

Wolves: Behavior, Ecology, and Conservation

Edited by D. Mech and L. Boitani. 2003. University of Chicago Press, 5801 Ellis Avenue, Chicago, Illinois, 60637 USA. xvii + 448 pages, U.S. \$49

In 1961, wolf biologist Douglas Pimlott wrote: "The wolf poses one of the most important conservation questions of our time. Will the species still exist when the twentieth century passes into history?"

Pimlott, if he were alive today, would be amazed and heartened by *Wolves: Behavior, Ecology, and Conservation* by L. D. Mech and L. Boitani because not only does it describe evidence of a "turn around" for the species that occurred in recent decades, but provides an encyclopaedia of scientific information about the wolf that has come from a remarkable amount of research over the past 40 years.

This book replaces one by David Mech written in 1970. However, this "update" is a much expanded, 22-authored, 448 page tome that provides one of the most extensive descriptions of the ecology of any mammal species in the world. The Table of Contents provides evidence of the book's depth, with chapters on: wolf social ecology; behaviour; communication; wolf-prey relations; wolf physiology; genetics; evolution and taxonomy; interactions with non-prey; restoration of the red wolf; wolves and humans; wolf conservation and recovery.

This is a book that you should read in selected chapters, rather than from cover to cover. There is too much detail to absorb, and although mostly written clearly, the style is fully referenced science. The book is well indexed, and brings together research conclusions on any conceivable topic related to wolves, very useful either for the interested person or the biologist.

The intent of the book, according to the editors, is to counter the "myth and legend, folklore and fairy tale" that has, and continues, to surround the species, by presenting a scientific view of the animal. The underlying assumption is that this scientific understanding will result in support for wise management of the expanded wolf populations that now exist in many places in the world. A more poetic reason for the book is given by physiologist Terry Kreeger: "Physiologically, we know a great deal about the wolf, although we still have much to learn. But why should we continue to study the wolf? Some people curse the animal; others deify it. As scientists study it, we may be able to blunt these extremes and place the wolf in proper perspective. Wolves tend to roughen the edges of a world being smoothed by human hands. For many of us, that is

good reason to learn what we can about them, inside and out, and certainly good reason to work for their conservation."

Some chapters are difficult, particularly those addressing wolf taxonomy and genetics, because the data from research are themselves confusing, contradictory or only tentative. Both fields have been fraught with "re-interpretations," sometimes by the same researchers, and consensus on what constitutes adequate evidence is unclear. For example, in the genetics chapter is a statement that parent-offspring relationships can be determined by examining nuclear DNA at as little as 10 microsatellite loci, whereas work done in association with our Algonquin wolf studies showed that as many as 15 loci were needed to avoid mistakes. These chapters leave their respective topics in chaos; hopefully, analytical methods soon will improve.

All other chapters are more readable and, because of the wealth of data, lead to more intriguing descriptions of the lives of wolves. Portrayed here are images of the wolf as a highly adaptable and intelligent species, one with a set of biological limits and norms, but with the flexibility to exercise a great deal of individual choice, the key to its success.

Human-wolf relationships are chronicled through the ages, right up to modern attitudes and their consequence for the future of the species. In a final chapter, Mech and Boitani reflect on the need to shift our perspectives on how to manage wolves from one of past "trench warfare" between people with different attitudes, to some new, more moderate paradigm that accepts the wolf with human imposed limits on population size, particularly in human-altered environments where it has been shown capable of surviving. Missing, however, is recognition of the importance of maintaining at least some areas as a crucible of natural selective forces surrounding the species – the very forces out of which the species evolved – rather than being content with the imposition of human modified environments and human control. There is still more to achieve before we congratulate ourselves in saving the real "wild" wolf in real intact wilderness.

Literature Cited

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BOTANY

Rendezvous with the Wild: The Boreal Forest

Edited by James Raffan, 2004. The Boston Mills Press, 132 Main Street, Erin, Ontario N0B 1T0 Canada. 192 pages, \$49.95 Cloth.

Named after the Greek god of the northwind, Boreas, the boreal forests of the world carpet the northern circumpolar reaches. St retching across Canada from New-

foundland to the Yukon, the boreal forest reaches into Alaska, through the vastness of Russia and into the Nordic countries of Scandinavia. Forests of coniferous black spruce, white spruce, balsam fir, jack pine, and tamarack, interspersed with deciduous white birch, aspens, willows and alders dominate the boreal scene.

Canada's boreal forests are of national, and indeed, global significance. Approximately 40% of the globe's boreal forests lie within Canada's boundaries. Fifty-eight percent of Canada's landmass is boreal forest that includes over 90% of the country's remaining large, intact forest landscapes or 25% of the globe's intact forests. Ecological values include prime habitat for many species of wildlife (including 75 percent of the continent's waterfowl), vast areas of lakes, rivers and wetlands and globally significant storage of carbon.

Canadian forests, especially the boreal forest, have long played a key role in the national economy. In 2003 alone, forest products contributed almost \$30 billion to Canada's \$46 billion trade balance. Canada is the world's second largest producer of wood pulp and the world's largest producer of newsprint. Direct forest industry employment totaled 376 300 workers for 2003. Much of this economic activity is directly related to the boreal forest that acts as the economic foundation for many communities across the country.

Given the economic and ecological significance of Canada's boreal forest, it is small wonder that people are becoming increasingly concerned about the long-term sustainability of this continental biome. *Rendezvous with the Wild* is the latest in a series of books, articles and media features on the future of the boreal forest. It tells the story of the Boreal Rendezvous, a series of canoe trips taken in the summer of 2003 on ten Canadian boreal rivers from the Wind River in the Yukon to the Moisie in Quebec.

The canoe trips were a vision of the Canadian Parks and Wilderness Society (CPAWS) in collaboration with the David Suzuki Foundation, the Canadian Boreal Initiative, and Mountain Equipment Co-op. They sought ways that would help shift our relationship with the boreal forest from one of accelerating large-scale, industrial fragmentation and transformation, to one that focused more on boreal forest conservation and viable, sustainable development.

Edited by the well-known Canadian author and avid canoeist James Raffan, *Rendezvous with the Wild* is an enticing collage of photography, art, journal entries, essays, poems, musings and prayers from many of the canoe trip participants. The variety of entries is marked by the diversity of contributors. Over 70 peo-

ple including Native elders, conservationists, television celebrities, scientists, photographers, poets, academics, canoe builders, and musicians contributed their voice and creativity to this marvelous tribute to the mystery and attraction of the boreal forest.

As Raffan notes in his opening essay, this is not a book about the boreal forest, but rather a book in response to the boreal forest. The canoe trips and canoeing act as constant themes weaving their way through the rich and varied fare. The photography is splendid and the book's layout a delight to the senses. The reader is carried along the current of the river with boreal vistas provided by the many witnesses offered by the book. Of particular strength throughout the book is the vision and witness of the First Nations to their boreal forest home.

The French philosopher Blais Pascal once remarked that the human heart has reasons of which the mind knows little. In boreal forest conservation issues, the environmental community often takes refuge in the technical, scientific dimensions of any particular boreal forest issue. This is essential and necessary. However, sole attention to the technical dimension fails to tap the depths of energy that can be attributed to the multidimensional human experience of the boreal forest. This human "emotional" experience is often dismissed as simply a "subjective," private experience that cannot be accepted on par with so-called "objective" scientific knowledge of any particular issue. *Rendezvous with the Wild* dispels such dualistic thinking and attempt to legitimize the direct human experience of the boreal forest as a powerful force that may energize action on behalf of forest conservation.

Rendezvous with the Wild begins and ends with a prayer by William Commanda, an Algonquin elder from Maniwaki and honorary elder of the CPAWS Boreal Program. The book is thus bounded by the spiritual, by due attention to the human experience of the boreal forest. You will have to look elsewhere for material on the boreal forest, on its ecology, on the impact of industrial activity, or the development of boreal forest policy. *Rendezvous with the Wild* attends to other data, to the inner data of human consciousness vis-à-vis the boreal forest. I have no doubt that if such data is not seriously considered, then conservation and sustainable development of Canada's boreal forests will remain a dream – forever.

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ENVIRONMENT

The Earth's Blanket: Traditional Teachings for Sustainable Living

By Nancy J. Turner. 2005. University of Washington Press, P.O. Box 50096, Seattle, Washington 98145-5096 USA. 298 pages, U.S. \$29.95.

Nancy Turner's book, *The Earth's Blanket* is a thorough treatise on indigenous peoples' relationships with the environment, and has as its goal to demon-