history in whaling, and guidelines for protection. In fact, whale watchers spent significantly more time reading Panel 1

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[45] ie. regardless of the total time spent reading, whether signs were read upon arrival or departure, or which panels were read (in Warrnambool)

[46] No significant differences were found between the sites regarding any parameters for the time spent reading the sign; including the total time spent reading: $t = 0.818$, $df = 257$, $p < 0.207$; the time spent reading if the sign was viewed on arrival: $t = -0.136$, $df = 35$, $p < 0.446$; or if it was viewed upon departure: $t = -0.193$, $df = 45$, $p < 0.424$.

[47] average times spent reading on arrival vs. departure, Head of the Bight: $t = 0.6196$, $df = 22$, $p < 0.271$; arrival vs. departure, Warrnambool: $t = 0.353$, $df = 58$, $p < 0.36$.

[48] Significant differences were found between those who read the sign during their experience at Warrnambool vs. those who did not read it during the experience (ie. they *either* read it before or after): $t = 1.669$, $df = 222$, $p < 0.0482$. No differences were found between those who read it during and (1) those who *only* read if before the experience: $t = -0.862$, $df = 185$, $p < 0.195$; or (2) those who *only* read if afterwards: $t = -1.584$, $df = 199$, $p < 0.057$.

($t = 2.631$, $df = 361$, $p < 0.004$). Whereas the basic information contained within Panel 1 adds value to the experience, whale watchers who overlook the information on Panel 2 miss an opportunity to learn to identify whale behaviour, which is especially relevant during their experience. Nonetheless, of those who only approached the sign before and/or after whale watching (instead of during the experience), there was no significant difference between which panel they preferred ($X^2 = 1.39$, $df = 2$, $p < 0.5$).

9.4.3 Visitor Compliance On-site

Data collected from observations of whale watchers at the Head of the Bight and Warrnambool can be correlated with aspects of the interpretation material available at these sites (e.g. extent, location, content). However, without the ability to confirm that the whale watchers' behaviour *is caused by* their degree of exposure to interpretation, the primary contribution of these results is that they illustrate particular needs and priorities for future efforts to manage visitor behaviour on-site through interpretation.

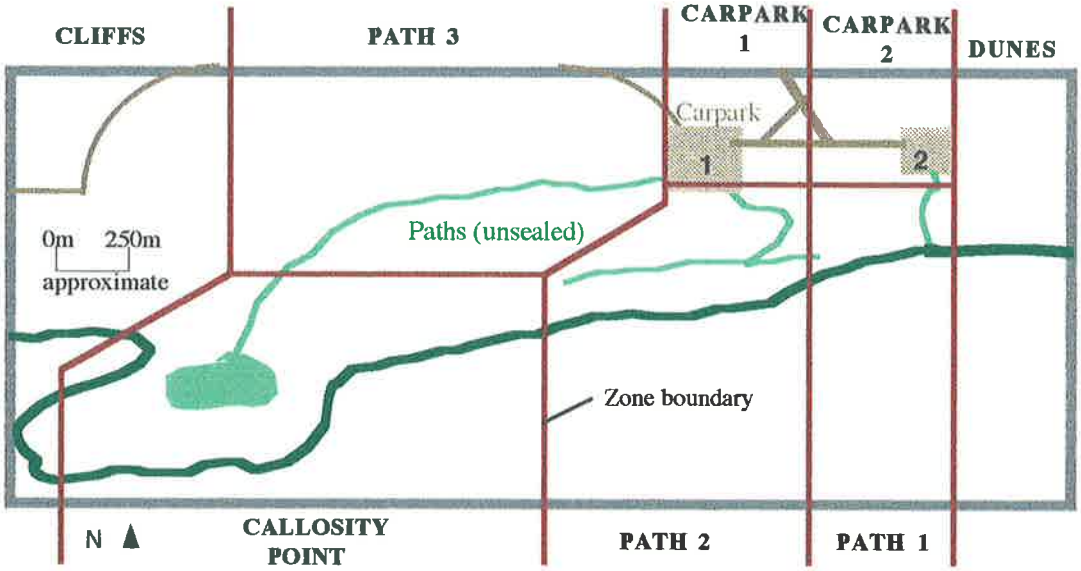
In Warrnambool, where whale watcher activity is largely confined to a discrete viewing platform, it seems that the need for further effort toward on-site interpretation[49] only becomes apparent when large crowds are present. During the observation period, whale watchers rarely strayed from the platform and its boardwalks. In the 2.7% of the time when they did, an average of only six whale watchers were sighted in grassy areas directly adjacent to platform. There was but a single occasion when two whale watchers ventured further east of the platform and into dune vegetation. The average number of people on the platform during incidents of non-compliance was 108, hence crowding may have been a factor in the position of whale watchers who stood off of the platform.

Other instances of such visitor behaviour at Warrnambool were noted opportunistically and outside of the observation sampling period, but in general, the platform appears sufficient in size to contain the whale watching population of this site at present. Nevertheless, neither visitor compliance nor incidents when they behave inappropriately at this site can be credited necessarily to interpretation, especially since the platform lacks on-site information about desirable behaviour on land (ie. to keep off of the surrounding dune system). Furthermore, if whale watching increases in popularity at this site, there may be a greater risk to the adjacent dunes and coastal vegetation, given these current omissions in the orientative interpretation available on-site.

At the Head of the Bight, structured observation of whale watchers revealed several locations of concentrated vehicle and pedestrian activity within the ~2km designated viewing area (Figure 26). For nearly the entire the observation period (97.6% of the time), there was at least one car in the main carpark ('Carpark 1' in Figure 26), with an average of four vehicles. Pedestrians also congregated in this carpark, and were observed there more frequently than any other site (for 67.9% of the time). Also popular

[49] in terms of encouraging appropriate behaviour in a fragile coastal environment

FIGURE 26 Whale Watcher Distribution and Compliance at the Head of the Bight



ZONE	% of time people were sighted in a zone	Mean # of people sighted in a zone	% of time ALL people sighted in a zone were compliant	% of time ALL people sighted in a zone were not compliant	% of time some people in a zone were compliant AND some were not compliant
CLIFFS	15.5%	1	n/a	100%	n/a
DUNES	13.1%	2	n/a	100%	n/a
CARPARK 1	67.9%	6	n/a	n/a	n/a
CARPARK 2	29.8%	5	n/a	n/a	n/a
PATH 1	57.1%	6	50%	10.4%	39.6%
PATH 2	53.8%	8	33.3%	17.8%	48.9%
PATH 3	21.4%	4	77.8%	11.1%	11.1%
CALLOSITY POINT	61.9%	7	5.8%	59.6%	34.6%

* compliant means within boundaries of official paths. All sighted in dunes or cliffs were considered non-compliant, as these zones were not within the designated viewing area and marked 'restricted area.'

were the headland at the viewing area ('Callosity Point') where visitors were sighted in 61.9% of the observation time, and an area directly in front of the main carpark ('Path 2'), where the highest average number of visitors (8) could be found. These results have implications for the placement of any future interpretative signs (e.g. in the carpark, at Callosity Point), in addition to confirming the inappropriate position of the current one.

Visitors to the Head of the Bight were instructed verbally by YLMP staff[50] (and in DENR's printed material when available) to avoid restricted and revegetation areas, to remain on designated paths, and to keep back from the cliff edges (which are already off of the paths). To reinforce these management directives, basic signage at the cliffs marked the fragile and dangerous areas of the site (e.g. 'Revegetation Area, Keep Out'), and designated (unsealed) paths were bordered by painted stones. The level of visitor compliance with these directives was inconsistent and varied between locations in the viewing area.

Vehicles were sighted in restricted areas (ie. west along the chain of cliffs, east in a dune system) merely 10.7% of the sampling period, though pedestrians ventured into such areas during 28.6% of the time. These figures may overstate the extent of such behaviour, however, since the average number of vehicles and people observed in the restricted areas at any one time was 1 and 2 respectively. Also, some observations of non-compliance were made consecutively, such that the same group of people may have remained in the dune system long enough to be counted twice. Hence use of restricted areas can be considered an uncommon occurrence at the site.

A more significant problem with visitor compliance at the Head of the Bight pertained to use of the paths within the designated viewing area, which is an important means of protecting revegetation area. The most frequent occurrences of pedestrians leaving marked paths occurred at Callosity Point, where for 59.6% of the observation time, *all* whale watchers present were standing/walking in areas off of the paths (and primarily at the edge of the cliff) (Plates 18 and 19). A further 34.6% of the time, at least one whale watcher at Callosity Point was off the path, with an average of six people disobeying the management directives at any one time. Danger signs were present at this location, but paths were difficult to discern, as most of the headland was rocky and covered in limestone similar in colour to the painted rocks.

At another location of frequent non-compliance, any excuse of ignorance regarding the presence of paths would be less tenable. The area in front of the main carpark was marked by directional signage (pointing to pathways) and identification signs (indicating revegetation areas), and paths were wide and visible. Regardless of these efforts, an average of five people were found leaving the paths and standing or walking in intended revegetation sites for nearly half of the observation time (48.9%) (Plates 20 and 21).

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[50] According to the YLMP manager, this instruction occurred upon purchase of the entry permits at White Well.

PLATE 18

Whale Watchers Disregard the Hazards and Fragility of the Coast at the Head of the Bight

(The arrow points to a danger sign that warns of the unstable cliffs; whale watchers behind this sign in the right of the photograph are within the designated viewing area).



PLATE 19

A Closer View Tempts Whale Watchers to the Cliff Edge of 'Callosity Point'



PLATE 20

Whale Watchers Stray from Designated Paths at the Head of the Bight

(Note that the operator/driver of a luxury coach tour [far right] accompanies these whale watchers and fails to encourage them to keep within clear path boundaries)



PLATE 21

Whale Watchers Enter Revegetation Areas at the Head of the Bight

(Whale watchers at the far right of the photograph are within designated path boundaries; the remainder are located within a marked revegetation area in front of Carpark 1).



In addition to the ramifications of these results for visitor safety and environmental protection, they signify the need for interpretation at the site to address these orientative topics in a more detailed manner. Due to the whale watchers' frequent entry into revegetation areas, on-site materials (portable or signage) could specify *why* walking through such areas is undesirable and harmful to the coastal flora, and at the same time, identify which species are particularly fragile and explain their significance to the local ecosystem.[51] Signage that identifies restricted areas could explain that entry to these areas poses a great risk to both environmental protection and personal safety, but other material on-site should emphasise that these issues also pertain to the entire viewing area at the Head of the Bight.[52] Also, observational results indicate that it may be necessary for signage to be even more explicit or emphatic that (1) the danger of crumbling cliffs is present at the most popular locations in the viewing area, and (2) proximity to the edge not only increases a risk of falling (out of carelessness), but that the cliffs are prone to crumbling under weight.

9.5 Post-Trip Evaluation

In the post-trip stage of whale watching, visitors reflect on aspects of their experience, including interpretation and whether or not they felt the available information was adequate (e.g. entertaining, informative). During this stage, interpretation itself can attempt to reinforce attitudes/behaviour appropriate to the protection of whales and the marine/coastal environment, in the context of whale watching and beyond. To take advantage of this opportunity, whale watchers need to have acquired interpretive materials that can be transported home with them, and these materials must contain information relevant to the topic of whale/environmental protection and conducive to encouraging action (cf. Standards VII, VIII). Results in this section reveal how whale watchers evaluate their experience at the case study sites, and how features of the current interpretation affect their level of satisfaction or disappointment. Results also indicate how access to the current (printed) interpretation after the experience might affect its potential for a longterm role in whale/environmental protection. Data from questionnaire respondents identify whale watcher characteristics (e.g. knowledge, interests) which could be conducive to such a role for interpretation, and which should be addressed and accommodated by interpretation content and strategies for delivery.

9.5.1 Whale Watcher Satisfaction

(i) Satisfaction with the Experience

In general whale watchers from each case study site displayed a high degree of satisfaction with their experiences. In total,[53] nearly all questionnaire respondents

[51]DENR's pages contain the former in general terms, but mainly in reference to sand dunes (not other coastal vegetation). This material does not refer to species on-site.

[52]DENR's pages do contain reference to appropriate behaviour on-site, but results above indicated that this material was not seen by more than 3% of whale watchers at the Head of the Bight; hence additional efforts on-site seem warranted.

[53]ie. combined samples of questionnaire respondents from each case study site; n = 624

claimed that their expectations of whale watching had been met (91%), and more than two-thirds (62.8%) were able to mention at least one feature of the experience that exceeded their expectations and particularly impressed them. Though their expectations may have been met in general, 40.4% of all whale watchers were also able to cite one feature of the experience with which they were disappointed (see below).

There were no significant differences between whale watcher satisfaction and the different case study sites,[54] if one factors out an anomaly in Albany, where 14 (26.4%) whale watchers aboard Southern Ocean Charters' vessel did not see any whales on their trip (and accordingly, were all disappointed). This is an inherent risk inherent of boat-based whale watching, though it is not commonplace in Albany, and hence not an accurate depiction of the general whale watching experience at the site.[55]

Despite suggestions that tourists with more experience will either be more satisfied (e.g. Pearce & Moscardo 1985a), or more disappointed (e.g. Neil et al. 1996), the results from the current research found no significant differences between whale watcher level of experience and whether they felt their expectations had been matched ($X^2 = 0.37$, df = 1, $p < 0.95$); nor between level of experience and those who listed impressive or disappointing features ($X^2 = 0.99$, df = 1, $p < 0.95$; $X^2 = 1.89$, df = 1, $p < 0.95$ respectively).

The role interpretation played in these realistic expectations cannot be deciphered, but there were certain aspects of the experience that impressed or disappointed whale watchers which were also covered in interpretation available for the case study sites. For instance, whale behaviour was a common theme in visitor satisfaction at all case study sites (Figure 27). As the most common feature to impress whale watchers, it was mentioned by 40.4% of all respondents. Of these respondents, most (57.9%; 146) specified that the proximity of whales to the boat or shore was the most impressive aspect of the experience. The fact that this impressed respondents is important, since proximity of whales was mentioned often within the printed material of each case study site. Whilst not necessarily a factor in the expectations of the above respondents, these results do suggest that current interpretation is adequately promoting a more realistic portrayal of the proximity of whales during whale watching, contrary to reservations expressed earlier regarding the interpreters' enthusiasm for promoting the 'close views' of whales offered at the sites (Chapter Eight, section 8.2.1) and the potential for unrealistic expectations of whale watchers (section 9.2.2).

Nevertheless, whale behaviour was also the most frequent item listed as a *disappointing* feature of the experience by a fifth (20.5%; 128) of all respondents. In this case, it was a lack of whale activity (rather than proximity) which failed to meet their expectations (76.6%).

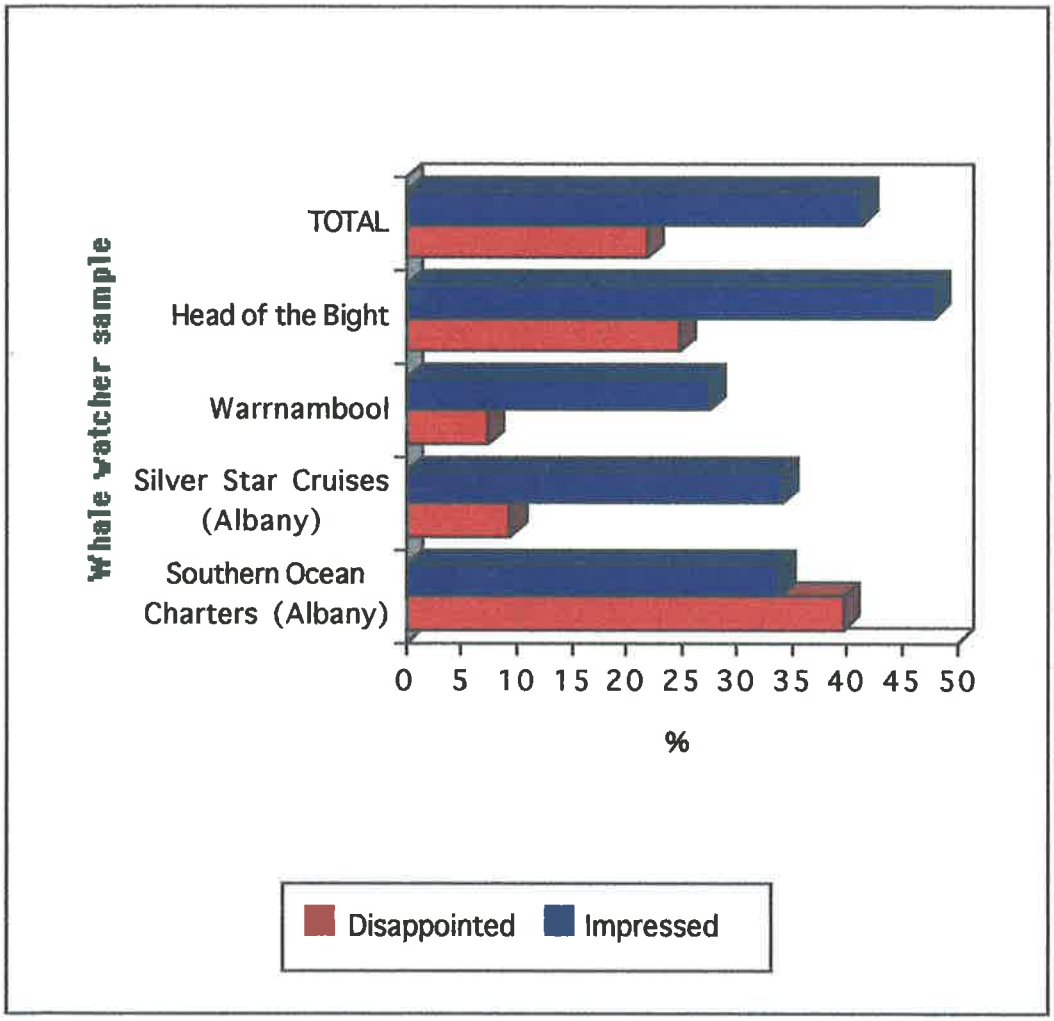
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[54] $X^2 = 0.73$, df = 2, $p < 0.95$

[55] e.g. approximately 3-4 such occasions in a season, L. Bail, Captain of Southern Ocean Charters' whale watching vessel, pers. comm.

FIGURE 27

Whale Watchers' Satisfaction with Whale Behaviour



Note: Answers were derived from open-ended responses; thus whale watchers did not have to choose between being impressed or disappointed with whales

This has implications for interpretation as well, for breaching and other types of whale behaviour were popular within the printed interpretation for the sites. Though a relatively small proportion of whale watchers overall had inflated expectations of behaviour (compared to those who were satisfied with whale behaviour above), the results suggest that interpretation could still add even more qualifications to its depiction of the frequency and type of whale behaviour most common to the experience.

Another main factor in the disappointment of whale watchers noted at land-based sites was the lack of comfort facilities, mentioned by 15.3% of whale watchers at Warrnambool, and 19.0% at the Head of the Bight. In fact, more whale watchers (from both sites, n = 518) were disappointed with the lack of facilities (23.4% together) than with whale behaviour (20.5%), or any other aspect of the experience. The unsealed (and rough) road at the Head of the Bight was a factor in the disappointment for nearly one quarter (24.7%, or 97) of all whale watchers at the site. As the subject of some of the most impassioned responses, the road was variously described in such strong terms as:

'the worst road in Australia,' *'absolutely deplorable,'* *'a disgrace,'* *'atrocious,'* and *'appalling.'*

Moreover, several of these whale watchers (14) declared that the road ruined their experience, and/or that they would not return nor recommend the site because of the road's unsatisfactory condition.

At the Head of the Bight, not only is the state of the road ignored in orientative information available prior to visitation, but there is no reliable warning that it is closed (because it is impassable) during rainy weather.[56] As noted in Chapter Eight, the lack of facilities (ie. toilets, shelters) is not mentioned in interpretation currently available for either the Head of the Bight or Warrnambool, nor is the potential for cold, windy weather. The risk of this oversight can be more than disappointment, if a lack of comfort distracts whale watchers from on-site interpretation (cf. Maslow's hierarchy, a premise of Standard VII). At Warrnambool, for instance, some respondents commented that the weather was a main reason they did not read the interpretive signs:

'Weather too bad to stand & read them.'

'Didn't get to read much because of rain, hail...'

Whilst no significant differences were found between land-based whale watcher discomfort/frustration with facilities (including the access road) and their tendency to read educative interpretive signs on-site,[57] there is still scope for interpretation to address the visitor concerns and thus attempt to fulfil its role in promoting their satisfaction as much as possible.

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[56]Whale watchers can find out the status of the road prior to their visit if they call the Yalata Roadhouse, but those who do not realise it is possible that it *can* be closed may not find out until they arrive.

[57]disappointment with facilities and reading the sign at Warrnambool : $X^2 = 0.99$, df = 1, $p < 0.95$); disappointment with facilities and reading the sign at the Head of the Bight (re: the road): $X^2 = 0.55$, df = 1, $p < 0.95$; (re: toilets): $X^2 = 0.55$, df = 1, $p < 0.95$.

(ii) Satisfaction with Interpretation

Several results from the whale watcher questionnaires reveal the level of satisfaction (or disappointment) that respondents have in regard to the interpretation available on-site. In general, the interpretive products at each case study site did not seem to make a notable impression on the whale watchers as part of the experience, although some degree of attention to the material was discernible through the whale watchers' ability to recite specific topics.[58]

Of all the whale watcher respondents (ie. from every case study site), only 1.9% (12) were impressed enough with the available interpretation to mention it on the questionnaire, though similarly, only 1.4% (9) professed any disappointment with the interpretation. Disappointment with the available interpretation did not vary significantly between case study site samples ($X^2 = 2.92$, df = 3, $p < 0.95$), but there *was* a correlation between those who were impressed with interpretation and the platforms for case study sites ($X^2 = 14.82$, df = 1 $p < 0.005$), with more boat-based than land-based whale watchers commenting favourably on the interpretation. Nevertheless, the boat-based whale watchers impressed with interpretation comprised only 6.6% of the total amount of Albany respondents. Of the 1% of land-based whale watchers to mention they were impressed with interpretation, all five were from the Warrnambool sample, and in particular, they referred to DCNR's sign on-site. Respondents impressed by this sign represent a mere 5.7% of those who claimed to have read the material.[59]

Observations indicate that approximately a third of whale watchers at the land-based sites were inclined to stop at the interpretive signs (see Table 47, p. 275), and nearly all tour participants in Albany listened to the commentary. However, this does not necessarily mean that they found the information to be interesting,[60] and a more reliable indication of this is presented by the questionnaire respondents. When asked directly, nearly all (91.2%) whale watchers at the Head of the Bight who read EPTA's on-site sign ('*Southern Right Whales*') found it to be interesting, despite its brevity and austere appearance. Though this sign displays none of the recommended features for promoting mindfulness in its audience,[61] it was the only information that most of whale watchers at the site were able to access, which may account for the favourable response to its basic facts.

Another measure of whale watcher satisfaction with interpretation is provided by Albany respondents. A majority of these boat-based whale watchers (81.1% aboard Silver Star Cruises, 69.8% aboard Southern Ocean Charters) were able to list at least one 'interesting' topic from the commentary in their open-ended responses, and they

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[58] on-site interpretation was the focus of this type of evaluation since all whale watchers would have had the same access to it.

[59] according to the questionnaire results, not the observations.

[60] e.g. Moorfoot & Blake (1978) urge caution when using results from observation to exemplify enjoyment of interpretation.

[61] cf. Standard IX, as outlined in Chapter Four, section 4.5

occasionally listed more than one without prompting (17%, 18.% respectively).[62] Amongst the varied examples were:

- Breeding
- Life span
- Weight
- Milk production & feeding young
- 'Whale footprints'[63]
- Why whales visit Albany
- Migration
- Modern whaling
- Population numbers

No single topic was listed by more than five respondents, but the results are one indication of the range of interests that they have in different kinds of whale information. These topics also represent a form of recall, in that these respondents were able to cite information they heard in the commentary. In this sense, most Albany respondents could recall at least one topic from the commentary.[64] Of course, respondents were not required by this question to cite a specific *fact*, only a topic; and these results are no indication of the quality of the interpretation's delivery in terms of style (e.g. mention of basic facts vs. theme development, affective language, timing). Nevertheless, the results do illustrate that such topics are retained and can be recalled by some whale watchers.

Topics of further interest to whale watchers included aspects of the marine and coastal environment and European and Indigenous history of the areas. A majority of whale watchers at both Warrnambool and the Head of the Bight welcomed additional information on these topics,[65] which is important for future interpretive efforts in light of the lack of attention these topics currently receive in the interpretive material.

A small number of Albany tour participants (3, 13) still had questions about whales after listening to the commentary, though no single topic was mentioned by more than two respondents. The questions, similar to those specified by Warrnambool whale watchers (23.9%), pertain to topics mentioned in available interpretation that they would like to learn about in greater detail. For example, the history of whaling specifically interested a few respondents in Warrnambool (4) who read about its general nature on the interpretive sign, but who were still curious about the involvement of the local area in that industry. At the Head of the Bight, which had the least amount of available interpretation on-site,[66] more than a third of whale watchers (38.1%) had remaining questions about whales. Their questions were of a more basic nature (e.g. size of the whale, how long they stay at the site, lifespan), and answers to some were in fact on EPTA's interpretive sign on Southern Right whales. However, in only a few cases (3) had someone read a sign at the Head of the Bight or Warrnambool and still asked a question that could have been answered by the interpretation.

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[62]No significant differences were found between the participants of either tour and their ability to list one interesting topic: $X^2 = 1.82$, df = 1, $p < 0.5$.

[63] It is interesting that 'whale footprints' were mentioned, as this is an interpretive way of describing the wake a whale makes as it dives.

[64]Failure to list a topic does not mean the respondents could not recall one.

[65]Warrnambool : 83.4% interested in the marine/coastal environment, 65.3% history; Head of the Bight: 63.9% marine/coastal environment, 60.7% history

[66]given that DENR's printed pages were not greatly distributed

It could be that whale watchers with remaining questions are unsatisfied with the available interpretation, or as seen in the last example, the interpretation did not effectively communicate that information to them. Unanswered questions, however, could also illustrate that some whale watchers were in fact inspired to learn more, either by the experience and/or the interpretation. Several of those who had questions (10.5%, or 28 of all whale watchers) claimed they had 'too many questions to list' on the survey. In any case, these are topics that could be incorporated into future interpretation efforts at the sites, and illustrate that some whale watchers are interested in greater depth of topics even though their whale watching experience is generally brief.[67]

9.5.2 Whale Watcher Knowledge

More than half of whale watchers at Albany (56.7%, 66%) and Warrnambool (58.9%) were able to correctly answer at least four out of five true/false questions on whales. Only a third (33.2%) of whale watchers at the Head of the Bight could do so, although survey questions varied slightly between sites (Table 49). For all sites, each question was answered correctly by approximately half of the respondents (at least). Exceptions to this result, or questions drawing the least number of correct answers, concerned the Marine Park status of the Head of the Bight (only 36% answered correctly), and the ability of whales to hear noise generated on land (46%, Warrnambool). Questions with the most correct answers of any of the sites concerned the ability of whales to hear noise generated by boat (90.6%, Silver Star Cruises passengers); the existence of limits to approach distances for aircraft (90.3%, from Warrnambool); and the sensitivity of coastal vegetation to pedestrian traffic (86.6%, Head of the Bight).

The theme of the true/false questions concerned (somewhat indirectly) environmental and whale protection, and information which would enable one to answer the questions correctly was found in the interpretation of each site, either in printed form (portable, signs) and/or claimed by tour operators to be a part of their verbal commentary.[68] The phrasing of some questions, however, may have facilitated the ability of respondents to guess the correct answers, or they may have known the answers intuitively without having to consult any interpretation. Nevertheless, even if some answers are intuitive, there is still up to 50.7% and often between 10-15% of respondents who are either incorrect or uncertain about the answer.[69] Thus the current interpretation has a role to play in informing these whale watchers about basic whale and environmental protection

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[67]ie. approximately one hour; noted in section 9.4.1

[68]An exception is the Marine Park issue at the Head of the Bight, and whale watchers at this site also had trouble with this question (36% answered correctly).

[69]e.g. 50.7% of Warrnambool respondents either do not know or are unsure that noise from land can disturb whales; 17% of these respondents were unsure/incorrect regarding the potential erosion caused by standing on sand dunes at the site; In Albany, 28.3% of Silver Star Cruises passengers do not know or are unsure whether boats have approach limits; whereas 24.6% Southern Ocean Charters passengers do not know/are unsure that whales can hear noise from boats.

TABLE 49 Whale Watcher Knowledge of Pertinent Topics

To-pic	Whale Watcher Sample	Correct Answer	Incorrect Answer	'Unsure'	Statistical Significance (correct vs. incorrect only)
I	Head of Bight	50.3%	21.1%	15.5%	(between all samples): $X^2 = 14.56$, df = 3, $p < 0.05$ **significant**
	Warrnambool	72.5%	10.5%	12.9%	
	S.Star Cruises	49.1%	26.4%	17%	
	S.Ocean Charters	60.4%	24.5%	11.3%	
II	Head of Bight	57.9%	2%	27.2%	(between land-based sites only): $X^2 = 33.91$, df = 1, $p < 0.005$ **significant**
	Warrnambool	46%	15.3%	35.4%	
	S.Star Cruises	90.6%	0%	1.9%	
	S.Ocean Charters	71.7%	5.7%	18.9%	
III	Head of Bight	54.1%	14.7%	16.3%	(between all samples): $X^2 = 23.64$, df = 3, $p < 0.075$
	Warrnambool	81.5%	4.8%	11.3%	
	S.Star Cruises	75.5%	9.4%	7.6%	
	S.Ocean Charters	77.4%	7.6%	13.2%	
IV	Head of Bight	36%	19%	28.4%	questions not able to be compared between sites
	Warrnambool	90.3%	0%	8.1%	
	S.Star Cruises	64.2%	11.3%	17%	
	S.Ocean Charters	92.5%	1.9%	3.8%	
V	Head of Bight	86.6%	1%	1.3%	questions not able to be compared between sites
	Warrnambool	81.5%	8.1%	8.9%	
	S.Star Cruises	73.6%	1.9%	17%	
	S.Ocean Charters	83%	1.9%	13.2%	

Not shown : those who did not answer

KEY: True or False Questions (Adapted to primary issues at each site)

I *'The whales here are no longer an endangered species.'*

II *'Whales can hear loud noises coming from - land.'* (Head of Bight, Warrnambool)
- onboard a boat' (Albany)

III *'The whales come to (the site) specifically to feed.'*

IV *'Boats* (Albany) *- are allowed to get as close as they want to whales.'*
'Aircraft (Warrnambool)-

'The Head of the Bight is a Marine Park.' (Head of the Bight)
Note: a question on tours and proximity to whales was not applicable during the survey; an aerial/land tour operator at the Bight conducted his annual tour during a part of the season when no surveys were distributed.

V *'Plants here are sensitive to foot traffic.'* (Head of the Bight)
'Standing on sand dunes contributes to coastal erosion here.' (Warrnambool)
'Whales may dive frequently if they feel disturbed.' (Albany)

issues, and to confirm, reinforce (and in future efforts, extend) the knowledge of those who are familiar with such issues.

At the Head of the Bight, an additional question concerning the safety of the cliff-top vantage point yielded disturbing results in that only 17.8% (70 out of 394) of respondents were aware that the cliffs within the designated viewing area could be unstable (ie. undercut and prone to collapse). It is unknown why so few respondents were aware of this hazard, but this issue is certainly in need of greater interpretive (and other management) effort to ensure the safety of the visitors to this site.

The only significant difference between respondents' exposure to the current interpretation and their ability to answer true/false questions correctly was found between Albany respondents, regarding the question on whale feeding.[70] Albany respondents (in total) were also the only ones for whom previous whale watching experience influenced the correctness of their answers, regarding the question on whales' ability to hear noise from boats ($X^2 = 1.74$, df = 1, $p < 0.95$). The collection of additional or more specific data from whale watchers would help to discern the implications of such results for the content of future interpretation.[71]

A majority of respondents from the Albany tours and Warrnambool (64.2%, 54.7%; 75% respectively) were able to correctly name the species of whale they encountered during their experience (the Southern Right whale). There was a significant difference between these samples ($X^2 = 7.35$, df = 2, $p < 0.05$) and their ability to cite this species name, but not between boat-based or land-based platforms ($X^2 = 3.2$, df = 1, $p < 0.95$). It is somewhat surprising that between one-half and one quarter (approximately) of these whale watchers were still unaware of the species name of their focal animal, considering it is identified on every interpretive product available for the sites, and most printed materials explain the origin of the name.[72] Hence their attention to even the most basic information, for whatever reason, can be somewhat unsubstantial, which should be borne in mind by those who wish to make grander points through their interpretation.

In spite of the lack of knowledge of this basic information, a contrasting result was found for the Head of the Bight sample, although the questions varied slightly by necessity. Instead of naming the species, Head of the Bight respondents were asked to cite one fact about the Southern Right whale,[73] and 58.4% (230 out of 394) provided a correct response. Correct facts listed by respondents about the Southern Right whale included general items (e.g. 'no dorsal fins') which were contained within the site's

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[70]Though there were no differences between tours regarding this correlation, whale watchers from Albany in total (n = 106) demonstrated a correlation between exposure to commentary and the ability to correctly answer this question on whale feeding: $X^2 = 6.05$, df = 1, $p < 0.05$

[71]e.g. if they consulted (printed) interpretation in order to answer the true/false questions; or how they knew the answers in general.

[72] ie. the 'right' whale to hunt

[73] These respondents were not asked to name the Southern Right whale since this information appeared on the questionnaire itself in order to identify and refer to an on-site interpretive sign.

interpretation, though these types of facts are also able to be observed by whale watchers without reading any information on the species. The majority of the facts provided by respondents were of greater detail (89.1% of 230; e.g. size in metres, feeding habits, history of the species name), and demonstrated an interest in, attention to and recall of certain topics.

When asked if they would like to receive more information on how whales are protected, at least a two-thirds majority of respondents at all sites (and up to three-quarters of those at the Warrnambool site) signalled their interest in such information (Figure 28). A comparable range (Figure 29) of respondents were interested in knowing what they personally could do to protect whales. Although these were prompted questions, respondents were still confident enough to state when they were not interested (e.g. up to 5.1% at the Head of the Bight, or 20 respondents, were definitely *not* interested in knowing more about what they could do to protect whales). Information on the whale protection (aside from the whale watching guidelines) is rare at the land-based sites, though according to these results additional topics appear to be welcomed by the respondents.

9.5.3 Whale Watcher Environmental Inclinations

In terms of general attitudes toward the environment and its protection, the most detailed information was collected from respondents at the Head of the Bight in 1995. In this sample (n = 250), a majority believed themselves to be both 'environmentally aware' (93.6%) and to a lesser extent, 'environmentally active' (74.4%). Of particular relevance to interpretation is their sense of a locus of control for environmental action (cf. Standard VIII). Regarding whales, 76.3% of these respondents believed there was a need to protect Southern Right whales, though slightly fewer (60.3%) accepted that the whales were adequately protected in Australia. A strong majority (87.5%) felt that it was important to contribute to this protection personally if they could, and almost three quarters (71%) agreed that there *was* action they could take as individuals that could help protect the whales. Their feeling of responsibility for the protection of the coastline against erosion was also convincing, with 92.9% citing it as a priority for the Head of the Bight, and 76.8% agreeing that they could each play a role in preventing coastal erosion.

As questions and results of this nature are limited to one sample, they are not discussed further, but they do illustrate whale watcher interest in information that could be pursued in interpretation on-site. At present, the whale watching guidelines and environmental code available for each site are an important contribution toward this end, but given the amount from this sample who claim they would still be interested in whales even if they never saw them in the wild (81.7%; 204), there is scope for addressing protection issues beyond the whale watching experience.

FIGURE 28

Whale Watchers' General Interest in Whale Protection

'Would you be interested in learning about how whales are protected?'

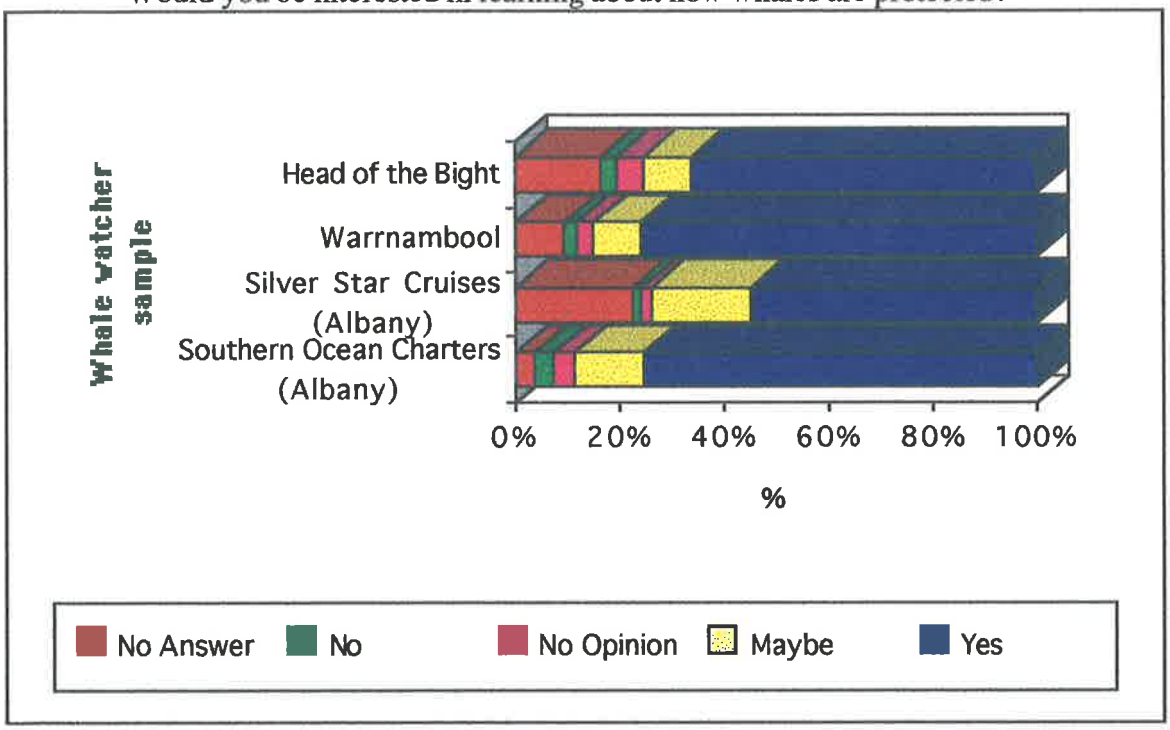
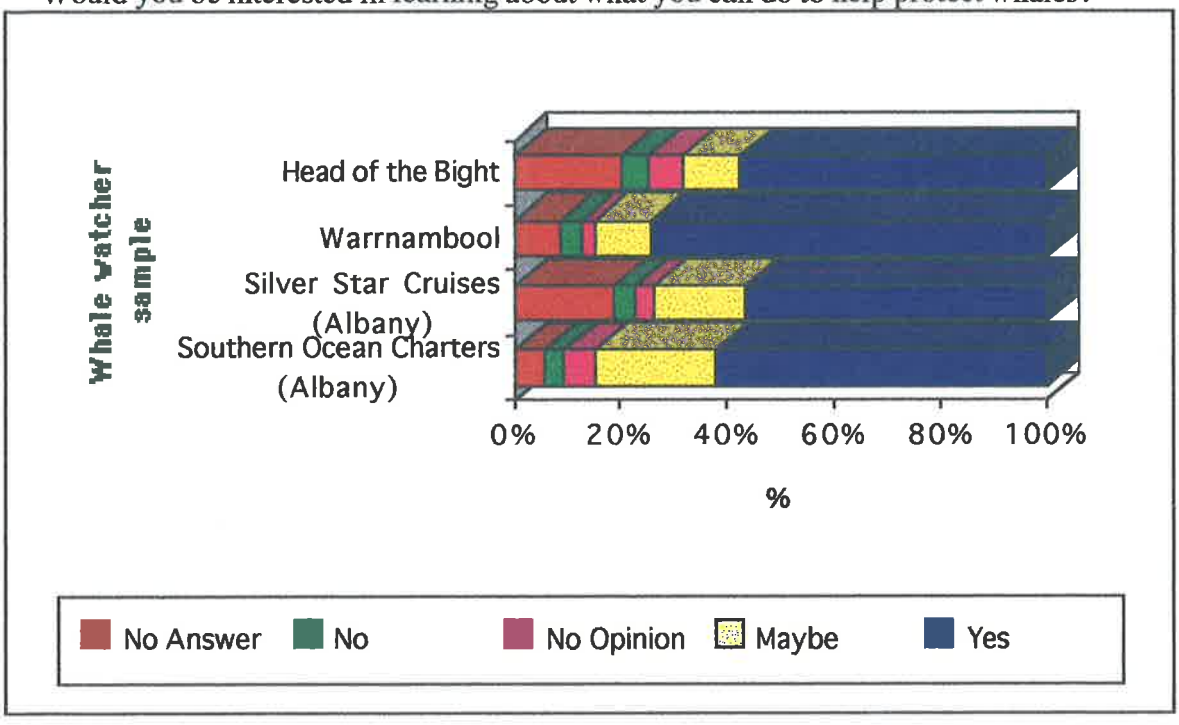


FIGURE 29

Whale Watchers' Interest in Taking Personal Responsibility for Whale Protection

'Would you be interested in learning about what you can do to help protect whales?'



In the above results regarding environmental attitudes, there is a possibility that answers were swayed by the social desirability bias, in which respondents make assumptions about the purpose of a survey and attempt to answer according to what they perceive to be as the desired result (DeVaus 1990; Pearce 1988). In the 1996 surveys, however, an indication of the respondents' interest in similar environmental/whale protection issues appears in unsolicited comments and other open-ended responses to questions. For example, when asked about features of the whale watching experience that impressed and/or disappointed them, several respondents cited instances about the protection of the coast or whales (Table 50).

In respect to the boat-based whale watchers in Albany, their comments were generally favourable and reflected their concern for the welfare of the whales, as well as their support of appropriate behaviour by tour operators. By contrast, it is interesting to note that land-based whale watchers' comments regarding whale/environmental protection featured were prompted more often by their disappointment with aspects of the sites, and/or indicated they think more should be done to protect the resources of the tourism. In addition to suggesting the environmental concern and awareness of these respondents, an implication of these comments for interpretation is that it could take the opportunity to describe what site managers *are* doing in this regard and why. Also, interpretation can address the whale watchers' concerns by outlining more explicitly how they can contribute to whale/environmental protection measures through their own behaviour during the experience and by additional means in future.[74]

Regarding environmental interests beyond the whale watching experience, results found that in all samples from the case study sites, a minority of respondents were currently members of any conservation groups. There was, however, a significant difference between those belonging to a conservation group and the case study site sample (X^2 = 16.8, df = 3, $p < 0.005$). More than a quarter (28.2%) of Warrnambool's whale watching sample were members of at least one environmentally-related NGO, whilst fewer then 19% of each sample from the other sites held any such membership. Of these latter sites, Greenpeace was the most popular conservation group, although overall, there was no particular group with a majority of members amongst the whale watchers.[75]

The relation between membership of a conservation group and environmental attitudes is subject to debate (see Iozzi 1989). In the case of the current samples, conservation groups were not likely to be a direct source of information for whale watchers specifically, especially if one considers that the most popular, Greenpeace, offers no

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[74]e.g. in terms of on-site behaviour, the environmental code at the Head of the Bight urges whale watchers to keep off of sand dunes, but it could also note the fragility of vegetation and the importance of keeping to paths within the designated viewing area. In respect to longer term measures, interpretation could prompt them to appeal to politicians, RMAs or other stakeholders for greater attention to site/whale protection issues, or join conservation groups that address coastal protection.

[75] Greenpeace membership ranged from 20% of those in conservation groups from Warrnambool (ie. 7 of 35 who were members of a conservation group), to 57.1% of those aboard Southern Ocean Charters (4 out of 7).

TABLE 50
Whale Watcher Comments on Whale/Environmental Protection

Case Study Site Sample	*COMMENTS*
Head of the Bight:	*'[impressed that] tourists were most considerate of the beautiful environment'*
	'[disappointed that] someone we presumed in authority drove around a "no access to the public' gate over the scrub, instead of ....opening the gate.'
	'[disappointed that] there is no protection for ecology of site e.g. wooden boardwalks to stop people trampling the native vegetation!'
	'Walkways need more definition to prevent damage elsewhere.'
	'Lack of proper tracks etc to protect walkways and cliffs...'
	'I think special areas like this should not be advertised. The area is so beautiful but so easily damaged. People who are interested in nature and whales will find out this area anyway and will perhaps be more sensitive to the fragile environment.'
	'[whale watching is good] as long as whales are protected and not subjected to stress.'
	'maybe [need] a wooden walkway to restrict walking and stop the walking onto revegetated areas.'
	'it is worrying to see how much damage the tracks are making on the cliff...'
	'a boardwalk would help keep the plants from being trampled...'
	'[benches would] keep them off young plants.'
	'I would be interested to know if I could be of any use/help to the preservation of whales.'
	'please erect a sign at the road for people to drive slowly to protect shingle-back lizards on the road. They deserve to be protected also.'
Warrnambool:	*'[impressed that] care had been taken not to erode the dunes.'*
	'[impressed that] it was achieved without spoiling the environment and intruding on the whales.'
	'[impressed] the public can see whales in their natural habitat and don't approach them in boats.'
	The whales should not be disturbed by any means.'
	'I feel concern about helicopter noise disturbing the whales.'
	'I'd urge thought to go into the design of viewing platforms, to protect dunes without being visually intrusive.'
Silver Star Cruises (Albany):	*'[impressed that] care was taken for natural habitat.'*
	'[impressed that] the skipper was compassionate about whales'
	'[I discovered that] I was ashamed that Australia was one of the last to stop whaling'
Southern Ocean Charters (Albany):	*'[impressed that the tour operators] tried not to disturb them'*
	'[impressed that] whales treated with consideration'
	'They didn't do anything in any way to scare the whales.'
	'The respect toward whales was high.'
	'The other boat seemed to chase they whales away.'
	'The operators...kept to the rules.'
	'Another boat went right up to the whales and disturbed them. I think we should respect their peace, but not all operators do so (please note this doesn't include the boat we were on).'

Note: Together, these comments represent 4.7% of the total whale watcher sample, but were unsolicited and hence may indicate those *most* interested in these issues, not *all* who are interested.

whale watching interpretation in the first place.[76] However, identification of respondents' membership by the questionnaire outlines potential sources for future interpretation information, if the conservation groups are made aware of the scope of their potential role in responsible whale watching.

Due caution is taken in this research to avoid drawing conclusions about whale watching populations and environmental attitudes or action, when it is likely that only respondents who were most concerned with such issues commented upon them. Nonetheless, the sentiments of a few whale watchers within the case study site samples display their level of interest in the protection of both whales and the surrounding coastal environment they encountered during their experience. A more sensitive survey instrument could test these types of results further. In terms of the implications for interpretation, the current results suggest that it could provide the means for a broader avenue for its audience to contribute to the longterm benefits of the tourism resources, or suit a perceived need for others to increase their awareness. Also, the provision of more information about the environmental features of the case study sites and greater effort to integrate whales into a broader marine environment theme could draw attention to other protection needs, and present whale watching as a more significant experience in terms of its adverse and positive impacts to the natural environment.

9.6 Chapter Summary

Table 51 summarises the main points from the results and identifies trends within the profiles of whale watchers at the case study sites, in general and according to their use of and interest in interpretation. Further implications for the success of the current interpretation, and recommendations for future efforts as derived from this profile, are presented in discussion in Chapter Ten.

Results from questionnaires reveal that whale watchers are often spontaneous when making decisions to visit one of the case study sites and/or to participate in the experience in general, which limits their exposure to pre-visit interpretive material. Although nearly half of the whale watching populations had previous experience in the tourism, most were inexperienced with the case study sites themselves, which suggests that topics of interpretation to orient them to the nature of whale watching at these sites may be well-received. Moreover, most whale watchers preferred particular characteristics of a whale watching experience (e.g. peaceful atmosphere) which could be included within the orientative material to entice them to the case study sites.

Whale watchers surveyed at the case study sites, whether participants in tours or independent, were generally satisfied with their experience and with the contribution of

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[76] see Chapter Six.

TABLE 51 Trends in Whale Watcher Profiles at Whale Watching Case Study Sites

Theme; Interpretation Standards of Relevance*	Trends / Major Results
Demographic and Travel Patterns **(V)**	• Whale watchers mainly comprised older adults who travelled in pairs and resided in the same state as the site (except for the Head of Bight, where most were from interstate). • Many whale watchers were spontaneous or complacent in their decision to whale watch (at all, and/or at the case study sites).
Previous Experience, Preferences for Whale Watching **(V, VI)**	• Approximately half of all whale watchers had some prior experience with the tourism, although this did not appear to affect their expectations, interests or satisfaction. • Whale watchers claimed to prefer a peaceful atmosphere for the activity and exhibited an interest in interpretation as part of their experience.
Pre- / Post-trip Activities and Access to Interpretation **(V, VII)**	• The spontaneous decision to whale watch or to select a certain tour meant that many whale watchers would not have time or opportunity to access pre-visit interpretation. • Pre-visit interpretation sought by whale watchers was more likely to be verbal and orientative than educative and printed, though visitation of venues which were off-site interpretive sources was not frequent. • Lack of frequent collection of printed material off-site (either before or after the experience meant that whale watchers had few opportunities for exposure to educative topics post-visit.
On-site Activities and Access to Interpretation **(VII, VIII)**	• Independent whale watchers (at land-based sites) spent an average of approximately an hour at the site observing the whales. • Printed material at the Head of the Bight was rarely acquired. • Problems with compliance (re: appropriate behaviour on-site) were more apparent at the Head of the Bight than Warrnambool, even though the latter lacked on-site information to alert visitors to this behaviour. • There was a discrepancy between attention to on-site signage claimed by and observed for land-based whale watchers; those observed stopping at the signs spent only brief periods reading the information. • A majority of boat-based whale watchers listened to most of the verbal commentary during the tour and claimed to find it interesting.
Evaluation of Whale Watching and Interpretation **(V, VIII, IX)**	• The majority of whale watchers from each site exhibit a high degree of general satisfaction with their experience and with available interpretation. • Orientative issues were a factor in the disappointment of some whale watchers, primarily in respect to features of whale behaviour and available facilities, although the dissatisfaction was voiced by a minority. • Whale watchers were interested in further information about whales and their protection, and were able to recall basic facts about the focal animals • Whale watchers at the Head of the Bight (1995) claimed to be environmentally concerned, active and aware of how their behaviour affected the resources of whale watching. • Only a few whale watchers from the 1996 season commented on environmental issues relevant to whale watching, although those who did were vocal in their concern for the welfare of both whales and the environment (ie. surrounds of the whale watching sites).

* The whale watcher profile is also relevant to process standards, in terms of information to be considered during planning/evaluation, and topics of liaison for coordinated interpretation efforts.

interpretation in its educative guise. Their primary interests in whale information are satisfied,[77] although topics of further interest demonstrate to interpreters the opportunities to (and importance of) broadening their information to include other aspects of the experience besides whales.

The general reliance on interpretation available during the experience may limit the exposure of all whale watchers (regardless of previous experience) to orientative information regarding the present site for whale watching. For those who were disappointed in aspects of the experience (a minority), exposure to the existing material off-site and additional topics (ie. not currently within materials) may have ameliorated their frustration with whale activity/proximity and the amenities of the land-based sites. Exposure to interpretation during the experience appears most favourable (in terms of duration and attention) for boat-based whale watchers, of whom most claimed to listen to the majority of the commentary. Land-based independent whale watchers were more likely to claim exposure to on-site signage than to be observed reading it, and even if the latter is an underestimate, their attention to it was generally brief.

The most common duration of whale watchers' visits to land-based sites limits the overall time available for reviewing on-site interpretation, which should be considered in the design and delivery of materials. Results also show that it may be possible to increase whale watcher access to interpretive signage by accounting for visitor movements on-site and locating the signs accordingly, such that more visitors can read the information at appropriate times during the experience. Regarding whale watchers' compliance with management directives at land-based sites, inappropriate behaviour was largely confined to specific times (in Warrnambool) or locations within the viewing areas (at the Head of the Bight), and instances of the latter are especially amenable to greater (and more explicit) interpretive effort during and prior to the experience.

A basic knowledge of facts about whales and whale/environmental protection was demonstrated by most whale watchers, although certain topics (ie. conservation status) which were intended to be prominent[78] did not appear to be understood to the same degree as other topics. Issues of whale/environmental protection during the experience were comprehended by most whale watchers, although this cannot be directly attributed to the current interpretation. Regarding environmental protection, activity at the land-based sites suggests that the (somewhat infrequent) instances of non-compliance are more likely to be an issue of an inability to discern restricted areas from designated viewing areas. The longterm interest in environmental and whale protection is unclear for most whale watchers, although interpretation designed to this end would at least reach the vocal minority to whom this is expressly important.

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[77] according to them, and in comparison to the available interpretation as reviewed in Chapter Eight

[78] and were present in interpretation, according to the interpreters and a review of their materials

CHAPTER TEN
DISCUSSION, RECOMMENDATIONS, CONCLUSIONS

'In the year 1690 some persons were on a high hill observing the whales spouting and sporting with each other, when one observed: there - pointing to the sea- is a green pasture where our children's grand-children will go for bread.'

Obed Macy's History of Nantucket
cited by Melville (1851: xxviii)

10.1 Lessons for Leisure, Learning and Leviathan

It could be argued that the above quote approximates 'interpretation', as it attempts to provoke thought about the future of the sea by drawing attention to the whales that dwell therein. Despite its apparent respect or interest in the preservation of certain natural resources, though, the quote is peculiar that it refers to a location and time in which whales primarily attracted attention as a source of oil, rather than as an inspiration for conservation ideals. Perhaps the comment was inspired by greed, where the sentiments do not harbour any further concern or interest in the integrity of the marine environment or its value to its inhabitants. Macy's 'green pasture' of the sea could merely be a cradle for leviathan, whose flesh and frame were intended to support the livelihood of humankind for generations. If this reading is correct, then the irony is complete; for three hundred years later, whales, as observed by humans in the tourism of whale watching, are emerging as ambassadors for the welfare of the oceans.

The encounters between humans and cetaceans during the modern activity of whale watching may indeed foster concern about the future of the animals and their habitat, ideally for the benefit of 'our children's grand-children' and the environment in its own right. Based on results of this research, it appears that interpreters in Australian whale watching are beginning to contemplate its direction as such, and to develop and embrace initial efforts toward this end by employing interpretation as a key management tool for the tourism. Certainly, the status of (and interest in) interpretation in Australian whale watching is commendable, and in fact, somewhat precocious considering the youth of the industry in this country. Nonetheless, there remain important deficiencies and unfulfilled potential within the current interpretive efforts, which suggest that any assumptions of 'success'[1] would be premature and ill-founded, and that interpreters in

[1] e.g. in achieving whale watcher satisfaction, environmentally responsible behaviour or other objectives

this industry must be wary to avoid any sense of complacency regarding the extent, substance and forethought in their use of the management tool.

There is great scope for the Australian whale watching industry to enhance the processes, practices and products of its interpretation such that it can maximise any potential to yield benefits for all stakeholders of this form of nature-based tourism. This thesis provides a mechanism for this enhancement through its significant contributions to knowledge:

(1) a comprehensive conceptual framework for research on interpretation as a management tool for nature-based tourism like whale watching;

(2) a set of best practice standards for interpretation based on prominent theory, innovative uses, and an explicit philosophy to guide the application of this tool in whale watching;

(3) the results of the analysis of the Australian whale watching industry's current use of interpretation, in terms of how its performance approximates these best practice standards.

The final chapter of this thesis reviews the key findings of the current research and elucidates the practical value of its conceptual and empirical components for Australian whale watching, as well as for other enquiries and applications of interpretation in different contexts of nature-based tourism.

Implications of the performance of interpretation in Australian whale watching according to best practice standards give rise to a series of recommendations presented in the chapter. Each recommendation represents the priorities for furthering the strengths and surmounting the weaknesses of the present use of interpretation in this industry. In conjunction with opportune and purposeful research endeavours in future, these recommendations would also be adaptable to other scenarios of the use of interpretation in nature-based tourism. Recent developments and established policies and forums within the nature-based tourism industry (including whale watching) afford substantial opportunities, practical avenues, and tangible means for the pursuit of the recommendations, and thus may facilitate the enhanced use of interpretation. Together the recommendations propose one possible direction for the management tool to contribute to environmentally responsible nature-based tourism,[2] and provide the foundation for the development of other conceptions of 'best practice' interpretation.

10.2 Contributions of the Conceptual Framework

10.2.1 Advantages of A New Direction for Research

The use of the 'human ecosystem' as part of the perspective and context of a conceptual framework for research has demonstrated several advantages to the examination of interpretation in nature-based tourism like Australian whale watching. In particular, the thesis contends that a critical aspect of the utilisation of this conceptual framework is that

[2] As defined by this thesis, environmentally responsible tourism is that which does not degrade the resources on which it depends, *and* which takes deliberate efforts for their protection in the longterm.

it focuses research on more than one stakeholder, and determines how their interests can be addressed through the use of interpretation. By adopting an ecological perspective, the thesis has endorsed a distinct *purpose* for employing interpretation as a management tool, such that it promotes the integrity of the 'human ecosystem' of the tourism phenomenon. This 'integrity' is defined by the interests of major stakeholders (human and non-human) in whale watching, identified as the primary interpreters, the interpretive audience, and focal points and other natural resources of the tourism. Importantly, this thesis exemplifies that the term '*human* ecosystem' need not (and must not) be misinterpreted as exclusive to our own interests; instead, it can and should signify that humans apply/consume interpretation in nature-based tourism as a means of managing the interaction between all stakeholders, to the benefit of each.

The nature of this conceptual framework for research has also furthered ideas of best practice interpretation by promoting the integration of unique features of whale watching and its stakeholders with the use of this particular management tool. Application of the framework has been successful in:

- directing the development of a set of standards for interpretation that attempt to acknowledge the stakeholders' various interests; and
- enabling the development of extensive profiles on the interpreters and interpretive audiences, and the elucidation of key features of the tourism resources and context.

These and the above advantages confirm that a significant part of the contribution to knowledge by this thesis is the adaptation and development of the conceptual framework and associated methodology, as a suitable means of addressing the complex issue of interpretation in nature-based tourism like whale watching. Furthermore, because of the advantages of this framework, the thesis supports other advocates of an ecological perspective for research in interpretation and nature-based tourism (e.g. Clapham 1981; Duffus & Dearden 1990, 1993; Farrell & Runyan 1991; Forestell 1995; Pearce & Moscardo 1985; Ross 1994 Williams & Patterson 1996).

This support is perhaps best illustrated by the type of information yielded by the current research, and in particular, by the profiles of interpreters, whale watchers and salient contextual features of the tourism. The profiles have major implications for interpretation in the Australian whale watching industry, and are integral to the development of recommendations for the future use of this management tool (section 10.4).

10.2.2 The Profile of Interpreters in Australian Whale Watching

The development of interpretive materials and strategies for Australian whale watching is an exercise conducted by members of several different organisations, all of whom bring their interests, needs, sense of priority and limitations to the task. Examination of such traits by the current research suggests how they are of consequence to the further enhancement of interpretation.

Resource management agencies (RMAs) are one of the principal groups of interpreters in the sample from Australian whale watching. Staff from government environment departments in each state were involved in the management of whale watching (via interpretation and otherwise),[3] although the degree and nature of their interpretive efforts for this tourism (and in general) varied between offices. Importantly, the tendency toward regional/district staff as those who held the majority of the hands-on experience with whale watching interpretation[4] does not imply that they have sole responsibility for its creation and implementation. Rather, head offices of environment departments have the potential for far reaching efforts in the development of interpretation, as is often the case in Australian nature-based tourism (e.g. Beckmann 1991; Fox 1996; Olsson 1985).

Although this potential is recognised by RMA interpreters, the current research highlights the need for deliberate attention to the relationship between head and district offices. Specifically, the division of RMA responsibilities for the creation/delivery of interpretation is important to maximise its efficient use in whale watching and in other nature-based tourism within the jurisdiction of these government departments. For instance, head offices allocate funds and occasionally engage in planning for state-wide information campaigns, which are implemented by district or regional offices. Results suggest it is advantageous for these state-wide campaigns to be adaptable to the specific whale watching issues of respective sites.[5] In light of the fiduciary limitations of these departments noted in this study and by others (e.g. Beckmann 1991; McArthur 1996; McArthur & Hall 1993a), adaptable interpretation would serve an interest in (and need for) resource-sharing (also see Bigelow 1995; Bolwell & Sutherland 1996).

As illustrated in the profile of RMAs in the current research, the part-time responsibilities of staff suggest that interpretation itself is unlikely to be a major priority in the management efforts from either head or district offices.[6] In this sense, greater awareness amongst the resource managers of *all* of interpretation's possible roles and associated benefits may be pertinent to efforts to further enhance (and increase) the use of this management tool.[7] As an example, RMAs might assume that interpretation can fulfil an environmental protection objective, yet they do not necessarily equate this with a broader potential to facilitate some of their duties in different contexts (e.g. governing responsible behaviour with other wildlife).[8] Since both the RMAs' division/part-time nature of responsibilities and their perceptions of interpretation's utility reflect the nature of their *general* use of the management tool (ie. regardless of the context), these features of their profiles can be considered just as salient to their application of interpretation in other kinds of nature-based tourism.

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[3] which is reflective of the popularity (and locations) of this tourism within the country; note that federal government departments (ie. ANCA) also contributed to whale watching management and interpretation.
[4] in both the national and case study samples
[5] as illustrated by examples from the case study sites of the Head of the Bight and Albany
[6] However, Howes (1989) cites an early example of specialist interpreters in Australian National Parks.
[7] Section 10.4.2 outlines potential avenues (e.g. personnel/forums) for enacting suggestions of this kind.
[8] Results of this kind are described further in section 10.3.2 in relation to specific best practice standards.

It is difficult to generalise the results for another major group of interpreters in the current research, non-government organisations (NGOs), due to their diversity. Nonetheless, amongst the prominent NGOs to emerge within the sample, there are noticeable trends in their whale watching interpretive efforts which may affect their use of this tool in other nature-based tourism. For instance, the nature and availability of printed interpretation produced by tourism associations (local and regional) were demonstrated to have implications for the expectations and preparedness of whale watchers regarding the tourism experience/sites. Therefore, results suggest it might be beneficial to other applications of interpretation to (1) explore how any nature-based tourism experiences are portrayed by the promotional and orientative efforts of these associations, and (2) for such NGOs to give greater attention to issues concerning the accessibility of their efforts.

NGO profiles also reveal other parties for whom an expansion of effort would enhance their contribution to whale watching interpretation. For instance, the main themes of local interpretive centres at case study sites[9] represent an auspicious yet undeveloped opportunity to promote whale watching as a modern relationship between humans and whales. To contribute more directly to the tourism, these centres could provide other whale watching interpreters with materials that emphasise such themes as well as contain the suggestion that whale watchers visit the centres to learn more about the animals and why they require protection. Hence results recognise the potential and importance of these types of peripheral venues in respect to a broader information strategy for nature-based tourism like whale watching, and encourage such venues to develop greater links with other interpreters in relevant nature-based tourism industries.

Australian whale watching tour operators in particular could benefit from these types of links. The current research indicates that staff whose positions are exclusive to interpretative duties are rare, and instead it is the captain or tour leader who generally holds the primary responsibility to develop/compile interpretive materials and deliver commentary during the whale watching experience. Such operators in the national and case study profiles claim to have extensive experience and knowledge of the relevant resources/areas, but they may still be distracted from delivering interpretation due to their responsibility for other aspects of the tours. This scenario has also been highlighted as a challenge to interpretation in nature-based tourism in general (e.g. Cohen 1985). As one means to address the issue, whale watching tour operators could collaborate with NGOs (and others) in a similar manner to the above, and results show that this is already welcomed by many operators.[10] This type of relationship is advantageous in that it could also alleviate some of the pressure for other nature-based tour operators, if they seek interpretive assistance from other parties (e.g. RMAs, NGOs) with demonstrated relevancy to the focal animals/features of their tours.

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[9] e.g. whaling history at Flagstaff Hill, Warrnambool, and at Whale World, Albany

[10] e.g. contributions such a printed materials from interpretive centres or other sources

Aside from the trend in the allocation of interpretive duties, aspects of the national and case study samples of tour operators debunk any myth of the 'average' whale watching tour. [11] The diversity of experiences within the Australian industry implies that *over-*generalised methods (or standards) of enhancing interpretation may be of limited use to a single tour operator, unless the methods are also explicit in their encouragement of attention to salient features of the context and of the individual tourism product. For example, the promotion of stage models as a means to enhance interpretation must be cautious, since results from the case study sites illustrate that the notion of 'general stages' of a whale watching trip could be misunderstood by interpreters.[12] The diversity within the whale watching tour operator profiles demonstrates that a stage model should be presented in a manner by which all nature-based tour operators can discern its relevance and utility to their own context.[13]

10.2.3 The Profile of the Interpretive Audience of Whale Watchers

In accordance with the conceptual framework, analysis of the interpretive audience is an essential part of research on interpretation in nature-based tourism like whale watching. Similar to the previous section, aspects of the Australian whale watcher profiles have direct implications to the enhancement of future interpretive efforts, and are of value because they:

- yield new information on current whale watching populations, and
- exemplify the kinds of audience features which are critical to identify through interpretation research.

Firstly, whale watcher data (e.g. on their preferences, satisfaction, access to interpretive opportunities, knowledge and practice of appropriate behaviour during the experience) provide a measure of the current performance of interpretation, and help to identify priorities for alterations/additions to products and practices. Indeed, many such features of the profiles either lacked detail in previous research or were hitherto unaddressed in Australian whale watching.

Though the profiles are restricted to case studies, trends in the results may still inform a national whale watching industry which has limited knowledge about its participants beyond the most popular areas. The baseline data on whale watchers generated by the current research is valuable to characterisation of the general nature of the Australian industry and to international inventories of whale watching. For instance, these data on whale watchers, in conjunction with further collection of information from other sites,

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[11] or whale watching experience, in the case of opportunities for independent whale watchers such as recreational boaters or day visitors to land-based sites

[12] e.g. stages 'during' the experience do not only refer to time spent viewing whales, but can include time spent travelling to or from the animals; each part of this stage presents different interpretive needs and opportunities as demonstrated by the current research (in the development of best practice standards, and the empirical results).

[13] e.g. according to issues that interpreters face regarding the order and timing of their efforts; also see section 10.3.3

could be part of the profile of Australian whale watching as presented to the IWC annual meetings (e.g. by Anderson et al. 1995, 1996), and also serve as benchmarks for the further monitoring of the whale watching populations in general or in response to modifications to existing management activities.

A second value of the whale watcher profiles of this research is that they exemplify the kinds of data which are of the greatest utility for interpreters to collect when evaluating and changing their interpretation efforts in future. Thus interpreters could consult the thesis as a means of developing their own framework for research on the interpretive audience. Also, baseline information from these (and future) profiles is critical to the *validity* of any eventual changes to interpretation, in that it can guide informed modifications based on the actual characteristics and activities of the main audience.

An important demonstration of this value exists at two of the case study sites, where following the completion of the thesis' empirical work, data from the whale watcher profiles have been used by site managers to address the nature of the tourism experience and their use of interpretation. In acknowledgment of visitor concerns at the Head of the Bight, the access road has been paved and toilets have been added, which have made the site more accessible to a greater number of people, and possibly minimised the distraction of these factors to the experience.[14] The on-site sign on Southern Right whales has also been repositioned along a main walkway, and boardwalks have alleviated part of the need for interpretation to concentrate on appropriate behaviour on-site (in regards to the protection of the fragile coastline and the safety of visitors).[15] In Warrnambool, whale watcher demand for more interpretation and their current exposure to the on-site interpretive sign have been noted as key issues for future work at the site within the 'Development Study' for the Logans Beach viewing platform (by Atkins 1997). At both sites, the whale watcher profiles have been important to the nature of specific decisions to alter the experience and interpretation which accommodate demonstrated needs and priorities of the primary interpretive audiences.

As well as informing efforts for particular case study sites, whale watcher profiles in general confirm the potency of interpretation in the guise of orientation (cf. Beckmann 1991; Carter 1981; McMillan 1981), and justify its inclusion as part of a broader information strategy for whale watching. The spontaneity of the whale watchers' participation in the tourism in many cases indicates that a traditional means of orientating them to the tourism experience (ie. relying on tourism associations to provide printed/verbal information) could be insufficient on its own. Results reveal that

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[14]In this instance, the visitor demand for facilities appears to have taken precedence over the expressed interest in an unspoilt and peaceful atmosphere. Further research is required to determine if the new facilities and design of the site have any effect on the whale watchers' perception of the quality of the experience.

[15]although as suggested throughout the thesis, attention to such behavioural issues in cases like these can still be advantageous to the promotion of responsible behaviour at other (similar) sites.

interpretation for independent land-based experiences[16] requires deliberate effort to introduce visitors to sites and appropriate behaviour upon arrival. Profiles of tour-based whale watchers suggest that commentary should include orientative topics that address their expectations of the experience, which is necessary to (*inter alia*) prepare them for the possibility of certain features which tended to be sources of their disappointment.[17]

Many of the above aspects of the whale watcher profiles are comparable to results found regarding several cetacean-interaction opportunities in Queensland,[18] such as the high level of general satisfaction with the experience and interest in interpretation as part of it (cf. Neil et al. 1996; Orams 1995, 1996), and particular features of disappointment (e.g. whale proximity; cf. Goyne 1993). Other aspects present conflicting trends, such as the level of prior experience in whale watching (ie. greater here than for those surveyed by Neil et al. 1996 & Goyne 1993), and current lack of correlation between expectations and prior experience (in contrast to Neil et al. 1996). Implications of these results for interpretation are discussed in section 10.3; but overall, the whale watcher profiles illustrate the merit of identifying features of nature-based tourists relevant to their personal evaluation and participation in the experience, in order to enhance the use of management tools like interpretation (e.g. as advocated by Adams & Hammitt 1993; Beck 1993; Beckmann 1991; Cheatley 1994; Cubit & McArthur 1995; Field & Wagar 1984; Hall & McArthur 1993; Hall et al. 1992; Stevens 1989; Tabata 1989).

In addition to whale watcher preferences for the general experience, the current research also exhibits the value of determining visitors' interest in particular educative topics of interpretation.[19] In terms of the relation of educative interpretation to their knowledge, this was not explored in precisely the same manner as other whale watching or interpretive research (e.g. Beckmann 1991; Orams 1995; 1996), but results still yield information which is significant to the use of interpretation at the case study sites. In particular, the current knowledge of whale watchers regarding certain topics reveal the importance for future interpretation (delivered in pre-visit stages and during the experience) to better explicate management issues pertaining to visitor safety, behaviour during whale watching, and whale protection. Due to the implications of these whale watcher data (e.g. in terms of educative interpretation's possible role in influencing their activity, learning and satisfaction), the results support calls for greater visitor research of this kind in nature-based tourism (e.g. Burde et al. 1988; S. Carlson 1995; Gale & Jacobs 1987; Hammitt 1984; Meredith et al. 1995; Moscardo & Pearce 1986; Olson et al. 1984; Orams 1995; Uzzell 1989d; VanderStoep & Gramann 1988).

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[16] e.g. whale watching or other nature-based tourism such as that which takes place in National Parks, some scenic lookouts, wildlife viewing opportunities outside of protected areas.

[17] e.g. inactive or distant whales

[18] including boat-based whale watchers and participants in supervised dolphin feeding programs

[19] For instance, in some cases, such interest can be correlated with other visitor aspects above. In light of the previous experience of many of the whale watchers at the case site studies, their awareness of where they might acquire further information following the experience would be advantageous, as they may already be familiar with introductory topics and desire greater depth of information

10.2.4 Pertinent Features of the Resources for Australian Whale Watching

The above style of information on the interpretive audience of whale watching can assist interpreters in determining priorities for the future enhancement of their efforts. Similarly, an advantage of the conceptual framework for current research is that it enabled the recognition of the more salient features of the context and natural resources of whale watching. Results show that an awareness of these features can help to identify directions for the improvement of interpretive practices and products.

Several of these features were already implied above, such as aspects of the behaviour of the focal animal which must be reflected accurately in interpretation's portrayal of the whale watching experience. Also, whale behaviour that occurs during the experience can be incorporated into educative interpretation, as demonstrated by tour operators in the national and case study sample who claimed to adjust the delivery of their commentary such that it reflects what is witnessed on tour. This technique is endorsed by the whale watching literature (e.g. Forestell 1993; Crabtree & Weiler 1996; IFAW et al. 1998; QDEH 1995), and more detailed data on its application in Australian whale watching may be able to further demonstrate its (pedagogic and philosophical) value to other enterprises of whale watching or nature-based tourism.

Results also illustrate instances where the Australian industry missed opportunities to adapt interpretation to features of the whales and (especially) to other natural resources of the tourism. For instance, the presence of mothers and calves at nursery sites could be further emphasised as a means of discussing whale life stages in Australian waters, and why protection (of the sites, of these whales) is critical in the sense of the recovery of their (endangered) species.[20] The incorporation of other flora/fauna into interpretation is important to the pursuit of a more holistic objective for environmental protection, although the Australian industry does not yet mention their biological significance as other members of a broader coastal/marine ecosystem of the whale watching sites. At sites where Marine Parks protect the focal animals of whale watching (e.g. Hervey Bay, Great Australian Bight, Ningaloo), the importance of these protection measures for the whales, and for other species within the Parks, should be emphasised in interpretation if it is intended to extend greater benefits to the non-human stakeholders of the tourism.

Much of the detailed data on resource features and how they are interpreted in Australian whale watching was (necessarily) collected from case study sites in the current research, but the results are of value to the national industry, other whale watching and other nature-based tourism. For instance, implications drawn from the failure to mention a site's significance to whales are a lesson for the interpretation of other burgeoning areas. Fitzgerald River National Park in WA recently added a whale watching platform to its facilities, but despite speculation that Southern Right whales use the site as a nursery area

[20]The endangered status of Southern Right whales was noted by most interpreters at the case study sites, but not in such terms as described in the example.

(Collins, pers. comm.), interpretation on-site does not yet mention this possibility.[21] Results from the current research suggest that it is desirable to do so in future. Regarding other nature-based tourism, there is obvious relevance of this type of information on tourism resources to the use of interpretation in National Parks, where the mention of a site's (or entire Park's) significance could be part of an interpretive effort to address environmental protection in broader terms.[22]

Additional themes on whale watching's focal animals and contextual factors (e.g. the influence of the site layout, and tourism platform) pertinent to interpretation are better discussed in respect to specific standards for best practice interpretation in the following section. The main point reiterated here is that all results from the empirical work illustrate the importance of an ecological perspective within a conceptual framework for research of this kind.[23] In essence, the profiles affirm that a crucial part of the enhanced use of interpretation is greater attention to certain features of interpreters, the interpretive audience and natural resources of the site/activity, in both research and application of the tool in nature-based tourism.

10.3 The Significance of Best Practice Standards for Interpretation in Whale Watching

10.3.1 The Proposed Best Practice Standards: Premises with Purpose

In conjunction with the conceptual framework, another significant aspect of the current research is its development of a set of best practice standards. These standards offer both conceptual direction and theoretical justification for the use of interpretation as a management tool for whale watching. The standards are also of sufficient detail for practical application and adaptation to different forms of nature-based tourism, both as an evaluative device to reveal the status of interpretation's current use, and as a means to enhance future efforts.

As described in the first four chapters of the thesis, the basic premises of the standards were derived in part from the nature of the enthusiasm for interpretation expressed by major stakeholders in whale watching (e.g. resource managers, tour operators).[24] They were also developed in response to the potential challenges faced by interpretation in this context, and designed to embrace and integrate the prominent theories for its success as a management tool as noted within a multidisciplinary literature base. Yet in spite of their disparate origins, the primary advantages of the standards proposed in this thesis arise from their existence as an original *ensemble*. Together, these standards accommodate

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[21] ie. in terms of the most frequent use of the site by the species; nor does the interpretation mention the nursery site of global significance further along the coast (ie. the Head of the Bight)

[22] e.g. by creating awareness of the vulnerability of similar resources/regions outside of protected areas. See Beckmann (1991) for a review of how significant contextual features are incorporated into a selection of interpretation content and delivery in Australian National Parks.

[23] as declared in section 10.2.1

[24] e.g. in respect to what interpretation is expected to accomplish

several conceptions of 'best practice,' and assimilate them into a unified direction for interpretation which ensures that the benefits to different stakeholders are acknowledged and pursued. Nonetheless, the essence of the standards is such that part of their value is to provoke thought about what is, can, and should be 'best practice.' As one heuristic model of this concept, this ensemble of standards is thus intended to inspire discussion as much as it is designed to guide the use of interpretation in a distinctive manner.

As depicted in Table 52, the particular advantages that the thesis' set of best practice standards offer to the enhancement of interpretation in nature-based tourism include:

- the incorporation of different dimensions of interpretation;
- an adherence to a central philosophical foundation to guide the use of interpretation;
- the encouragement and a means of effecting strategic and coordinated effort toward all aspects of an interpretation program (development, implementation, evaluation);
- an expanded application of interpretation that maximises its utility as a management tool and information campaign in nature-based tourism
- flexibility and the accommodation of salient contextual features of nature-based tourism enterprises which employ interpretation as a management tool.

Each of these advantages is illustrated by the empirical results from the current research. The reasons *why* these are advantages were described at length in the discussion of the premises of the standards (ie. in Chapters Three and Four), but are also exemplified by a review of the performance of interpretation in the Australian whale watching industry.

10.3.2 Strengths and Weaknesses of Interpretation in Australian Whale Watching According to Best Practice Standards

The results yielded by the exploration of 'best practice' interpretation within Australian whale watching illustrate the complexity of the use of interpretation as a management tool. Given the nature of these results, it is difficult to accept/reject several of the null hypotheses in their entirety. That is, part of a single hypothesis may be able to be rejected, whilst another part cannot; in some cases, a hypothesis can be rejected in terms of the national context, but not according to case study site results.[25] Due to such discrepancies and the breadth of the results, the performance of the interpretation within the Australian whale watching is better cast according to its major trends. These trends highlight several strengths in the industry's use of interpretation, representing instances where it approximates the thesis' conception of best practice, as well as weaknesses which exhibit scope for improvement toward this end.

Overall, the strengths of interpretation represent instances of progress toward the fundamental aspects of the standards, whereas weakness is displayed in the depth and detail of interpretive efforts. However, no single 'dimension' of interpretation performed better or worse than others within Australian whale watching; that is, the industry's interpretive processes, practices, and products have all demonstrated

[25]Hypotheses are listed in Chapter Five, p. 115

TABLE 52

Advantage of the Standards for Best Practice Interpretation in Whale Watching (and Nature-Based Tourism)

Standard for Interpretation (#) and Main Dimension(s)		Primary Strength of the Best Practice Standard			
		Addresses a Philosophical Basis for Interpretation	**Expands the Application of Interpretation as a Management Tool**	**Encourages/ Enables Strategic and Coordinated Effort in the Creation, Use or Review of Interpretation**	**Exhibits Flexibility to Features of the Tourism Resource or Context**
I	*Process*	√			
II	*Process*	√	√*		
III	*Process*			√	
IV	*Process*			√	√
V	*Practice/ Product*	√	√		
VI	*Product*		√	√**	√
VII	*Practice/ Product*		√	√**	√
VIII	*Product*	√	√*	√**	√
IX	*Practice/ Product*			√**	√

* regarding an environmental protection role that includes longterm benefits for the tourism resources
** these standards entail theories which incorporate a degree of strategic effort applied directly to interpretive content/delivery

KEY: **Numbers for best practice standards correspond to the following:**

I: The ultimate goal of interpretation in whale watching should be to promote and produce benefits for all of the tourism's stakeholders (human and non-human)

II: Objectives for interpretation should be explicit and inclusive of all its potential roles as a management tool (ie. value-adding, on-site behaviour, longterm environmental protection)

III: A strategic approach to the development and continued use of interpretation is essential, and should include planning and evaluation activities which are structured, comprehensive and longterm in their perspective.

IV: Interpreters should liaise/coordinate efforts with all tourism stakeholders regarding the use of interpretation in whale watching (e.g. policy, issues, materials, delivery), and in particular, pursue opportunities for increasing their own capabilities to produce and implement this management tool.

V: Interpretation should be developed as part of a broader information strategy for whale watching, where its content and delivery extend to promotional and orientative information that can promote visitor satisfaction and environmental protection

VI: In the guise of promotion/orientation, interpretation should generate realistic expectations amongst visitors regarding: (1) features of the tourism experience in general (e.g. whale activity; but also interpretation as *part* of the experience); (2) the potential to address their personal needs and interests within this experience; and (3) appropriate (ie. non-impact) behaviour during the experience.

VII: Interpretation should be delivered according to stages in the tourism experience, in an ordinal manner that corresponds to its use as promotion, orientation and education

VIII: Interpretation should appeal to visitor characteristics and present holistic information which are outlined by a reasoned action model as conducive to environmentally responsible behaviour.

IX: Interpretation should employ techniques within its composition and delivery that are capable of inducing a mindful response from its audience

both strengths and weaknesses. It is significant that the areas for improvement already rest upon a foundation of interests, knowledge and in many cases, skill. Thus additional measures for enhancing the interpretation of this industry could foster what is already represented in the current use, by challenging interpreters to exhibit greater commitment to more specific notions and applications of best practice interpretation. This point affects the nature of the thesis' recommendations for the industry (section 10.4), in that the notion of priority can (primarily) refer to actions for refinement rather than the initial acceptance of rudimentary elements of interpretation principles and practice.

Occasionally, specific types of interpreters or scales of whale watching (e.g. local vs. national efforts) exhibited distinct trends in the empirical results. In the majority of instances, however, the strongest trends and most prominent trends were consistent amongst the stakeholders and contexts. Case studies which reflect similar tendencies as the national profile can offer greater insight into the potential factors behind the results, and thus may be able to direct the ways by which changes are made to interpretive efforts on a broader scale. In both scales, the majority of problems in the use of interpretation in whale watching seem to have been inherited from (or at least reflective of) the general use of this management tool in nature-based tourism and what is known of its quality.[26] Hence many ideas for addressing best practice may be able to be exchanged between the different nature-based tourism enterprises in this country, as long as there is attention to the salient contextual features which facilitate or hinder the use of interpretation.

Table 53 summarises the strengths and weaknesses of the Australian whale watching industry's use of interpretation, and discussion in the remaining sections of 10.3 highlights these points according to the various dimensions of the management tool and specific standards for best practice interpretation.

10.3.3 The Performance of the Australian Whale Watching Industry According to Standards for Interpretive Processes.

By embracing a philosophical foundation for interpretation in nature-based tourism, the standards for best practice presented by this thesis urge interpreters to avoid any premature emphasis on implementing the management tool, and instead invite them to explore the idea of why the tool is employed in the first place. Specifically, Standards I and II afford meaning and priority to its use according to traditional tenets of visitor satisfaction *and* environmental protection. However, a key feature of the standards as a conceptual tool is that they also extend Tilden's (1977) philosophy for interpretation based on potential benefits to nature-based tourism stakeholders; in particular, this is noted by their emphasis on the *longterm* preservation of ecosystem integrity.

Results from the interpreters within Australian whale watching industry also display a level of agreement with such a philosophy and direction for interpretation, and the

[26] ie. as addressed in Chapter Two

TABLE 53 Strengths and Weaknesses of the Profile of Interpretation in Australian Whale Watching

Interpretation Dimension and *Relevant Standards for Best Practice*	Performance of the Australian Whale Watching Industry's Use of Interpretation	
	STRENGTHS	**WEAKNESSES**
Processes *(Standards I, II, III, IV)*	• **Objectives for Interpretation** (content, range) • **Planning/Evaluation Efforts** (quantity of national interpreter and tour operator efforts) • **Liaison** (frequency within local areas; local and national liaison by RMAs; local liaison by tour operators; availability of local workshops and potential for in-service training [RMAs])	• **Definitions of Interpretation** • **Objectives for Interpretation** (level of explicitness, formality and comprehensiveness) • **Planning/Evaluation Efforts** (nature and extent / rigour) • **Liaison** (amount of interpretive topics discussed in national/local forums; national liaison by tour operators, local liaison by NGOs)
Products *(Standards V, VI, VII, VIII, IX)*	• **Interpretation type** (diversity between & within interpreter types; amount of: - printed materials by NGOs and RMAs, - commentary by tour operators) • **Interpretation content** (acknowledgment of whale and environmental protection issues; quantity of orientative topics; use of guidelines format; style in terms of structure)	• **Interpretation content** (amount of holistic themes; range and nature of orientative topics; explicit emphasis on longterm scope for whale and environmental protection)
Practices *(Standards V, VII, IX)*	• **Interpretation Delivery*** (attention to the provision of on-site efforts; diversity and [potential] availability of off-site materials)	• **Interpretation Delivery*** (level of pre-/post- visit emphasis; reliance on passive efforts; consideration of access to off-site materials)

* performance at case study sites only; more information is needed for the national context

Note: The value of the strengths and weaknesses of interpretive efforts is implied in this table. When listed as a 'strength,' topics that refer to 'diversity,' 'quantity,' 'frequency' or a level of emphasis represent the beneficial treatment of the topic (e.g. a *wide* diversity, a *large* quantity, *high* frequency, a *great* amount of emphasis). When listed as a 'weakness', such terms have the opposite connotation (e.g. a *limited* diversity, a *small* amount, infrequent nature, a lack of emphasis).

expressed intentions for this management tool (according to RMAs, NGOs and tour operators) are sophisticated given the youth of the industry. They are inclusive of the range of interpretation's possible roles (cf. Standard II) and also address the various benefits to both human and non-human stakeholders in whale watching (cf. Standard I). Thus, in light of other nascent whale watching industries across the globe who provide little if any interpretation (cf. Gambell 1995), the Australian industry is in a laudable position of needing to assist interpreters in the pursuit of their more ambitious goals, rather than needing to inspire the use of interpretation at all. Results should also allay fears that certain tourism industry stakeholders employ a purely commercial purpose in their use of interpretation (cf. Beckmann 1988). Interpreters were rarely emphatic about the value-adding role of interpretation,[27] and in fact were more likely to claim that interpretation's function was to contribute in some fashion to the protection of the environmental resources of whale watching.

However, whilst the range of potential management roles for interpretation was covered *between* interpreters, few single interpreters from either the national scale or case study sites identified *all* roles within their own objectives, and many conveyed vague intents for interpretation to merely 'generate understanding.'[28] Those who were explicit in their environmental objectives for interpretation, but who also offered a sterile or superficial definition of it (as was often the case), may fail to meet their own expectations for its value as a management tool.[29]

Additional information is required to determine whether or not these interpreters believe interpretation should promote instrumental or intrinsic values of the whales and/or the environment in general. Yet, any attention bestowed upon the environmental protection role for interpretation is particularly noteworthy since these sentiments were expressed without prompting by the tools of empirical analysis.[30] In this sense, the evaluation of interpretation according to standards for goals and objectives has been able to identify the *scope* of Australian endeavours for whale watching interpretation, which is in fact consistent with the path advocated for the global industry.[31] Similarly, data yielded by this type of evaluation can chart the progress of other nature-based tourism industries, and in particular, those subscribing to the term 'ecotourism', in terms of how well management stakeholders have put these principles to practice. Not only may such enquiry dissuade tourism stakeholders from adopting a label for popularity instead of

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[27] although in terms of interpreter types, an emphasis on value-adding was found more frequently amongst the objectives cited by tour operators and tourism associations. It should be reiterated that Standard II contends that value adding *should be* part of interpretation, as long as it is in conjunction with objectives for environmental protection.

[28] If these interpreters *do* realise the full potential of interpretation as a management tool (and the value of pursuing this potential), it is not expressed in their list of personal objectives for its use.

[29] ie. this suggests that there may be a need to convince these interpreters that achieving environmental protection via interpretation requires more than simple the provision of facts.

[30] ie. objectives of interpretation were open-ended responses and not prompted by answer categories.

[31] e.g. as outlined by IWC's (1993) *Whale Watching Resolution*

principle, but it may highlight any needs to increase the consistency between intentions and actions for interpretation.

In the absence of this type of research (ie. as prompted by standards for interpretive goals/objectives), there is a risk that intentions for interpretation will remain unquantified, unspoken or (at worst) undervalued. Indeed, in the majority of cases, Australian whale watching interpreters' goals for interpretation were implicit rather than entrenched in policy or incorporated into mission statements. Thus drawing attention to a philosophical basis for interpretation in the current research uncovered sentiments that interpreters have not yet formally verbalised. The implications of vague and/or informal intentions for interpretation whale watching are shared by other nature-based tourism (e.g. Hooper & Weiss 1991; McDonough 1982; Uzzell et al. 1995), and without research on the nature of the use of interpretation in other enterprises, interpreters may:

(1) have difficulty determining whether their use of interpretation is 'successful', and

(2) exacerbate any perception that *provision* of the interpretation *is* the (only necessary) achievement.

These possibilities can be minimised through a strategic framework to host and outline the intentions and methods for developing/implementing interpretation, as proposed by Standard III. However, the current research suggests this may remain a problem in Australian whale watching due to the informality of the majority of planning and evaluation activities amongst national and case study interpreter profiles at present. Results from the Australian whale watching industry indicated that it suffers from a similar reluctance (or inability) to engage in strategic interpretive planning and evaluation as the nation's nature-based tourism industry in general (cf. Beckmann 1988, 1991; McArthur & Hall 1993b, 1996c). Whilst these activities may seem widespread given the level of professed involvement by Australian whale watching interpreters, it is also clear from their descriptions that a 'strategic' emphasis is lacking in most efforts, and planning and evaluation are instead largely superficial and ad hoc.[32]

Likely influences on the apparent informality[33] of planning or evaluation include the part-time nature of interpretive responsibilities, resource deficit, or in the case of many RMAs and NGOs, a lack of direct control over a whale watching site/experience. Other factors could include the general underestimation of the importance of *strategic* effort to plan and evaluate interpretation, but there are also indications of a belief that 'planning and evaluation' are *too* complex to be warranted/viable for the current use of interpretation.[34] In this case, the result depends on the interpreters' conception of these

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[32] ie. planning was predominantly treated as an information gathering exercise for interpretation topics; evaluation entailed general feedback regarding satisfaction with the whale watching experience.

[33] A more sensitive survey instrument needs to confirm the informality of most planning and evaluation. The current research is mindful to avoid a false positive result from a social desirability factor, where interpreters who want to seem credible or efficient over-state their efforts (see Pearce & Moscardo 1985). However, those who did emphasise such activities in their responses were forthcoming in the provision of unsolicited detail, which is an indication of the reliability of results.

[34] e.g. several RMAs perceived evaluation to largely entail the use of formal questionnaires (valuable, but time & resource-consuming efforts), and hence do not claim great involvement in this practice.

activities. In general, though, similar hindrances to strategic effort for interpretation have been identified within other forms of nature-based tourism,[35] and the current research implies that this issue remains a significant consideration in the enhancement of interpretation in this tourism context.

Without a strategic framework for the development of interpretation, interpreters in Australian whale watching face an immense challenge of adapting their efforts to a potentially unstructured (for independent whale watching opportunities) and dynamic tourism experience. The paucity of deliberate action to collect feedback on the performance of interpretation is also likely to have several important effects upon the industry which could further hinder attempts to enhance its use of interpretation:

- It may exacerbate the perception held by some that interpretation goals can be achieved through simple compilation and presentation of facts.
- It may mean that interpreters' conception of the current preferences or satisfaction of whale watchers are unreliable or inaccurate due to a vocal minority (a risk of over-reliance on informal feedback).
- It may hinder any changes to interpretation efforts which take into account the aspects of the performance of interpretation as identified by the current research.[36]
- In light of part-time and shared interpretive responsibilities, absence of a formal framework to delineate goals/activities may mean these change with the personnel. Hence interpreters would not be obligated to carry out predecessors' interests or necessarily share priorities with current colleagues.

These risks illustrated by the Australian results could be posed to any nature-based tourism industry for which the 'strategic' nature of planning and evaluating interpretation is undervalued. Ultimately, this would compromise the capacity of interpretation to function according to other best practice standards for its products and practices.

Strategic effort toward the development or review of interpretation could be enhanced by changes to the current nature of contact between Australian whale watching interpreters. Standard IV encourages these interpreters to consider interpretation as more than an insular or linear activity, and to liaise with others who are in a position to offer materials, activities, skills, and/or advice. Such contact could also include the coordination of planning and evaluation, and at present, results show that interpreters in the industry do tend to consult each other for information relevant to their interpretive content.

However, whilst there are discrete examples of sharing interpretive materials, staff, or information for content (primarily witnessed at case study sites), the general nature of contact between these parties regarding tourism and resource management issues is informal, infrequent or irregular,[37] and rarely concerns interpretation as the impetus or main issue for liaison. In addition to inefficiency, implications of these results are

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[35] e.g. part-time effort, resource scarcity, perceptions of complexity; see Beckmann (1988, 1991), McArthur & Hall (1993b, 1996c)

[36] e.g. because there are no mechanisms such as allocation of resources within a planning framework that would enable the interpreters to be able to instigate change to their current efforts.

[37] A discrepancy was noted between the frequency and scales of liaison; in terms of national correspondence, contact between different whale watching interpreters was more variable, whereas the profiles indicate that on a local/regional level, liaison is of greater frequency and somewhat periodic, at least during the annual whale watching season

missed opportunities to exchange knowledge regarding the use of interpretation, not only between those in the whale watching industry, but also in respect to representatives or stakeholders in other forms of nature-based tourism who employ the management tool, and who could offer expertise and innovative ideas for its use.

One result which conflicts with a general trend in nature-based tourism concerns RMAs specifically, who in the current research claimed to have occasional opportunities to directly improve their interpretive knowledge and skills through participation in in-service training sessions.[38] This contrasts with Beckmann's (1991) findings for RMA interpreters and Australian National Parks, where such opportunities were deemed to be rare. The discrepancy may be due to perceptual differences regarding what is 'occasional,' or there could be a genuine increase in training opportunities for RMA staff. If the latter is confirmed by additional research, the situation would be advantageous for other nature-based tourism, since current results indicate that in-service training sessions are not often exclusive (or even specific) to whale watching interpretation.

10.3.4 The Performance of the Australian Whale Watching Industry According to Standards for Interpretive Practices and Products

(i) Interpretation's Expanded Role and Accessibility

In accordance with the philosophical foundation for interpretation supported in this thesis, Standards V and VI for best practice propose an expanded role for interpretation in nature-based tourism where it is (also) applied in a promotional and orientative capacity. This conception of the use of interpretation was not explicitly advocated by Tilden (1977), despite its advantages to the pursuit of benefits for all major stakeholders in nature-based tourism. Results from Australian whale watching illustrate that the industry is receptive to the general notion of an expanded role for interpretation; however, increased attention to the current promotional and orientative functions of interpretation could increase its potential to contribute to visitor satisfaction and environmental protection in future. Specifically, the nature of interpreters' depictions of whale watching, as well as the frequency and manner by which they describe appropriate behaviour during the experience, reveal some critical omissions and exaggerations in the content of this interpretation.

Nationally, tour operators were generally unrestrained in their portrayal of possible whale activity during the experience,[39] and whilst case study site tour operators were perhaps more modest in their depictions (at least in respect to images), they were also

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[38] RMAs in the national profile were more likely to mention these opportunities than representatives from case study sites. This could be a difference between state departments (e.g. fewer from SA referred to training).

[39] and to a lesser extent, whale proximity, as discovered in both the images and text of their material. Recall that tour operator material was the only printed pre-visit interpretation examined nationally. Hence provision of this type of orientative information by RMAs and NGOs for tour or independent whale watchers remains unknown on a national scale

less likely to qualify their claims. In both cases, this type of information presents a risk of unrealistic expectations by whale watchers which may lead to their disappointment with the experience; in fact, aspects of whale behaviour commonly portrayed in these materials (e.g. proximity of whales, type of behaviour) featured prominently amongst the reasons for visitor dissatisfaction at case study sites. Correlations between their evaluation of the experience and the promotional/orientative material could not be drawn, but unlike other studies of Australian whale watchers (e.g. Goyne 1993; Neil et al. 1996), prior experience with the tourism did not seem to influence their expectations. This suggests that the provision of more information about the idiosyncratic nature of a particular whale watching opportunity is important to enhancing interpretation in the Australian industry, since previous experience does not appear to make visitor expectations any more *realistic*. [40]

Whatever their source, it is clear that certain visitor expectations were not matched; though to remedy the situation, it would be difficult to discourage the above style of promotion in whale watching, or by other nature-based tour operators who all depend on an attractively portrayed product, and who may face increased competition as this form of tourism continues to gain popularity. Also, the whale-related features in the Australian industry's promotion are not necessarily always an exaggeration,[41] and it must be kept in mind that tour operators have additional opportunities besides their brochures to generate realistic expectations amongst participants (ie. during commentary). Nonetheless, in the interest of maximising visitor satisfaction, and possibly minimising their distraction from educative interpretation, results from this research should be an encouragement to tour operators and other interpreters who offer pre-visit materials/advice to qualify their claims, or at least enable the visitors to gain some control over the quality of their experience. For instance, topics to empower visitors, such as encouraging patience and the use of binoculars, were not common within Australian whale watching material, but are also pertinent to interpretation for other forms of nature-based tourism where the preparedness of visitors (e.g. in terms of equipment) could contribute to their satisfaction.[42]

Similarly, the current research also demonstrates the importance for interpretation in an orientative guise to mention aspects related to physiological comfort, as the tangible effects of the failure of RMAs and NGOs to provide independent whale watchers with sufficient information to this end are clear in the results for the case study sites.[43] Land-

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[40] or to enable them to satisfy basic needs or interests for every context of the tourism; this point is reinforced by discussion below on the relation between visitor satisfaction and aspects of physiological comfort during whale watching. Of course, a greater amount of (psychographic) research on whale watching populations would help to test the reliability of these results.

[41] In sites like Hervey Bay it is rare to be unable to find whales during the season, and these Humpbacks do have a well-deserved reputation for their 'curiosity' about the whale watching fleet.

[42] e.g. using binoculars on safari; having a torch for night forest walks featuring nocturnal animals

[43] This was not as pertinent an issue amongst tour operator material, since those in the national and case study samples consistently highlighted various aspects of the whale watching experience offered by their tours which were relevant to participants' comfort and safety needs; e.g. the availability of facilities, refreshments, the stability of the vessels

based whale watchers were in fact more disappointed with the state of facilities than with any aspects of whale behaviour, which corresponds to Dunn-Ross & Iso-Ahola's (1991) findings regarding the salience of practical concerns to tourism satisfaction, as well as to Pearce's (1982) discovery that negative accounts of experiences most often relate to a lack of fulfilment of these types of concerns.[44] Whilst the disappointment of these whale watchers did not appear to have a significant effect on their satisfaction with the experience in general (nor their likelihood of reading on-site signage), the lack of comfort facilities may still represent a threat to the duration of the contact stage of the experience when educative interpretation is opportune (ie. in the presence of whales).[45]

Clearly these results are applicable to the orientative interpretation for other nature-based tourism, particularly in National Parks or remote areas, where the availability of certain facilities on-site can be a major determinant of visitor comfort. Alerting potential visitors of the nature of an experience in these terms is not only advantageous for enabling their preparation for their own comfort, but it may also enable the matching of visitor interests and preferences for a nature-based tourism experience with an actual site or opportunity (cf. Pearce & Moscardo 1985a), and potentially minimise disappointment. For sites similar to the Head of the Bight, interpretation could *extol* the lack of facilities as part of a remote, undeveloped area, which might attract whale watchers who prefer these circumstances.[46] At the very least, it could warn others before their arrival and also cast the nature of the site in a positive light, such that perhaps the status of facilities would not be as much of a distraction whilst on-site. In both cases, interpretation which includes this sort of information could increase visitor satisfaction with nature-based tourism.

The role of promotional/orientative interpretation in environmental protection can be promoted by incorporating educative information within pre-visit materials/efforts (cf. Standards V, VI). This can introduce the resources of the nature-based tourism and may allow further development of themes for their protection during the experience (Butler 1991). Such an opportunity remains largely undeveloped within the Australian whale watching industry; however close to half of the promotional/orientative material from tour operators suggested that learning was a later part of the tourism experience. Such operators are in fact promoting interpretation as a desirable part of whale watching, which is a valuable point for NGOs and RMAs in particular who wish to portray the tourism as educational, but who currently do not mention its learning opportunities.[47]

RMA interpreters do often include whale watching guidelines in their pre-visit materials, which fulfils an important task of orienting visitors to what is expected of them during

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[44]and also offers some support to the notion of Maslow's (1970) hierarchy within a tourism experience; although it is noted that no direct correlations (ie. cause/effect) can be drawn from these results

[45] Visitors to the land-based sites rarely spent more than an hour whale watching, and a near majority spent even less time (e.g. half an hour).

[46]Regarding the new additions to facilities at this site, in relative terms they change the nature of the (extreme wilderness) experience at the Head of the Bight, yet they are still no more of a 'developed' than those most common to Australian National Parks.

[47]even when they contributed to materials available on-site, as witnessed in all case studies

the experience (cf. Weiler 1991) *and* introduces them to an important theme on whale protection which can have broader applications. With a few notable exceptions, other Australian whale watching interpreters neglect this opportunity to orient visitors to appropriate behaviour before the experience; and thus in light of the problem in accessing RMAs' interpretation (see below), they are exacerbating a risk to the terrestrial and marine features they seek to promote. In fact later, discussion supports the idea that the incorporation of such guidelines into interpretation (pre-visit orientative and educative during/after the experience) is one of the most significant means of enhancing the potential for this management tool to result in environmentally responsible behaviour during a nature-based tourism experience and in the longterm.

Regarding an expanded role for interpretation in general, it can be summarised that the nature of topics addressed in promotional/orientative material for Australian whale watching may be symptomatic of the interpreters' respective roles in the management of the tourism. RMA staff primarily use interpretation to elicit low impact behaviour from anyone in contact with the resources of whale watching; whereas tourism association NGOs[48] employ it to promote a region or town as a tourism destination, and tour operators direct it toward the attraction of whale watching participants in particular. As nature-based tourism in general is likely to harbour similar divisions of interpreter interests and use of orientative information, other enterprises should heed the attendant problems that this can create in respect to access of interpretation.

With this inadvertent division of orientative topics, poor access to any of these interpreters' materials/opportunities would frustrate attempts to provide visitors with all pertinent information.[49] That is, if the interpretive audience is not exposed to *each* of these different opportunities for orientation (ie. assuming the topics remain divided as above), they may begin their nature-based tourism experience without awareness of its features important to their own comfort, interest, safety, enjoyment (cf. Maslow 1970), and/or to the protection of the tourism resources. Likewise, if educative topics are missed during the experience,[50] nature-based tourists would not only forgo an opportunity to learn about the focal resources, but interpretation would fail to take advantage of its capacity to promote awareness of or encourage action for their longterm protection. Unfortunately (in terms of Standards I, II, V, and VII) these risks are currently inherent within the interpretation in Australian whale watching.

Analysis of interpretive strategies for case study sites illustrated the potentially poor access visitors have to interpretation (especially off-site), and whale watcher profiles confirm that many did not come across several of the major interpretive materials or opportunities offered by different interpreters at these sites. Poor access to this

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[48] the majority of NGO interpreters at case study sites

[49] although the various emphasis on topics is not entirely disadvantageous (e.g. to avoid repetition of information), and the promotion of coordinated effort between interpreters encourages them to work to their strengths and key interests. This point is detailed below.

[50] also due to different emphasis by the interpreters, or other reasons, outlined below

interpretation was often the result of the location of the opportunities, and exacerbated by the fact that whale watchers of Australia are largely reliant upon their own initiative (and awareness) to acquire interpretation prior to or after their experience.[51] This is of course true for nature-based tourism in general, and results for whale watcher behaviour in the current research may also have implications for the interpretive strategies of other enterprises. For instance, it may be insufficient to host materials exclusively in venues which tourists are assumed to be likely to visit in the course of their travels (e.g. tourist information centres). Whale watcher travel patterns reveal there is still no guarantee that they will access interpretation from these venues, nor that they are cognisant of the opportunity to acquire specific (or desirable) materials at such locations.

One consequence of the nature of the current access to interpretation is that most whale watchers are reliant upon on-site materials/information, which in some cases fail to be delivered, lack the desired details, or are inadequate in their orientative and educative information. This problem could be shared by other nature-based tourism, and compounded in the case of independent visitors (e.g. to National Parks) who are not automatically exposed to commentary. Of course, reliance upon on-site interpretation for such visitors is an even more critical issue if access to these particular opportunities is hindered, as witnessed at the case study sites in terms of signage. Whale watcher behaviour at each site illustrated patterns of only moderate (at best) access to/patronage of existing interpretive signs, which were determined in part by the signs' position.[52]

Furthermore, results from the current research show that the position of the signs and other interpretive material is a critical determinant of whether topics are conveyed at the most appropriate stage in a tourism experience. In terms of orientative topics, the whale watchers' ordinal exposure to such interpretation is less assured.[53] There is also reasonable doubt that the whale watchers are exposed to educative topics after the tourism experience, which is considered to be the most opportune time for encouraging their consideration of conservation issues regarding whales or the marine/coastal environment (e.g. Forestell 1993), and/or contributing to their positive evaluation of the experience (Beckmann 1991; Carter 1981; Crabtree & Weiler 1996; QDEH 1995).[54] These issues are potentially faced in any nature-based tourism enterprise in terms of pre/post stages,[55] and are of particular relevance to those which comprise mainly independent visitors.

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[51] as well as during their viewing, in the case of participants in independent land-based experiences

[52] primarily at the Head of the Bight; potential access to on-site interpretation is adequate for Warrnambool, where the placement of the signs is conducive to whale watcher activities during the experience. However, observations reveal that neither sign was read by more than a third of visitors. In Albany, a whale-related sign is distant to the site of the majority of the tourism activity, and few whale watchers from the site claimed to have read this sign.

[53] given the locations and patronage of venues off-site

[54] ie. in terms of satisfying curiosity, portraying what was witnessed (or not seen) as realistic

[55] unless, for example, tour operators provide future participants with detailed information prior to the tour, and/or deliberately give away printed educative information for participants to take home.

To address the weaknesses of the Australian whale watching industry noted in this section, and minimise similar risks for other enterprises, it is important to attempt to reconcile the options of (1) comprehensive coverage of pertinent orientative and educative topics within all interpretation, and (2) a coordinated effort between interpreters for a site/enterprise in which they each address one particular topic/theme according to their current interests and roles in the management of the tourism.[56] To undertake such a task, it must be acknowledged that issues regarding an expanded role for interpretation and regarding access (ordinal, physical) to its variety of topics are intertwined. As such, an important means to enhance interpretation in Australian whale watching exists in the distribution of interpreter efforts according to the nature of their access to an interpretive audience during different stages in the tourism activity.[57]

Specific means by which interpreters can facilitate such an effort are implied within the results and include efforts to impose structure on the nature-based tourism experience, which can control ordinal access to interpretive topics. This opportunity already exists for tour-based whale watchers who are automatically exposed to commentary,[58] and though audience attention can wane, this was not common amongst results from boat-based samples. Hence tour operators essentially have a captive audience for their interpretation, and also have the greatest control over the order of their topics.[59] The current research also exemplifies how interpreters can impose a degree of structure to independent nature-based tourism. Enforced contact with YLMP staff upon arrival at the Head of the Bight demonstrates the value of orienting visitors before they reach the coastline,[60] and provisioning them with educative material which is minimal at the cliff edge. This scenario is relevant to the nature-based tourism within discrete areas such as National Parks, which might achieve similar benefits from a contact point at the entrance to the sites. Whether these contact points offer personal contact with site managers or not,[61] visitors would at least be confronted with an (orientative and educative) interpretive opportunity without having to rely on their awareness or initiative to locate information.

Controlling access to interpretation in pre/post (mainly off-site) stages is inherently more difficult, but a suitable strategy in light of the results of the current research may be to increase production of (portable) printed materials relevant to both orientative and

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[56]noted above, regarding the apparent division of orientative topics between whale watching interpreters

[57]"Distribution' does not necessarily mean interpreters should pursue these efforts exclusively, in fact, this thesis ultimately advises an error on the side of comprehensive activities rather than risk omissions of topics. But in the interest of resource sharing and strategic targeting of an interpretive audience, interpreters in whale watching and other nature-based tourism could take better advantage of certain (and current) opportunities presented by these parameters.

[58]which all but one tour operator in the national and case study site samples claimed to provide

[59]According to the national and case study tour operator samples, topics included both pre-contact orientative information and educative themes; although more information is required about nature of the tour operator commentary in Australian whale watching in respect to the order and quality of such topics.

[60]in light of their unfamiliarity with the site and failure to collect many orientative materials prior to their arrival, as well as the limited orientative information present within pre-visit materials.

[61]e.g. remote sites with self-administered permits for entry have an opportunity to present pre-visit orientative topics; as illustrated by SA's Deep Creek Conservation Park and Port Lincoln National Park

educative topics for the tourism. Such materials could be distributed amongst a wide variety of venues, although interpreters should be mindful of the actual travel patterns of visitor, as these were shown to influence access to current materials.[62] Dissemination of materials through more popular venues should also be considered for the Australian whale watching interpreters who are responsible for other nature-based tourism as well (e.g. RMAs and some NGOs), for patronage of their venues by tourists from these enterprises may be similarly poor. Finally, the availability of portable printed materials on-site for land-based whale watchers would enable them to periodically refer to topics (potentially at opportune times) during the experience, regardless of their own position on-site.[63] This is an important consideration for any independent nature-based tourism experience, as all interpretation provided during the experience competes with the focal animals/features for visitor attention. If it is portable, it may be more likely to be consulted during viewing; but even if it fails to do so, it could still relieve questions after the experience if taken home.[64]

(ii) Conservation Themes and Creativity in Interpretation

As part of the conception of 'best practice' developed in this thesis, Standards VIII and IX were derived from prominent learning theories in the literature which inform the composition and delivery of educative interpretation. These theories were selected amongst a plethora of others in a multidisciplinary literature base because they emphasise the capacity for interpretative products and practices to promote not only learning, but also environmental attitudes and action amongst participants in a nature-based tourism experience like whale watching. Results from the Australian whale watching industry suggest that to enhance the potential of current interpretation toward this end, interpreters should consider the following issues: the breadth of educative topics, the composition of particular themes, and the response to such information by the interpretive audience.

Overall, the educative topics within Australia's whale watching interpretation are largely restricted to basic behavioural and biological characteristics of the focal animals, although many interpreters[65] are also inclined to extend this general discussion of whales to more conservation-related themes, such as the status of certain endangered species and their decimation by whaling. A means of taking further advantage of these opportunities to introduce whale protection issues would be for these interpreters to broaden the scope of their current themes. Although issues in cetacean stranding and research were occasionally included amongst the educative topics, interpreters generally neglected their potential to raise awareness about other campaigns regarding threats to particular species or sites of significance to their recovery or lifecycle in general.

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[62]e.g. patronage of NGO and RMA venues was poor. The need to consider this type of empirical data is also relevant to visitor behaviour on-site in respect to the position of signage, as noted above.
[63]ie. they do not have to turn their backs on the whales or travel far to view information, as they may have to do for signage.
[64]whereas any exposure to interpretive signs must be completed on-site.
[65]representing all types (RMAs, NGOs, tour operators) and both the national and case study samples

Some of these undeveloped opportunities include topical issues directly related to the whale watching sites,[66] and no interpretation portrayed the species encountered during the experience as ambassadors for other species throughout the world.[67] Holistic conservation issues affecting the marine and coastal environment (and other flora/fauna species therein) were also somewhat rare. Similarly, most Australian whale watching interpretation affords little attention to issues that demonstrate how other human behaviour along the coast (ie. non-tourism) affects either the focal animals or other flora/fauna witnessed during the tourism experience (e.g. marine pollution).[68] Illustration of the greater significance of an area/ecosystem and its inhabitants would be of relevance to the whale watchers when they encountered similar features in different contexts (nature-based tourism-related or otherwise), and would enhance the current interpretation's ability to address a broader environmental protection objective.

Results suggest that another means of improving the current interpretation's attention to conservation themes would be to increase awareness amongst interpreters of appropriate techniques for creating mindfulness amongst their interpretive audiences (cf. Standard IX). At present, the Australian whale watching industry's application of such techniques is somewhat limited, and with the exception of theme development and the appeal to affect regarding whaling topics, most printed materials are rather unadorned (ie. with imagery, prompts or analogies).[69] This is not surprising, given the prevailing notion of interpretation amongst interpreters (according to their definitions) that it is chiefly the transfer of basic information about whales. In addition to the potential concerns this creates for the level of interest or attention of the interpretive audience,[70] this may also exacerbate a linear conception of learning and inspiring environmental action.[71] In fact, there is only one exception (cited below) within the interpretation which incorporates any aspects of a reasoned action model for the use of educative information to inspire environmentally responsible behaviour (cf Standard VIII).[72]

Whilst the implications of these features (or lack thereof) of the interpretation were not tested directly, other data still indicate that some topics already face problems in their retention (or perhaps initial accessibility) by the interpretive audience. For instance,

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[66] In a case study site example, inattention to the GABMP issue at the Head of the Bight represents a missed opportunity to recruit the support of anyone sympathetic to the cause who was exposed to its necessity when such information is most timely.

[67] or for different populations of the same species

[68] Tour operators in case studies addressed such issues rather frequently; yet the above point refers to the majority of interpreters (for national and case study profiles) as a whole

[69] These results refer primarily to interpretive efforts examined from the case study sites, but also the promotional materials that comprised the national sample of interpretation.

[70] although at present the whale watchers themselves did not exhibit any noticeable prejudice toward the interpretation in terms of its attractiveness or style of composition/delivery. As noted above, the vast majority of tour participants listened to (and enjoyed) the commentary, and those who did read the signs or other printed materials claimed to find them interesting. Nonetheless, any *preferences* for certain mindfulness techniques were not tested (nor volunteered).

[71] ie. where provision of facts alone is assumed to generate environmentally responsible behaviour (or other such objectives)

[72] Though more information is required on verbal information and commentary before a truly convincing representation of all available interpretation material can be offered

whale watchers were less likely[73] to correctly answer a question about the endangered status of the focal whale species, even though this topic was mentioned in most interpretive efforts. If whale watchers remain unaware (for whatever reason) of this status in spite of its prevalence as an educative topic, the information cannot be expected to automatically inspire their interest in/contribution to whale protection, nor to provide them with an understanding of *how* they can contribute to this end (cf. Hines et al 1986). More intensive research on the aspects of reasoned action models and mindfulness techniques are required to test their effectiveness within whale watching; but Orams' (1995, 1996) successful application[74] of such features in a nature-based tourism experience are encouraging, and suggests greater attention to these issues in the current interpretation would be advantageous to the pursuit of its more ambitious objectives.

One important exception to the treatment of interpretation described above is the prevalent use of whale watching guidelines by interpreters within the Australian industry.[75] Their content and style of composition are significant to the pursuit of an environmental protection objective, for they often incorporate aspects of mindful techniques (e.g. theme development) as well as represent a deliberate attempt to create an intent to act responsibly amongst the interpretive audience via a reasoned action model.[76] Whilst such qualities were noted earlier in the thesis in terms of their presence in the original *Australian Whale Watching Guidelines* (ANPWS 1989),[77] the empirical review of the industry reveals that a style and type of information of a similarly high quality is in fact widespread within the current interpretive efforts, as it exists in different versions of these guidelines. Further to this point, another part of the quality of the guidelines is that their current use is typified by an adaptation to local issues of whale watching (e.g. posed by the platform and/or focal species).[78] By demonstrating the adaptability of the traditional model of the guidelines to contextual issues for particular whale watching experiences, these interpreters have set a valuable precedent for other such enterprises or different forms of nature-based tourism which could establish similar codes of appropriate behaviour.[79]

However, like the conservation themes in general, the broader implications of the behaviour advocated by the guidelines may need to be addressed in a more explicit manner. As noted in Chapter Three, the type of information contained within the

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[73] as compared to other questions about factual information; refer to Table 49, p. 291

[74] ie. in terms of their ability to engender environmental interest, attitudes, and the intent to engage in responsible behaviour in the longterm.

[75] The guidelines were available from the majority of interpreters in both the national and case study samples, although less so from NGOs in the national sample

[76] ie. the guidelines incorporate such techniques as outlining action skills, consequences of inaction, and the locus of responsibility as recommended by Hines et al. (1986) and Hungerford & Volk (1990), and as deemed to be successful in a tourism context by Orams (1995; 1996).

[77] in Chapter Four, section 4.4.3; refer to Appendix 2 for the guidelines in their entirety

[78] This is illustrated by the specific guidelines found at case study sites, which in some instances included codes for coastal behaviour appropriate to land-based whale watching activity.

[79] Further discussion on the adaptation of whale watching guidelines for other nature-based tourism experiences is found in section 10.4.2

Australian Whale Watching Guidelines is applicable to both on site and longterm activities by whale watchers, although the latter requires greater emphasis since it remains implicit. This problem applies to most of the various versions of the guidelines and environmental codes examined at the case study sites. To further approximate the type of best practice proposed by Standard VIII, the guidelines would need to incorporate a direct appeal to behave in a similarly responsible manner upon conclusion of the tourism experience. In this sense, the environmental codes would then be a particularly valuable opportunity to encourage the consideration of one's behaviour in other contexts of coastal tourism.

In respect to the current incarnation of the whale watching guidelines and environmental codes of behaviour, whale watchers at the case study sites demonstrated basic knowledge of their premises. Although this knowledge cannot be directly correlated with the whale watchers' exposure to these materials or information during the tourism experience, this result is still meaningful in terms of their current awareness of what is appropriate behaviour in whale watching and their expressed desire to learn more about what they personally can do to protect whales. It suggests whale watchers are receptive to and interested in the type of information found in the guidelines, and thus signifies that the guidelines are in fact the element of current interpretation in Australian whale watching most likely to enable it to fulfil an environmental protection objective.

10.4 Toward an Enhanced Use of Interpretation as a Management Tool for Whale Watching: A Path for Progress

10.4.1 Recommendations for Interpretation in Whale Watching

Empirical results suggest that the use of interpretation in the whale watching industry of Australia is advancing toward greater potential to fulfil its more ambitious goals as a management tool. The weaknesses and challenges it faces in the meantime can be characterised as those most common to interpretation in nature-based tourism in general. There are also new issues for interpretation posed and/or highlighted by the nature of whale watching (e.g. independent participation, spatial range of whale watching sites), as well as noteworthy products and strategies in existence (e.g. at case study sites) which could be models for other enterprises. Recommendations outlined in this section reflect these and other findings for the performance of interpretation in Australian whale watching, and propose a direction for further progress toward best practice.

Recommendations are presented in terms of themes and implications arising from the preceding review of results, and discussion also identifies priorities and 'targets,' or who would be responsible for their implementation. Whilst some recommendations are unique to the Australian industry, many issues are potentially shared by other nature-based tourism, and hence the adaptability of the suggestions are noted as appropriate.

(i) Needs and Priorities Relevant to Particular Stakeholders

Table 54 outlines recommendations for the enhancement of interpretation in Australian whale watching that pertain to discussion from 10.2, where results demonstrated the relevance of the various elements of the human ecosystem of the nature-based tourism in terms of the function of interpretation as a management tool. In this sense, recommendations are relevant to the roles of different types of interpreters in whale watching or other nature-based tourism, and their knowledge of the interpretive audience and natural resources of the tourism experience.

A major theme of these recommendations is to encourage the interpreters' consideration of *how* they can contribute to the use of interpretation as a management tool for whale watching. Some of the recommendations require the coordination of effort with other types of interpreters (e.g. between RMAs and tour operators; recommendations 1E, 1F, 1G in Table 54), whereas others identify needs which should be addressed within an organisation or amongst peers (e.g. between RMAs from head and district offices; between different tour operators; 1A to 1D).

Another theme of the recommendations is for interpreters to identify relevant aspects[80] of other social groups and elements of the tourism phenomenon , and to incorporate these into the use of interpretation. For instance, recommendations 1E to 1G in Table 54 refer to measures which incorporate the key features of the tourism participants and resources/context of whale watching into interpretation. Each of the recommendations also raises the issue of the scale for the application/discussion of interpretation. Several recommendations are most appropriately directed toward specific sites (e.g. 1E to 1G), some correspond to a more general consideration of interpretation as a management tool for nature-based tourism (e.g. 1A, 1C), and others pertain to the use of interpretation on both scales (e.g. 1B, 1D).

In all cases, the recommendations address basic issues pertaining to the role of interpretation as a management tool, which are applicable to the interpreters' use of this tool in enterprises other than just whale watching. For instance, recommendation 1A regarding an increased profile of interpretation amongst RMAs' management duties would have benefits for the use of the tool in National Parks, other protected areas, or different tourism enterprises that concern resources under the jurisdiction of the various government environment department. Though this type of recommendation is quite broad, it arises from results in the national and case study site profiles which characterise the current use of interpretation by RMAs for whale watching, and for nature-based tourism in general (e.g. in terms of resource deficit, staffing trends).

In fact, in respect to the priority of recommendations, the more capacious issues are in many cases the most important, *because* of their implications for all interpretive products and practices in whale watching, *and* their clear relevance to interpretation in other

[80] as illustrated by results in section 10.2

TABLE 54 Recommendations I: Pertaining to Interpreters and Their Role in Whale Watching Management

#	TARGET*	RECOMMENDATIONS
1A	RMAs	• Prioritise interpretation as much as possible within RMAs, by identifying it as a major facilitator of other resource management duties.
1B	RMAs	• Maintain/foster dialogue between state and district offices of resource management agencies regarding the most efficient and meaningful (re: management concerns) applications of state-wide interpretive campaigns to discrete sites
1C	NGOs	• Promote direct involvement from different types of NGOs and illustrate avenues for their : - provision of interpretive products, - contribution to interpretive processes of development, and/or - delivery of interpretation (themselves); as appropriate
1D	Tour Operators	• Encourage tour operators to consider how the features of the tourism experience they offer can influence the application of standards for best practice interpretation; and to consult other operators who share similar features, in order to behold examples of the success and failure of interpretation under those circumstances.
1E	RMAs, NGOs, Tour Operators	• Highlight prominent management issues or features of the experience at the individual whale watching sites, in order to clearly convey the uniqueness and management needs (ie. appropriate behaviour) particular to the area/experience.
1F	RMAs, NGOs, Tour Operators	• Facilitate any access to interpretation available prior to and during the experience (e.g. by means of position, host venues) to attract and maintain attention to it by whale watchers.
1G	RMAs, NGOs, Tour Operators	• Identify / incorporate aspects of whale watcher travel patterns and previous experience into the design and delivery of orientative and educative interpretation. Incorporate their preferences for topics and more in depth information into educative content.

: Number of the recommendation, as referred to in discussion

* : Target refers to the main party or parties to whom the recommendation is directed; these parties may be responsible in part for implementing the recommendations, although additional avenues for this (e.g. through policies, accreditation schemes) are presented in section 10.4.2

red text : denotes the high priority of the recommendation, as described in discussion

nature-based tourism enterprises. That is, recommendations which draw attention to the general need for interpretation and the potential roles of different types of interpreters are necessary in order to enable a more specific focus on the application of the management tool. For instance, the prioritisation of interpretation as a management tool within RMAs (part of recommendation 1A in Table 54) is necessary before there can be informed and meaningful dialogue between different offices for its use at a particular site (ie. recommendation 1B). Regular dialogue between the offices would then facilitate more detailed tasks like the selection of appropriate content for interpretation or the coordination of its delivery (e.g. according to recommendations 1E and 1F).

(ii) Needs and Priorities Relevant to Particular Standards for Best Practice

Table 55 summarises the major recommendations from as they correspond to results on the status of interpretation in Australian whale watching from section 10.3. Recommendations draw together the dimensions of interpretation as a management tool, and expose prominent themes regarding necessary measures to enhance the use of interpretation in this industry.

Several of the recommendations in Table 55 direct an interpreter's attention to *why* it is advantageous to use interpretation in nature-based tourism like whale watching. Also, the recommendations enable interpreters of all types to translate their goals for interpretation into action and address particular strengths and weaknesses of the industry. For example, recommendations to increase the production of printed materials (e.g. recommendation 2E) or to develop content which addresses longterm behaviour relevant to whale protection (e.g. 2G) both correspond to the current performance of interpretation in Australian whale watching.

Furthermore, whilst the recommendations in Table 55 refer in part to the general premises of best practice standards, the specific suggestions and corresponding priorities are derived from particular needs identified by the empirical examination of interpretation in Australian whale watching. For instance, recommendation 2C refers to the need for greater communication between interpreters (cf. Standard IV), although it distinguishes the issues of frequency and the nature of information exchange as priorities for the Australian industry. Additional research is required to identify the extent to which these types of needs (ie. specific aspects of best practice standards) are shared as *priorities* for other nature-based tourism enterprises, although discussion from section 10.3 has illustrated known examples where there are some parallels between results from the current research and the use of interpretation in different contexts.

A major theme within these recommendations is the advantage of coordinating interpretive efforts between the types of interpreters (RMAs, NGOs and tour operators). Although this is emphasised by one recommendation (2C) in respect to the nature of such coordination (cf. Standard IV), the cooperation amongst interpreters when addressing all

TABLE 55 Recommendations II: Pertaining to Best Practice Standards for Interpretation

#	Relevant Standards*	RECOMMENDATIONS
2A	I, II	• Encourage thought amongst interpreters regarding their own values of the resources of whale watching and how/if these are portrayed in their interpretation.
2B	III	• Debunk the myth of rigid planning/evaluation activities but promote greater attempts toward the sophistication and formalisation of strategic effort to develop, implement, and review interpretation.
2C	IV	• Foster communication lines between interpreter types to encourage a greater frequency of information exchange specific to the use of interpretation.
2D	IV, V, VI, VII	• Highlight the orientative potential of interpretation as a management tool for whale watching; and through the coordination of effort between interpreters, facilitate acquisition of this type of information in both the pre-visit stages and on-site/ during the experience.
2E	V, VII	• Increase production of printed materials available off/on-site for all types of whale watching experiences; in particular, include both orientative (as above) and educative information in these materials such that it can be consulted when most convenient and important[81]
2F	VIII, IX	• Develop interpretive content according to techniques for creating mindfulness that specifically address (a greater amount of) holistic themes, especially the factors in the intent to behave in an environmentally responsible manner.[82]
2G	VIII	• Regarding whale watching guidelines and other content on whale/environmental protection, make explicit reference to the longterm relevance of this information to encounters with the animals and/or activities in the marine/coastal beyond the current tourism experience.

Note: Targets for these recommendations (cf. Table 54) include all whale watching interpreters (RMAs, NGOs, and tour operators), as noted in discussion.

: Number of the recommendation, as referred to in discussion

* : refers to the relevance of the recommendations according to the premises of standards for best practice interpretation

red text: denotes the high priority of the recommendation, as described in discussion

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[81] e.g. for orientative: prior to arrival; for educative: after the experience, in terms of fostering longterm behaviour for whale and environmental protection.

[82] ie. rather than using mindful techniques only for the presentation of general facts about the resources of the tourism

recommendations in Table 55 would further enhance the use of interpretation in Australian whale watching. For example, to facilitate whale watchers' access to orientative interpretation (recommendation 2D), RMAs, NGOs and tour operators should consider who has the most direct and/or frequent access to the interpretive audience during the pre-visit stages of whale watching, and design their efforts accordingly. Another main theme of the recommendations in Table 55 (ii) is that they represent specific aspects of content and delivery which, at the very least, should feature in interpreters' strategic effort to develop and implement interpretation.[83] A higher profile for these types of suggestions within site-specific measures (e.g. Management Plans) as well as a national forum could increase the sophistication of interpretation in whale watching and the dedication to professionalism by its practitioners.[84]

Similar to the point made in the previous sections regarding the scope of recommendations, the notion of priority of the recommendations in Table 55 is also derived from their ability to integrate and/or facilitate each other. In this sense, recommendations to increase the frequency of liaison between interpreters (2C) can provide the basis for addressing the coordination of access to interpretation in different stages of the tourism (2D). Likewise, consideration of recommendation 2A regarding goals for interpretation is essential before further attention to one particular goal (ie. longterm implications of interpretation) as addressed in 2G would be most pertinent.

In terms of the targets, recommendations are appropriate to each type of interpreter (RMAs, NGOs and tour operators) in Australian whale watching, and some explicitly call for the attention of all types of interpreters *together* (e.g. 2C, 2D). Nonetheless, the relevance of the recommendations to certain types of interpreters and the notion of priority varies according to the particular site for the tourism. For instance, even though a recommendation for the increased production of printed interpretation (number 2E) is applicable and important in a general sense to Australian whale watching (as noted by empirical results of both the national and case study scales of enquiry), it may be a higher priority for RMAs and NGOs in relation to sites with predominantly independent whale watching activity, than for areas where most interpretation is delivered by commentary.

Thus far, discussion has insinuated that individuals and different groups of interpreters can address the recommendations for enhancing interpretation in whale watching. However, many of these recommendations (and those in Table 54) could also be accommodated within specific policies, training activities, accreditation schemes, professional organisations or other forums for liaison. The means by which these opportunities could incorporate the recommendations are outlined in the following section.

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[83]e.g. in terms of goal setting (2A), development of certain themes for education and environmental protection (2F, 2G), and features of the coordination of orientative efforts according to stages in the tourism experience (2D, 2E).

[84]as described in section 10.4.2

10.4.2 Opportunities for Enhancing Interpretation in Australian Whale Watching

(i) The Importance of Formalising Best Practice Standards

Overall, the 'regimes' presently in place to manage Australian whale watching through interpretation (and other tools) comprise a loose conglomeration of stakeholders and strategies that struggle with diverse priorities, responsibilities and jurisdictional boundaries. In absence of dominating bureaucratic boundaries for the use of interpretation in Australian whale watching, there exists a degree of freedom that can engender innovation and enable the most enthusiastic amongst the different types of interpreters to spearhead new techniques. Ideally, though, such efforts would be facilitated and promoted through coordination with other interpreters. Disadvantages of their 'loose conglomeration' is that there is no *predominant* association or framework in place to obligate adherence to any standards for the best practice of interpretation in whale watching, nor to facilitate the implementation of recommendations based on empirical review of interpretation's current status. Indeed, at this stage in Australian whale watching, there are no policies in place that ensure the use of interpretation at all.

Interpretive efforts are clearly encouraged within the tourism,[85] and as demonstrated by the current research, they are embraced and undertaken by RMAs, NGOs, and tour operators. Nonetheless, interpretation in Australian whale watching at the moment is ultimately *reliant* upon the personal initiative, interest and capabilities of an eclectic group of interpreters. As such, the extent and quality of the future use of the management tool in this tourism remains uncertain.

Increased discourse & formalisation of best practice standards, as well as the pursuit of the specific recommendations for the Australian industry, by means of the avenues outlined in this section (10.4.2) can help to chart a discernible course for the future use of interpretation in whale watching. It is argued that the effective (and enduring) integration of interpretation into the management agenda and activities for Australian whale watching is facilitated by greater promotion of its use and demonstration of its success in local, national and international arenas. Certainly, no single strategy or policy is likely to be able to adequately address all salient issues. Yet attempts to formalise the essential features of best practice interpretation can still ensure that it attracts the attention as an essential management tool for whale watching and other nature-based tourism, and can equip interpreters with the knowledge and skills (and motivation) that may increase its potential for success.

Many of the potential opportunities to formalise best practice interpretation in Australian whale watching have been mentioned in previous discussion, in terms of their support of or receptivity to the premise of best practice standards. In fact, several were specifically related to Standard IV regarding liaison opportunities between interpreters. As delineated below, though, it is apparent that they also constitute avenues for addressing specific

[85] ie. as noted in the emerging literature for the tourism, as well as conferences and policies (see below).

priorities for the industry as identified by the current research, and can accommodate recommendations that pertain to all dimensions of interpretation (processes, practices, products). The following organisations, policies and forums have the potential to address each of the recommendations on some scale (local, national, international), although the suggestions outlined here indicate where emphasis may be *best* placed in terms of the enhancement of interpretation in Australian whale watching, enterprises of this activity further afield, and different forms of nature-based tourism.

(ii) Pursuit of Recommendations to Advance Interpretation through Local Avenues

The recommendations for enhancing interpretation are intended to result in the development of interpretive products, the coordination of key practices and processes, and the acknowledgment of each of these within policies or forums for liaison.[86] The forums would have the farthest reaching benefits in terms of a larger audience of potential interpreters, although the manifestation of recommendations in localised products and activities is still of great value to particular sites or tourism enterprises.

An example of the latter is a newly developed whale watching brochure by DENR (now the Department of Environment, Heritage and Aboriginal Affairs [DEHAA]), which incorporates the basis of recommendations for interpretive content, and demonstrates their applicability to tangible items. The content of the brochure[87] addresses aspects of recommendations 2E, 2F and 2G (in Table 55, p. 331), as the text incorporates mindful techniques for behavioural codes (e.g. use of imagery, theme development) and emphasises the longterm nature of whale protection. This brochure represents progress toward best practice interpretation in terms of the priorities for the industry, and as such it exemplifies how this type of material could be developed by other whale watching interpreters or for other nature-based tourism from the recommendations.

Whilst the above is the most detailed type of application of recommendations, other local opportunities are able to address a greater range of the priorities for enhancing interpretation and hence result in more than specific products. These opportunities include:

(1) the use of best practice standards (and in particular, the recommendations) as topics in the agenda of workshops, and

(2) the formalisation of standards within management plans and tour operator permits for a tourism activity or discrete site.

Firstly, regular workshops between interpreters in Australian whale watching are important to ensure that interpretation itself is not marginalised by any occasional nature of their liaison.[88] Though these interpreters may not have very frequent or periodic

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[86] regional, national and/or international

[87] '*The Journey of the Southern Right Whale*' (DEHAA 1998); produced for state-wide distribution

[88] as noted in the national and case study profiles

liaison otherwise, their assembly at local or regional workshops to discuss management of the tourism represents an opportunity for dialogue about the general use of this tool, and about priorities for its enhancement. As well as to pursuing recommendation 2C itself, the workshops would be able to dispense more than updated whale information, and could promote means by which this information is ideally conveyed in content and practice. For instance, discussion could include the necessity and nature of *strategic* planning for interpretation (cf. recommendation 2B), in terms which illustrate practical ways for the workshop participants to select appropriate content/materials and monitor the success of their efforts. A broadened agenda to current workshops could also undertake recommendation 2A, where discourse on setting goals for interpretation could provoke thought amongst participants regarding their own values of whales/the environment, and how (or if) these are addressed by their use of the management tool.

To take full advantage of these workshops as a means for addressing interpretation recommendations and/or the best practice standards, they must be periodic, and flexible enough to accommodate the above topics in discussion. Part of this flexibility presupposes the interpretive interest, knowledge and skills of the workshop hosts, who in the case of Australian whale watching are primarily RMA staff. Ideally, RMA staff would address similar issues to the above within their own in-service training, which could also be a forum for implementing recommendations 1A and 1B (Table 54, p.329). According to results of the current research, RMA staff welcome additional opportunities to participate in interpretive training (ie. where sessions are not restricted to new or seasonal staff), and to enhance their skills in delivering interpretation in nature-based tourism and whale watching specifically.[89] Thus their current interests suggest they are receptive to addressing priority issues for enhancing interpretation in whale watching (and otherwise) within their own agencies, and are already advocates of the main avenue to do so (ie. training).

Regarding the RMAs' role in hosting workshops between other interpreters, though, the recommendations made in this thesis may in fact be best served by interaction amongst all parties, rather than instruction by one. Dialogue between RMAs, NGO staff and tour operators could address recommendations on interpretive content which are relevant to management issues for local whale watching activity (e.g. 1D, 1E, 1G in Table 54), such that the expertise and knowledge of these different stakeholders is utilised to maximum efficiency. This type of liaison (ie. local/regional workshops) between interpreters could also acknowledge (and lead to the implementation of) recommendations pursuant to the coordination of interpretive effort (e.g. 1F, 2D); significantly, this could occur on a scale where action could be taken immediately. For example, a strategy for the division of interpretive responsibilities could be devised at a pre-season workshop, attempted during that whale watching season, and reviewed at the end of the season or at a workshop the

[89]Primary issues needed for inclusion in training (e.g. skills in delivery) pertain to interpretive practices/processes applicable to all nature-based tourism within the RMAs jurisdiction.

following year. Hence these local opportunities represent one of the most (potentially) rapid and direct ways to enhance interpretation in whale watching in general, and to address the priorities regarding its current status.

Another direct (but not necessarily as expeditious) avenue to implement recommendations for interpretation in a local/regional arena exists within the development or modification of Management Plans. Ideally, these Plans would *formalise* high quality standards for interpretive efforts used in whale watching of a terrestrial and/or water-based nature, and which occurs in protected areas or beyond. The process of developing and/or changing a Management Plan to this end may offer a means of consultation and coordination between different interpreters (and other human stakeholders in the tourism).[90] Furthermore, on a local or regional scale, Management Plans could incorporate site specific information in their directives that can enhance interpretive content (cf. recommendations 1E, 1G) and delivery (2D), and could acknowledge key strategies for interpretive products or practices (e.g. 1F, 2F, 2G).

Since specific products and practices of interpretation may need to change over time, Management Plans may be most appropriate as an avenue for implementing recommendations regarding strategic processes for the use of this management tool. Amongst the higher priorities for the Australian whale watching industry are the setting of goals and development of strategic frameworks for planning and evaluating interpretation, which contain enough specificity to guide immediate and practical efforts (cf. recommendations 2A, 2B in Table 55). Management Plans represent opportunities for a formal commitment to the use of interpretation for value-adding and environmental protection, and can accommodate detailed measures to facilitate the achievement of such goals via strategic effort (e.g. identifying a timeline for action, the division of responsibilities, criteria for assessment).

The potential for Management Plans to implement specific recommendations of the current research is demonstrated by recent Plans for two of the case study sites, both of which incorporate results from the 1996 empirical work into their tenets.[91] An official Management Plan now exists for the Head of the Bight,[92] and a Development Study in Warrnambool sets the precedent for future work at the Logans Beach whale watching platform. Interpretive items addressed by the Bight's Plan include (*inter alia*) the necessity of increased and accurate orientative materials for the site (cf. recommendation 2D), better access to educative materials during the experience (cf. 1F), and a timeline (albeit somewhat vague) for implementing various interpretive products/practices.[93] Warrnambool's Development Study (by Atkins 1997) is also a useful model for

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[90]e.g. by offering community consultation periods, as exemplified by the development of the GABMP draft and final management plans (see Edyvane & Andrews 1995; DEHAA 1998).

[91]e.g. whale watcher data and the performance of particular interpretive products

[92]in respect to its adjacent Great Australian Bight Marine Park; the Plan was developed by DEHAA in conjunction with Primary Industries and Resources SA, and based on the majority of the Draft Plan's recommendations (Edyvane & Andrews 1995), as described in Chapter Seven.

[93]Also note that some of the items have already been enacted, as described in section 10.2.

implementing these types of priorities for interpretation, especially in terms of its recognition of the importance of pre-/post-visit orientative topics (cf. recommendations 1F, 2D) and of the development of links with peripheral venues (cf. 1C) for the future management of the local whale watching activity through interpretation.

For sites/activities without Management Plans, several recommendations could still be formalised within permits or licensing criteria for tour operators. In Australian whale watching, sites which require operators to obtain permits do not include the provision of interpretation amongst the criteria. The introduction of the mandatory use of interpretation as a condition of tour operator permits (e.g. Kaschner 1993) seems a logical first step in addressing their use of the management tool. However, this may in fact be too elementary, or at least not take enough advantage of this avenue for enhancing interpretation, in light of the results of the current research. The status of the whale watching tour operator use of interpretation suggests that permits could also be used as an opportunity to encourage *better quality* interpretation (cf. best practice standards in general, and priorities identified in the recommendations). The tour operators in the national and case study profiles already provide interpretation of a 'background nature' (cf. Kaschner 1993), and the weaknesses arise from more detailed aspects of their efforts (e.g. in respect to content and availability).

It is conceded that operators who do not use interpretation may have failed to respond to the survey for this reason,[94] and the mandatory provision of interpretation could be appropriate in terms of new operators who engage in the tourism (if they are not already familiar with the use of the management tool). Nonetheless, the potential for permits to address specific recommendations could still be pursued, particularly in terms of the including reference to longterm whale protection in the content of interpretation (cf. recommendation 2G). For instance, permits in WA require whale watching operators to adhere to the *Australian Whale Watching Guidelines* (ANPWS 1989) in their practice of the tourism (see Coughran 1994); yet they could also mandate that the operators *convey* these guidelines to their participants, such that these whale watchers would be aware of how their own behaviour could affect whales in other contexts.[95] This implementation of the recommendations would set a suitable precedent for other whale watching areas or countries which currently use permits (e.g. New Zealand, Patagonia; see Carlson 1995; Baxter & Donoghue 1995; Hawke 1996; Orri & Visintini 1996), or which are considering them (e.g. Japan; see Mori & Yamada 1996); as well as for other nature-based tourism which requires permits/licenses or conditions of entry for its operators (e.g. some terrestrial or marine parks).

Undoubtedly there are problems with attempts to legislate 'quality' interpretation in whale watching or nature-based tourism; it is recognised that the priorities identified in

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[94] ie. the profiles do not confirm that *all* Australian whale watching tour operators use interpretation

[95] Though many operators already do this, it is still important as an addition to permits because of the identified need to highlight the longterm nature of whale protection.

this research will not remain immutable, and of course inherently reflect the viewpoint of the author in terms of what constitutes 'best practice' in the first place. For these reasons, certain aspects of the recommendations for interpretive products and practices may be more appropriately addressed within other national opportunities for discourse and attention to the use of interpretation in whale watching.

(iii) Promoting Recommendations for Best Practice Interpretation in National and International Arenas

The ATOA's accreditation program for Australian 'ecotourism' operators is perhaps one of the most valuable opportunities for enhancing interpretation in whale watching in a manner which reflects the priorities identified by the current research. In its present form, this program would be able to embrace a wide range of the thesis' recommendations (described below), and in future it could be a platform for promoting additional standards for best practice interpretation amongst those who have direct contact with the interpretive audience in nature-based tourism.

Another advantage of the accreditation program is its suggestion that greater effort toward 'best practice' interpretation can bring tangible rewards to tour operators.[96] Hence it appears to be in their own interest to pursue this status, whilst it still affords them some freedom to draw their own conclusions about what is 'best practice' (e.g. in terms of any bonus criteria to which they choose to adhere). Although the accreditation program was not addressed in empirical work due to its recent introduction at the time of study,[97] it now has the potential to be a model for introducing high quality interpretation to whale watching and other nature-based tourism, and can even acknowledge the unique aspects of specific enterprises.[98]

In respect to interpretation criteria (for whale watching and other nature-based tourism), many of the core requirements of the ATOA accreditation program seem to be already met by the tour operators in the current research's samples.[99] For example, most tour operators in the samples do provide more than one form of interpretation and use at least two sources as references in their development of interpretive content (both activities represent core criteria in the accreditation program). However, results suggest that other core requirements may need greater effort by Australian whale watching tour operators, such as the mention of the values or significance of an area (which relates to holistic themes) and the local management issues relevant to the tourism. Note that these particular core requirements also correspond to specific recommendations for

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[96]ie. through enhanced use of the management tool and the associated benefits (recall Table 3, p 54), and from the label of accreditation as a promotional advantage

[97]ie. the scheme for tour operators' consultation was released the same year of the field studies, in the months after the whale watching season (when data were collected)

[98]In respect to Australian whale watching, for instance, it is already highlighted in the scheme as a unique form of nature-based tourism with special requirements, such as explicit limits to approach distances to the focal animal.

[99]Also refer to the introduction of this scheme in Chapter Three, section 3.4.2

interpretation based on its current performance in the industry.[100] Thus it is advantageous to the future enhancement of interpretation that these points have been acknowledged in a type of formal strategy which has the potential to reach tour operators (whale watching and otherwise) on a national basis.[101]

In light of the current research, some changes to the ATOA accreditation program could be made such that it would more accurately reflect other priorities for enhancing the use of interpretation in Australian whale watching:

- Core criteria could demand more than just informal evaluation, and require periodic and reviews of interpretive efforts.
- Behavioural codes and theme development could become core (rather than bonus) requirements of interpretive content .

Results reveal that most operators readily engage in informal evaluation, and that greater structure, deliberation and regularity of their efforts could yield more informative data for assessing the performance of their interpretation (cf recommendation 2B). Also, a change of emphasis or priority of certain criteria included in the present program could recognise the value of behavioural codes (e.g. whale watching guidelines) and theme development as beneficial means of integrating an aspect of mindfulness theory with holistic and longterm perspectives of environmental protection in a single effort (and hence is relevant to recommendations 2F, 2G). Appendix 7 relays an example of theme development of this nature applicable to whale watching and adaptable to other nature-based tourism, which suggests that this technique is more of an essential (rather than optional) part of an interpretation program.

Thus far in section 10.4.2, avenues for implementing the recommendations have focused primarily on the activities/skills of RMAs and tour operators, but the current research also illustrates the salience of many types of NGOs to interpretation for Australian whale watching. In terms of potential avenues for recommendations, those which refer to aspects of interpretive products and practices are of course appropriate to the 'individual' efforts of an organisation, but also of relevance is the capacity for some NGOs to be a platform for achieving farther-reaching possibilities. Specifically, large conservation groups could contribute to the enhancement of interpretation in whale watching (and nature-based tourism) by addressing priorities that pertain to longterm environmental protection (ie. recommendation 2G).

Several conservation groups with national and international agendas for whale protection (e.g. Greenpeace, Pacific Whale Foundation) are involved in creating interpretive information on specific issues, but did not participate in the current research. One cannot conclude that they do *not* take advantage of tourism like whale watching as an ultimate

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[100] e.g. holistic themes, recommendation 2F; local issues 1E.

[101] or an international basis, if this type of scheme is used as a model for other industries, as suggested above.

opportunity to disseminate their material. However, they could be targeted as key organisations to consult for interpretive content or other contributions to interpretation.[102] With campaigns to protect whales in other contexts (e.g. whaling, captivity), certain conservation groups could offer whale watchers an additional perspective on what they, as individuals, can do to help those animals they enjoyed viewing during the tourism experience. There is also greater scope for the NGOs' cooperation with tour operators which could further their own conservation mandates and help ease the responsibilities of the operators, in terms of providing either interpretive materials or staff aboard the vessels (cf. 1C).[103]

One conservation group in particular, the Pacific Whale Foundation [PWF], represents an important avenue to enhancing interpretation in Australian (and other) whale watching, and is a prominent example of the advantages of NGOs' contributions to the use of this management tool in nature-based tourism. Although based in Hawaii, the PWF extends its knowledge and expertise to the whale watching operations in Queensland, where it places volunteers aboard tour vessels to deliver interpretive commentary. The PWF also provides printed materials for use by the operators (ie. as part of the vessel's library). Other details of these efforts for interpretive content and delivery are unknown, as only one of the tour operators in the current research used PWF volunteers as interpreters, and the Foundation itself did not respond to the survey. Nonetheless, these present activities of the PWF constitute a means of incorporating specific priorities for the industry (e.g. recommendations 1C, 2C, 2E). Given the PWF's potential for broad and direct involvement in interpretation, an expanded agenda and scope for their efforts (ie. beyond Queensland) could further benefit whale watching in Australia. This role of an NGO in interpretation could also serve as a model for the for other conservation groups (in respect to recommendation 1C) whose causes are relevant to resources of nature-based tourism.

A forum for the exploration and discussion of these types of interpretive roles for NGOs in whale watching is presented by national conferences for the tourism, and by professional organisations with expertise in nature-based tourism and/or interpretation. In respect to the latter, Australia's professional association for interpreters (the IAA) could consider its capacity to serve various contexts of nature-based tourism (like whale watching) as a theme for one of its annual conferences. As part of such an exploration, the IAA could determine how best to make its proceedings accessible to the nature-based tourism enterprises of Australia who have not yet been represented at the conferences. Developing links with other industry stakeholders could also include promotion of the benefits of IAA membership of the association to further cultivate professionalism in the

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[102]In this case, 'targeting' these organisations refers to convincing them to participate in whale watching interpretation (or at least discussion on the matter) cf. recommendation 1-3, and this could be the task of RMAs in the spirit of resource sharing, or hosts of large forums for liaison regarding the tourism.

[103]e.g. Specific interpreters (ie. whose sole task is interpretation) aboard tours can offer accurate information, allow captains to focus on other duties, provide more information on conservation avenues

use of interpretation for nature-based tourism.[104] These types of undertakings relate to the implementation of recommendations 1C and 2C, and need not be restricted to Australian associations. The NAI has similar possibilities for its interpreters in the USA, and both associations have international scope for distribution of innovative ideas on best practice in a variety of contexts, and as a means of promoting, debating and expanding the concept of best practice proposed in this thesis. However, there must first be effort to increase access to their publications, or representation at their conferences.[105]

A similar opportunity for the enhancement of interpretation for Australian whale watching specifically could be taken in regards to the *Encounters with Whales* conference series. As noted in proceedings and by interpreters in the empirical profiles, this conference series attracts a diversity of stakeholders in the tourism, but could improve the representativeness of its proposed policies (from workshops) and the breadth of its information exchange (e.g. through presentations). Future research directed specifically toward the reasons why the whale watching stakeholders attend or do not attend could indicate the best means for encouraging greater participation in the series. In the meantime, the conferences still represent an avenue for the pursuit of recommendations for the priority changes to the industry's use of interpretation as offered by this thesis.

In addition to providing exposure to individual presentations from delegates with proficiency in interpretation,[106] the *Encounters with Whales* workshop discussions are an important platform for detailed discussion of best practice standards such as those developed here, as well as others borne of the delegates' own conceptions and needs. In fact, several topics similar to the recommendations for interpretation that arose from the current research are acknowledged in a main product from a 1995 workshop, the proposed National Education Strategy.[107] For instance, a feature of the proposed Strategy which appears to be especially profitable in light of the research results is its advocacy of training programs to enhance the use of interpretation in whale watching (noted above as a means of addressing other recommendations). The Strategy also advocates evaluation of whale watchers in order to accommodate their interests in interpretation (cf. recommendation 1G), the coordination of interpretive efforts (e.g. 2C, 2D), and the 'recognition' of goals for interpretation (see Colgan et al. 1996).[108] Thus in this instance, representatives of Australian whale watching addressed issues that have now been confirmed by the current research as priorities for the industry.

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[104]such as directories of other members, advertising assistance, access to other interpretive information; as described in Chapter Three, section 3.4.2

[105]e.g. conference proceedings, journals

[106]e.g. as seen in the 1995 conference from Orams and Crabtree & Weiler's papers

[107]In this sense, it seems that the delegates of the 1996 conference, whilst not completely representative of the national whale watching industry (as noted in Chapters Six and Seven), were still able to construct a policy which addresses key issues as identified in this research on additional stakeholders.

[108]Here the notion of 'goals' ostensibly refers to clear conceptions held by the stakeholders (though none are described), but at the very least the Strategy could inspire thought about goals which may not yet be articulated by interpreters in whale watching (cf. 2A).

The Strategy (or the idea of such a strategy) even has interest from whale watching interpreters who did not attend the conference series (as noted in the results of this research), and appears to be able to accommodate their own requests and needs. Yet in a broader sense, this National Education Strategy, in itself and as a general representation of a *type* of avenue for the pursuit of recommendations in Australian whale watching, is valuable to the enhancement of interpretation as a potentially formal outcome of *national* liaison on the management tool that acknowledges specific priorities for the industry.

A similar approach has been undertaken in the international arena, in a late 1997 workshop on the educational values of whale watching hosted by several conservation groups (ie. IFAW, European Conservation and Tethys) and attended by a diverse array of delegates (academics, government staff, tour operators) representing whale watching enterprises around the world. The proceedings of this workshop offered insight into the basic nature of whale watching interpretation in several countries, and were compiled in the form of a guidebook to assist interpreters to develop their efforts for the tourism (see IFAW et al. 1998). Again, certain priorities identified here for the Australian industry were also advocated by this workshop, such as more intensive evaluation of interpretation and its audience (cf. recommendations 1G, 2B), and a more holistic perspective of whale protection in interpretive content (2F). The IFAW et al. (1998) workshop is the third in a series inspired by the IWC's *Whale Watching Resolution*, and its proceedings are also intended to find an audience amongst the delegates to the IWC's annual meetings. Hence this type of workshop is a particularly valuable opportunity to maintain interpretation's status as a high priority for management discussion amongst the international representatives of the management of human and cetacean interactions.

As a platform for discussion and promotion of best practice interpretation, these international forums for whale watching are drawing attention to pertinent issues in the enhancement of the management tool as identified by the current research. However, there is a need to introduce to their discussion additional issues and influences on the success of interpretation, as noted in the current research. Thus far, these national conferences (*Encounters with Whales*) and international workshops (IFAW et al. 1995, 1998) and meetings (IWC) have emphasised one specific context of whale watching: boat-based tours. Detailed information on the nature of the Australian industry can offer further insight into important contextual features which affect the performance of interpretation in other types of enterprises. In particular, the presentation of baseline data on interpretation and whale watcher profiles generated by the current research (and similar endeavours) would increase the validity of inventories of the industry as generated by international fora such as the IWC (e.g. Gambell 1995), and further studies could monitor the changes to these profiles in general or as a result of modification to existing management activities.

Together, the forums, policies and programs described in this section (10.4.2) illustrate their capability (and in some cases, current efforts) to address prominent concerns and

issues related to the use of interpretation in whale watching (or other nature-based tourism). There are recurrent themes within their conception of key issues for enhancing interpretation, and importantly, these refer to many of the priorities identified in the current empirical work regarding the actual performance of interpretation in whale watching (of which there are few other indications). However, at present, none of the forums, policies or activities noted here incorporate the premises of *all* of the best practice standards developed in this thesis, nor all of the recommendations arising from their current status in Australian whale watching. In particular, recommendations which are *not* acknowledged in the existing opportunities to enhance interpretation concern the facilitation of access to interpretive efforts and coordination between different types of interpreters regarding interpretive content (promotional, orientative, *and* educative) as part of a broader information strategy for the tourism (1F, 2D, 2E) . Though these recommendations raise contextual (and often site-specific) issues, the salience of access and a coordinated effort to the successful exposure of interpretation to its whale watching audience (as seen in results of the current research) suggest that these issues are worthy of greater attention in the key interpretation forums and policies.

10.4.3 Further Research Needs

It is not necessarily possible to address each recommendation in this thesis via a single avenue, and discussion has focused on the possibility of different scales of emphases for their implementation. In all cases, however, the primary avenues (above) could increase their capacity to enhance interpretation in whale watching through continued dialogue on the subject, such that additional issues and priorities that account for the dynamics of the tourism are raised and pursued. Further research into the use of interpretation in whale watching and nature-based tourism can facilitate the identification of these issues.

The approach and execution of the current research is complex, and represents a comprehensive examination of interpretation in whale watching. Yet it is by no means exhaustive, and indeed, presents a plethora of opportunities and directions for other research. Many examples were mentioned in the course of this chapter, and/or alluded to in reference to particular results in the empirical chapters. Thus the suggestions cited here represent major directions which encompass the premises of more detailed studies.

The first theme for further research is the collection of baseline profiles for the main stakeholders in the nature-based tourism experience. Section 10.2 relayed the advantages of psychographic profiles of interpreters and their audience, but the importance of the features of the tourism resources and context warrants reiteration. In fact, the contextual theme of the current research demands that further studies conduct an initial review the nature of the whale watching industry at different sites in order to facilitate the application of the standards. In the instance of land-based whale watching sites, priorities would constitute identification of the impediments to accessing interpretation presented by an unstructured experience, and a review of the current

availability of materials and their correlation with visitor travel patterns and behaviour on-site. For example, other land-based sites in Australia present additional factors not seen at the case studies, which may confound the use of interpretation. In Encounter Bay (SA), sightings of Southern Right whales do not occur at a discrete site along the coast, and whale watchers who follow the whales' movements can visit different areas in a single day, such as National Parks, Council land, and areas adjacent to private property. Furthermore, the visitors occur in an extraordinary concentration of numbers (e.g. 12000 in a single day or weekend, see Olesinski 1994), which poses different risks to the natural resources of the vantage points and may affect access to interpretation if available on-site. In this case, research on the nature of the whale watching experience and its visitor profile is necessary to determine how to induce order to the exposure to interpretation when it is most valuable (e.g. orientation before educative information).

Boat-based whale watching tours are encouraged to take advantage of their imposed structure of the experience, and research can help to define factors of this structure (e.g. distance of the departure point to whales) and other tour features which could affect the timing and method of the delivery of interpretive commentary.[109] The nature of the commentary itself is a priority issue for research, especially in terms of the consistency between what is claimed to be included and what is actually said, and the style of the commentary according to techniques of creating mindfulness in the audience. Variations between excursions or interpreters are important to the notion of the interpretation's status and quality, although this type of research in general must be particularly cautious in its approach, lest its results be perceived as more critical than constructive.

In both a national and case study context, research that examines the social networks between interpreters in greater depth may reveal political or personal reasons behind (and influences on) their liaison which might affect their use of interpretation. Studies on the capacity for information exchange and coordinated efforts with peripheral interpreters (ie. those with more remote contact with whale watchers, usually separate to their experience) would help to maximise the efficiency and perhaps comprehensiveness of interpretation as part of a broader information strategy for whale watching tourism.

The acceptance of best practice standards (or similar premises) by the whale watching and other nature-based tourist operators is an important theme for future research, and could specifically explore the progress of the ATOA accreditation program, discussion of interpretation within national forums, or instances of the incorporation of specific standards into interpretation. For example, the QDEH (1995) guide for whale watching interpretation was not mentioned by interpreters as a source for their planning activities, but research could address their receptiveness to the guide and its principles. Data of this nature would illustrate how these principles (or the standards promoted in this thesis) can be most efficiently introduced into industry practice.

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[109] e.g. seating arrangements on the vessel, conducive to either intercom systems or face to face contact between interpreters and their audience

Additional research on this thesis' individual standards for best practice can develop more complex indicators of their presence in the current interpretive efforts, and assess and fortify the factors behind their premises. Indeed, research that determines necessary additions, changes or added detail for the best practice standards may increase their ability to yield tangible successes in the interpretation of nature-based tourism. In particular, greater specificity regarding the premises of Standards VIII for inspiring environmentally responsible behaviour and IX for creating a mindful response by the interpretive audience is necessary, either in terms of individual factors or their function together within actual interpretive programs (cf. Orams 1995).

This detailed type of research may be best performed by academics, although they may also contribute to other types of research outlined above. In terms of other parties who can conduct any of the further research, this thesis has suggested that the standards themselves are important as an evaluative tool that can be applied by interpreters, be they RMAs, NGOs or tour operators. In this sense, research could contribute to broad scope issues as well as yield evaluative data pertinent to one's own efforts.

Finally, an essential part of enhancing interpretation for whale watching and other industries is the widespread discourse on the topic. Likewise, it is critical that the results from the research suggested here find an audience amongst those in a position to direct the creation, implementation and further enhancement of this management tool. This could occur either through the forums recommended above, or by the identification or formation of new opportunities for liaison between interpreters in nature-based tourism.

10.5 Conclusion: A New Hope for the Future of Interpretation in Whale Watching

This thesis has endorsed the basic tenets of interpretation as a management tool for nature-based tourism like whale watching, where it can fulfil important roles in environmental protection and visitor satisfaction. Examination of the current status and quality of interpretation in Australian whale watching has confirmed that there is a laudable foundation of its use, predicated upon widespread interest in its benefits and the advanced nature of several of its initial applications in both an orientative and educative capacity. This indicates that measures to enhance the use of interpretation in Australian whale watching are more a matter of facilitating efforts to incorporate and emphasise best practice, and need not be as concerned with convincing people to interpret in the first place, or overcoming a pervasive apathy for its use as a management tool.

However, trends in the deficiencies of the current interpretation are a warning against perceptions that its existence and the interest in its use are in themselves adequate endpoint. A more sophisticated approach would enable the industry to increase the

potential for the successful use of interpretation, and results of this research suggest that amongst highest priorities are the needs to:

- increase discussion amongst all types of interpreters regarding the use of the tool, especially in terms of its broad intentions and precise objectives;
- promote practical and strategic measures in the development of and modification to interpretation in the industry;
- discern and highlight particular roles or avenues for contribution to interpretation which account for the different groups of interpreters that comprise the industry.

The conceptual framework developed in this thesis can define the scope of further research on the management tool, and best practice standards set a precedent for the nature of its use. The ensemble of standards constitute a comprehensive direction for 'best practice' interpretation which accounts for its processes, practices and products. In particular, the standards are premised on the value of:

- key learning theories in environmental education;
- social networks, and the coordination and discussion amongst interpreters;
- contextual parameters of the nature-based tourism experience (temporal, spatial, ordinal, social, biophysical); and
- a philosophical basis for the use of interpretation, which is appropriate to the modern interaction between humans and cetaceans and/or other natural resources in context of tourism.

To apply the best practice standards for the development, implementation, and/or review of interpretation in any form of nature-based tourism, interpreters could consult their main points as an ensemble (Table 10, p. 114), empirical indicators (Tables 11-13, pp. 117-119), and ideally, review their theoretical development (Chapters Three and Four), in order to discern how they are adaptable to a specific context.[110] The interpreters' review of the summaries of empirical results (e.g. at the end of Chapters Six through Nine) and the corresponding recommendations would draw their attention to priorities for the Australian whale watching industry, and serve as baseline information on the nature of interpretation for comparison with future endeavours or other enterprises. As described in this last chapter, the best practice standards (and recommendations) are relevant to different scales of practical use in whale watching or other nature-based tourism, including their application as:

- components in manuals or guidebooks for the development of interpretive products (e.g. signs, brochures, booklets, commentary);
- evaluative indicators for the interpretive efforts of individual sites or tours;
- key elements of Management Plans or other formal strategies of individual sites;
- points of discussion for in-service training (RMAs) or regional workshops;
- criteria within accreditation programs for nature-based tour operators; and
- themes of proceedings for national and international forums for nature-based tourism management and interpretation.

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[110] e.g. who constitutes interpreters relevant to the coordination of efforts, what are the stages of the particular tourism experience, if the interpretive audience is independent or tour-based.

The contributions of this thesis represent a significant step toward the enhanced use of interpretation in whale watching where it can hope to fulfil its most ambitious goals. To further this potential, it is important to maintain vigilance regarding interpretation's application and achievements, and interpreters should continue to be mindful of any necessary expansion of the conception of best practice interpretation in light of new theories, information and/or circumstances. This attention, along with a renewed focus on the roles of interpretation as a management tool, the promotion of best practice standards for its use, and additional research would all enable interpretation to remain (deservedly) at the forefront of management discussion in whale watching.

As a prominent form of nature-based tourism, whale watching has emerged during a time in which human influence on the environment has come under greater scrutiny (Mercer 1991) and there is likely to be closer attention to the progression of the industry as it matures. The infancy of Australian whale watching has already attracted international interest, and the adolescence of its practices are also sure to have a global audience, as well as alert observance by the nation's own vigilant conservation groups and public (see Hodda 1996a). With its current status of interpretation, and importantly, its discernible interest in instigating improvement to its performance, Australia is in an good position to become a voice for the use of interpretation in whale watching activities abroad. The enhancement of interpretation within Australian whale watching, even if incremental, is therefore of penultimate importance to the future of this form of tourism, and could offer a new hope for our relationship with whales and with nature. Those who have been touched by an encounter with whales on the animals' own terms would surely agree that

'*leviathan...maketh a path to shine after him*' (Job 41).

Interpretation must continue to encourage this wake of the whales to linger, so that our consciousness is accompanied by the respect, ambition, and abilities to make leviathan's journey enduring.

APPENDIX 1
List of Abbreviations

ANCA	Australian Nature Conservation Agency
ANPWS	Australian National Parks & Wildlife Service
ATA	Albany Tourism Association
ATOA	Australian Tour Operators Association
CALM	Department of Conservation and Land Management
CDT	Commonwealth Department of Tourism
CMC	Centre for Marine Conservation
DART	Dartington Amenity Research Trust
DCNR	Department of Conservation and Natural Resources
DEHAA	Department of Environment, Heritage and Aboriginal Affairs
DENR	Department of Environment and Natural Resources
DNRE	Department of Natural Resources and Environment
EAA	Ecotourism Association of Australia
EPTA	Eyre Peninsula Tourism Association
GBRMPA	Great Barrier Reef Marine Park Authority
GABMP	Great Australian Bight Marine Park
IAA	Interpretation Association of America
IFAW	International Fund for Animal Welfare
IWC	International Whaling Commission
NAI	National Association of Interpreters
NGO	Non-government organisation
NMFS	National Marine Fisheries Service
PWF	Pacific Whale Foundation
QDEH	Queensland Department of Environment and Heritage
RMA	Resource management agency
SARDI	South Australian Research and Development Institute
SAWC	South Australian Whale Centre
WTIC	Warrnambool Tourism Information Centre
YLMP	Yalata Land Management Program

APPENDIX 2
ANPWS (1989) *Australian Whale Watching Guidelines*

Note

While these guidelines apply primarily to species of large whales, they do have application to other cetaceans such as dolphins and porpoises. These small cetaceans may approach vessels very closely e.g. to ride in the bow wave.

Whale researchers who have appropriate permits may have to approach whales closer than recommended in these guidelines but should behave responsibly keeping in mind the intent of the guidelines.

These guidelines have been prepared in cooperation with State and Territory government conservation agencies and others. Further information can be obtained from the following agencies:

NSW National Parks and Wildlife Service
PO Box 1967
HURSTVILLE NSW 2220
Phone: (02) 585 6444

Conservation Commission of the Northern Territory
PO Box 496
PALMERSTON NT 0831
Phone: (089) 89 4411

Division of Conservation, Parks and Wildlife
Department of Environment and Conservation
PO Box 155
BRISBANE NORTH QUAY QLD 4002
Phone: (07) 227 7801

National Parks and Wildlife Service
PO Box 1782
ADELAIDE SA 5001
Phone: (08) 216 7777

Department of Parks, Wildlife and Heritage
GPO Box 44A
HOBART TAS 7001
Phone: (002) 30 8011

Department of Conservation, Forests & Lands
PO Box 41
EAST MELBOURNE VIC 3002
Phone: (03) 412 4364

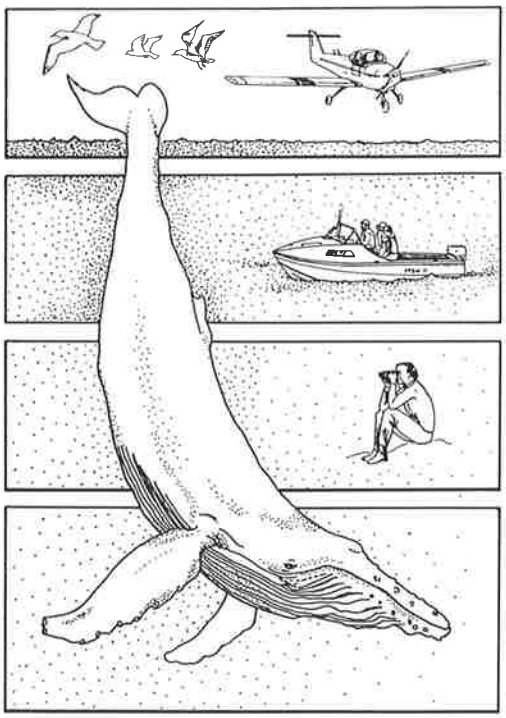
Department of Conservation and Land Management
PO Box 104
COMO WA 6152
Phone: (09) 367 0333

In order that these guidelines can be revised as experience accumulates, your comments and observations are welcome and should be sent to:

The Director
National Parks and Wildlife Service
GPO Box 636
CANBERRA ACT AUSTRALIA 2601
Phone (062) 46 62211 Telex AA62971 Fax (062) 47 3528

P.S. 12/10000/Sept/89

WHALE WATCHING GUIDELINES



Australian National Parks and Wildlife Service

Introduction

Whale watching can be an exciting and educational experience if done safely. Increasing numbers of whales are being seen in Australian waters in recent years. The reason for this is unclear, but one explanation is that with the cessation of commercial whaling in the seas around Australia, there are more whales and they are less wary of people.

Most species of large whales spend the summer feeding in Antarctic waters and migrate to more temperate and sub-tropical waters in winter where they give birth and mate. At this important time some species of whales come close to the Australian coastline and people need to be particularly careful not to disturb them. The following guidelines have been prepared to encourage enjoyable and safe whale watching without interference to the whales.

Please remember

- **Operate your vessel or aircraft so that it does not disrupt the normal movement or behaviour of a whale.** Disrupted behaviour may be shown by prolonged diving, evasive swimming with rapid changes in direction or speed and interruptions of breeding or nursing activities.
- **Abandon contact with the whales at any sign of their becoming disturbed or alarmed.** Whales may abandon an area if continually disturbed.
- **Do not separate or scatter a group of whales.** Whales often form groups for mutual support, reproduction and protection. Some groups may be tightly-knit extended family units. Disturbance which breaks up the groups may separate individuals and increase their vulnerability.
- **Do not attempt to feed whales or throw rubbish into the water.** Dumping rubbish, particularly plastics, can kill whales through accidental swallowing or entanglement.
- **Avoid loud disturbing noises near whales.** Whales have extremely sensitive hearing and are affected by sounds above and under the water.
- **Observe general boating and aircraft regulations and restrictions.**

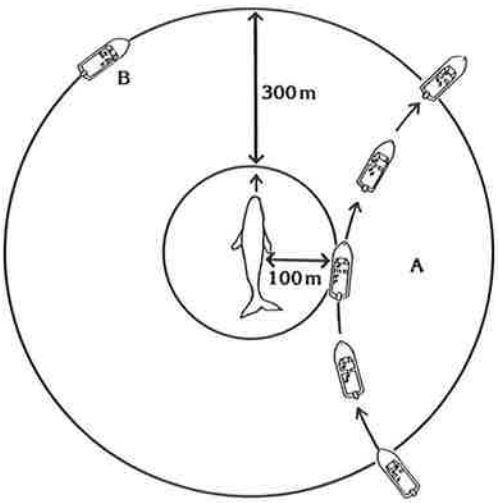
Aircraft

- **Do not operate any aircraft including helicopters less than 300 metres (1,000ft) above or near a whale.** The use of helicopters for whale watching should be avoided as they can cause considerable distress to whales because of the loud noise and down draught. If using a helicopter, under no circumstances fly directly above a whale and if the whale changes its behaviour, move away.

Swimmers and divers

- **It is recommended that swimmers and divers do not enter the water when near whales because of the possibility of being injured.** However, if you are in the water near a whale, do not approach closer than 30 metres.

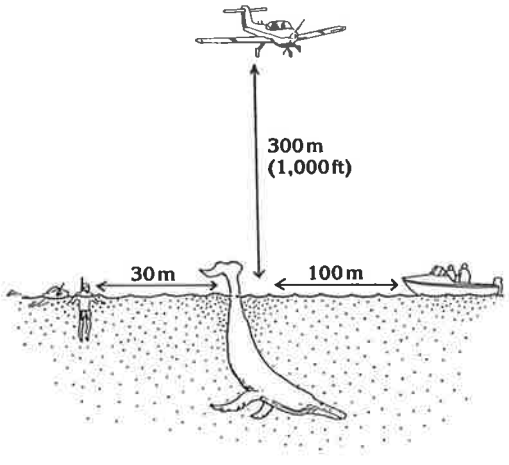
How to approach a whale



Caution

- **When whale watching, accidents may occur, especially if the whales feel threatened or harassed. Active whales also require ample space particularly during the mating season when males competing for females may engage in rough physical contact.**

Limits of approach



Where to watch whales

Whales can be seen almost anywhere along the Australian coastline at some time but their visits are infrequent and unpredictable. Humpback and Southern-right whales are the two species of large whales most likely to be seen by whale watchers. Accessible areas where whales have been seen over the last few years are:

NSW	Humpback whales	Cape Byron at Byron Bay, Korogoro Point at Hat Head National Park, Camden Head at Camden Haven.
	Southern-right whales	Sydney Harbour area.
Qld	Humpback whales	Hervey Bay, Point Lookout on Stradbroke Island, the waters between the Great Barrier Reef and the coast.
SA	Southern-right whales	Cliffs of the Great Australian Bight, Wilson's Bluff at Eucla, Merdayerrah Sand Patch east of Eucla, south coast of Kangaroo Island.
Tas	Southern-right whales	D'Entrecasteaux Channel, Storm Bay and generally along the east coast (humpback whales can also occasionally be seen from the east coast).
Vic	Southern-right whales	Otway coast including Warrnambool, Port Fairy and Portland Bay.
WA	Humpback whales	Dampier Archipelago; Point Quobba at Shark Bay; Ningaloo Marine Park.
	Southern-right whales	Cape Leeuwin and embayments along the south coast including Twilight Cove and Bremer Bay.
	Dolphins	Monkey Mia at Shark Bay.
NT	Large whales are not common in inshore tropical waters, however, several dolphin species are often seen in the Northern Territory including Darwin Harbour and the neighbouring coastline and river estuaries.	

Whales are protected

The whale watching guidelines have been written to help people watch whales safely without disturbing the whales and contravening the laws protecting them. Whale watchers should be aware that since 1979, the Australian Government has a policy of complete protection for all cetaceans (whales, dolphins and porpoises). The Whale Protection Act 1980 prohibits killing, taking, injuring and interfering with cetaceans in the waters of the Australian Fishing Zone (AFZ) i.e. approximately between 3 and 200 nautical miles offshore. Interference as defined in the Act, includes harassment, chasing and herding of whales. The Act also prohibits such actions by Australian citizens anywhere in the world and provides for substantial penalties.

Cetaceans are protected also in State and Territory waters (from the shoreline to some 3 nautical miles offshore) under various State and Territory legislation.

Note

While these guidelines apply primarily to species of large whales, they do have application to other cetaceans such as dolphins and porpoises. These small cetaceans may approach vessels very closely e.g. to ride in the bow wave.

Whale researchers who have appropriate permits may have to approach whales closer than recommended in these guidelines but should behave responsibly keeping in mind the intent of the guidelines.

These guidelines have been prepared in cooperation with State and Territory government conservation agencies and others. Further information can be obtained from the following agencies:

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Phone (062) 46 62211 Telex AA62971 Fax (062) 47 3528

P.S. 12/10000/Sept/89

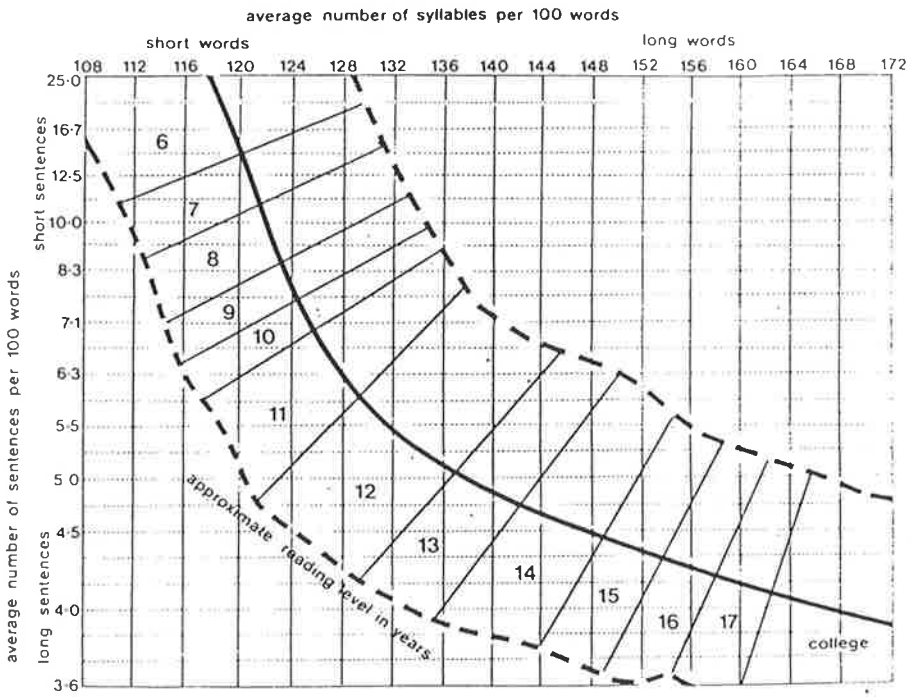
APPENDIX 3
Calculating the Readability of Interpretive Text

The readability of the printed interpretive material at case study sites was assessed according to the Fry procedure which calculates the approximate reading age of the text (as advocated by Beckmann 1991; Stansfield 1981; Trapp et al. 1994).

To calculate readability according to the Fry procedure (as noted in Stansfield 1981:52):

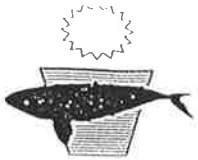
- select samples of text which are approximately 100 words long (test at least two passages to be able to take the average score);
- count the total number of sentences in the text sample and calculate the average number of sentences per 100 words;
- count the total number of syllables in the text sample and calculate the average number of syllables per 100 words;
- use the graph below (printed from Stansfield 1981) to determine the reading ages for the text.

THE FRY TEST FOR READING AGE



This graph was redrawn from Journal of Reading, April 1968; the dotted lines indicate the boundary of the region of maximum reliability of the test.

APPENDIX 4
Questionnaires for Australian Whale Watching Interpreters



1996 Survey of Resource Management Organisations: INTERPRETATION FOR WHALE WATCHING

THANK YOU FOR YOUR TIME & ASSISTANCE

E.Reid, U. of Adelaide

Organisation/Agency:
(include Branch if applicable) _____

_____

Survey Respondent Name: _____

Position: _____

i. *Please estimate the number of whale watchers who visit your district per season:*

_____ **OR** ❑ Not applicable

How did you estimate this number? _____

ii. *How do you **define** 'interpretation?'*

I. RESOURCES FOR INTERPRETATION

1. *Number of **staff** involved (e.g. planning, development, delivery) in interpretation:*

a. _____ Administration _____ Field Work (on-site)

b _____ Full Time _____ Part Time

c. _____ **Total** staff involved in interpretation _____ **Total staff** in organisation

If such categories do not apply, please provide interpretation staff details as appropriate:

2. *Are there any **changes** in the above during whale watching seasons?*

❑ Yes; *please describe briefly below.* ❑ No

3. *For the 1995/6 fiscal year, please estimate the following **budgets:***

_____ **Total** budget for organisation _____ Budget for Interpretation

If it is not possible to isolate these figures, please provide budget details as appropriate:

II. INTERPRETATION PLANNING AND POLICY

4. *At what level is **planning** conducted for interpretation related to whale watching?*

a. *Tick all that apply* ❑ Head Office ❑ Regionally ❑ Branch Office ❑ Site Specific

b. *Please describe briefly below.*

5. *Does your organisation have* ***explicit objectives*** *for interpretation related to whale watching?*

❑ Yes *Where are these objectives stated?* _____
If possible, please attach relevant material.

❑ No *Please describe* ***general goals*** *for interpretation related to whale watching:*

6. *Which* ***forms*** *of interpretation does your organisation provide for the public related to whale watching? (Tick all that apply).*

❑ Guided talks for whale watchers at viewing site
❑ Informal contact for whale watchers at viewing site
❑ Informal contact for whale watchers away from viewing site
❑ Other: _____
❑ Sign(s) on-site
❑ Brochure(s)
❑ Booklet(s)

7. *Are there any plans for* ***changes*** *to the above?*

❑ Yes; *please describe briefly below.* ❑ No

8. *In your opinion, what would be an* ***ideal change*** *to the whale watching interpretation provided?*

9. *If your organisation provides signs and/or brochures, please tick any which are included as* ***topics:***

❑ Whale social behaviour
❑ Whale biology
❑ Threats to whales
❑ European history
❑ Human impact on marine environment
❑ What individuals can do to protect whales
❑ Names of whale-related conservation groups
❑ Whale migration
❑ Protecting whales
❑ Whale research
❑ Indigenous history
❑ Coastal / marine ecosystems
❑ Protecting whales' environment
❑ Whale watching regulations
❑ Other plants/animals in the area
❑ Human use of coastal environment
❑ Sources of further information
❑ Other: _____

10. *Does your organisation provide any* ***training*** *for staff involved in interpretation ?*

❑ Yes; *please briefly describe below and note any which are specific to whale watching activities* ❑ No

III. LIAISON: WHALE WATCHING and INTERPRETATION

11. a. *Does your organisation liaise with the* ***media*** *regarding whale watching?*

❑ Frequently; *go to* **b** ❑ Occasionally ❑ Rarely ❑ Never

b. *Please tick any with whom you have* ***frequent*** *contact:*

❑ Local newspapers ❑ Major newspapers ❑ Television ❑ Radio

12. a. *Does your organisation liaise with* ***tourist organisations*** *regarding whale watching?*

❑ Frequently; *go to* **b** ❑ Occasionally ❑ Rarely ❑ Never

b. *Please tick any tourist organisations with whom you have* ***frequent*** *contact:*

❑ Local (visitor info. office) ❑ Regional ❑ State ❑ Federal

13. *Does your organisation liaise with whale watching* ***tour operators****?*

❑ Frequently ❑ Occasionally ❑ Rarely ❑ Never

14. *If your organisation has any contact with such tour operators, please tick all of the following which describe the* ***nature of this contact*** *concerning interpretation:*

❑ Provides interpretation (materials) for operators to use
❑ Provides advice on interpretation (materials) for operators
❑ Hosts/attends workshops or meetings with operators
  ❑ pre-season ❑ during season ❑ after season
❑ Collects information from operators:_____
❑ Other: _____

IV. EVALUATION OF INTERPRETATION

15.a. *Does your organisation* ***evaluate*** *its interpretation related to whale watching?*

❑ Yes; *go to* **b** ❑ No: *go to* **c**

b. *Please tick any of the following which are* ***used to evaluate*** *this interpretation.*

❑ Whale watcher surveys ❑ Informal feedback from whale watchers
❑ Cost-effective analysis ❑ Formal/structured observation of whale watchers
❑ Casual observation of whale watchers ❑ Other: _____

c. *If your organisation does* ***not*** *conduct such evaluation, why not? Tick all that apply.*

❑ Cost ❑ Difficulty ❑ No Need ❑ Low priority ❑ Low interest
❑ Other: _____

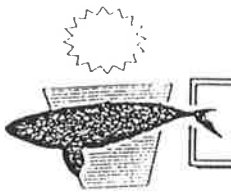
16. Finally, *the 1995 Encounters With Whales conference in Australia recommended a National Education Strategy for Whale Watching. What would you want such a strategy to do to help you?*

'It would be helpful if...'

Tick here if you would like to receive a copy of the results ❑ Please send me a summary.

THANK YOU AGAIN FOR PARTICIPATING. *Further comments are welcome.*

To return the questionnaire, please post to: **E.Reid, PO Box 309 Rundle Mall SA 5000** by **7 October.**



1996 Survey of Non-Government Organisations: INTERPRETATION, WHALES AND WHALE WATCHING ACTIVITIES

THANK YOU FOR YOUR TIME & ASSISTANCE

E.Reid, U. of Adelaide

Organisation Name: _____

_____

Survey Respondent Name: _____

Position: _____

i. *Do you provide interpretation for the public on whale -related topics?*

❑ Yes *Please continue the survey.*
❑ No *Why not?* _____
Please post the survey anyway

ii. *How much of your whale-related interpretation includes **whale watching** themes?*

❑ All of it ❑ Most of it ❑ Some of it ❑ A tiny amount of it ❑ None of it

iii. *How do you **define** 'interpretation?'*

I. RESOURCES FOR INTERPRETATION

1 a. _____ Total # **staff** in organisation

b. *Do you have staff with **specific responsibility** for interpretation (e.g. planning, development, delivery) ?*

❑ Yes, number of staff: _____ ❑ No

IF NOT, *please briefly describe who contributes to interpretation and how:*

2. *For the 1995/6 fiscal year, how much of your total budget went towards whale-related interpretation (planning, development, delivery)?*

❑ 1-10% ❑ 11-20% ❑ 21-30% ❑ 31-40% ❑ 41-50% ❑ more than 50%

If it is not possible to answer the above, please provide budget details as appropriate:

II. INTERPRETATION PLANNING AND POLICY

3. *Does your organisation have **explicit objectives** for whale-related interpretation?*

❑ Yes *Where are these objectives stated?* _____
*If possible, **please attach** relevant material.*

❑ No *Please describe your **general goals** for whale-related interpretation.*

4. *What did you do to* ***plan*** *your whale-related interpretation in the first place?*

5 . a. *Please tick any of these you* ***used as sources*** *of information on whales when when developing your interpretation.*

❑ Books ❑ Magazine features ❑ Newspaper articles
❑ Television programs ❑ Word of mouth ❑ Teacher resource guides
❑ Museum/interpretive centres ❑ Researchers/scientists ❑ Brochures
❑ Government environment depts. ❑ Journals ❑ Other: _____

b. *Is there any source which you used most of all?* ❑ Yes: _____ ❑ No

6. *What do you hope to achieve by providing whale-related interpretation to the public?*

7 . *Who are the main 'target groups' or audiences for your whale-related interpretation? (Tick all that apply).*

❑ General public ❑ Whale watchers ❑ School students
❑ Members/Subscribers of _____ ❑ Other: _____

III. THE INTERPRETATION

8 .*Which* ***forms*** *of whale-related interpretation does your organisation provide for the public? (Tick all that apply).*

❑ Guided talks for visitors at whale watching sites ❑ Booklet(s)
❑ Informal contact for visitors at whale watching sites ❑ Brochure(s)
❑ Informal contact (about whale-related information) away from whale watching sites ❑ Sign(s) at whale watching sites
❑ Lecture nights or public talks on whales / whale watching ❑ Newsletters
❑ Exhibits (in museums, shows, or info.centres) on whales / whale watching
❑ Other: _____
_____

Any comments? _____

9. *If your organisation provides* ***printed material*** *(ie. signs,brochures, exhibits andor booklets) relating to whales, please tick any which are included as* ***topics****:*

❑ Whale social behaviour ❑ Whale migration ❑ Coastal / marine ecosystems
❑ Whale biology ❑ Protecting whales ❑ Protecting whales' environment
❑ Threats to whales ❑ Whale research ❑ Whale watching regulations
❑ European history ❑ Indigenous history ❑ Other plants/animals in the area
❑ Human impact on marine environment ❑Human use of coastal environment
❑ What individuals can do to protect whales ❑ Sources of further information
❑ Role of your organisation in whale protection ❑ Other: _____

IV. LIAISON:

10. a. *Does your organisation liaise with the* ***media*** *regarding whale watching?*
❑ Frequently; *go to* **b** ❑ Occasionally ❑ Rarely ❑ Never

b. *Please tick any with whom you have* ***frequent*** *contact:*
❑ Local newspapers ❑ Major newspapers ❑ Television ❑ Radio

11. a. *Does your organisation liaise with* ***government environment departments*** *regarding* ***whale watching****?*
❑ Frequently; *go to* **b** ❑ Occasionally ❑ Rarely ❑ Never

b. *Please tick any government environment departments with whom you have* ***frequent*** *contact:*
❑ Local ❑ Regional ❑ State ❑ Federal

12. *Does your organisation liaise with* ***whale watching tour operators****?*
❑ Frequently ❑ Occasionally ❑ Rarely ❑ Never

13. *If your organisation has* ***any*** *contact with such tour operators, please briefly describe the* ***nature of this contact****:*

IV. EVALUATION OF INTERPRETATION

14.a. *Does you whale-related interpretation change?*
❑ Frequently ❑ Occasionally ❑ Rarely ❑ Never

b. *Why or why not?* _____

15. *Tick all that apply. How do you get feedback about your whale-related interpretation?*

❑ Informal questions or comments ❑ Suggestion box ❑ Guest book comments
❑ Specific question & answer session during a talk ❑ Formal questionnaires
❑ None of the above ❑ Other: _____

16. Finally, *the 1995 Encounters With Whales conference in Australia recommended a 'National Education Strategy for Whale Watching'. What would you want such a strategy to do to help your organisation?*

'It would be helpful if...

❑ Nothing ❑ Not sure

Tick here if you would like to receive a copy of the results ❑ Please send me a summary.

THANK YOU AGAIN FOR YOUR TIME AND PARTICIPATION.

Your response is greatly appreciated, *and further comments are welcome.*

To return the questionnaire, please post to: **Reply paid no.44**
E.Reid, PO Box 309 by **11 October.**
Rundle Mall SA 5000



1996 Survey of Tour Operators: INTERPRETATION FOR WHALE WATCHING ACTIVITIES

THANK YOU FOR PARTICIPATING IN THE SURVEY E.Reid, U. of Adelaide

Company Name : _____

Survey Respondent Name: _____

I. OPERATION DETAILS

i *Type of tour(s): (Tick all that apply)* ❑ Boat-based ❑ Land-based ❑ Aerial
❑ 4 Wheel Drive ❑ Tour Bus ❑ Whale -based ❑ Dolphin-based ❑ Other:

ii. *First year of operation :* _____ *Average length of tour:* _____

iii. *Estimated number of passengers during 1995 season:* _____

iv. *Do you provide interpretation during your tour?* ❑ Yes *Please continue the survey.*
❑ No *Why not?* _____
Please skip to question # 14

v. *How do you define 'interpretation?'*

II. RESOURCES

1.a. *Who provides interpretation during the tour?* ❑ Tour leader ❑ Vehicle driver
❑ Person(s) employed specifically for interpretation ❑ Other: _____

b. *Number of staff involved in interpretation:* _____ full-time _____ part-time

c. *Please briefly describe the background of the staff involved in interpretation .*

III. PLANNING AND POLICY

2. *What did you do to plan your interpretation in the first place?*

3. a. *Please tick any of these you used as information sources on whales when developing your interpretation.*

❑ Books ❑ Magazine features ❑ Newspaper articles
❑ Television programs ❑ Word of mouth ❑ Teacher resource guides
❑ Museum/interpretive centres ❑ Tourism associations ❑ Other tour operators
❑ Researchers/scientists ❑ Conservation groups ❑ Brochures
❑ State Environment Department ❑ Commonwealth Environment Departments
❑ Other: _____

b. *Is there any source which you used most of all?* ❑ Yes: _____ ❑ No

4. a. *Do you have contact with government environment departments?*
❑ Often ❑ Occasionally ❑ Rarely ❑ Never

b. ***If you do*** *have contact with these departments, please tick any which describe this contact:*

❑ You request advice on interpretation from them
❑ You attend workshops/meetings with them regarding whale watching
(*tick all that apply*) ❑ pre-season ❑ during season ❑ after season
❑ You give information to them (*please describe*) _____
❑ You have applied for / collected a permit from them
❑ Other: _____

5. *What do you hope to achieve by providing interpretation on your tours?*

6.a. *Do you give special tours for school groups?*
❑ Often ❑ Occasionally ❑ Rarely ❑ Never

b.*Do you have any other sort of contact with schools / school groups?* ❑ Yes ❑ No

Please describe: _____

IV. THE INTERPRETATION

7. *Which types of interpretation do you provide for whale watchers? (Tick all that apply).*

❑ Verbal commentary ❑ Videos ❑ Audio material (tape recordings, music)
❑ Hydrophones ❑ Booklet(s) ❑ Brochure(s)
❑ Other :_____ *(Please attach any examples of printed material)*

8. *(Tick all that apply). If you provide printed material, are visitors*
❑ automatically given copies ❑ encouraged to take copies
❑ made aware that copies are available ❑ Other:_____

9. *If you provide* ***verbal*** *commentary, please tick any you generally include as topics :*

❑ Whale social behaviour ❑ Whale migration ❑ Coastal / marine ecosystems
❑ Whale biology ❑ Protecting whales ❑ Protecting whales' environment
❑ Threats to whales ❑ Whale research ❑ Whale watching regulations
❑ European history ❑ Indigenous history ❑ Other plants/animals in the area
❑ Human impact on marine environment ❑Human use of coastal environment
❑ What individuals can do to protect whales ❑ Sources of further information
❑ Names of whale-related conservation groups ❑ Other: _____

10.a. *How do you* ***promote*** *your tour?*
❑ Brochures ❑ Tourist booklets ❑ Radio advertisements
❑ Newspaper advertisements ❑ TV advertisements ❑ Other:_____

b.*(Tick all that apply). If you use brochures, are they available*

❑ Locally ❑ Nationally ❑ Internationally *Please attach samples.*

V. EVALUATION

11.a. *If you provide verbal commentary, does the content change?*
❑ Often ❑ Occasionally ❑ Rarely ❑ Never

b. *If the commentary ever changes, please briefly describe* ***why and how*** *it changes:*

12. *Tick all that apply. How do you receive visitor feedback?*

❑ Informal questions or comments ❑ Suggestion box ❑ Guest book comments
❑ Specific question & answer session during a talk ❑ Formal questionnaires
❑ None of the above ❑ Other: _____

13. Finally, *the 1995 Encounters With Whales conference in Australia recommended a 'National Education Strategy for Whale Watching'. What would you want such a strategy to do to help you?*

'It would be helpful if the strategy...

❑ Not sure ❑ Nothing

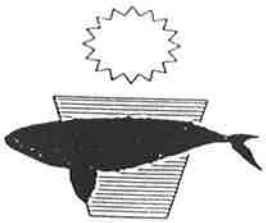
Please return the questionnaire by 4th October.
Tick here if you would like a summary of the results: ❑ Please send me a summary

THANK YOU AGAIN FOR YOUR TIME & ASSISTANCE.
Further comments are welcome.

APPENDIX 5
Questionnaires for Whale Watchers at Australian Case Study Sites

SILVER STAR CRUISES

WHALE WATCH SURVEY 1996



***You can help** to enhance the Silver Star's whale watching tours by filling out this brief questionnaire. Only short answers are needed, so it shouldn't take much more than 5 minutes. All answers will remain anonymous.*

INSTRUCTIONS:

- *Please complete the questionnaire **on the way back to port**. You may return the questionnaire even if you couldn't answer all the questions*
- *Only **1 person** (over 15 years old) from your group should answer the questions, according to his/her own opinions (ie. answers do not have to reflect group opinions).*
- *Please return the questionnaire to the counter on the lower deck.*

THANK YOU FOR YOUR TIME & ASSISTANCE E. Reid: U. of Adelaide

---

i. *Date of the tour:* _____

ii. *Estimated time you spent actually watching the whales* _____ minutes or hour(s)

iii. *Your city / town of residence* _____ *State* _____ *Country* _____

1.a. *How did you find out that you could go whale watching in Albany?*

_____

b. *How did you find out about Silver Star cruises?* _____

2. *Have you been whale watching before?* ❑ Yes, ____ times ❑ No

IF SO, *what is your favourite whale watching spot and why?* _____

_____ OR ❑ No preference

3. *Please tick any of these that you have **ever visited** in Albany:*

❑ Whale World Whaling Museum ❑ Tourist Information office
❑ Dept. Conservation & Land Management office ❑ Middleton Beach

4. *Please tick any you have **ever done**:*

❑ Read magazine articles about whales ❑ Looked at museum exhibits about whales
❑ Watched TV programs featuring whales ❑ Read newspaper articles about whales
❑ Visited whale aquaria (e.g. Sea World)

5. *Please tick any you have **ever read**:*

❑ 'The Albany Experience' booklet ❑ Whale information in Silver Star brochure
❑ 'Watching Whales' brochure (white) ❑ Signs about whales at Middleton Beach
❑ 'Whale Watch' feature in local newspaper

6.a. *Did you listen to the commentary during the tour today?* ❑ Yes, all of it
❑ Yes, most of it ❑ Yes, some of it ❑ Not much of it ❑ No, not any of it

b. *What was 1 interesting topic of the commentary?* _____

_____ ❑ Nothing

Any other comments on it?: _____

c. *Do you have any unanswered questions about whales?* ❑ Yes ❑ No

My unanswered questions are: _____

_____

7.a. *Did Silver Star meet your expectations as a whale watching tour?* ❑ Yes ❑ No

b. 'I was impressed that: _____

c. 'I was disappointed that _____

8. *If more information was provided whilst you were whale watching, would you be* ***interested*** *in learning about:* (Tick a box for **each** item)

a. how whales are protected ❑Yes ❑Maybe ❑No ❑No Opinion

b. what you can do to help protect whales ❑Yes ❑Maybe ❑No ❑No Opinion

Any comments? _____

9. *When you are whale watching (anywhere), is it* ***important*** *that:* (Tick a box for **each** item)

a. there is a peaceful atmosphere ❑Yes ❑No ❑No Opinion

b. the location is an unspoilt natural environment ❑Yes ❑No ❑No Opinion

c. information on whales is provided ❑Yes ❑No ❑No Opinion

Any comments? _____

10. ***True or False?*** (Tick a box for **each** item)

a. The whales here are not an endangered species anymore. ❑ True ❑ False ❑ Unsure

b. Whales can hear loud noises coming from onboard a boat. ❑ True ❑ False ❑ Unsure

c. The whales comes to Albany specifically to feed. ❑ True ❑ False ❑ Unsure

d. Boats are allowed to get as close as they want to whales. ❑ True ❑ False ❑ Unsure

e. Whales may dive frequently if they feel disturbed. ❑ True ❑ False ❑ Unsure

11. *Can you please name the kind of whale you saw today?* _____

12. *What is one new idea you discovered today?* _____

_____ ❑Nothing

13.a. *Your group has ___ (#) people and includes* : ❑Family ❑Friends ❑Other:_____

b. *Number of people in each age group:* under 15____ 15-30____ 31-55____ 55+____

14. *Conservation groups in which you are/have been a member:* _____

_____ ❑ None

THANK YOU AGAIN for your help. Additional comments are welcome.

SOUTHERN OCEAN CHARTERS

WHALE WATCH SURVEY 1996



You can help to enhance Southern Ocean Charters' whale watching tours by filling out this brief questionnaire. Only short answers are needed, so it shouldn't take much more than 5 minutes. All answers will remain anonymous.

INSTRUCTIONS:

- *Please complete the questionnaire* ***on the way back to port****. You may return the questionnaire even if you couldn't answer all the questions*
- *Only* ***1 person*** *(over 15 years old) from your group should answer the questions, according to his/her own opinions (ie. answers do not have to reflect group opinions).*
- *Please return the questionnaire to the Captain as you leave the boat.*

THANK YOU FOR YOUR TIME & ASSISTANCE E. Reid; U. of Adelaide

---

i. *Date of the tour:* _____

ii. *Estimated time you spent actually watching the whales* _____ minutes or hour(s)

iii. *Your city / town of residence* _____ *State* _____ *Country* _____

1.a. *How did you find out that you could go whale watching in Albany?*

_____

b. *How did you find out about Southern Ocean Charters?* _____

2. *Have you been whale watching before?* ❑ Yes, _____ times ❑ No

IF SO, *what is your favourite whale watching spot and why?* _____

_____ **OR** ❑ No preference

3. *Please tick any of these that you have* ***ever visited*** *in Albany:*

❑ Whale World Whaling Museum ❑ Tourist Information office
❑ Dept. Conservation & Land Management office ❑ Middleton Beach

4. *Please tick any you have* ***ever done****:*

❑ Read magazine articles about whales ❑ Looked at museum exhibits about whales
❑ Watched TV programs featuring whales ❑ Read newspaper articles about whales
❑ Visited whale aquaria (e.g. Sea World)

5. *Please tick any you have* ***ever read****:*

❑ 'Watching Whales' brochure (white) ❑ 'The Albany Experience' booklet
❑ Whale information, Southern Ocean Charter brochure ❑ 'Whale Watch' feature, local newspaper
❑ Signs about whales at Middleton Beach

6.a. *Did you listen to the commentary during the tour today?* ❑ Yes, all of it
❑ Yes, most of it ❑ Yes, some of it ❑ Not much of it ❑ No, not any of it

b. *What was 1 interesting topic of the commentary?* _____

_____ ❑ Nothing

Any other comments on it?: _____

c. *Do you have any unanswered questions about whales?* ❑ Yes ❑ No

My unanswered questions are: _____

7.a. *Did Southern Ocean Charters meet your expectations as a whale watching tour?* ❑ Yes ❑ No

b. 'I was impressed that: _____

c. 'I was disappointed that: _____

8. *If more information was provided whilst you were whale watching, would you be* ***interested*** *in learning about:* (Tick a box for **each** item)

a. how whales are protected ❑Yes ❑Maybe ❑No ❑No Opinion

b. what you can do to help protect whales ❑Yes ❑Maybe ❑No ❑No Opinion

Any comments? _____

9. *When you are whale watching (anywhere), is it* ***important*** *that:* (Tick a box for **each** item)

a. there is a peaceful atmosphere ❑Yes ❑No ❑No Opinion

b. the location is an unspoilt natural environment ❑Yes ❑No ❑No Opinion

c. information on whales is provided ❑Yes ❑No ❑No Opinion

Any comments? _____

10. ***True or False?*** (Tick a box for **each** item)

a. The whales here are not an endangered species anymore. ❑ True ❑ False ❑ Unsure

b. Whales can hear loud noises coming from onboard a boat. ❑ True ❑ False ❑ Unsure

c. The whales comes to Albany specifically to feed. ❑ True ❑ False ❑ Unsure

d. Boats are allowed to get as close as they want to whales. ❑ True ❑ False ❑ Unsure

e. Whales may dive frequently if they feel disturbed. ❑ True ❑ False ❑ Unsure

11. *Can you please name the kind of whale you saw today?* _____

12. *What is one new idea you discovered today?* _____

_____ ❑Nothing

13. ***If you visited Whale World****, please answer the following:*

a. *Did you go on the guided tour?* ❑ Yes ❑ No

'The most interesting part was _____

b. 'Before my visit, I never knew: _____

14.a. *Your group has ___ (#) people and includes* : ❑Family ❑Friends ❑Other:_____

b. *Number of people in each age group:* under 15____ 15- 30____ 31-55____ 55+____

15. *Conservation groups in which you are/have been a member:* _____

_____ ❑ None

THANK YOU AGAIN for your help. Additional comments are welcome.

You can help *enhance the management of whale watching at Warrnambool by completing this questionnaire. Only short answers are needed, so it should take about 5 minutes. All answers will remain anonymous.*

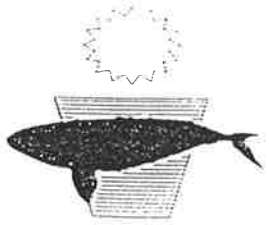
THANK YOU FOR YOUR TIME & ASSISTANCE E.Reid; U. of Adelaide

INSTRUCTIONS:

- *Only 1 person (over 15 years old) from your group should answer the questions, according to his/her own opinions (ie. answers do not have to reflect group opinions).*
- *You may return the questionnaire even if you couldn't answer all the questions.*
- *To return it: fold at dotted lines (address & instructions facing out), seal, & post OR take it to the Dept. Conservation & Natural Resources office, 78 Henna St.*
- *Please provide the following details.* **Whale Watching: Date(s)_____**
  Estimated time spent whale watching _____ minutes or hour(s)

Your stamp is appreciated

TO: E. REID, REPLY PAID NO. 44
WHALE WATCHER SURVEY
of WARRNAMBOOL
PO BOX 309
RUNDLE MALL SA 5000



SENDER: *City/town of residence* _____ *State* _____
Country (if not Australia) _____

---

1. *How did you know there was a sighting today?* _____

2. *Have you been whale watching before?* ❑ Yes, _____ times ❑ No
   IF SO, *what is your favourite whale watching spot and why?* _____
   _____ **OR** ❑No preference

3. *Please tick any of these that you have EVER VISITED in Warrnambool:*
   ❑ Flagstaff Hill Maritime Museum ❑ Robert Ullman's Art Studio
   ❑ Tourist Information Office ❑ Giants of the Deep whale exhibit
   ❑ Dept. Conservation & Natural Resources branch office

4. *Please tick any information sources that you have used to learn about whales:*
   ❑ Radio programs ❑ Tourist brochures/booklets ❑ TV travel / wildlife programs
   ❑ Magazine articles ❑ Newspaper articles ❑ Aquaria (e.g. Sea World)
   ❑ Exhibits (museums, info. centres) ❑ Other : _____

5. *Please tick any you have EVER read:*
❑ 'Whales at Warrnambool' (booklet) ❑ 'Whale Watching in Victoria' (booklet)
❑ Signs at whale watching platform ❑ 'Whale Watching in Victoria' (brochure)

6. IF you have seen *the information boards at the whale watching platform, did they answer all of your questions about whales?* ❑ Yes ❑ No; My unanswered questions are: _____
Any other comments? _____

7.a. *Did Warrnambool meet your expectations as a whale watching site?* ❑ Yes ❑ No
b. 'I was impressed that: _____
c. 'I was disappointed that: _____

8. *If more information was provided whilst you were whale watching, would you be* ***interested*** *in learning about:* (Tick a box for **each** item)
a. features of the area's coastal/marine environments ❑Yes ❑Maybe ❑No ❑No Opinion
b. the European & Indigenous history of the area ❑Yes ❑Maybe ❑No ❑No Opinion
c. how whales are protected ❑Yes ❑Maybe ❑No ❑No Opinion
d. what you can do to help protect whales ❑Yes ❑Maybe ❑No ❑No Opinion
Any comments? _____

9. *When you are whale watching (anywhere), is it* ***important*** *that:* (Tick a box for **each** item)
a. there is a peaceful atmosphere ❑Yes ❑No ❑No Opinion
b. the location is an unspoilt natural environment ❑Yes ❑No ❑No Opinion
c. information on whales is provided ❑Yes ❑No ❑No Opinion
Any comments? _____

10. ***True or False?*** (Tick a box for **each** item)
a. The whales here are not an endangered species anymore. ❑ True ❑ False ❑ Unsure
b. Whales can hear loud noises coming from land. ❑ True ❑ False ❑ Unsure
c. The whales comes to Warrnambool to feed. ❑ True ❑ False ❑ Unsure
d. Aircraft are allowed to fly as close as they want to whales. ❑ True ❑ False ❑ Unsure
f. Standing on sand dunes contributes to coastal erosion here. ❑True ❑ False ❑ Unsure

11. *Can you please name the kind of whale you saw today?* _____

12. ***If you visited the Giants of the Deep*** *exhibit, what was:*
a. *your favourite part & why?* _____
_____ ❑No preference
b. *something that would have improved the exhibit?* _____
_____ ❑Nothing
c. *one new idea you discovered at the exhibit* _____
_____ ❑Nothing

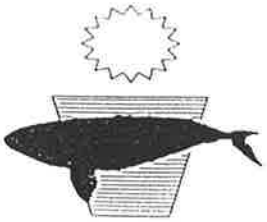
13.a. *Your group has ___ (#) people and includes* : ❑Family ❑Friends ❑Other:_____
b. *Number of people in each age group:* under 15____ 15- 30____ 31-55____ 55+____

14. *Conservation groups in which you are/have been a member:* _____
_____ ❑ None

THANK YOU AGAIN FOR YOUR HELP.
Additional comments are welcome.

HEAD OF THE GREAT AUSTRALIAN BIGHT

WHALE WATCH SURVEY 1996



You can help the management of whale watching at the Head of the Bight by completing this questionnaire. Only short answers are needed, so it should take much more than 5 minutes. All answers will remain anonymous.

INSTRUCTIONS:

- *Only 1 person (over 15 years old) from your group should answer the questions, according to his/her own opinions (ie. answers do not have to reflect group opinions)*
- *Please complete the questionnaire* ***after*** *you have finished whale watching. You may return the questionnaire even if you couldn't answer all the questions.*
- *To return it:* ***drop it off at the White Well Station*** *(where you received it) OR post it to the following address (your stamp is appreciated):*
  E. REID, Reply Paid No. 44, PO Box 309 Rundle Mall, SA 5000

THANK YOU FOR YOUR TIME & ASSISTANCE E. Reid, U. of Adelaide

---

i. *Date(s) you went whale watching at the Head of the Bight* _____

ii. *Estimated time spent whale watching* _____ minutes or hour(s)

iii. *Your city or town of residence* _____ *State* _____ *Country* _____

1.a. *How did you find out that you could go whale watching at the Head of the Bight ?*

_____

b. *Is whale watching the main reason for your travel?* ❑ Yes ❑ No

2.a. *Have you been whale watching (anywhere) before?* ❑ Yes, _____ times ❑ No

b. IF SO, *what is your favourite whale watching site and why?* _____

_____ **OR** ❑ No preference

c. *Have you been to the Head of the Bight before?* ❑ Yes, _____ times ❑ No

3.a. *Please tick any that you have* ***ever visited****:*

❑ Ceduna Tourist Information Ctr.
❑ Dept. Environment & Natural Resources - Ceduna ❑ Nundroo Roadhouse
❑ Scenic lookout(s), Nullarbor National Park ❑ Yalata Roadhouse
❑ Nullarbor Roadhouse ❑ Eucla Roadhouse ❑ Border Village ❑ None of these

b. *Did you get information on whale watching from any of the above?* ❑ Yes ❑ No

IF SO, i. *what kind of information?* ❑ *Verbal* ❑ *Printed*
ii. *Please <u>underline</u> the place(s) above where you got the information.*

4. *Please tick any you have* ***ever done****:*

❑ Looked at museum exhibits about whales
❑ Read magazine articles about whales ❑ Read newspaper articles about whales
❑ Watched TV programs featuring whales ❑ Visited whale aquaria (e.g. Sea World)

5.a. *Please tick any you have **ever read:*** ❑ 'Great Australian Bight' sign (at entrance)
❑ 'Southern Right Whale' sign (at cliffs) ❑ 'Southern Right Whales' brochure (blue)
❑ Yalata / Nullarbor sections of the 1996 Eyre Peninsula guide booklet
❑ 'Welcome to Whale Watching' pages (provided at White Well) ❑ None of these

Any comments? _____

b. If you read *the 'Southern Right Whale' sign at the cliffs, was it interesting?*
❑ Yes ❑ No *Any comments?* _____
_____

6. *Do you have any unanswered questions about **whales**?* ❑ Yes ❑ No

My unanswered questions are: _____
_____

Any other comments / questions? _____

7.a. *Did the Head of Bight meet your expectations as a whale watching site?* ❑ Yes ❑ No

b. 'I was impressed that: _____

c. 'I was disappointed that: _____

8. *If more information was provided here, would you be **interested in learning about:***
(Tick a box for **each** item)

a. features of the area's coastal/marine environments	❑Yes	❑Maybe	❑No	❑No Opinion
b. the European & Indigenous history of the area	❑Yes	❑Maybe	❑No	❑No Opinion
c. how whales are protected	❑Yes	❑Maybe	❑No	❑No Opinion
d. what you can do to help protect whales	❑Yes	❑Maybe	❑No	❑No Opinion

Any comments? _____

9. *When you are whale watching (anywhere), is it **important** that:* (Tick a box for **each** item)

a. there is a peaceful atmosphere	❑Yes	❑No	❑No Opinion
b. the location is an unspoilt natural environment	❑Yes	❑No	❑No Opinion
c. information on whales is provided	❑Yes	❑No	❑No Opinion

Any comments? _____

10. *True or False?* (Tick a box for **each** item)

a. The whales here are no longer an endangered species.	❑ True	❑ False	❑ Unsure
b. Whales can hear loud noises coming from land.	❑ True	❑ False	❑ Unsure
c. The whales come to the Head of the Bight to feed.	❑ True	❑ False	❑ Unsure
d. The Head of the Bight is a Marine Park.	❑ True	❑ False	❑ Unsure
e. Plants here are sensitive to foot traffic	❑ True	❑ False	❑ Unsure
f. The only cliff edges that are unstable are outside the viewing area	❑ True	❑ False	❑ Unsure

11. *Name 1 fact about the Southern Right Whale:* _____

12.a. *Your group has ___ (#) people and includes :* ❑Family ❑Friends ❑Other:_____

b.*Number of people in each age group:* under 15____ 15-30____ 31-55____ 55+____

13. *Conservation groups in which you are/have been a member:* _____
_____ ❑ None

THANK YOU AGAIN for your help. Additional comments are welcome.

Whale Watchers Questionnaire

HEAD OF THE BIGHT 1995

YOU CAN HELP to make whale watching at the Head of the Bight as enjoyable as possible by completing and returning this 10 minute questionnaire. There are no right or wrong answers, and all answers will remain anonymous.

INSTRUCTIONS FOR THE QUESTIONNAIRE:

- The questionnaire will take approximately 10-15 minutes to complete.
- Please have ONE ADULT(over 16 years old) from your group answer the questions.
- The person who completes the questionnaire should answer according to his/her OWN opinions, and does not have to represent the opinions of the group.
- Unless specified, questions refer to your entire visit (if more than 1 day) to the Head of the Bight
- Please fill in the questionnaire at the END of your visit to the Head of the Bight
- Please return the questionnaire even if you couldn't answer all the questions

TO RETURN THE QUESTIONNAIRE:

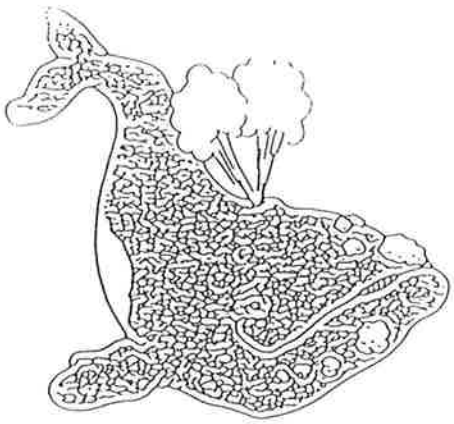
- Fold the questionnaire in half along the dotted line, then stamp and post it
- OR deposit it in a "Whale Watcher Survey Forms" box (with the whale symbol below) located in

(1) Yalata Land Management Ranger Station (2) Yalata Roadhouse (3) Nullarbor Roadhouse
(4) Border Village Roadhouse. (5) Dept. Environment & Natural Resources office (Ceduna)

If you have any questions you may contact Elizabeth Reid at (08) [illegible] 5899

(Please fold here when you have completed the questionnaire)

STAMP



WHALE WATCHERS Questionnaire
Head of the Bight 1995

c/o PO BOX 309
ADELAIDE SA 5000

Date(s) of whale watching: _____ Time spent whale watching (total): _____ Time(s) of visit:
☐ morning ☐ midday ☐ aftern~

PURPOSE OF YOUR VISIT

1). Are you the person /one of the people responsible for choosing to go whale watching at the Head of the Bight? ☐Yes ☐N

2) Circle whatever BEST describes your MAIN purpose for travelling to the Nullarbor: To go whale watching
Travelling to SA Travelling to WA To Fish To Surf Other: _____

3) Why did you go whale watching? (Please give as many reasons as you like).

PREVIOUS EXPERIENCE, INTERESTS, & KNOWLEDGE

4) If you have been whale watching before (anywhere), please provide some details below:

Year:	Place:	Did you see any whales? ☐Yes ☐No
Year:	Place:	Did you see any whales? ☐Yes ☐No
Year:	Place:	Did you see any whales? ☐Yes ☐No

5) How interested were you in the following topics and how much did you know about them BEFORE you went whale watching at the Head of the Bight? For each topic, tick a box below the word that best describes your opinion.

	INTEREST LEVEL				KNOWLEDGE LEVEL			
	High	Medium	Low	NONE	High	Medium	Low	NONE
a. Whale behaviour & life cycle								
b. Protection of whales								
c. Natural features of coastal environments								
d. Prevention of coastal erosion								
e. Marine ecosystems								
f. Great Australian Bight Marine Park proposal								
g. Aboriginal culture								

INFORMATION SOURCES

6) If you had any knowledge about WHALES before you went whale watching at the Head of the Bight, please circle up to 3 main sources of your information: Brochures Books Newsletters Radio/TV news Newspapers
Exhibits (info centres, museums) Video documentaries Magazines Other _____

7) How did you find out about the Head of the Bight as a place to watch whales? (Circle all that apply) TV Radio
Newspapers Magazines Ceduna tourist information centre SA Whale Centre Travel agents
Dept. Environment & Natural Resources (DENR) Ceduna office Locals of nearby towns Friends/relatives
Nullarbor Roadhouse Sign Nullarbor Roadhouse staff Yalata Roadhouse staff Signs near highway
Other: _____

8) a. After you found out you could see whales at the Head of the Bight, did you try to get any more information on the area BEFORE your visit? ☐ Yes ☐ No

b. IF YES, i) What kind of information?

ii) Where did you get it?

9) Is there anything you wish you'd known BEFORE whale watching at the Head of the Bight?

10) a. Please circle any of these that you have EVER READ : SA Museum whale watching book Whale Watcher's Kit
An Environmental Code for Whale Watchers Information received with permit

b. Please circle any of these that you have EVER VISITED: SA Whale Centre (Victor Harbor)

THE NATURE OF YOUR WHALE WATCHING EXPERIENCE

11) Circle any of these that you did during the day(s) you went whale watching at the Head of the Bight.

Read educative material that came with the permit
Asked Yalata Land Management staff questions
Visited the Nullarbor Roadhouse
Read displays at the Yalata Land Management Station
Asked other whale watchers questions
Visited the Yalata Roadhouse

12) For the whales you saw at the Head of the Bight, please try to estimate their average:

a) Activity level: ☐High ☐Medium ☐Low b) Distance from shore: ☐Very near ☐Fairly close ☐Not too near

YOUR EVALUATION OF THE WHALE WATCHING EXPERIENCE

13) Please circle any of the following features of whale watching at the Head of the Bight that you were particularly:

a. PLEASED with: Whale numbers Whale activity Whale distances Just seeing whales

b.DISAPPOINTED with: Whale numbers Whale activity Whale distances Not seeing enough whales

14) a. What was the BEST part of your whale watching trip?

b. Is there anything that would have improved your whale watching trip?

15) This question has 2 parts. For each item a-k tick a box below the word that describes: 1-its IMPORTANCE to you for any land-based whale watching trip; 2- how SATISFIED you were with it at the Head of the Bight

	Very Important	Important	Neutral	Unimportant	Very Unimportant	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Don't Know
a. scenic beauty of the area											
b. protection of the area's natural features											
c your ability to get a good photo											
d. comfort facilities (toilets, benches, shelter)*											
e. a naturalist/ranger is there to answer questions											
f. peacefulness of the atmosphere											
g. the site is not too crowded											
h. opportunity to view other wildlife in the area											
i. the area is not too far from home											
j. the viewing area is safe											
k. other tourist activities are available nearby											

16) a. What kind of information would you like to be available ON-SITE whilst you are whale watching?

b. Which way would you prefer to find this information ON-SITE ? (Circle one). Guided tours Brochures Signs Someone to answer questions Self-guided tour booklet Other:_____

17) Circle up to 3 of the following that you think would greatly enhance whale watching at the Bight: more toilets benches shelter kiosk picnic areas boardwalks viewing platform improved roads Other _____

18) a. Circle any below that you are MORE INTERESTED in (even a little bit) since whale watching at the Bight

Whale behavior/life cycle Whale protection Natural features of the coastal environment Preventing coastal erosion
Marine ecosystems Great Australian Bight Marine Park proposal Aboriginal culture

b. Circle any below that you KNOW MORE about (even a little bit) since whale watching at the Bight:

Whale behavior/biology Whale protection Natural features of coastal environments Preventing coastal erosion
Marine ecosystems Great Australian Bight Marine Park proposal Aboriginal culture

20) a. Circle any of these which you would be interested in if they were available at the Head of the Bight:
Tours explaining whale behaviour Cave tours Tours of Aboriginal sites Tours of European heritage sites
Tours of the coast/other wildlife Bush tucker tours Other: _____

b. If you are interested in ANY of the tours above, what are your overall preferences regarding their:

i) TIME OF DAY
☐morning ☐midday
☐afternoon ☐no preference

ii) WAY TO TRAVEL
☐walk ☐bus ☐4WD
☐camel ride ☐no preference

iii) LENGTH
☐less than 1 hour ☐1 to 2 hours ☐half-day
☐full day ☐no preference

OPINIONS ON THE ENVIRONMENT

23) Please rate your level of agreement with each of the following statements (Tick only one box for each).

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a. I consider myself environmentally AWARE.					
b. I consider myself environmentally ACTIVE.					
c. Southern Right whales are very vulnerable to extinction.					
d. The main value of animals/plants is for human use.					
e. I cannot do anything to help protect whales.					
f. I cannot do anything to prevent coastal erosion.					
g. Public support can influence environmental protection.					
h. It is important to me to help protect whales if I can.					
i. In Australia, whales are adequately protected.					
j. I would still be interested in whales even if I never saw them in the wild.					
k. We have the right to alter the environment to suit our needs.					
AT THE HEAD OF THE BIGHT: l. Protecting whales from harassment should be a high priority.					
m. Prevention of coastal erosion should be a high priority.					
n. Whale watchers are causing coastal erosion.					
o. Protecting the marine environment for the whales should be a high priority.					
p. Whale watching should be the priority activity for the area.					

PERSONAL DETAILS

24) City/town where you live: _____ State: _____ Country (if not Australia) _____

25) a. Circle one: "I am travelling alone with a spouse/partner only with mostly family with mostly friends
b. In how many cars? _____

26) a. Circle YOUR age group: 16-19 20-29 30-39 40-49 50 or over Gender: Male Female
(Not including you) Ages of those in group: _____ No. of males _____ No. of females _____

27) Circle your education level: Tertiary degree TAFE/trade certificate Completed high school

28) Conservation or environmental community group(s) you have (ever) joined: _____

29) a. If you spent more than 1 day whale watching, where did you spend the night(s)? _____
b. Accommodation type (circle): hotel/motel friend's place own caravan cabin tent other: _____

30) Please circle the estimate of what you/your group have spent (or will have spent) whilst visiting the Nullarbor (between Eucla and Ceduna): less than $50 $50-100 $101-150 $151-200 $200+

END OF QUESTIONNAIRE

THANK YOU for your time and effort in completing the questionnaire. Comments are welcome below.

APPENDIX 6
Details of Whale Watching Tour Operators from Case Study Sites

Tour	Site & Platform	Initial Year of Operation	Duration of Tour	Estimated Passenger Numbers per 1995 Season	Comments
Eco Interactions	Head of Bight Land-based; - Small bus - Camping	1994	5 days	not divulged; 1-2 trips to the site per season	- Majority of operations are boat-based dolphin watching in Adelaide
Goanywea Camel Safaris	Head of Bight Land-based; - Camel ride - Camping	not divulged	3 days; on-site= 1-2 days	20 people	- Whale watching site is one destination during the tour
Great Australian Bight Safaris	Head of Bight Land-based - 4WDs - Some Camping	1986	5 days	100 people	- Majority of operations are not whale watching and take place in the Eyre Peninsula
AAT Kings	Head of Bight Land-based; - Large coach	1960's (general tours)	12 days; on-site= 1/2 hour	1000 people	- Whale watching site is one destination during the tour
Holiday-makers	Head of Bight Land-based; - Large coach	1971	5 days; on-site= 1/2 hour	350 people	- Whale watching site is one destination during the tour
Nullarbor Adventure Tours	Head of Bight Land-based - 4WDs - Some Camping	not divulged	3 days	not divulged; 1-2 trips to the site per season	- Whale watching site is one destination during the tour
Whales & Wildlife Ecotours	Head of Bight Land,air based - Small bus - Fixed wing	1993	3 days	12 people	- Tour operator collects whale identification data during aerial part of tour
Helicopter Operators of Australia	Warrnambool Aerial tour; - Helicopter	1987	10 min.	1995 no tours; 1050 passengers in 1996	- An average of 3-4 tours conducted per day if whales in area
South-West Aviators	Warrnambool Aerial tour; - Fixed-wing	1976	30 min.	not divulged	- Tours are infrequent
Silver Star Cruises	Albany Boat-based - Catamaran	1990	2 1/2 hours	1000 passengers	- Often gives tours for school children
Southern Ocean Charters	Albany Boat-based - Fishing boat	1978	2 hours	350 passengers	- Tour operator manages Whale World Interpretive Centre; dive & fishing tours off-season
Shalimar Charters	Albany Boat-based - Fishing boat	1995	3 hours	500 passengers	- Dive & fishing tours off-season
Spinners Charters	Albany Boat-based - Fishing boat	1996	3 hours	600 passengers (1996)	- Dive & fishing tours off-season
Albany Sailing Academy	Albany Boat-based - Sail boat	1994	3 hours	50 passengers	- Tour operator on local council at time of study

APPENDIX 7

An Example of Theme Development for Whale Watching Interpretation

This sample of theme development regarding whale watching represents a model for interpretation which incorporates:

- aspects of mindfulness in its composition
- a holistic perspective for creating an intent to act in an environmentally responsible behaviour in regards to resources of nature-based tourism; both in the context of the tourism activity and after its conclusion.

As such, this example can be adapted to other nature-based tourism enterprises to address the respective focal animals, flora, ecosystem and/or regions.

Theme:

(1) Whales were hunted extensively, with devastating results for their populations;

(2) Decimated whale populations, including the species viewing during the present tourism activity, are struggling to recover their numbers, and thus it is a privilege to witness the whales (at all) during whale watching;

(3) Whale activities in Australian waters contribute to the population's recovery, and represent a critical period within the individual whales' lifecycles (ie. giving birth, finding a mate)

(4) Whales are protected in Australia through legislation/guidelines which outline responsible behaviour by whale watchers, tour operators, and others who come into contact with them.

(5) Your own behaviour affects whales and other features of the marine/coastal environment (important to whales and in their own right) during the tourism experience.

(6) There are measures you can take (in addition to the behaviour outlined previously) to continue to protect whales and the marine/coastal environment elsewhere, and other sources you can consult for further information on the features of the experience and their protection.

In this example, the juxtaposition of the (mainly)'historical' relationship and an incarnation of the modern relationship between humans and cetaceans can intimate why protection is needed in the first place, and that the whales viewed during participation in the tourism are not necessarily 'safe.' To further develop this theme, the interpreters could also portray the species viewed in Australian whale watching as emissaries for others that still suffer whaling or other dangers posed by human behaviour.[1] This type of theme development within the whale watching interpretation represents a useful model for other forms of nature-based tourism, as the technique is readily applicable to all types of threatened resources encountered during the tourism experience.

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[1]This thesis is unrepentant in its anti-whaling position, however in the interest of interpretation avoiding indoctrination (cf. section 3.2.4), it recognises that such issues must be addressed with respect for other cultural values. Interpretation should introduce alternative points of view in the discussion of whaling; and can thereby address its environmental protection objective (by including the Western view) but allow participants to come to their own conclusions.

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