appearance of white trappers and the devastating impact they had on fur-bearing animals and wildlife. A third one is that disease continued to ravage Indian populations in the early 20th century - e.g., the flu epidemic of the 1920s may have reduced the Indian population in the Mackenzie Basin by one-third.

The authors describe the second half of the 20th century as "turbulent." The conflict between resource developers and the original inhabitants of the provincial norths comes to the fore in the post-World War II era, completing colonization of the provincial norths. Provincial development strategy rested on four economic elements, namely, mining, forestry, hydroelectricity and public expenditures. For the developers, resource development often resulted in great personal wealth and the creation of mine and mill towns; and for the aboriginal inhabitants, the exchange of a hunting way of life for settlement life resulted in a form of dependency called welfare colonialism. Geographically speaking, there are now two norths - one is found in the resource towns and government centres and the other exists on Indian reserves and Metis settlements. This spatial dualism is rooted in the process of core/periphery development where the hinterland is both developed and underdeveloped. Those involved in the resource economy represent the developed component, while the original inhabitants are disposed of their lands and, in the process, marginalized.

In the final chapter, the authors revisit the issue of northern development. As they see it, the neo-classical development model has done little for the North, particularly its Native inhabitants. The authors maintain that the problem results from too few economic benefits remaining in the North. While their new model is rather vague, they seem to be suggesting a "bottom-up" approach, where local Indian entrepreneurs or bands would own and operate northern firms. As an example, they cite Air Creebec, an airline operated by the James Bay Cree. This approach ensures local control over development. The question is, however, would the Air Creebec management board make different economic decisions from those controlled by outside interests?

Make no mistake, this book is a good beginning. The authors, by presenting an historical overview of the provincial norths, have drawn our attention to another north. In so doing, they have had to skim over critical issues and leave out others. These "forgotten" matters could be the focus of further research. To go beyond *The Forgotten North*, Professors Coates and Morrison (and their students) face the challenging and time-consuming task of sorting through provincial archives, conducting interviews and gathering oral histories. Such detailed historic information could result in a fuller, more complete history of each provincial north. In their new positions as administrators at the University of Northern British Columbia, they may find themselves in a unique position to start with the history of northern British Columbia.

> Robert M. Bone Department of Geography University of Saskatchewan Saskatoon, Saskatchewan, Canada S7N 0W0

THE NATURE OF SOUTHEAST ALASKA. By RITA M. O'CLAIR, ROBERT H. ARMSTRONG and RICHARD CARSTENSEN. Anchorage/Seattle: Alaska Northwest Books, 1992. 254 p., 64 colour photos, 130 blackand-white drawings, map, index, bib. Softbound. US\$17.95.

If you are looking for a book that provides a unique glimpse of the natural history of southeast Alaska and the interrelationships among its varied organisms, you will be interested in *The Nature of Southeast Alaska*. This book blends an informal, folksy style of writing with biological facts and interesting personal anecdotes. All three authors have extensive experience in this region and their enthusiasm for natural history and their complementary backgrounds (botany, zoology, photography, nature illustration, and education) combine to provide the reader with an intimate view of southeast Alaska's biodiversity. From whales, eagles, and brown bears to caddisflies, mushrooms, and orchids, this book covers a variety of species and ecological relationships seldom found under one cover.

As the authors state:

The Nature of Southeast Alaska is about a place — its glacial history, landforms, natural communities, species interrelationships, and the roles played here by a few key plants and animals. Instead of the dipper, sand lance, and devil's club, we might have chosen the winter wren, the herring, and the salmonberry. Our selection includes those species about which we are most knowledgeable, as well as some that we wanted to learn more about [p. 13].

Rather than the traditional textbook-style approach of describing species and their habitats, this book incorporates a lively narrative style, focusing on interrelationships within the region:

The merlin comes barreling out of nowhere, its swift and lethal swoop across the muskeg punctuated by a soft *whump!* and an explosion of feathers. Later those scattered brown and white feathers will be all that remains of a greater yellowlegs. The yellowlegs is one of the few birds heavily dependent on the muskegs of Southeast Alaska, where it nests in moss on the ground [p. 54].

Despite the cabbagelike texture of skunk-cabbage leaves, they are inedible to humans because their tissues contain long sharp crystals of calcium oxalate. Even a nibble, especially of the young shoots, embeds these crystals in the tongue and gums and causes extreme irritation. But bears, geese, and deer seem oblivious to them. Bears dig up the thick underground parts, and mature plants are staple food for nesting Vancouver Canada geese. Skunk-cabbage is one of the highest-quality plants available to Sitka black-tailed deer, eaten in early spring when other forage is in low supply and when deer are in the poorest condition of the year [p. 210].

The book is organized into chapters on habitats, mammals, birds, fish, invertebrates, fungi and lichens, and plants. Because of its broad coverage, it does not serve as a field guide or reference book for any taxonomic grouping. This, however, does not appear to be the purpose of the book. Rather, the authors offer their readers many unusual tidbits of information presumably designed to stimulate interest and appreciation of the nature of southeast Alaska.

Harlequin ducks are specialists in prying limpets, mussels, and chitons off rocks and swallowing them whole; amazingly, they can do this while swimming underwater. Their gizzards can crush shells that we must open with a blow by rock or hammer. In streams we have observed harlequin ducks pushing up rocks with their upper bill, then grabbing the dislodged aquatic insects while swimming underwater against the swift current [p. 120].

Coniferous trees, especially those near muskegs, are so heavily decorated with long, draping strands of pale lichens that they seem prepared for Christmas year round. These lichens are commonly called "old man's beard," and the most common in our area is *Alectoria sarmentosa*, which hangs in large, pale, grayish green clumps. Lichens of the genus *Alectoria* are so abundant in our coastal forest that 1 acre may contain nearly 1.5 tons dry weight [p. 184].

Most field guides provide a few descriptive details of an entire taxonomic group, while many regional natural history books highlight only the charismatic megafauna. Selective diversity characterizes *The Nature of Southeast Alaska*. From Sitka black-tailed deer to mosquitos, the authors endeavor to awaken a sense of curiosity about every cog in nature's wheel:

Culistea alaskaensis is a large, slow-flying mosquito with spotted wings. After spending the winter in a protected spot such as a crack in the bark of a tree, the female emerges in early spring and seeks a blood meal as a prerequisite to the development of her eggs, which are laid on the surface of small ponds having lots of emergent vegetation. Somewhat later in the spring, smaller, fast-flying mosquitoes of the genus *Aedes* appear. They overwintered as eggs laid the previous fall and spend the early part of spring going through larval and pupal stages in fresh water [p. 153].

The book's strength is its readability. Its convenient size $(14 \times 24 \text{ cm})$ makes it an ideal companion for evening reading on a field trip. The color plates are excellent and contribute significantly toward enhancing one's enthusiasm for southeast Alaska. The black-and-white drawings

help bring additional life to the text. The quality of reproduction, however, does not do justice to the artist. Based on my field of expertise (large mammals), the material is well researched and factual. I recommend, however, that the bibliography be updated in future editions.

I believe the authors have achieved their purpose of providing the reader with an overview of the natural character and flavor of southeast Alaska. This is not a book for experts to learn more about their discipline, although even experts will find interesting reading about species and interrelationships outside their field of study. I recommend this book to both residents and visitors interested in the natural history of south coastal Alaska and coastal British Columbia. *The Nature of Southeast Alaska* will increase people's knowledge, understanding, and appreciation of this unique coastal bioregion. This book should also fill a niche as an important resource for the new and expanding interest in wildlife viewing and ecotourism.

John W. Schoen Senior Conservation Biologist Division of Wildlife Conservation Alaska Department of Fish and Game 333 Raspberry Road Anchorage, Alaska 99518 U.S.A.

EXPLORATION OF ALASKA 1865-1900. By MORGAN B. SHERWOOD. Fairbanks: University of Alaska Press, 1992. 207 p., 41 illus., bib., index, 10 maps. Softbound. US\$15.00.

As the title suggests, this book is about the pioneering explorations into the Alaskan interior in the latter half of the 19th century by the Western Union Telegraph Company, U.S. Army, U.S. Geological Survey, and others. The book has recently been reissued — it is the second in the University of Alaska Press Classic Reprint Series. This study was originally published in Yale's Western American Series. In keeping with the central theme of the series, it "tends to emphasize the hitherto-neglected role of the national government in charting the American West" (Cunliffe, 1967).

Morgan Sherwood believes that "exploratory activities by the federal government in Alaska were extensive," given the existing social attitudes and preoccupations in the United States (such as the reformation after the Civil War) and the fact that Alaska's small population was politically impotent. The author thinks that the main focus for further Alaskan historical research should be the scientific exploration of Alaska, not its political evolution. Sherwood works to present a balanced account "between the impersonal institutional approach and excessive attention to individual heroism." A further goal was not only to present the physical data, but to reveal something about the background of the men and institutions who interpreted that data. The study area is the inland Subarctic, essentially the territory south of the Brooks Range. The temporal framework begins in 1865, the year of the first methodical exploration of Alaska by the Western Union Telegraph Company, and ends in 1900, a somewhat arbitrary date, but one based on administrative, political, and scientific factors.

Sherwood gives a realistic evaluation of the significance of the Western Union Telegraph Company Expedition, which later may have indirectly influenced the United States decision to purchase Alaska. A chapter is devoted to the scientific career of William Healey Dall, who often frustrates historians and anthropologists because of his errors and ambiguous generalizations. The author puts Dall's work into a broader perspective, which caused James VanStone (1965) to comment that "they tend to forget, or are ignorant of his [Dall's] accomplishments in other fields and his accurate assessment of the future needs of the newly acquired territory."

Another predominant figure of the period is Ivan Petroff, who was a major contributor to Bancroft's *History of Alaska* and the Tenth Census of 1880 (two of the three most influential books on Alaska published in the 19th century). Sherwood highlights many of the inconsistencies in Petroff's background and work, as well as pointing out his sometimes less than ethical methods. For example, Petroff was a journalist, not a scientist, but with clever plagiarism of Dall's ethnographic data, he created the illusion that he was "at least" Dall's equal as an ethnographer. Also, Sherwood believes that Petroff's census report was of "doubtful accuracy," but probably as good as could be done in the circumstances.

A major portion of this book is devoted to U.S. governmentsponsored military explorations, including the expeditions of Raymond, Schwatka, Allen, Abercrombie, Cantwell, Stoney, and others. Sherwood writes that Lieutenant Frederick "Schwatka's wanderlust was both intellectual and geographical." After graduating from West Point, Schwatka studied law and medicine while serving at different army posts. He was eventually admitted to the Nebraska bar and also received a medical degree from New York's Bellevue Hospital Medical College. Of Lieutenant Henry Allen's 1885 expedition, which covered over 1500 miles and charted three major river systems for the first time, the author thinks it "deserves to be ranked with the great explorations of North America."

Also described are the more specifically scientific contributions of Turner, Nelson, and Jacobsen, plus others, and the valuable support of the Smithsonian Institution, as well as the role of prospectors and missionaries. Leroy McQuesten, a Yukon River trader and prospector, explored part of the Koyukuk River, obtaining rare mammalian species for Nelson, and also collected census information for Petroff. Some explorers gained fame from being "versed in the art of advertising," rather than from the rigors or the results of their expeditions. In 1896, W.A. Dickey led a small expedition no more than 50 miles up the Susitna River to its fork. Later, he reported additional information obtained from prospectors who had traveled the distance up the Talkeetna and Chulitna rivers. Dickey received wide acclaim when accounts of his "journey" were published in the New York Sun and National Geographic Magazine. Finally, the last chapter of the book is devoted to the work of the U.S. Geological Survey and the outstanding contributions of Alfred Brooks.

Sherwood clearly describes the underlying political, economic, and philosophical forces acting on events taking place in Alaska during this period. For reader comprehension, it is desirable to present both the contextual framework of the period and the human element. To that end, the author gives the characters dimension, so that the readers understand more about the reasons behind the explorers' actions. Part of the enjoyment of this text is learning about the people involved. The book has a few minor shortcomings. Sherwood failed to mention Father Jules Jette', who, before the turn of the century, started to gather what was to become a substantial collection of ethnographic and linguistic information about interior Athabaskans. Also, the book's central thesis is rather subjective, even though its slant provides a necessary balance, considering previous works, and the author supplies enough evidence to support his thesis. Overall, the book is a most competent work, it is well edited, the maps are informative and coordinated with the text, and the illustrations, consisting of photographs and drawings, are excellent reproductions. In his 1965 review of the book, VanStone (1965) predicted that this text "will surely be a basic source for many years to come." This projection has certainly come true; today scholars consider this volume to be a landmark in Alaskan historical literature. This edition continues to be a valuable resource of information and enjoyment to laymen, students, and professionals. I recommend it to anyone interested in the exploration and history of Alaska.

REFERENCES

CUNLIFFE, M. 1967. Exploration of Alaska, 1865-1900. (Book Review.) English Historical Review 82:189-190.