

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,

feeding, growth rates, parasites, mortality and effects on indigenous vegetation. For their future, far from advocating removal, the author draws attention to the need for a management plan, and the general scientific interest of these and other small stocks of introduced animals in alien situations. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

POLAR BEARS IN CANADA

POLAR BEARS. Stirling, I. 1988. Ann Arbor, University of Michigan Press. 220 p. illustrated, hard cover. ISBN 0-472-10100. US\$39.50.

Polar bears, like penguins, are among the world's most popular animals, and authors at a loose end find it profitable to write on them. Ian Stirling was never at a loose end; he is a dedicated professional zoologist — a senior research scientist with the Canadian Wildlife Service — with a strong and lasting commitment to polar bears. If he profits from this book he well deserves to, for it tells of his own research, set in a context of other recent circumpolar studies on this enigmatic, exasperating species. In *Polar bears* he collaborates with Dan Guravich, a leading wildlife photographer with a matching interest in the Arctic.

The result is all that a popular wildlife book should be, the text knowledgeable and intelligent, the pictures sensitive, colourful and a delight in themselves. Stirling covers the origins of polar bears, their background ecology, relationships with primitive man, reproductive and population biology, behaviour, and conflicts with modern man. A dozen other scholars might have done no less and congratulated themselves on a much duller book. This author uses his wide experience in lecturing and film-making to answer the kinds of questions that real people — not just scientists — ask about polar bears. Yet it is a thorough book; beyond the biology and pictures you find the texts of two important documents, the 1976 International Agreement on the Conservation of Polar Bears and their Habitat and the more parochial 1988 Canadian/US Management Agreement for Polar Bears in the Southern Beaufort Sea, together with a good bibliography and index. All concerned, including University of Michigan Press, can be proud of this one. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

KINSHIP AMONG THE DENE

KINSHIP AND THE DRUM DANCE IN A NORTHERN DENE COMMUNITY. Asch, Michael. 1988. Edmonton, Boreal Institute for Northern Studies. 113 p, illustrated, soft cover. ISBN 0-919058-74-4.

Michael Asch's work on the Dene is widely known and justly appreciated and this first published appearance of the material on social organisation and music from his PhD thesis (1972) is most welcome. The time is 1969–70, at a period of social stress but before the 'development of a

sophisticated political response'. The book's focal point is a community faced with a dilemma about how to conceptualise, and thus live through, changes in their own social organisation. The Canadian government had moved three local bands into one settlement, where they had now crystallised into two groups. Previously, marriage had been with people who lived elsewhere; now everyone was a neighbour. In terms of kinship, the two groups could now be seen either as 'nodal kindreds' or as halves of a 'Dravidianate' system of exogamy. This tension caused difficulty for the community's sense of solidarity as a whole. Asch then relates social organisation to different types of music, components of the Drum Dance. This dance, when 'successful', suggests that the community is indeed solid; but its success is not guaranteed on every occasion. The author clearly knows much more than he tells us in this short book and the reader is left crying out for more: more data, to show us the inner political process, case studies of persons making the choices which are here outlined in abstract form (eg the 'contentious issue of the election of a Chief' which made one dance unsuccessful). This book is tantalising and it is to be hoped that its appearance will not preclude a fuller account, not least because the situation described is one in which an updating would be very exciting. The postscript from 1988 leaves still obscure Asch's very interesting idea that the successful drum dance may create a social solidarity through resolution of present conflict but at the price of future social development. (Piers Vitebsky, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER).

BRIEF REVIEWS

UNTENEHMEN POLARSTERN: DAS BORDBUCH DER ANTARKTIS-EXPEDITION. Stonehouse, B. and Casarini, M. P. 1988. Düsseldorf, ECON Verlag. 302 p, illustrated, hard cover. ISBN 3-430-18801-6.

Illustrated popular account, by two who took part, of Winter Weddell Sea Project 1986, a six-months' expedition aboard icebreaker RV *Polarstern*, of the West German Alfred-Wegener-Institut für Polar und Meeresforschung. Casarini covers the first half (June to September, Stonehouse the second half (late September to December), recording day-to-day life and scientific discovery on a modern polar oceanographic expedition. In German.

DÄGGDJUR, GRODDJUR & KRÄLDJUR. Curry-Lindahl, K. 1988. Stockholm, Norstedts Förlag. 396 p, illustrated, hard cover. ISBN 91-1-864142-3.

A pocket-sized field guide to the amphibia, reptiles and mammals of Europe, with maps and both full-colour and black-and-white illustrations; it features especially the fauna of Denmark, Finland, Iceland, Norway and Sweden, but covers also the British Isles, Belgium, Netherlands, Poland, Germany and western USSR, showing skulls, tracks and other details as well as portraits. Text in Swedish, a useful book in any language..