borrowed, however, from numerous other herbaria throughout the world, giving a more complete coverage of the continent. Unreliable records that were unavailable for verification were not included in the book (so this is not really a catalogue of the Antarctic flora).

Lichenicolous fungi are not given as main entries since this was not the aim of the book, but many are mentioned in the comments regarding the host lichen, making this a valuable reference for anyone with a sick Antarctic lichen. It is a pity, however, that the names of these fungi are not included in the index, making it difficult to determine what was actually found. An account of the climate, ecology, and geology of the region is quite complete. A concise, informative summary of the ecology of Antarctica and South Georgia emphasizes the remarkably extreme climates of continental Antarctica.

The geography of the 427 known taxa (41 still unnamed or unidentified) is summarized in a long checklist/table, with all taxa scored for their presence in seven major regions, as well as for global distribution and affinities.

Many taxa are reported in this book as additions to the Antarctica flora, and several are described as new, raising the previous total of 260 species (Castello and Nimis 1995, 1997) back up to the level reported (incorrectly) by Dodge (1973). The temptation to create new names must have been great because Antarctic populations often differ in details from their European counterparts. To their credit, Øvstedal and Lewis Smith have chosen a taxonomically conservative path, tending to merely point out small differences in morphology or chemistry rather than use them as the basis for describing new taxa. If the authors are uncertain about the status of a distinctive population, they often assign it a tentative "letter name" (e.g., *Acarospora* sp.A) rather than create a new and perhaps superfluous name.

The systematic treatments are in alphabetic order by genus, which I think is the most practical approach. Each genus is described, followed by a key to species within the genus. The keys are very abbreviated, with most choices taking up less than a line. Most seem easy to use, but in some genera, they make unnecessary demands. In the key to crustose genera, for example, heavy emphasis is placed on distinguishing ascus types, which may be difficult for many (if not most) readers. In other cases, such as in the key to *Rhizocarpon*, chemistry is emphasized where anatomical distinctions would have been easier. I also found it difficult to use the *Buellia* key with some unidentified Antarctic material in my own collection.

The genus and species descriptions are concise but usually sufficiently detailed. In some cases, however, some useful information was left out in the interests of brevity. Under each species, there are detailed and useful observations on ecology, and taxonomic discussions are added where necessary. The Antarctic and world distribution of each species is also given. Dates of the publication of the accepted combinations are presented in almost all cases. Synonymy is only partial. Dodge's names are largely ignored, reference being made to the paper by Castello and Nimis (1995). That article must be at your fingertips if you make any attempt to deal with Dodge's bewildering lichen flora of 1973.

The book, being designed for nonspecialists as well as specialists, ends with an excellent, remarkably concise glossary. All of this information is packaged in a well-bound, attractively produced volume with the added bonus of over 100 colour photographs illustrating habitats and individual species.

Despite the few cases of missing anatomical information and troublesome keys, *Lichens of Antarctica and South Georgia* is a remarkable achievement, especially given the state of taxonomic chaos the authors had to deal with. Those working with Antarctic lichens now have a modern, accessible guide for the identification of their collections. It is an indispensable reference for anyone working with austral lichens.

REFERENCES

CASTELLO, M., and NIMIS, P.L. 1995. A critical revision of Antarctic lichens described by C.W. Dodge. Bibliotheca Lichenologica 57:71–92. [Festschrift Ch. Leuckert]

———. 1997. Diversity of lichens in Antarctica. In: Battaglia, B., Valencia, J., and Walton, D.W.H., eds. Antarctic communities: Species, structure and survival. Cambridge: Cambridge University Press. 15–21.

DODGE, C.W. 1973. Lichen flora of the Antarctic Continent and adjacent islands. Canaan, New Hampshire: Phoenix Publishing.

HERTEL, H. 1988. Problems in monographing Antarctic crustose lichens. Polarforschung 58:65–76.

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OUR VOICES: NATIVE STORIES OF ALASKA AND THE YUKON. Edited by JAMES K. RUPPERT and JOHN W. BERNET. Toronto: University of Toronto Press, 2001. ISBN 0-8020-8467-2. 394 p., maps, b&w illus., notes, bib., index. Softbound. Cdn$29.95.

The editors of this collection have made an important contribution to the study of Native American oral literature by bringing together in one volume the works of many prominent storytellers. The collection features Athabaskan and Eyak stories from Alaska and the Yukon, a region that has often been neglected in previous collections. While some of the stories have appeared in other publications, this work offers the advantage of bringing a representative sample of stories together for the first time.

Native American narratives have been the focus of studies by linguists, anthropologists, and students of

literature, and each discipline has developed specialized modes of presentation and analysis. The stories in this collection are considered primarily as literature, although the format of the translations reflects the oral performance of the stories as well. The mode of presentation attends to features identified by Hymes (1981) and Tedlock (1983), and reflected as well in more recent translations of native oral performances, such as Krupat (1993), Krupat and Swann (1987), Swann (1994), and Bringhurst (1999). Although the editors' focus is on the presentation of narratives as literature, they make informed use of linguistic and anthropological perspectives in translating and presenting the stories. They have worked closely with the linguists and anthropologists who recorded many of the stories to achieve a high quality of translation. The notes that accompany the stories provide relevant cultural information as well as information on the original performance and its translation.

The editors have been able to meet their ambitious goal for this project—providing comprehensive coverage for the region—despite the challenges of working with uneven source materials. Sadly, many storytellers represented have since passed on, and it is especially appropriate that their work is now available to a wider audience. The editors demonstrate a dedication to authentic sources and quality translations, although they have had to depend on materials that were originally recorded by others. Not all the original sources were available in the line/pause (verse) format, some having been translated as prose from oral performances, and others having been written directly in prose by Native authors who were fluent in English. The editors were able to make the best possible use of all these sources, however, so that each geographical area is well represented.

The collection will appeal to a wide audience, and each reader will find stories of special interest. Having worked for many years with Yukon First Nations and their traditions, I was especially intrigued by some of the related mythic or "distant-time" stories from Alaska. The superb stories by Koyukon elder Catherine Attla, such as "Great Raven Who Shaped the World" and "The Woodpecker Who Starved His Wife," provided me with a fresh perspective on these shared traditions. Although I have encountered many of the Yukon stories in other works, they remain fresh sources of wisdom. While reading Kitty Smith's story, "Naakw: Devilfish, or Octopus, Helper," I was reminded of the strong cultural connections between the Yukon and Tlingit on the Pacific coast. Her story, "The First Time They Knew K'och'èn, White Man," places the history of white domination of Natives in the Yukon in the context of Native prophecy. These are all fascinating stories that both general readers and serious scholars can return to again and again.

In such a comprehensive work, it is inevitable that some topics are given a more cursory analysis than others. The description of narrative genres, for instance, reflects traditional approaches to the classification of narratives as myths, historical accounts, and transitional types, rather than approaches that emphasize the productive relations between generic types, such as those of Bakhtin (1986 [1979]) and Briggs and Bauman (1992). In the case of the description of narrative genres, the omission of significant contemporary sources points to a general need for more research in this region on the productive relations between genres.

The editors attempt to give a feel for the contexts in which the stories are performed, but this is difficult to accomplish without adequate descriptions for all areas. Some practices that are attributed to all groups, for instance, may exist only in a particular region. The editors state (p. 2), "In south central and interior Alaska and the Yukon Territory, distant-time stories were told almost exclusively during the winter, especially in early and midwinter." This practice is not observed by Kaskas, and I have heard distant-time stories told in the summer by elders from other Yukon groups as well.

The editors deserve recognition for their care in checking the spellings of native terms with linguists, but here too there are small errors and inconsistencies. I note, for instance (p. 169) Tagish *k'è* should have a low tone, and that two orthographies are used (p. 169–170) for the Tagish words without explanation. These are small points, however, and in general the work accurately reflects the scholarship on each group as well as the literature on the entire region. The book provides an indispensable overview of scholarship on Athabaskan narratives by Native speakers, anthropologists, linguists, and others.

This collection is highly recommended for both the general public and scholars at all levels. It will be of special interest to those who are interested in storytelling and the traditions of this region. The work is equally appropriate for library and personal collections, as it reflects a high standard of scholarship while remaining both readable and affordable.

REFERENCES

BAKHTIN, M. 1986 [1979]. Speech genres and other late essays. Edited by Caryl Emerson and Michael Holquist. Austin: University of Texas Press.

BRIGGS, C., and BAUMAN, R. 1992. Genre, intertextuality, and social power. Journal of Linguistic Anthropology 2(2): 131–172.

BRINGHURST, R. 1999. A story sharp as a knife: The classical Haida mythtellers and their world. Vancouver: Douglas and McIntyre; Lincoln: University of Nebraska Press.

HYMES, D. 1981. "In vain I tried to tell you": Essays in Native American ethnopoetics. Studies in Native American Literature 1. Philadelphia: University of Pennsylvania Press.

KRUPAT, A. 1993. New voices in Native American literary criticism. Washington, D.C.: Smithsonian Institution Press.

KRUPAT, A., and SWANN, B. 1987. Recovering the word. Essays on Native American literature. Berkeley: University of California Press.

SWANN, B. 1994. Coming to light: Contemporary translations of the Native literatures of North America. New York: Random House.

TEDLOCK, D. 1983. The spoken word and the work of interpretation. Philadelphia: University of Pennsylvania Press.

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SNOW ECOLOGY: AN INTERDISCIPLINARY EXAMINATION OF SNOW-COVERED ECOSYSTEMS. Edited by H.G. JONES, J.W. POMEROY, D.A. WALKER, and R.W. HOHAM. Cambridge: Cambridge University Press, 2001. 398 p., b&w and colour illus., index, bib., glossary. Hardbound. US$80.00.

The predominance of precipitation as snow is a central factor in the biogeophysical environment of the world's polar, boreal, and alpine regions. The presence or absence of snow and its seasonal variability in these systems have dramatic effects on climate, energy, hydrological regimes, and biota. Most studies of snow have revolved around estimating water resources and subsequent availability rather than exploring the relationships between biota and snow. For too long, ecological phenomena occurring on, in, and under snow were considered to be unimportant (because of freezing temperatures) or too difficult to study. Fortunately, an appreciation of the biological aspects of snow-covered ecosystems has been gaining momentum, and this book is an outstanding example of this trend.

According to the editors, the purpose of this text is to introduce readers to multidisciplinary studies of snow-covered ecosystems. They address this goal by presenting the physical, chemical, and biological processes of these ecosystems while retaining focus on their interconnections. The first two chapters cover the physical aspects of snow. Through most of the first chapter, the authors discuss changes in snow cover over time (from the 1970s forward) and the role that snow has in modifying local and regional climate. Speculations follow on the effects of global change on snow cover and feedbacks to climate. In the second chapter, the authors efficiently explain the physical processes, characteristics, and dynamics of snowpacks. The chemical components and processes associated with snowfall and snowpacks are detailed in chapter three. Chapters four through seven feature biological aspects of organisms living in, above, and below snow. These chapters address microbial ecology, insects and small animals, snow and tundra vegetation interactions, and determination of past snow regimes using tree ring measurements, respectively.

While the editors present the physical, chemical, and biological stories individually throughout the early chapters, they achieve their goal of holistic integration by frequently relating and referencing between chapters to produce a comprehensive picture. The text does a particularly effective job of communicating the interrelationships between physical features of snow (insulative properties, chemical components, snowmelt) and the ways in which they influence species distributions, morphological and physiological adaptations, and ecosystem processes. Furthermore, it illustrates how biological organisms, through feedbacks, play a key role in affecting local patterns of snow distribution and snow characteristics, both chemical and physical. A striking example of this is related in chapter two, where the effects of tree canopies on snow cover and sublimation are discussed. This strong feature gives the reader a more complete idea of how organisms respond to physical phenomena, and how organisms moderate these phenomena. The most enlightening aspect of this text is its portrayal of snow's biological importance at different times of the year. During the winter, snow insulates fauna and flora from large temperature fluctuations and provides habitat for insects and small mammals. In the spring, snow comes alive with algae, bacteria, and fungi. Eventually, it melts to supply water and nutrients to plants and aquatic organisms.

Snow Ecology is well edited, organized, and cited. The book is thorough and rich in useful resources for people interested in learning more about ecological processes occurring in and around seasonal snowpacks. The book is of particular interest to those who work in Arctic, boreal, and alpine systems. It aggregates information gleaned from a diverse set of studies and written by authors with unique research interests. Every author develops a clear objective and coherent message that complements the rest of the book and the editors' stated goals. With a few rare exceptions, the figures are clearly explained in the context of snow ecology and help the reader understand concepts communicated by the authors.

It is clear to me that this book is a valuable reference and that it is likely to long serve as a source of information on this topic. I do regret the lack of a more extensive section in chapter one describing methods employed to measure or model snow cover and depth in seasonally snow-covered systems. While there is some mention of remote sensing and snow course data, a deeper discussion of the different methods and problems of acquiring data on snow cover, depth, and properties would be useful. Another criticism is that some of the chapters include jargon-laden vocabulary, requiring more explanatory background than information provided on the topic of interest. In a few small sections of the book, I suspect that the targeted audience can be inundated in specific terminology related to algal pigmentation or insect anatomy and physiology. Fortunately there is a good glossary. Also, a few figures adapted from other works require more explanation or development. Most of the figures are excellent for communicating desired ideas,