THE WHITE BEARS OF GREENLAND. By E.W. BORN. Nuuk, Greenland: Ilinniusiorfik Education, Ministry of Environment and Natural Resources, 2008. ISBN 978-87-7975-405-8. 128 p., maps, colour illus., further reading, index. Softbound. DKK 186 (~US\$40.00) + shipping. (Also available in Danish and Greenlandic from Ilinniusiorfik, Postboks 1610, 3900 Nuuk, Greenland, http://www.ilinniusiorfik.gl or the Atuagkat Bookstore in Nuuk, Greenland, http://www.atuagkat.com/default.asp?lang=uk.)

This excellent book on the polar bears of Greenland was written for the information of the general public, first in Greenland and then elsewhere. Remarkably, it has been published simultaneously in Greenlandic, Danish, and English to ensure maximum availability of the information to the public everywhere. Dr. Born has conducted scientific research on many aspects of the biology of bears, seals, and walruses in Greenland, Svalbard, and Canada for several decades. The extent of his experience is clearly reflected in the breadth, depth, and up-to-date nature of the information throughout the book. This work follows on his two previous publications: *The Walrus in Greenland*, also written for the lay public, and *The Ecology of Greenland*, his outstanding book for the school system.

The book starts in fairly traditional fashion by giving the reader a wide variety of the standard descriptive information on polar bear topics such as weights and measures, the senses, the reproductive cycle, distribution of the various populations, and the kinds of annual movements undertaken by bears that call West Greenland and Baffin Bay home. In more specialized yet easily readable sections, Born delves into a wide range of subjects, such as evolution (including a photo of the famous hybrid polar/ grizzly from the Beaufort Sea), physiology, genetics, and methods of study. In some ways, the most original and thus most interesting aspects are those dealing with polar bears and their importance to the Greenlandic people. There are sections on myths, changing methods of hunting, the passage of knowledge from father to son, and how a harvested polar bear is used by the hunters themselves.

The latter sections of the book are sobering. In an objective manner, the author moves on from the natural history of this popular mammal and the people to whom it is of such great significance to address the dark clouds looming on the horizon. Recent research indicates ever more complex concerns about pollution, the likely need to reduce quotas to allow for sustainable harvests from populations that currently appear to be overharvested, and the overriding threat of continuing climate warming that is slowly but steadily melting the sea-ice habitat the polar bears depend upon for their very survival.

Conservation of polar bears through science, local knowledge, and developing a greater understanding of Arctic ecosystems is a theme that runs throughout the book. Despite all the obvious difficulties ahead, Born ends with a positive, if realistic, statement of hope (p. 122): "It

is very difficult for Greenland to ward off the negative consequences of global warming and pollution for the polar bear on its own. But the bear population can be followed closely and the catch can be adjusted according to developments. There is still a large task to be done in gathering data so that we can ensure that the catch of polar bears is sustainable in an Arctic that is changing rapidly."

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HUNTERS AT THE MARGIN: NATIVE PEOPLE AND WILDLIFE CONSERVATION IN THE NORTHWEST TERRITORIES. By JOHN SANDLOS. Vancouver: UBC Press, 2008. ISBN 978-0-7748-1363-1 (paper). xxiii + 333 p., maps, b&w illus., appendix, notes, bib., index. Hardbound, Cdn\$85.00; Softbound, Cdn\$32.95.

The standard history of early 20th century Canadian wild-life management in the North recounts that dedicated biologists and managers worked long and hard to conserve caribou, bison, muskox, and other animals, overcoming great pressures that threatened the survival of those species. John Sandlos calls this account into question, describing the contradictory goals and actions of managers of the time. Recently in these pages, I reviewed *Kiumajut* (Kulchyski and Tester, 2007), which examined the same history, using some of the same examples as *Hunters at the Margin*. In contrast to those authors, Sandlos takes a historical rather than a political-science approach to his reexamination.

The result is a compelling narrative that nicely complements *Kiumajut*, providing additional examples of wild-life agencies that pursued the incompatible aims of conserving game populations for aboriginal and other well-being while also promoting commercial harvests and other uses of the same populations. In one sense, this clash is symptomatic of divergent views of the North: an untapped resource awaiting exploitation versus the home of aboriginal societies with long-standing practices of their own. In another sense, the clash is symptomatic of the inability of wildlife managers to distinguish actual crises from their own lack of understanding.

Sandlos uses three main examples to demonstrate that wildlife management practices in the early 20th century were at least consistent in their inconsistency. Wildlife officials found reason to be concerned about the future of muskox, caribou, and bison in the Canadian North. At the same time, they found reason to be optimistic about the prospects for using the same populations to support settlement and economic development in the same region.

Needless to say, the officials in question found no contradiction in their own actions. Sandlos persuasively argues that to support commercial and recreational hunting while disparaging traditional hunting required denigrating aboriginal people and practices:

The presence of unruly Native hunters in Canada's hinterland regions was inimical to the implementation of modern and scientific wildlife management intended to produce a usable surplus of wild game. ... By the account of most conservationists, both Aboriginal people and the animals they hunted needed the rational guidance of state wildlife managers in order to have any chance of survival. (p. 12)

Putting these ideas into practice meant restricting hunting, "educating" aboriginal hunters, and creating game preserves that were strictly off-limits. For people trying to feed their families as they had always done, these approaches caused hardship and eventually led to dependence on aid from government and others. The regulations also systematically disenfranchised those who spent time away from their homelands. Fort Chipewyan trapper Alfred Benoit, for example, was initially classified as a halfbred and thus forced to leave the Wood Buffalo National Park area. Later, having obtained the status of a Treaty Indian, he petitioned to be allowed to resume his trapping activities in the park. Sandlos observes:

The assertion of state authority over wildlife in Wood Buffalo National Park was not limited to restrictions on Native hunting and trapping activities, but also caused dramatic changes to community, kinship, and cultural relationships among the Cree and Chipewyan communities in the region. ...To ignore the game regulations was, in a sense, an act of political restoration, an attempt to return to a time before an arbitrary and largely impersonal state bureaucracy mediated the relationship between humans and nature in the region. (p. 75)

At the same time, wildlife agencies were promoting ranching of big game in the hopes of providing a stable source of food and income. In part, this goal was guided by the belief (which has had many promoters over the years) that ranching would be an improvement over the uncertainties of the hunting way of life. In contrast to fur trapping,

The proposed ranching demanded a much broader transformation of economic and social life, however, entailing the marginalization of the hunting and trapping economy, the introduction of capitalism to the region, the transformation of Native hunters into wage labourers, the intensive management of wildlife for the purposes of production, and the further entrenchment of the North as a staple-producing region for southern commodity markets. (p. 235-236)

Sandlos offers useful (if tentative) conclusions about the implications of this history for present-day wildlife management and state-aboriginal relations in Canada, showing that history continues to shape the present, and that re-examining history can help illuminate current dilemmas and open new options for future action. *Hunters at the Margin* is well written, well produced, and a valuable contribution to the ongoing evaluation of the meanings of the North for those who live there, those who are new arrivals, and those for whom it looms large in imagination and expectation.

REFERENCE

KULCHYSKI, P., and TESTER, F.J. 2007. *Kiumajut* (talking back): Game management and Inuit rights 1900–1970. Vancouver: University of British Columbia Press.

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PENGUINS OF THE WORLD. By WAYNE LYNCH. Richmond Hill, Ontario: Firefly Books. ISBN: 978-1-55407-274-3. 175 p., maps, colour illus., further reading, index. Softbound. Cdn\$24.95.

Very nicely illustrated with numerous photos by the author, this volume provides a synopsis of what a traveler to the Southern Ocean might want to know about penguins before going there. Indeed, Wayne Lynch, as a naturalist and lecturer, has made many "ecotour" trips to southern coasts. The book summarizes what he has learned on his trips and in his library searches, illustrating points well with his photos. Throughout, the author sprinkles the text with his own experiences and anecdotes told by others who first discovered penguins for themselves in the early days. Almost all species are treated to some degree, though the author, whose experience is somewhat broader than the usual ecotour, focuses on such species as the gentoo penguin, the king penguin, and a few of the crested penguins found on sub-Antarctic islands.

A preface tells how the author acquired his wealth of knowledge about penguins and who his heroes are among students of penguinology. The main text is broken into six chapters, followed by two appendices, a section on "further reading," and an index.

Chapter 1, "Blueprint of a Penguin," reviews the attributes shared by all penguins, as well as some of those that distinguish penguins from other marine vertebrates. Lynch briefly describes the evolution of the penguin, as well as various morphological adaptations that aid penguins in what they do. Included is a table comparing the average length and body mass of the 17 extant species of penguins.