

Reviews

ANTARCTICA AND GLOBAL CLIMATIC CHANGE. Colin M. Harris and Bernard Stonehouse (editors). 1991. London, Belhaven Press, in association with the Scott Polar Research Institute, Cambridge. 198 p, illustrated with more than 50 photographs, maps, and line diagrams, hard cover. ISBN 1-85293-187-6. £33.00.

This book forms the proceedings volume of a symposium held in Cambridge to celebrate the one hundred and fiftieth anniversary of the Treaty of Waitangi, signed by representatives of Britain and the indigenous Maori population of Aotearoa, from which the modern state of New Zealand developed. The theme of the book is global climatic change and the role played by United Kingdom and New Zealand cooperation in Antarctica. It is also appropriate that 1990 represented the one hundred and fiftieth anniversary of the pioneering voyage to Antarctica by James Clark Ross.

The book comprises 13 chapters in three parts following an introductory historical overview. *Part 1: Current state of knowledge*, sets the scene of global climatic change with special reference to Antarctica, both as an observatory for recording global change and as a continent undergoing change. Four chapters cover prominent issues, global climate models, the geological perspective, and the contribution of Antarctic glaciology. *Part 2: Atmosphere, ice and ocean*, considers atmosphere-ice-ocean interactions in two chapters and the role of the Antarctic ice sheet in a further two chapters. *Part 3: Ecology and management responses*, includes two chapters on ecosystems, two chapters on strategies for mitigating impacts of climatic change, and a final chapter giving a bibliographical guide to recent Antarctic and global climatic change literature. There is a list of contributors, a foreword by Lord Shackleton, an editors' introduction, and a good index.

This reviewer's initial reaction, 'not another book on global climatic change' was quickly overcome, for here is a very readable text that covers all the major points with an accent on New Zealand and United Kingdom research in Antarctica. There are some refreshingly honest papers, particularly those by Vernon Squire, David Drewry, and Paul Mosley, that draw attention to gaps in knowledge, the extreme complexity of global climate, and the difficulty, if not impossibility, of making reliable forecasts at the present time. For example, the popular scenario of increasing carbon dioxide accelerating climate warming to result in large-scale melting of the ice sheets is not so simple; much more likely is a delayed response of 500 to 1000 years for major ice-sheet melting. In fact, increased precipitation may initially add to the total ice volume and actually contribute towards a fall in global sea level, or at least offset a rise in sea level due to thermal expansion of the oceans. All in all, we learn that Mankind is capable of

changing the global climate and is undoubtedly doing so, but that the extent of the change and its effect on the natural cycle of change is, as yet, uncertain. There are some interesting tables of carbon dioxide emissions that show New Zealand in a particularly poor light. But perhaps the most telling comment in the whole book is a call for '... further effort to limit growth in human population since the emission of greenhouse gases is a function of not only industrial and agricultural practices but also of population.' This single action would surely eliminate many and reduce virtually all of the global environmental problems we currently face, but it will require a greater awareness and a will to succeed on the part of all Mankind.

This book should appeal to all who are interested in global climate and the contribution that can be made by scientific research in Antarctica. It will be readily comprehensible to the lay reader. Although it is not an advanced scientific text, it does include a political and human perspective that could be enlightening to the dedicated scientist. The book has an important message to convey and it is a pity that the price may deter many prospective casual purchasers. (P.D. Clarkson, Scientific Committee on Antarctic Research, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER.)

LONG TERM ADAPTATIONS AMONG ARCTIC HUNTER-GATHERERS. George Sabo, III. 1991. New York, Garland Publishing. 400 p, illustrated, hard cover. ISBN 0-8240-6111-x. \$91.00 (US).

In this study, the author draws on archaeological fieldwork, historical material, and ethnographic data from the Lake Harbour/North Bay region of southern Baffin Island in an attempt to consider the social strategies employed by successive Arctic hunter-gatherer populations in long-term environmental adaptations. The study covers an 800-year period, from the time when the first Thule migrants moved to the North Bay region in about AD 1100. George Sabo examines how prehistoric Thule and historic Inuit groups living in this area responded and coped with the effects of climatic change on the availability, distribution, and population dynamics of the animal resource base they depended upon.

Sabo takes an ecological anthropology perspective that regards culture as the characteristic means through which people organize and define their specific relationships with other aspects of their environments. He begins by outlining some basic concepts and assumptions about human ecosystems and adaptations, before placing his archaeological analysis of the North Bay region in its environmental and cultural setting, developing an ecosystem model, and reviewing evidence for climatic change in the Central Arctic over a 1000-year period.

The discussion of Baffinland Inuit subsistence activities and settlement patterns is based mainly on the work of Boas and others and is set in the ethnographic present. Sabo argues that two main adaptive social structures can be identified. Both the rescheduling of resource procurement systems and the continuity of a flexible arrangement in settlement patterns and demographic organization ensure the availability and production of food and act as regulatory social mechanisms that respond to environmental change. Furthermore, two features of Baffinland social organization are identified as means by which adaptation and cultural realignment are encompassed within the wider and larger human ecosystem. These are an elaborate and far-ranging bilateral kinship network and the organizational flexibility of socio-economic groups within individual settlement bands. A characteristic feature of Inuit culture is an intricate and extremely flexible kinship network that allows for the creation of ancillary kin ties beyond consanguineal and affinal arrangements. This allows, in part, for residential flexibility. As an adaptive social mechanism, residential flexibility can also act to constrict extensive networks, so in times of shortage, for example, individual households can merge to form discrete socio-economic units to ensure access to resources.

It is difficult for archaeological research to reconstruct specific features of kinship networks, such as name-sharing, adoption, and fictive relationships. However, it is possible to examine residential flexibility and household structure, and Sabo's archaeological data is also backed up by ethnohistorical data on band organization and settlement location. While there is paleoenvironmental evidence to suggest climatic changes did affect Baffinland Inuit subsistence activities during this 800-year period, Sabo argues that climatic change is only one of several factors contributing to adaptive responses. The varied climate, topography, and ecology of southern Baffin Island does not result in an environmental determinism. Rather it enables successive human populations to develop a long-term process of environmental diversification.

Successful environmental diversification necessitates firstly an ability to acknowledge and incorporate diversity into an existing cultural framework, and secondly to retain a social organizational flexibility that is adaptive and strong enough to withstand this diversity. In reconstructing southern Baffinland Inuit subsistence and settlement systems, Sabo argues that through the utilization of a wide variety of resources and habitats, the prehistoric Thule and historic Inuit have retained a resilient human ecosystem during a long period of continuity and change. (Mark Nuttall, Department of Social Anthropology, University of Edinburgh, George Square, Edinburgh EH8 9LL.)

NORTH TO ALASKA! FIFTY YEARS ON THE WORLD'S MOST REMARKABLE HIGHWAY. Ken Coates. 1992. Fairbanks, University of Alaska Press. 304 p, illustrated, hard cover. ISBN 0-912006-55-2.

Some historians are attracted to the unfamiliar in time and place. Others, like the author of this popular history of the

Alaska (Alcan) Highway, are drawn to the familiar. A Canadian specializing in the regional history of the sub-Arctic Canadian northwest, Coates describes himself as 'a child of the Alaska Highway' (first travelled at age seven). He has published widely on his dominant interest, editing and contributing to *The Alaska Highway: papers of the 40th anniversary symposium* (1985). His latest book, commissioned by Public Works Canada to mark the road's half-century, reaches out to a potential audience beyond academia. Its brisk narrative traces the germination of the idea of a highway, summarizing the efforts of those who lobbied for 'The Road' in peacetime, the competing routes, and how the attack on Pearl Harbor provoked the US military to take the geopolitical significance of Alaska seriously. Coates weaves a story rich in human interest and anecdote around the frenzied construction within eight months of the pioneer road. Although the road runs across 2446 km of wild country between Dawson Creek, British Columbia, and Fairbanks, Alaska, the book concentrates on the Canadian four-fifths.

The highway actually consisted of two separate enterprises; the initial road pushed through by American soldiers, and the subsequent permanent highway built by civilian authorities. Coates supplies vignettes of men and women tempted north by high wages, patriotism, the spirit of adventure, and military directive. The most engaging chapter details the hardships and challenges of their lives and describes conditions in the camps and highway communities during the construction. The story progresses through the follow-up operation by the US Bureau of Public Roads — a less celebrated, and rather anti-climactic, exploit (the threat of Japanese invasion had evaporated entirely by 1943). Pursuing an increasingly prosaic topic up to the present, Coates deals with the post-war transition to civilian highway, the hand-over to Canada, the road's maintenance and improvement, the growth of tourist traffic, and, finally, the controversy over paving the Canadian section.

Coates has underlined his versatility within his chosen field and firmly established his credentials as the authority on this particular road. His prose is lively and studded with colourful images, yet generally avoids lapsing into hackneyed reportage. Hyperbole and superlative loom large in his saga, with the physical setting and the project's nature providing plenty of excuse. The black-and-white photographs are evocative and profuse (numbering approximately 100). The inclusion of a restrained number of unobtrusive endnotes illustrates that scholarship need not be a casualty of popular history. Coates and his research assistants have laboured in the archives but the key source is the testimony of 'ordinary folk' who participated in this extraordinary venture ('this is their story'). This deployment of oral history follows David Remley's lead in an earlier history of the highway (*Crooked Road*, 1976). While this is not the kind of book for digging too deep into the integral, yet seamier, frontier topics of disease, alcohol, prostitution, and racial prejudice (involving black soldiers as well as natives), Coates does touch on such issues,