

in that it is not only a competent, well-written synthesis, but also in that Maxwell, through anecdotes and his own brand of humour, shares his unique insight into the physical conditions of the Arctic, and the human qualities of its prehistoric inhabitants. It is undoubtedly the most important source book for Eastern Arctic prehistory to appear to date.

A brief introductory section deals with the present physical and biological setting, and the paleoecology and paleoclimatology of the last 4000 years. This is followed by a section dealing with the origins of pioneering Paleoeskimo groups, in which such aspects as points of origin, causes and rates of initial colonization, and socio-economic conditions are addressed. The principal chapters of the book follow, and deal with the identification of the earliest Paleoeskimo cultures in the eastern Arctic (Independence I and early Pre-Dorset), and thereafter the discussion and interpretation of various hunting, domestic, and magico-religious activities, and temporal and regional variability, in Pre-Dorset, Dorset, and Thule cultures respectively.

While the book presents a summary of the current data base, and detailed statements on the history of Arctic archaeological research and major interpretive trends therein, it also in many respects goes beyond a synthesis. In particular, it provides a forum for Maxwell to present his own view of Arctic cultural development, in which the general conservatism in technology, ideology, and subsistence-settlement systems during the 4000 years of human occupation is seen within the context of cultural systems in balanced equilibrium. This theme provides a common link throughout the chapters in the book. The concept is attractive in its explanatory value, and while beyond the scope of the book, a demonstration of the precise articulation between archaeological remains as traditionally excavated and reported and various cultural systematic processes would have been intriguing.

Many Arctic archaeologists will find a number of the statements and interpretations challenging, and indeed they are so intended: as Maxwell remarks in the preface, 'Not the least of my intentions is to provide a target for the lances and harpoons of my colleagues, who will hurl their own interpretations of what happened in the past'. There is little doubt, however, that Maxwell will answer these challenges as ably as he has answered those in the past.

The book is very well illustrated but unfortunately many of the plates have been poorly reproduced—inexcusable given the price of the book. Otherwise, it is handsomely produced, with clear, sharp print, very few typographical errors and a useful index. (J. M. Savelle, Scott Polar Research Institute, University of Cambridge, Cambridge CB2 1ER)

NORTHERN STUDIES IN CANADA

ARCTIC HERITAGE: PROCEEDINGS OF A SYMPOSIUM. Nelson, J. G., Needham, R. and Norton, L. (editors). 1987. Ottawa, ACUNS. 653 p, illustrated, soft cover. ISBN 0-969-0987-9-0. Can\$27.50

The Association of Canadian Universities for Northern Studies (ACUNS) provides a forum for the Arctic and sub-Arctic interests of 35 Canadian universities, maintaining an office in Ottawa and promoting northern scholarship through education, professional and scientific training and research. This volume is one manifestation of ACUNS activity; it reports an interdisciplinary symposium on ecological planning and management aspects of Arctic Heritage use, held in Banff, Alberta, August 24–28 1985. Sponsored jointly by ACUNS and the IUCN commissions on Ecology and National Parks and Protected

Areas, the meetings were attended by conservationists from many countries in both hemispheres.

Over 40 papers are listed under three headings. Part 1, entitled 'The natural realm in the Arctic', provides background papers on climatic variation and change, marine processes, arctic landforms, floral, faunal and limnological processes, and terrestrial and marine oases. Part 2, 'Land use and conservation in the Arctic', is divided into three sessions and covers a wide range of topics from an overview of northern circumpolar protected areas to fluctuations in caribou numbers, Antarctic protected areas, case studies in tourism and conservation, shipping and marine environmental protection, and applications of the Ramsar Convention to Arctic wetlands. Part 3, 'National parks and protected areas in the Arctic: national overviews' highlights different national perceptions and approaches to parks and reserves in Alaska, Canada, Greenland, Norway and the Soviet Arctic. Each part includes overviews, summaries and discussion papers, and the conclusions accepted by a plenary session on the final day of the symposium are listed.

This must have been a shattering meeting to organize and an overwhelming one to attend; it is difficult enough to digest this account of it, though well worth the effort; most of the contributions are lucid, all are well edited, and they add up to a significant statement by intelligent, concerned people on international cooperation in Arctic planning. One most encouraging conclusion is a mandate for IUCN to study 'the applicability of Antarctic treaties, conventions and agreements for research, information exchange and resource and environmental management in terms of their applicability to the Arctic area'. If this is a long-winded way of saying that the Antarctic Treaty may have something to offer the north, we can all drink to it. Ecologists have a sound record of international cooperation in the Arctic; perhaps their initiatives will pave the way for the only international agreement that will ultimately make sense for the north, a full Arctic Treaty. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Cambridge CB2 1ER.)

ONE MAN'S ANTARCTICA

THE ICE: A JOURNEY TO ANTARCTICA. Pyne, S. J. Iowa City, University of Iowa Press. 428 p, illustrated, hard cover. ISBN 0-87745-152-4. \$US37.50.

Stephen Pyne, a historian, has taken trouble to explore scientific aspects of Antarctica in order to write his book. *The Ice* provides an unusual and interesting perspective that ranges through oceanography and glaciology, geology and geopolitics, literature and history. The prologue to *The Ice* is the history of an iceberg from source to ultimate destruction; Pyne weaves fact and descriptive passages in an enjoyable and interesting manner. However, in avoiding dry scientific presentation he risks confusing the reader—a simple diagram of Southern Ocean circulation would have been welcome, for example—and some statements on scientific matters—for example that hydrostatic pressures are higher under ice shelves than under open oceans—do not bear close scrutiny. The author is more comfortable in the general sections. His philosophical chapter on scientific exploration and the opening up of Antarctica is the one which, for me, shows the book's strength. The author develops convincing arguments to account for the stages of Antarctic exploration, and reviews the influence of expedition narratives on contemporary literature and artistic output. Coleridge's 'Rime of the ancient mariner' relied on accounts of Cook's voyages but, Pyne argues, the explorers did not provide imaginative literature; it took others to effect the transformation. Antarctic art has mostly been representational and