remarkably shallow. The title is misleading, in that it claims to be examining "Scandinavian" policies with respect to the Sami when, in fact, all of Jull's references deal only with the situation in Norway. More troubling, however, is Mr. Jull's apparently compelling need to lecture Norwegians and Sami on how to resolve their differences. While such admonishments might have served some use during the Alta demonstrations, when there was a crisis in relations between Sami and non-Sami, one questions whether, in 1993, the presenter was telling his audience anything they did not already know. The Sami leadership in each of the three Nordic countries is very knowledgeable on the international situation with respect to indigenous rights—and more than capable of espousing their own point of view. Indeed, the presentations by a number of Sami at this conference bear testimony to this.

A more substantive complaint for this reviewer is that several papers were published in the Norwegian and Swedish languages and, therefore, are not available to a wider international audience: presentations by Ragnhild Nystad of the Sami Council; Ole Henrik Magga, President of the Sami Parliament in Norway; Ingwar Åhrén, chairman of the Sami Parliament in Sweden; the late Aslak Nils Sara, a longtime proponent of indigenous rights at the international level; Alf Nystad, a member of the Executive Committee of the Norwegian Sami Parliament. I met each of these Sami during the course of my study on the Sami land title issue, and their opinions deserve a wider audience. While a full translation might have led to delays and additional costs, the editors could surely have provided a summary.

Overall, readers interested in Arctic indigenous rights issues will find much that is useful in this excellent compilation of what appears to have been a most dynamic conference.

> Lennard Sillanpää Docent in Political Science Faculty of Social and Caring Sciences Åbo Akademi University Vaasa, Finland

## VOICES IN STONE: A PERSONAL JOURNEY INTO THE ARCTIC PAST. By PETER SCHLEDERMANN. Calgary: The Arctic Institute of North America, 1996. Komatik Series, No. 5. ISBN 0-919034-87-X. 221 p., maps, b&w and colour illus., notes, bib., index. Softbound. Cdn\$25.00.

In his new book *Voices in Stone*, archaeologist Peter Schledermann writes a hitherto unknown chapter of world history: the cultural history of Ellesmere Island, High Arctic Canada. Archaeological information from excavations and surveys of prehistoric sites and personal experiences from his fieldwork form the starting point of Schledermann's remarkable book. A synthesis of research into 4500 years of Native and Norse prehistory at the gateway to Greenland is presented for lay as well as learned readers.

With a few exceptions, professional archaeological research on Ellesmere Island has been carried out only during the past two decades. Patricia D. Sutherland is working in the northern part of this huge island, whereas Peter Schledermann and Karen McCullough have concentrated their research on the central and southern east coast of Ellesmere Island, in particular the Bache Peninsula region. The results of their surveys and excavations were presented in two books (McCullough, 1989; Schledermann, 1990) aimed at professional archaeologists. *Voices in Stone* represents, in a sense, the overall conclusions of these scientific volumes, and thus it is welcomed by students and researchers. However, this third book of the "Ellesmere trilogy" is written also for a broader audience.

The linguistic style and structure of the book make it as exciting as a novel. Schledermann elegantly weaves together dramatic experiences from fieldwork under harsh conditions, personal feelings and considerations as an explorer of the Arctic past, and interpretations of archaeological data. He succeeds in constructing a personal, but also convincing and coherent model of the culture history of Ellesmere Island from the days of the Palaeo-Eskimo pioneers 4500 years ago until the present.

The first chapters of the book deal with Schledermann's fascination with the High Arctic environment and the smallscale human societies that were playing their part on this great ecological scene. The author considers himself a human ecologist, and questions on the influence of climatic change and human (over-) exploitation of game resources are main themes. The reader is briefly introduced to archaeological methods, for example, excavation strategy and Carbon 14 datings, and to the use of analogies from ethnology and experimental archaeology. Chapter 3, "The Search," tells the quite fascinating story of how the author's career in Arctic archaeology finally led him and his crew to the geographical "gateway to Greenland"-east central Ellesmere Island. The importance of the rich resource areas at the polynyas of the Bache Peninsula region is emphasized: probably every human migration across Smith Sound into Greenland has left an archaeological trace there.

The following five chapters deal with the Palaeo-Eskimo prehistory of the area. Schledermann interprets each archaeologically defined culture-Independence I, Saqqaq, Pre-Dorset, and Dorset—as a separate people or ethnic group, in some cases overlapping in time. This starting point sets the stage for a story covering three millennia, in which migrations triggered by climatic changes, encounters between cultures, amalgamation, and discontinuity and abandonment are key ideas. The well-documented finds of "West Greenland Saqqaq" sites in the Bache Peninsula region are remarkable, and so are the late Dorset massive constructions -the longhouses—and the accompanying figurines. Schledermann's thoughts, memorable moments, and the enthusiasm of the crew in the search for and excavation of the archaeological sites are transmitted to the reader. I myself recognize the many blessings of fieldwork in the Arctic from twenty seasons in Greenland.

Schledermann draws attention to discontinuities in the cultural sequence of the study area. During long periods—

from Early Dorset (c. 500 B.C.) to the arrival of the Late Dorset (c. A.D. 800)—the High Arctic was abandoned by humans. In this connection, I must correct a minor error in Chapter 6 on the Pre-Dorset/Early Dorset cultures. Dorset I in West Greenland is dated to the period c. 500 B.C. to c. A.D. 300. Thus, West Greenland was not abandoned a few centuries after 700 B.C. because of climatic changes, as stated on page 80.

The next three chapters are devoted to the Thule culture. Excellently preserved houses and finds analyzed by Karen McCullough document that these Neo-Eskimo whale hunters migrated directly to Ellesmere Island and North Greenland from Western Alaska around A.D. 1200. A peak in Schledermann's book is reached when he presents and interprets the finds of Norse objects found in Thule culture context. The first contacts between peoples of the Old World and the Inuit were made here in the remote North.

With the chapter "Land of the Bears," we enter the transition to history. At Cape Faraday, Schledermann and his crew traced the sites which belonged to the last Inughuit migrants into Greenland in the 1860s—the small group of Baffinlanders led by the great hunter Qitdlarssuaq. Finally, the chapter on the dramatic history of exploration and geopolitics of the Ellesmere/Thule region casts light on the importance of this seemingly remote and deserted area.

In the last chapter, a kind of postscript, the author returns to more general ecological lessons from the past. The vulnerable ecosystem and the discontinuities of human presence in the area trigger considerable worry about the future of mankind: "Unless we collectively wake up to reality and take evasive action, a lot more than the High Arctic will have to be abandoned" (p. 196).

It is truly an eyeopening experience to read *Voices in Stone*. The reader's concept of marginality—of what is centre and what is periphery—is challenged by Schledermann's fascinating and skillfully written book. He succeeds in his main objectives: to demonstrate the importance of Arctic archaeology, to contribute to awareness of vulnerable ecosystems, and, basically, to tell a brilliant story.

The author's starting point in systems theory and the "ecological approach to archaeology" founded in the late 1960s and 1970s dominates the explanations and interpretations throughout the book. This very consequent, sometimes rigid, approach provides a clear basis for Schledermann's version of the history. However, this has left very little room for important discussions on the concept of culture. I would have welcomed a discussion on, for example, the problems of Schledermann's direct correlation between an archaeologically defined "culture"-a combination of material elementsand a people or ethnic group. If this correlation is not as simple as presented, which I suspect, several alternative and equally valid versions of the history of the study area could be told. I miss as well some more thorough consideration of culture interactions and concepts like "fusion" of three different cultures, and culture elements that "trickle southwards" (p. 80).

These critical remarks in no way overshadow the fact that Schledermann's book is a most important and original contribution to Arctic literature. Furthermore, the quality of the layout, the cover design, and the black-and-white photographs and colour plates is remarkably high. Brenda Carter's drawings of migratory birds are beautiful. The many notes, the references, and the index make the book a very useful tool for students and professionals.

I warmly recommend Peter Schledermann's book to everyone—lay and learned—who wishes to travel into the fascinating world of Arctic prehistory.

## REFERENCES

- McCULLOUGH, K.M. 1989. The Ruin Islanders: Early Thule culture pioneers in the eastern High Arctic. Canadian Museum of Civilization Mercury Series, Archaeological Survey of Canada Paper 141. 347 p.
- SCHLEDERMANN, P. 1990. Crossroads to Greenland: 3000 years of prehistory in the eastern High Arctic. Komatik Series, No. 2. Calgary: Arctic Institute of North America. 364 p.

Bjarne Grønnow Director Historical-Archaelogical Experimental Centre Slangeallen 2 DK-4320 Lejre, Denmark

EMERGENCY CARE AND REHABILITATION OF OILED SEA OTTERS: A GUIDE FOR OIL SPILLS INVOLV-ING FUR-BEARING MARINE MAMMALS. Edited by TERRIEM. WILLIAMS and RANDALL W. DAVIS. Fairbanks: University of Alaska Press, 1995. 279 p., b&w and colour illus., glossary, appendices, index. Hardbound, US\$45.95; Softbound, US\$29.95.

The sea otter, Enhydra lutris, a social marine mustelid found around the Northern Pacific rim, once ranged from northern Japan, through Russia and the Alaska Peninsula, along the west coast of North America to Baja California. Apart from Russia, Alaska, and a few transplanted populations in California, Oregon, and British Columbia, the sea otter is now extirpated from its Asian and southern North American range. This is the result of intensive hunting from the 16th to the early 20th century, a period when sea otter fur was at times literally worth its weight in gold. Sea otters have high metabolic rates and may eat 30% of body weight daily in proteinrich invertebrate prey. These animals lack insulating blubber, they rely on regular grooming of dense pelage with an outer guard hair coat to exclude water, and an inner dense layer of underfur serves to trap air and maintain body heat in water as cold as -1°C. Events like storms that cause the cessation of grooming behaviour and physical or chemical damage to pelage may cause hypothermia and subsequently drowning. By consuming macroalgae-eating invertebrates, such as sea urchins and abalone, sea otters play an important role in the preservation and health of the Macrocystis and Nereocystis kelp stands, which are the nursery of much larval and juvenile