

to the post-war development of Canadian wildlife ecology. If readers can put aside the narrative unevenness at the end of the book, the story of growing Inuit resistance to federal authority in the region does make for compelling reading. *Kiumajut* is certainly essential reading for historians of science, the environment, and the Arctic in Canada, though they will find much to debate and discuss as they address similar themes in their own work.

**John Sandlos**, Department of History, Memorial University of Newfoundland

***Caribou and the North: A Shared Future.* By Monte Hummel and Justina C. Ray. Forewords by Robert Redford and Stephen Kakfwi, sketches by Robert Bateman. Toronto: Dundurn Press, 2008. 288 pp. Appendices, bibliography, index, maps, illustrations.**

*Caribou and the North: A Shared Future* by Monte Hummel, President Emeritus of the World Wildlife Federation, and Justina C. Ray, Executive Director of the Wildlife Conservation Society Canada, documents the complex relationship between caribou and human populations in northern latitudes. The book was created with multiple audiences in mind, from laymen with little knowledge of caribou to scientists working in disciplines that intersect with caribou and their environments. It is well-written throughout and, in addition to essays by its main authors, it contains contributions by native peoples who rely on caribou for their lifeways and researchers who study caribou ecology and the consequences of human interactions with caribou. The book is beautifully illustrated with forty maps of caribou ranges and over 120 photos, as well as wonderful sketches of caribou by renowned wildlife artist, Robert Bateman. It also includes forewords by Stephen Kakfwi, former Premier of the Northwest Territories, Canada, and movie star and environmental activist Robert Redford, who sums up a key theme in the book: "So go the caribou, so goes the North; and so goes the North, so go the caribou."

The authors' main goal is to educate people about the challenges facing the future of caribou and their environments. They do this through a number of effective methods. The early chapters provide a thorough overview of the biology of the various subspecies of caribou, their modern and historical ranges, and the different conservation challenges facing them. These chapters are accessible to a popular audience, but also have plenty of data and detail for more specialized caribou researchers.

They provide an excellent foundation for subsequent chapters on the conservation of the species and clearly document the biggest threat to the continued existence of caribou: humans.

Hummel and Ray effectively outline historical and current threats to caribou (e.g., overhunting, encroaching development, and loss of habitat), while also shedding light on the complexity of the environments that caribou inhabit. They demonstrate how seemingly inconsequential incursions into these environments, such as roads, can have substantial impacts on caribou behavior and sustainability by limiting the ranges necessary for the survival of the animal. The authors document how these factors can have dire impacts on caribou adaptations that have been successful for millennia in the often harsh and unforgiving environments of the North. In addition, they go a long way toward providing the sort of holistic understanding of a broad range of sustainability factors necessary for the conservation of this keystone species. Indeed, the book as a whole expertly demonstrates the importance of caribou not only to native peoples who depend on them for subsistence and raw materials, as they have for thousands of years, but also to the conservation of Arctic and Subarctic ecosystems in general.

For an archaeologist working in the Arctic and Subarctic such as myself, the information contained in this book is invaluable for understanding fundamental caribou behavior and biology. Knowledge of such matters is extremely important when studying people who have relied on the animal for thousands of years. However, the use of data from other disciplines, particularly prehistoric archaeological and paleoecological information, would have been a welcome addition to the book because the inclusion of such material would have helped readers grasp the shifting baselines of caribou ecology. While the authors provide ethnohistoric and modern data concerning caribou populations and their fluctuations, declines, and loss of habitat, it would have been beneficial if they had also evaluated data from earlier periods in order to develop better management policies and assessments of various human and environmental impacts on caribou habitats.

Another minor problem with the book involves its narrow focus on North American caribou populations. While European and Asian caribou (i.e., reindeer) are discussed early in the book, they are largely ignored for the remainder of it. Constraints on time and the varying availability and detail of datasets from those regions may have contributed to the authors' decision to focus almost exclusively on North America. But it would have been helpful to have a wider frame of reference for assessing the successes

and failures of conservation efforts in Canada and the United States in comparison to those of other nations. In particular, the book would have been stronger if it had addressed such issues as the biological and ecological impacts of reindeer herding peoples on regions where caribou have been domesticated by these groups.

Another problem with the book involves Section 4, which contains several research articles written by caribou biologists. Unlike earlier sections of the book, where native people whose cultures are dependent on caribou to varying degrees provide useful regional perspectives on the importance of caribou conservation to their communities, the section containing the research articles is often redundant. These articles provide interesting details on particular caribou herds, but they do not contribute significantly to the main thesis of the book.

Despite its minor flaws, *Caribou and the North* will be useful for anyone interested in caribou, whether in their biology and ecology, the sustainability of ecosystems where they live, or their importance for wider environmental, economic, and social issues. The authors have created an authoritative volume on the animal, its significance to northern ecology, and human impacts and reliance on it. Moreover, rather than simply decrying the fate of caribou and humankind's hand in their destruction, Hummel and Ray have included an entire chapter that outlines plans, policy suggestions, and responsibilities for various groups and institutions, both public and private, that if implemented would improve the fate of caribou in the north.

**Christopher B. Wolff**, Postdoctoral Research Fellow, Arctic Studies Center, Smithsonian Institution

***Canada and Arctic North America: An Environmental History.***  
**By Graeme Wynn. Santa Barbara, CA, Denver, CO, and Oxford,**  
**England: ABC-CLIO, 2007. xxi + 503 pp. Illustrations, maps, glossary,**  
**bibliography, index.**

*Canada and Arctic North America: An Environmental History* is the eighth installment in ABC-CLIO's regionally-focused Nature and Human Societies series. Series editor Mark Stoll recruited Graeme Wynn, an historical geographer, to write a synthetic treatment of what is one of the largest landmasses on earth. Wynn's work succeeds in demonstrating the impacts on the environment of human activities across northern North America over the past one thousand years. While the text fails to meet