

great explorer's expeditions, namely through the North-west Passage (1903-05), to the South Pole (1910-12) and finally a voyage on *Maud* along the coast of Siberia traversing the Northeast Passage (1918-19).

In contrast to the easy professionalism of the text, the photography is expectably the work of amateurs; pruned to the basic essentials. Amundsen's expeditions never boasted a Ponting or a Hurley. The author however has taken pains to identify and describe each photograph in detail pointing out just the sort of detail to which Amundsen himself would likely have made reference in his lectures. Thus a fairly commonplace photograph of the kitchen at Framheim takes on an added dimension when it is explained that the cubicle doubled up as an instrument repair workshop, thus accounting for the various instruments hanging on the wall, each of which is carefully identified. How then did the British public react to the slides and the lecturer? Mr Huntford touches on this in his introduction. A young schoolgirl found Amundsen's Norwegian accent 'simply killing', the slides being 'mostly coloured and simply lovely'. Lady Scott, rather sourly, found the pictures 'very poor, and many of them faked — painted etc.'. As for Amundsen, he, like his rival Scott, did not find public appearances at all congenial. Cash flow problems meant that he could never entirely dispense with 'trailing round the lecture trail'. This may account, the author suggests, for Amundsen's increasing bitterness in later years. Undoubtedly the man never received his due acclaim. Mr Huntford, with his second book on the subject in ten years, is clearly set on redeeming it. (H. G. R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

### MAWSON'S DIARIES

MAWSON'S ANTARCTIC DIARIES. Jacka, F. and Jacka, E. (editors). 1988 London, Unwin Hyman. 414p. illustrated, hard cover. ISBN 0-04-320209-8. Not priced.

The pride of the Mawson Institute in the University of Adelaide, Southern Australia, are the archives of Sir Douglas Mawson himself, a collection of diaries, notebooks, correspondence and personal papers, together with a major photograph collection and some Antarctic artefacts. Mawson's Antarctic diaries constitute the jewel in this crown and it has been the ambition of the Institute's Director, Dr Fred Jacka, since his appointment in 1965, to publish a scholarly edition of this important historical material. Now, thanks to the Institute's former Secretary, Edna Sawyer, who is responsible for the transcription, and to the devoted help of Eleanor Jacka and others the work is completed.

The papers transcribed in this volume consist of eight notebooks and other papers covering Shackleton's British Antarctic Expedition 1907-09, the Australasian Antarctic Expedition 1911-14, and the British, Australian and New Zealand Antarctic Research Expedition 1929-31. The

diaries are in essence field notes not intended for publication as such. They are, to quote Dr Jacka 'in content, style and tone the records of a man of action'. They are not in the least bit, therefore, reminiscent of the diaries of say R. F. Scott or E. A. Wilson; there are no purple passages and little personal introspection or emotional outburst. Nor is there a great deal of comment on fellow expeditioners, except on the occasions when Mawson's carefully planned scientific programmes or the safety of the expedition are at stake. Sydney Jeffries, the all-important wireless operator on the AAE 1911-13, who suffered a midwinter breakdown, gave Mawson much cause for concern. Likewise Captain John King Davis on BANZARE, 1929-31, who became in Mawson's words 'mentally strained', went out of his way to obstruct Mawson's every wish. The leader's preoccupation with this ongoing guerilla warfare very much sours the final pages of the journal.

Expectably field notes, often written in uncongenial conditions, cannot make for absorbing reading. Where Mawson's diary entries score is in their very immediacy and their occasional revelation of personal feelings in moments of stress and conflict. Readers already versed in Mawson's adventures will tend to turn to the account of the Far Eastern sledge journey of 1912-13 in which Mawson's two companions, Lieutenant B. E. S. Ninnis and Dr Xavier Mertz died in dramatic circumstances, and Mawson himself only just managed to reach winterquarters more dead than alive. Ninnis's disappearance with the sledge and the precious food and equipment is recorded in careful detail. One can imagine what Scott's reaction might have been. All Mawson allows himself is 'May God help us'. Mertz's death is made to seem even more terrible by the almost clinical objectivity of Mawson's comments: 'Death due to exposure finally bringing on a fever, result of weather exposure and want of food. He had lost all skin of legs & private parts. I am in the same condition ...'. Further on he is sufficiently collected to write: 'I greatly regret my inability to set out the coast line as surveyed for the 300 miles we travelled and [record] notes on glaciers and ice formations etc ...'. Science is what mattered most to Mawson, even in extremis, as is made clear throughout these pages. He was not only a magnificent leader but an outstanding pioneer of Antarctic science and discovery.

This work is a masterpiece of devoted editing. There is an excellent introduction to Mawson the man and his expeditions, based on the writings of those closest to him, especially his wife Paquita. The notebooks themselves are helpfully tied together with linking narrative, and illustrated throughout with a selection of Frank Hurley's splendid photographs, some reproduced here for the first time. Appendixes list expedition personnel, technical terms and place-names, cloud and wind notation, ice terminology and maps. The editors are to be congratulated on an historical source book of the first importance, constituting a worthy monument to Australia's greatest

Antarctic explorer. (H. G. R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### ALASKAN SKIN BOATS

THE SKIN BOATS OF ST LAWRENCE ISLAND, ALASKA. Braund, Stephen R. 1988. Seattle, University of Washington Press. 141 p, illustrated, hard cover. ISBN 0-295-96674-2. US\$19.95.

In a blend of ethnography and history the author has written a detailed and welcome study of the *angyapik*, or open skin boat of St Lawrence Island. He describes the modern skin boat (the ethnographic present is 1973), providing valuable information on materials, construction and use. In particular, the section on covering the frame is delightfully detailed, informing us not only of the various stages in the preparation of walrus skins, but of such intricacies as the correct needle size required for stitching the stern. Braund also offers a history of their *angyapik*, tracing its development from flat-bottomed aboriginal structure to the modern bent-rib version. He has produced a well-illustrated volume which contributes handsomely to the study of the history, development and use of boats. (Mark Nuttall, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### ANTARCTIC BIOMEDICINE

MAN IN THE ANTARCTIC; THE SCIENTIFIC WORK OF THE INTERNATIONAL BIOMEDICAL EXPEDITION TO THE ANTARCTIC (IBEA). Rivolier, J. and others (editors). 1988. London, Taylor and Francis Ltd. 157 p, illustrated, hard cover. ISBN 0-85066-280-X.

This book publishes the results of the only comprehensive biomedical study ever attempted in the Antarctic. The study focused upon a working group of 12 men of five nationalities during a traverse of 800 km in Adelie Land during the southern summer of 1980/1981. It was conducted in three phases. Phase I was carried out in the laboratories of the Commonwealth Institute of Health, University of Sydney over a period of 31 days to provide baseline measurements. Phase II was 71 days in the field in Adelie Land, Antarctica where measurements were made of life styles, work, cold exposure, etc. and of adaptation to the environment. Phase II was completed in Sydney, over a period of two weeks, to provide the follow-up measurements.

Since the earliest days of Antarctic exploration it became apparent that those who participated had to cope with a high degree of stress resulting from a combination of the harsh climate, isolation, work, sensory deprivation, and other conditions peculiar to Antarctica. Responses to these stimuli sometimes resulted in psychological problems which had tragic consequences in the field. Medical officers, whose main concern was the health of the participants, made many observations during these early expeditions. Since the International Geophysical Year it became increasingly apparent that the Antarctic itself was an ideal

laboratory for human biomedical studies. This led to the initiation of separate programs on immunology, sleep, cold adaptation, nutrition, microbiology, and chronobiology. It was also hypothesized that a greater understanding of the signs and causation of psychological problems, in particular 'winter stress', might lead to preventative methods. An expedition in the field devoted to 'man as a whole' was endorsed by the Scientific Committee on Antarctic Research in 1977 — hence the IBEA study.

The book is a very well-organized summary of the results of the experiments in the field and the post expedition analyses. The data are well collated and presented in a manner that is clear to the layman as well as to scientists of the disciplines involved. It is also full of information useful to personnel managers and future expedition leaders. However, it can not be classified as a handbook or a textbook on the subject; it is best described as a beginning — a foundation study for future research.

As one who has 'wintered-over' in the polar regions, and who subsequently had to help select personnel who we hoped could cope with 'winter stress', this study seems long overdue. Man's reactions to living in the Antarctic are not well understood and as such are a threat to his health and well-being. The IBEA study is a courageous start and one would hope that Antarctic program managers would agree that this type of research is deserving of continued funding as a major focus of international Antarctic research. (Brian Shoemaker, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### SOUTHERN HEMISPHERE REINDEER

REINDEER ON SOUTH GEORGIA. Leader-Williams, N. 1988. Cambridge, Cambridge University Press (Studies in Polar Research). 319 p, illustrated, hard cover. ISBN 0-521-24271-1. £20.00, US\$49.50.

Rats, mice, rabbits, horses, cattle, sheep, goats, pigs and upland geese have at various times been introduced to the Southern Ocean island of South Georgia by sealers and whalers. A few species, notably the less welcome rodents, survived to make nuisances of themselves. Reindeer were brought in for sport and meat by whalers, and liberated on grassy areas of the central northeastern side of the island. This author writes of three introductions between 1911 and 1925, of which two, numbering ten and seven individuals, went forth and multiplied. They have been conspicuously successful. With the recent retreat of glaciers the stocks have spread beyond their original confines. No longer puzzled by reversed seasons or culled by whalers, there are now several thousand reindeer munching contentedly on South Georgia's tussock-covered lowlands between Fortuna Bay and Royal Bay.

Nigel Leader-Williams's research for British Antarctic Survey began in 1972 and covered several seasons. The result is a very thorough study of the stocks and their ecology; this book covers the annual cycle, breeding,