music or poetry dealing with the North. Moreover, one of the last sections deals with what he terms *transdisciplinarité*, *pluridisciplinarité*, and *interdisciplinarité*. He is aware of the contributions of other fields to the study of geography, or to the study of the North (*nordologie*).

For northern scholars, the most interesting sections relate to the development of the concept of nordicity, a seminal concept in Canadian geography, the establishment of the Centre d'études nordiques (CEN) at Laval, and his interest in the Aboriginal peoples of northern Canada. Nordicity, which comes from an interest in applied geography, from his early studies of the land, from parish rangs to more regional and global studies, has linked the physical to the human element in understanding the North. He notes that a speech at McGill by the explorer Stefansson, a trip to James Bay in 1948, the influence of the ethno-botanist Jacques Rousseau, and a Rockefeller grant to study the North, helped inspire his interest in an area largely ignored by southern academics. This in turn resulted in a brief to l'Université Laval, where he began teaching in 1951, in which he suggested a research centre on the North: this, of course, led to the founding in 1961 of CEN, which he directed until 1972. CEN's creation also reflected the involvement of the provincial government of Lesage in Nouveau-Québec, including the influence of René Lévesque.

Another influence on the development of his northern expertise was the European impact, outlined in the earlier sections. Early on, Hamelin was influenced by geographers and other scholars from France in Quebec, especially during and after the Second World War. Their presence led to the québécisation of geography. Secondly his own studies at Grenoble "sous l'oeil sévère mais bienveillant du maître Raoul Blanchard" (p. 37) showed him an approach to alpine studies, as well as a world beyond Quebec. Furthermore, constant contact with Europe, from visits to France (his wife's birthplace) and international academic associations, additionally was important in his intellectual development.

The third primary area of interest for northern scholars deals with Hamelin's appreciation of the Aboriginal populations. In one sense this recognition reflects the growing interest in Native groups in Canada, especially in Nouveau-Québec. He outlines a number of steps that led to this interest, which also reflected a more inclusive view of the country.

The book also outlines the growth of geographic studies in Quebec, in which he had a pivotal role: this included the "quatre tours d'angle" and the shift from an East-West to a North-South orientation.

The book has an interesting, if perhaps unusual style. At times, as the introduction indicates (p. 1), Hamelin uses the third person singular to refer to himself, at others the first person. This unusual style is more evident in the 28 short sections of the book, which are grouped in three major parts (*Le Temps des Choses, Métiers*, and *Valeurs*). But the sections are in a sense interactive, as the author often refers to a past or future section. In addition, the index of terms, places, and people refers to the sections rather than the pages. At the end he suggests four major sources about himself. The text concludes with a series of photographs that portray various aspects of Hamelin's life: the farm and family at St. Didace, his contacts with other people dealing with nordicity, contacts with Aboriginals, his conferences, honours, trips, and university work, and his own family. These help the reader understand the author's career, influence, and values.

In brief, if one can enter into Hamelin's love of language, this latest book reveals some of the spirit and mind  $(\hat{a}me)$  of a geographer in his intellectual and life journey (*parcours*).

## REFERENCES

HAMELIN, L.-E. 1975. Nordicité canadienne. Montreal: Les Cahiers du Québec.

——. 1979. Canadian nordicity? It's your North too. Montreal: Harvest House.

> Robert MacDonald The Arctic Institute of North America University of Calgary 2500 University Drive NW Calgary, Alberta, Canada T2N 1N4

HEART OF THE YUKON: A NATURAL AND CUL-TURAL HISTORY OF THE MAYO AREA. Edited by LYNETTE BLEILER, CHRISTOPHER BURN and MARK O'DONOGHUE. Mayo, Yukon: Village of Mayo, 2006. ISBN 0-9780263-0-6. (Available from Village of Mayo, PO Box 160, Mayo, YT Y0B 1M0; mayo@northwestel. net) 138 p., maps, b&w and colour illus., bib. Softbound. Cdn\$25.00.

This attractively produced popular level book provides a thorough review of the natural and cultural history of the Mayo region in central Yukon Territory. The editors, Lynette Bleiler, Christopher Burn, and Mark O'Donoghue, who are also the book's main contributors, use their intimate knowledge of the region to bring together a vast amount of information of interest to Yukon residents, specifically those from Mayo, and to the region's many scientific researchers, resource managers, conservationists, naturalists, amateur historians, and tourists. The book was produced by the village of Mayo to commemorate its centennial in 2003. Readers will immediately see that this is a book focused almost exclusively on the Mayo area and written primarily for the people of Mayo, or at least for people who have some prior knowledge of the region. It is not a book for those who need more general information on the Yukon or want to read about the history or environments of northern Canada or the circumpolar North as a whole. However, the narrow theme should not be viewed as a negative trait. Rather, its focus makes this book a great resource for anyone who needs information on this small region of central Yukon without getting lost in a regional overview of wider topical and geographic scope.

Although I have not yet been to Mayo, I felt a real sense of familiarity with the place and its people after reading this book, and this sense of closeness is precisely what makes Heart of the Yukon an excellent book. It is appropriately titled, as one is left with the feeling that although the Mayo area may seem small and insignificant to many outsiders, it truly has a big heart in terms of its rich natural and cultural history and its role in the 20th-century development of the Yukon Territory and northern Canada. Importantly, contributions to the book go beyond the typical academic or research world to include informative chapters by the local Mayo First Nation of Na-Cho Nyäk Dun, which bring a strong sense of community to its pages. I sense this book will be on the coffee tables of nearly every resident of Mayo and the nearby villages of Keno and Elsa, and on those of many people who live across the Yukon and tourists who visit the territory. The importance of community for this book is demonstrated by the fact that proceeds from book sales will fund scholarships for central Yukon students to pursue post-secondary education.

This short, softcover volume is generally assembled in the chronological order of the environmental and cultural events that shaped the Mayo area. Individual chapters are short (three to nine pages in length) and concise, with numerous color photographs and maps. Specialized scientific jargon is supplemented with popular-level descriptions, making this book informative to researchers and accessible to the public.

The opening section, "The Natural World: The Land," includes seven chapters describing the physical attributes of central Yukon: the general landscape, rocks and minerals, the Ice Ages, climate, permafrost, landforms, and rivers and lakes. Except for the "rocks and minerals" chapter by Charlie Roots of the Yukon Geological Survey, all of these chapters were written by the book's co-editor, Christopher Burn of Carleton University, and their content clearly reflects his expertise. Burn has dedicated much of his scientific research career to studying the relationships between permafrost, climate, and geomorphology in the Mayo area. In general, the content of these chapters should be accessible to the public, yet the fine scientific writing provides much useful information and will be a great resource for fellow researchers interested in obtaining topical overviews for their particular work. There is an effective amount of overlap between some of the different chapters to highlight important interconnections between associated topics, such as climate and river hydrology. The connection between the "rocks and minerals" section and the later chapters on the mining history of Mayo is well made and will help all non-specialists gain further understanding of the geological forces that led to the region's rich mineral resources. One drawback for someone not strongly familiar with the area is the lack of an overview map that shows the location of the Mayo region in relation to the Yukon and the rest of northwestern North America. Furthermore, there are several mentions of specific places in the region that would have been easier to follow if the map had these locations highlighted or numbered.

The second section, "The Natural World: The Flora and Fauna" by Mark O'Donoghue, is divided into separate chapters that describe the vegetation, fish, amphibians, birds, and mammals of the Mayo region. In keeping with the regional or community focus, the plants and animals described are those that live only in the Mayo area. The opening chapter on vegetation provides an inventory of the various habitat or ecological types that one would encounter in the region. A useful appendix is provided that lists the scientific and common names of the key plants described in the chapter, although it does not describe in detail every plant or the composition of every habitat. Again, there is good interconnectivity with the previous section that relates why certain types of plant communities are found in certain physical settings. The chapters on fauna provide exhaustive inventories of all the large and small vertebrate animals known to inhabit the region. Although individual species descriptions are short, each provides information on the ecology and habits of the species, as well as on particular issues, such as management efforts or population changes through time. The Mayo community focus is exemplified by descriptions of the traditional knowledge and cultural uses for many of the animals, e.g., particular fish caught locally for food. Traditional Northern Tuchone terms are provided, along with scientific and common names, in the species tables at the end of each chapter. Numerous color photos make this section a pleasant reference source for those non-biologists who have an esthetic appreciation for the natural world. In no way is this section intending to be a replacement for more detailed regional biological survey volumes, such as Cody's (2002) Flora of Yukon Territory, Sinclair et al.'s (2003) Birds of the Yukon Territory, or Youngman's (1975) Mammals of the Yukon Territory. Rather, it will be very useful for those wanting to know what species live specifically in the Mayo area, or for researchers in other disciplines who need an overview of Mayo's regional flora and fauna.

The third and final section of the book, "The Cultural World," describes the cultural history of the Mayo region from the perspectives of archaeology, First Nations traditional history, post-European settlement, the establishment of Mayo village, mining, and current community activities. The pre-contact archaeology section was written by Ruth Gotthardt of the Yukon Archaeology Program. Although the pre-contact archaeological record from the region is limited, this chapter provides an informative background on the various archaeological phases or periods of central Yukon and sets the cultural-historical stage for many of the changes that people in the region would experience in more recent times. The section proceeds with a chapter by Denise L. Peter, Joella Hogan, and the Na-Cho Nyäk Dun First Nation Lands and Resources Department on the history of the local Na-Cho Nyäk Dun people of the Mayo area. The chapter discusses many of the local traditional ways, values, and activities, and it includes many interesting and informative quotes by Na-Cho Nyäk Dun Elders, who describe the numerous cultural changes they have witnessed firsthand over their lifetimes. Unfortunately, this chapter on cultural changes is presented before the chapters that describe the history of early prospectors and exploration, and many readers unfamiliar with the region may be left confused by the lack of preceding historical context. The next five chapters, by Lynette Bleiler, present a detailed account of the colorful post-contact history of prospectors, traders, Mayo village, and mining, leading up to modern-day industry and government. These chapters will be a delight to anyone interested in the vibrant characters, including Jack McQuesten and Al Mayo, whose efforts eventually led to the establishment of Mayo and the gold, silver, lead, and zinc mines that were central to the Yukon economy for most of the 20th century. The next chapter, by Denise L. Peter, Anne Leckie, and the Na-Cho Nyäk Dun First Nation Lands and Resources Department, provides an informative historical account of the path of First Nations people to selfgovernment and eventual land claims under the Umbrella Final Agreement of 1993. This chapter highlights the importance in the land-claim agreements of traditional cultural values as exemplified in contemporary Na-Cho Nyäk Dun society. The discussion on the operation and activities of Na-Cho Nyäk Dun First Nation government provides an interesting contrast with the traditional activities and old ways described by Elders earlier in the book. The book concludes with a chapter by Shanon Cooper and Anne Leckie that describes the activities, organizations, and foundations that make up the present-day community of Mayo.

In summary, this is a well-written, esthetically pleasing volume on the natural and cultural history of Mayo and surrounding area in central Yukon Territory that belongs on the coffee tables of all Yukon residents and in the library of anyone with an active interest in northern Canada. Northern researchers and resource managers will find this a useful reference book for summary overviews on a wide variety of topics pertinent to central Yukon. This volume provides a great model, which I hope other northern communities will follow, for producing a high-quality, easily accessible, and informative account of the land, life, and people within the place they call home.

## REFERENCES

- CODY, W.J. 2000. Flora of the Yukon Territory, 2nd ed. Ottawa, Ontario: National Research Council Press.
- SINCLAIR, P.H., NIXON, W.A., ECKERT, C.D., and HUGHES, N.L. 2003. Birds of the Yukon Territory. Vancouver: University of British Columbia Press.

YOUNGMAN, P.M. 1975. Mammals of the Yukon Territory. National Museum of Natural Sciences, Publications in Zoology, No. 10. Ottawa, Ontario: National Museums of Canada.

> Grant Zazula Yukon Palaeontology Program Government of Yukon Department of Tourism and Culture P.O. Box 2703 L2A Whitehorse, Yukon Territory, Canada Y1A 2C6 Grant.Zazula@gov.yk.ca

THE ARCTIC CLIMATE SYSTEM. By ROGER BARRY and MARK SERREZE. New York: Cambridge University Press, 2005. Cambridge Atmospheric and Space Science Series. ISBN 0-521-81418-9. xvii + 385 p., maps, b&w illus., colour plates, bib., index. Hardbound. US\$130.00.

The Arctic Climate System, by Mark Serreze and Roger Barry, could not be more timely. With the International Polar Year (IPY) and the 2007 IPCC Assessments following close on the heels of the Arctic Climate Impact Assessment, eyes are turned to the Arctic regions with wonder and concern. Will climate change in the North play out as dramatically as is forecast? To assess what a warmer Earth will mean for sea ice, ice sheets, the hydrological cycle, and storm frequency, we need a solid understanding of the mean climate state and historical climate variability in the Arctic. What are the fundamental dynamics and characteristics of the Arctic climate system?

This text squarely addresses these questions, and I cannot imagine a better pair of authors for this task. Roger Barry, Distinguished Professor at the University of Colorado, has had a tireless research career in Arctic, atmospheric, and cryospheric science. Recent accolades include the 2006 Goldthwait Polar Medal, honouring lifetime achievement in polar research, and the 2007 Francois Emile Matthes Award of the American Association of Geographers, recognizing Barry's 50 years of contributions to cryospheric science. The Arctic Climate System will join two other Barry volumes, Mountain Weather and Climate (1992) and Synoptic and Dynamic Climatology (2001; co-authored with A.M. Carleton), which spend more time on my desk than on my shelf. Mark Serreze, research scientist at the University of Colorado, has worked on a broad spectrum of problems in Arctic science over the last 20 years. I know of no one who has contributed more to the primary research on Arctic climatology over this time. Serreze is clearly the heir-apparent to Roger Barry in continuing the outstanding legacy of Arctic climate research at the University of Colorado and the U.S. National Snow and Ice Data Center.

With the subject matter in such good hands, many researchers in the community will pick up *The Arctic Climate*