

animals. Each study is represented in a separate section. Most notable is the extremely low species richness of the different groups throughout the core samples. Thus two closely related diatom species account for more than 90% of the diatoms present, and water fleas are represented by only three species, of which one was recovered in only one sample. At ca. 4000 years ago the concentration of diatoms, water fleas and mosses falls abruptly. Among the green algae, a drastic change in the species composition is documented in a very detailed study using 2 mm thick, very small samples. These changes in the biota of the lake are thought to represent a change from seasonally open water to almost permanently frozen water, another response to colder summers. After this event deposition of lake mud almost stopped.

Although the reports are not concerned with taxonomy, it would be very helpful for future workers if more of the fossils had been figured. This applies especially to the green algae that are ignored by most pollen workers or not preserved. It is also strange that the chydorid water flea found is referred — although tentatively — to *Chydorus sphaericus*, since the only species of that genus currently recognized in Greenland is *Chydorus arcticus*. A few notes would be appropriate to explain this. There is also some minor confusion about place names. "Kap Inglefield SØ" is put in quotation marks because it is an unauthorized name, but another unauthorized name (Cache Point) is not. Some Greenlandic place names are spelled in the current orthography, while others are spelled in the old orthography.

It is the first time that a core from a high arctic lake has been utilized for such an integrated study. The record obtained will undoubtedly serve as a reference for years to come, and it is hoped that the study will serve as a future standard for paleoecological and paleoclimatological works on lake cores from the Arctic. It is also to be hoped that the work on the glacial geology will be extended to other areas of Inglefield and Washington Land in western North Greenland, from which only very scanty information exists. Blake presents a few notes about the marine geology of Nares Strait. Perhaps the key to the understanding of the late Quaternary glacial history of the region lies under the sea floor, waiting to be recovered. Marine geological work in other controversial areas, such as the Barents Sea, the shelf west of Spitsbergen and the fjord complex of Scoresby Sund in East Greenland, have shown beyond doubt that these areas were glaciated during the global maximum of the last glacial period.

This very well-documented book, which presents a lot of new evidence on the Quaternary history of the region, is highly recommended to Quaternarists. Major introductory chapters on climate, botany and limnology also make the book of value to students in these fields.

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**THE FORGOTTEN NORTH: A HISTORY OF CANADA'S PROVINCIAL NORTHS.** By KENNETH COATES and WILLIAM MORRISON.  
Toronto: James Lorimer and Company, 1992. 142 p. Softbound.  
Cdn\$16.95.

In *The Forgotten North*, Kenneth Coates and William Morrison have cobbled together a much needed popular history of those lands lying between the territories and the Canadian ecumene. Consisting of seven provincial norths, these hinterlands have been carved out of Rupert's Land and the North-West Territories. While the seven provincial norths stretch from the shores of British Columbia to the Labrador coast, they are all resource hinterlands. Each serves the needs of its province, and each provincial government has attempted to fully integrate "its" provincial north into the provincial economy. This *lebensraum* strategy is most apparent in Quebec, where the development of hydroelectric energy in James Bay is designed to foster industrial development along

the St. Lawrence Valley. This political approach to regional development takes on the features of a classical heartland/hinterland relationship whereby the heartland benefits from the economic development of the hinterland.

Provincial norths are, in one sense, like the "lost" Atlantis. Submerged beneath the all-powerful provincial structure, the inhabitants of the Canadian Subarctic have no sense of place and regional identity — their allegiance is more to their province than to this other place called the forgotten North. Coates and Morrison offer another reason why provincial norths are forgotten lands. Canadians, they feel, consider the Northwest Territories and Yukon to be the "real" North. There is considerable truth to this statement. Most scholarly writers define the North as those lands lying beyond the 60th parallel. This more narrow definition of the North has some merit. First of all, it greatly simplifies the nature and scope of the discussion. Secondly, as each territorial government produces its own statistics, the task of assembling numerical data needed to bolster the text is greatly eased. Lastly, the territorial process of development is less complicated than that found in the northern provinces.

Long ignored by scholars, the impetus behind this book is to provide a modicum of historical information about this part of northern Canada. During the course of preparing this manuscript, Coates and Morrison joined the University of Northern British Columbia and they proudly state that their book is the first to be published by faculty members at this new university. Yet, like an iceberg, this book leaves most of the history of the provincial norths for others to tell.

The authors have divided their book into six chapters. The first chapter, "Sub-Arctic Fringe," sets the background to their discussions of historical events taking place since Confederation. It provides the reader with an overview of the first arrival of humans in North America, the coming of Europeans, the fur trade, and the Hudson Bay Company's surrender of its lands in 1870.

The next chapter is entitled "The Incorporation of Northern Regions." It deals with the establishment of provinces in the lands south of 60 degrees. With the federal government holding both Rupert's Land and the North-West Territories, it was only a matter of time before these lands were divided into new provinces or territories or ceded to the "old" provinces. This balkanization of the Subarctic destroyed any hopes of a subarctic territory.

Within this political setting, the authors then describe the colonization of the provincial norths prior to the Second World War. In this chapter, Coates and Morrison stress that there would be no single pattern to the unfolding of the frontier in the provincial norths. Since control of resource development was assigned to provincial governments, the process of core/periphery development/underdevelopment set in motion had a provincial "spin" to it. By unleashing provincial government resource programs designed to accommodate southern interests, each north was uniquely "colonized." Southern workers worked in the logging and mining camps, while Native peoples continued to pursue game and fur. But this forest/mineral economy resulted in neither a large, permanent non-Native population nor a stable resource economy. Unlike the agricultural settlement of the Prairies, the population of resource towns was subject to a boom-bust cycle, resulting in a much more mobile population. This combination of a primary economy and a large transient workforce did not provide a solid foundation for the development of a sense of place and the formation of a regional perspective.

But what was happening to the original inhabitants? According to the authors, not much. Resource development in the pre-World War II period was so limited that it had little effect on the aboriginal population. Similarly, the absence of much governmental presence left the Indians and Metis to their nomadic hunting and trapping ways. For all but a few, the fur trade remained the economic foundation of aboriginal life by providing economic security and cultural continuity. This is a romantic view of the past and it ignores a number of critical issues. One such issue is that the fur trade kept Indians in debt to the company, thereby preventing them from taking advantage of new economic opportunities that emerged in the early 20th century. Another is the

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.

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**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 black-and-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:

*Culisteia 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 × 24 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