

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 the *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,