

## VOYAGES OF THE DISCOVERY

### PREPARING FOR NEXT TRIP

Sydney, June 5.

Sir Douglas Mawson, who arrived from Brisbane to-day, said that the examination of the hull of the Discovery at Melbourne showed that it was in good order. Until the end of October, added Sir Douglas, he would be busy supervising the arrival of scientific apparatus from overseas and collecting stores. It was hoped to leave Hobart early in November. The regions to be covered on the next expedition would be those lying directly south of Australia and east of those covered on the last expedition.

## SPECIMENS FROM THE ANTARCTIC

### Adelaide Member of Mawson Expedition Returns

"Of the several tons of specimens collected by the Mawson expedition, many will come to Adelaide for biological research purposes, and many others will be sent to the British Museum," said Mr. A. L. Kennedy who was a member of the expedition, on his return by the Melbourne express yesterday.

Mr. Kennedy disembarked at Hobart, and left immediately for Melbourne. He said the Discovery's early return was largely due to unusually strong westerly winds, which greatly assisted the vessel. It was estimated that the return trip would take about 40 days, but the strong following winds reduced the time to 28 days. On the passage between Hobart and Melbourne the Discovery would continue dredging operations for specimens.

## ANTARCTIC EXPLORATION

### Tribute to Sir Douglas Mawson PROF. JOHNSTON RETURNS

"Few persons can realise the enormous amount of careful thought and attention necessary to equip and finance a scientific expedition to the Antarctic," said Prof. T. Harvey Johnston, a member of the Mawson expedition, who returned to Adelaide by the express from Melbourne this morning.

Prof. Johnston paid a glowing tribute to Sir Douglas Mawson as a leader. Everything required was on the ship when the Discovery left.

Members of the expedition were a happy family, he added. Without the assistance of Sir Douglas his duties could not have been as satisfactorily performed as he hoped they had been. The collection would not have been so extensive. Sir Douglas had proved the great value of team work in expeditions of that nature.



Prof. Johnston

Speaking of weather experienced during the voyage, Prof. Johnston said that it was not nearly as satisfactory as that during the previous trip. There were more storms and fewer bright days. Ice conditions also were more difficult. However, the party was able to spend more time in the Antarctic regions and a more extensive area was traversed.

Prof. Johnston, who was entrusted with the collection, preservation, and storage of all plant and animal life obtained on land and sea, added that many hundreds of boxes of material had been brought back. Some had been forwarded to the British Museum for study by Mr. J. W. Marr, zoologist, who was a member of the previous expedition.

Other samples had been sent to New Zealand for examination by Mr. R. Falls, he continued. Bulk of the collection, however, would come to Adelaide shortly, where it would be housed until

## MAGNETIC POLE MOVES

### 100 MILES CLOSER IN 20 YEARS

#### OBSERVATIONS IN THE ANTARCTIC

Canberra, January 8.

"We have just embarked after two days ashore on King George V. Land, during which period excellent weather prevailed," telegraphs Sir Douglas Mawson from the Discovery.

"After escaping several days ago from the grinding edge of the pack," the message states, "the Discovery very slowly progressed in face of the gale east across Dunville Sea, arriving off Cape Denison at noon on January 4. Three anxious hours elapsed before the anchor was safely dropped, owing to the difficulty experienced in manoeuvring in-shore in face of a fierce gale. About 9 o'clock on the morning of January 5 the weather moderated sufficiently to allow a party to go ashore.

King George V. Land

"The hut where I raised the flag 20 years ago still stands, although it is greatly weather worn. The interior of the hut is largely choked by an extraordinary development of large spongy masses of ice-crystal plants which, on being touched, fall to the floor. The outside exposed wood of the hut and all wooden objects were found to be deeply scored by snow blast, resulting in hard and soft tissues standing in singular relief. Fully exposed oregon boards have been thus reduced in thickness, owing to snow abrasion, in 20 years, by quite half an inch. The wireless masts have fallen in shattered fragments. The astronomic and magnetic huts still stand, and in one of the latter Mr. Kennedy made 24 hours' continuous observations which, by comparison with the determinations made on the same spot in 1912, indicate that the magnetic pole has in the interval moved about 100 miles closer than formerly, and probably it is now distant only about two hundred miles to the S.S.E.

Compasses Useless

"Indeed, we are so near the south magnetic pole that ships' compasses are almost useless.

"Brilliant, clear weather gave ideal conditions for Mr. Simmers to make a useful series of measurements of the sun and sky radiations which, in this intensely clear and dry atmosphere, have a special value. Whilst work was thus in progress in every department of observation, we all met together for a brief period at noon on January 5, and officially hoisted the British flag over the territory of King George V. Land and its extension as part of Oates Land—an area embraced between the meridians 140 and 160 east. This impressive ceremony terminated with cheers, and the singing of 'God Save the King.'"

(Publication without permission in whole or in part in Australia or overseas is strictly forbidden).

## BOTTLE WITH MESSAGE

### Dropped From Discovery, Drifts 1,000 Miles In Nine Months

A bottle, containing a message, thrown overboard from the Discovery on the return of Sir Douglas Mawson's expedition from the Antarctic, has been recovered from the sea about five miles off the coast near Robe.

The message said:—"This bottle was thrown overboard from the Discovery, Capt. J. K. Davis, in latitude 35.02 S, Longitude 119.37 E., on March 21, 1930, by the second officer (W. R. Colbeck). The finder was asked to send the paper to the Meteorological Office, Air Ministry, London.

On the date mentioned the Discovery was about 100 miles east of Albany. The bottle drifted east about 1,000 miles during nine months.

the committee of the expedition decided its distribution for detailed study.

Much material was obtained from the Antarctic, sub Antarctic, and off the coast of Tasmania, where dredging and trawling was undertaken in comparatively shallow waters. As in the previous trip, much attention was paid to minute sea life, which formed the basis of higher oceanic life, such as whale, seals, fish, and birds, he concluded.

## SMALL FISH KILLED BY COLD

### Mawson Finds Big Ice-Locked Sea

(By wireless from Sir Douglas Mawson on the Discovery, dated February 12.)

After passing through an area in which pack ice to a fine open sea was west south and in the shelter of an enormous tabular berg the aeroplane was got up and further geographic observations made. A marine station was run from the ship. We were then in an extensive region of shallow sea ranging from 100 to 250 fathoms in depth.

Here the water is uniformly cold. Howard found the bottom water the coldest yet recorded by this expedition—28.30 degrees Fahr. Many small fish floated past the ship dead, apparently frozen.

Hurley sculled a boat into some remarkable grotto formations sculptured in grounded bergs and obtained some striking photographic records.

#### WHERE BERGS ARE BORN

The land ice slopes seen from the aeroplane are entirely covered by ice. This inland ice sheet was observed to reach an elevation of 4,000 feet at no great distance inland. From such heights it descends in a series of undulations. Finally, at sea level it is fringed for the most part by horizontally disposed floating extensions which advance several miles over the waters before truncation by periodic calving of tabular bergs.

The existence of this ice-locked sea extending to beyond the 60th degree latitude is an interesting discovery.

The air is much cooler lately, being usually below 20 degrees Fahr., and as low as 3 degrees Fahr. has been recorded by the aeroplane. Today we have been steaming north to resume the delayed charting of MacRobertson land coast further to the west.

All rights reserved. Publication without permission in whole or in part in Australia or overseas strictly forbidden.

## MOVEMENT OF MAGNETIC POLE

### VALUE OF OBSERVATIONS IN ANTARCTIC

The observations made by Mr. Kennedy with the Mawson Antarctic Expedition at King George V. Land, which showed that the south magnetic pole had moved northward about 100 miles since 1912, confirm the observations made at the Adelaide Observatory, stated the Government Astronomer (Mr. G. F. Dodwell) yesterday.

The magnetic poles, he explained, were cyclical in their movement. At present the south magnetic pole was moving northward almost along a meridian of longitude, and for this reason did not affect the compass variation very much. The principal difference caused by the present movement was in the magnetic inclination, or depth, which had been increasing at the rate of one minute of arc per year. The experience of the expedition confirmed this.

The magnetic pole in the Antarctic would not continue to move northward indefinitely. It would gradually move round westward again, and in a few hundred years would be travelling southward. There need be no fear that the movement of the magnetic poles would cause navigators to run their ships aground through taking wrong bearings. The Admiralty charts recorded the movements to be made by the poles, and these facts were taken into account when observations were made. The information obtained by the expedition would be of great value, added Mr. Dodwell, in checking the information on these charts.

## DISCOVERY

### RETURN TO ANTARCTIC Plans for 1931

Melbourne, April 15.

It is almost certain that the Mawson Antarctic Research Expedition will return to the Antarctic regions next summer in the Discovery from Hobart.

The Prime Minister (Mr. Scullin) said to-day that a second programme for the expedition was being considered favorably by the Federal Ministry. The expedition committee would meet on April 23 to complete a report for presentation to him. He hoped to make a statement on the future of the expedition when Parliament reassembled after Easter.

The Discovery, which was the only suitable vessel available in the southern hemisphere for the expedition, had been lent by the British Government for two years, he said.

Sir Douglas Mawson (leader of the Australian and New Zealand Antarctic Expedition) returned on Wednesday from Melbourne, where he attended a meeting of the expedition committee. They discussed the proposed second cruise of the Discovery to the south, which will probably begin in November.

## DISCOVERY'S NEXT EXPEDITION

### COMMITTEE TO MEET SOON

#### SIR DOUGLAS MAWSON RETURNS

Sir Douglas Mawson (leader of the Australian Antarctic Expedition), returned to Adelaide from Melbourne yesterday.

He stated that he hoped the Federal Government would be able to find it unnecessary to override the arrangements made by the former Government with reference to the proposed second trip of the Discovery to the Antarctic. There would be a meeting of the expedition committee at the end of April, in Melbourne, and it was hoped that by then definite information would be available from the Government.

Until that meeting the Discovery would remain at Port Melbourne. After the meeting it was probable that the vessel would go to Sydney, where it would be in the care of the Royal Australian Navy.

A number of firms who had supplied food and equipment for the recent trip had offered their assistance for the proposed second trip.

## PLANES OF GREAT VALUE TO MAWSON

### Could Not Plot Coastline Without Them

#### PACK ICE BARRIER

(Wireless message dated January 17 from Sir Douglas Mawson on board the Discovery. All rights reserved.)

A wide belt of heavy tight pack ice to the south effectively prevents the Discovery from pressing in to the land shelf. Aerial reconnaissance reveals an absence of open water between the pack and coast.

For days we have followed west along the margin of this field of ice, the like of which in its enormous breadth and extent was not met with by the two former expeditions which visited this locality.

With its assistance, on fine clear occasions, we are able to check the location of the coastline as suggested by soundings and the set of the pack. We have thus been able roughly to indicate the apparent approximate position of the continental margin westward to meridian 121.

#### ICE STOPS SHIP

On the fifteenth Campbell and Oom from the plane sighted a land margin on the far southern horizon to the south-west from latitude 66 longitude 127. Further to the west on the sixteenth Douglas and Oom again sighted land extending approximately east and west, located on meridian 122 and a little to the north of latitude 67. Last evening the Discovery attempted to push to the south through the pack but had to abandon the effort after few minutes because of the heavy nature of the ice. The weather is holding fine and the ship in continuing west.

(Publication without permission in whole or in part in Australia or overseas is strictly forbidden.)

## DISCOVERY IN DOCK FOR OVERHAUL

### Oaken Ship As Stout As Ever

MELBOURNE, Monday.—Perched high above the concrete floor of the dry dock at Williamstown, the exploration ship Discovery is sunning herself before the sailors tar her hull. The baroncles have been scraped off her.

It is the first time in a year that the ship has been overhauled in dry dock. She was in London on the last occasion.

Twenty seamen, floating in long red punts, slung from the vessel's side, had scraped and scrubbed the famous oaken hull when all the water had been pumped out.

Captain J. K. Davis, who has sailed the Discovery safely through many icefields, stood on the floor of the dock today, eyeing the ship affectionately.

#### NEW CAPTAIN

Captain W. Mackenzie, her new master, who will take her over from Captain Davis, when in ten days' time she comes out of dry dock and ties up at Port Melbourne, stood there too.

Sheets of steel are on the bow to smash ice pinks, but the whole hull is English oak of an average thickness of eighteen inches. It is as sound as ever it was.

When she is thoroughly dry the ship will be painted and tarred. In the meantime officers and crew aboard, twelve in all, are tidying up and making minor adjustments.