

Reviews

ALL KINDS OF ICE

THE GROWTH AND DECAY OF ICE. LOCK, G. S. H. 1990. Cambridge, Cambridge University Press. 434 p, illustrated, hard cover. ISBN 0-521-33133-1. £65.00, US\$100.00

My understanding of the aims of this innovative book is that the author is attempting to pull together concepts involving ice in many forms and at many scales in a structured way. The author remarks at the outset that this is an immense task. The range of topics covered is huge. Both theoretical and observational aspects of ice growth and decay in and on the Earth's surface, in the atmosphere, in and on water, and relating to biological systems are covered. Chapters on the thermodynamics of ice and the Stefan problem provide an important theoretical basis to the book, but the problem of such a wide range is that the level of detail to which the discussion of many points is taken will not be sufficient to satisfy the specialist. For example, the freezing of foods is given a quantitative treatment, whereas the melting of icebergs, a topic on which both theory and empirical observations are available, is treated in a purely subjective fashion.

The section dealing with permafrost processes, and in particular the geological results of these processes, is also supported by only a scattered and ageing list of references. I would imagine that similar statements could be made by specialists in other fields covered in the volume. However, while the book, in my view, will never command a wide readership due to the problems outlined above, it is clear that Lock has made a rather interesting attempt to find unity in an area that is usually divided among several disciplines. This is the strength of the work, but it has inevitably lead to a variability in treatment which was not entirely satisfying for this reader. (Julian Dowdeswell, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER, UK.)

DEVOLUTION IN NORTHERN CANADA

DEVOLUTION AND CONSTITUTIONAL DEVELOPMENT IN THE CANADIAN NORTH. Dacks, G. (editor). 1990. Ottawa, Carleton University Press. 373 p, soft cover. ISBN 088629 110 0. Can \$19.95.

This collection of six case studies and five essays is the first book to emerge from the Consortium for Devolution Research, a four-year-old cooperative effort by Canadian university researchers to make northern research more relevant and more accessible to northerners by involving them in the research design and then sharing the results with them. Thus representatives of aboriginal groups and of the territorial and federal governments participated in workshops at the outset and at the conclusion of this research on the political devolution process.

Dacks defines devolution as the 'transfer of jurisdic-

tion from a senior government to a junior government', and, following an introductory historical essay (P. Clancy), the six case studies examine Canada's experience in shifting responsibility for forest and wildlife management (F. Abele, P. Clancy), health care (G. Weller, J. D. O'Neil), and oil and gas (G. Dacks) and in the evolution of local government in the Yukon and Northwest Territories (K. Graham). The closing essays seek and find patterns in the negotiation of devolution agreements (K. Graham); examine the effect of devolution on democratic institutions (F. Abele); discuss the very real possibility of dividing the Northwest Territory into two territories, eventually to become two provinces (G. Weller); and analyze the influence of devolution on the interaction between constitutional and political development in the North (G. Dacks). Little more than a mention is given to the philosophical aspects of devolution as a mediating institution between two largely incompatible approaches to political organization: Anglo-Canada's fundamental principles of majority rule and liberal individualism and the aboriginal inhabitants' assertions of group rights appertaining to a cultural collectivity; nevertheless, recognition of this fundamental conflict, which underlies the entire devolution process, informs the studies and lends them an even broader relevance, as the native peoples' anti-assimilation sentiments have much in common with those of the Québécois to the south.

As well as being a timely and useful set of studies and analyses, the book and the process of developing it may mark a new rapport between social scientists and northerners. While the consortium members indicate some disappointment at the extent of governmental and aboriginal input at the second workshop, they were pleased at the participation in the research design and were able to suggest ways of eliciting more response at the results stage of subsequent projects. (William V. Dunlap, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

POLAR ECOLOGY AND RESOURCES

NORTH POLE SOUTH POLE: A GUIDE TO THE ECOLOGY AND RESOURCES OF THE ARCTIC AND ANTARCTIC. Stonehouse, B. 1990. London, Pion. 216 p, hard cover, illustrated. ISBN 1-85375-056-5. £17.95 To do justice in a review to *North Pole South Pole* is extremely difficult. Few coffee table books equal the lavish quality of production, and the illustrations are breathtaking. Superlatives certainly, but these would be superficial judgements of a work which in itself is outstanding, disciplined and well structured, irresistibly readable, with a scientific objectivity lightened by wry humour.

How the Arctic and Antarctic differ from the rest of the

world is well enough known, but rarely have the differences been focussed so vividly. Stonehouse contrasts the snowbunting, alert and cheerful at -20°C , and the tuft of lichen alive and in business, with industrial man, the 'meddlesome ape', who is seldom at home in polar conditions. Native plants, animals and people have adapted, and find what they need: modern man has failed to adapt, and receives only grudging acceptance in the polar environment.

In the first half of the book Stonehouse with deceptive ease carries us through millennia of years, the history of changing climate, the sequence of ice ages culminating in the last brief 600 years with the little ice age of 1400–1700 AD, the warmer period between 1880 and 1940, and recent very gradual cooling. Interpretation is judicious, with no snap conclusions but an instinct that polar conditions change slowly, and worries are longer-term rather than immediate. There is the comprehension that nature is not static but ever-changing, with a balance exceedingly delicate and sometimes fragile. Stonehouse does not discount any of the varying influences, natural or man-created, that bear on polar environments. He stresses instead the need to measure, watch and observe, and the increasing technical competence needed so to do, for everything measured has an inherent component of change.

Fifty years ago some of us were digging pits into glaciers to measure by lamplight the annual striations. It is sobering to read today that the 20 or 30 m of depth which we chipped away are dwarfed by the 1500 m cores produced by modern drills — cores which, kept frozen, allow long term laboratory study. None the less we enjoyed those simpler times. I go along with Stonehouse in his view that, when telling hardship stories at home here in Britain, we got away more easily than we would have in Scandinavia or the American Middle West, where in winter children go to school in the temperatures that defeated Scott.

However, I quibble with his claim that pre-1940 British university expeditions were on a financial shoe-string, if the impression is of meagreness or penny-pinching. Our 1935/6 expedition to Svalbard, lasting 13 months, cost only £5000 in the money of the time, but that was plenty for a well-founded expedition with good equipment yielding sound scientific results. It was at that time that Gino Watkins opened a door to a new outlook which is very much that of Stonehouse himself, and to which the subsequent successes of British Antarctic Survey owes much. Adaptability was the guideline, an adaptability which also in World War II was to have its influence far beyond the Arctic in North Africa, Burma and Malaysia.

What is most important, however, is not yesterday or today but tomorrow. In the final chapter Stonehouse treats with the same quiet reflection, wisdom and perception both the scientific challenges and the complex environmental issues — including the legislation stakes required for Antarctica, a tour de force in itself. But a tour de force

is precisely what *North Pole South Pole* is. (Sir Alexander Glen, The Dower House, Stanton, Broadway, Worcs. WR12 7NE.)

NATIVE HUNTING AND ANIMAL RIGHTS

ANIMAL RIGHTS, HUMAN RIGHTS: ECOLOGY, ECONOMY AND IDEOLOGY IN THE CANADIAN ARCTIC. Wenzel, George. 1991. London, Belhaven Press. ix + 206 p, photographs, maps hard cover. ISBN 1-85293-030-6. £37.50.

Who defines Inuit culture? Common sense would say the Inuit themselves. In the controversy over seal hunting and the sale of sealskins, however, Inuit have rarely been given a chance to speak for themselves. George Wenzel documents the systematic efforts of the animal rights movement to deny the Inuit a connection with their history and thus to deny the existence of traditional elements in modern Inuit society. An anthropologist with long experience in the Canadian north, Wenzel then attempts a more accurate picture of modern Inuit life, demonstrating the importance of seal hunting to Inuit identity and the inaccuracies of animal rightists' portrayals of Inuit culture and hunting.

In demolishing the myths that others have built about the Inuit, Wenzel comes perilously close to creating his own. Writing on behalf of a people, he feels the need to justify Inuit ways to outsiders. Although he describes Inuit hunting patterns in detail, the voice of the Inuit themselves is often lacking. In attempting to shift the debate from one between whites to one that includes Inuit, Wenzel could have given more room to the Inuit hunters.

Nonetheless, Wenzel makes an important contribution to the sealing debate. The strength of the work is the portrayal of Inuit as active participants in the changes occurring in the north, rather than as passive recipients of southern virtues and vices. The failure of policy makers in Europe and elsewhere to recognize this fact has led to the distortions and misrepresentations that have resulted in inappropriate bans on sale of sealskins and the more extremist and threatening calls for limiting or ending Inuit access to the resources upon which they have so long depended.

Finally, a word to the publishers. The text is too dense on the page for comfortable reading and typographical errors abound. Wenzel's study deserves better. (Henry P. Huntington, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

SLEDGE DOGS

TRAVELERS OF THE COLD; SLED DOGS OF THE FAR NORTH. Cellura, Dominique. 1989. Anchorage, Alaska Northwest Books. 159 p, hard cover, illustrated. ISBN 0-88240-374-5. US\$32.95.

This work, originally published in French as *Les Voyageurs du froid - Chiens de Traineaux*, is lavishly illustrated with photographs from many sources. Although attempting to deal with sled dogs throughout their entire range in