

council, as Moore was the only one with an earned doctorate.” And so it went.

Moore set goals and involved faculty and students in committee activity to operate the university. But he found it difficult to carry out changes partly because the well-entrenched former President Bunnell still lived in the president’s residence and used his old office to confound actions of the new president. Some traumatic events occurred, fraught with misunderstandings and lack of communication. One of these involved the directorship of the Geophysical Institute, the National Academy of Science, and world-famous scientists. It is too lengthy and complex to discuss here, but is skillfully treated by the author. The growing institution was effectively launched on its way as a university by the end of Moore’s time as president. It had come of age, as Neil Davis says.

Davis writes this history from the perspective of a physical scientist, and a long-term Alaskan resident who knew and respected many of the people who made the history. He also is a pack rat, and a well organized one, who has placed his collection in the University of Alaska Fairbanks Archives as *The College Hill Chronicles Files*. He has written many scientific papers, and his scientific habit of documenting what he writes resulted in 806 formal notes at the end of the book and many additional footnotes on pages of the text. But there’s more: this history reads like a novel. Davis writes with a gentle sense of humor, obvious respect, even awe, for the people involved, and love of his subject. No one else could have written this magnificent book. I strongly recommend it to anyone with an interest in Alaska in general, or Alaska’s university in particular.

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NORTHERN HYDROLOGY, INTERNATIONAL PERSPECTIVES. Edited by T.D. PROWSE, C.S.L. OMMANNEY and L.E. WATSON. Saskatoon, Saskatchewan: National Hydrology Research Institute, Environment Canada, 1994. National Hydrology Science Report No. 3. 215 p. Hardbound. Cdn\$18.00.

Progress in science depends on the effectiveness of each generation in building on the successes, and recognizing the failures, of its predecessors. The organization of our scientific disciplines, our journals, conferences, textbooks and electronic and other networks are all parts of the system which we hope produces “progress.” So are review articles and books.

The National Hydrology Research Institute (NHRI) in Saskatoon has just published the third in a series of publications which, in different ways, attempt to provide state-of-the-art views of hydrology as it is applied to a particular geographical region, the Arctic. The first of this series,

*Northern Hydrology: Canadian Perspectives*, published in 1990, included review chapters on such topics as snow, permafrost, glacier and floating ice hydrology by Canadian authors focusing on work in Canada. The second of the series, *Northern Hydrology: Selected Perspectives* (1991) included peer-reviewed papers by scientists associated with the Northern Research Basins (NRB) working group of the International Hydrological Program of UNESCO. The NRB group, which has met regularly for many years, includes representatives from all eight circumpolar countries and several other nations which have strong polar interests. As a result, the forty or so papers in this volume provide a useful snapshot of ongoing work in hydrology throughout the Arctic.

Like the first volume, the most recent of this NHRI series, *Northern Hydrology: International Perspectives*, published in 1994, consists of solicited review articles by specialists. But in this case each is a review of a work in a different circumpolar country—the United States (Alaska), Canada, Finland, Iceland, Norway, Sweden and the former Soviet Union. The authors used the approach of *Northern Hydrology: Canadian Perspectives* as a model, so that most chapters have sections on snow hydrology, permafrost hydrology, groundwater hydrology, glacier hydrology, hydrology of floating ice (freshwater and seawater), regional water and energy balances, water quality and water management. Most give some thought to the future of hydrology in the region concerned.

Naturally, emphases vary. The chapter from Greenland, for example, as one might expect, is dominated by the ice cap! The Icelandic contribution has a special focus on geothermal heat, electricity generation and glacier-related floods. The author dealing with the former Soviet Union makes special mention of swamps, while the Finn waxes lyrical about the beauties of snow and ice while providing an excellent overview of scientific and practical hydrology in that country. Many of the authors pay some attention to climate change, circumpolar pollution and the control of rivers in the North.

It is not easy to obtain an overview of research and current hydrological practices in such a wide range of countries even though they clearly share common cold region interests and problems. Hydrologists operate within various, relatively self-contained subdisciplines and they submit papers to different journals which publish in a variety of languages. Even with sophisticated abstracting services and electronic networking, someone, now and again, has to take the trouble to bring people and ideas together. In this case, for example, I found the comprehensive list of references at the end of the book remarkably useful. The subject matter of the articles, the affiliations of the authors and the range of journals they use for publication were all revealing to me in terms of activity in northern hydrology today.

It’s gratifying that a Canadian organization, NHRI, in these straitened times, has found the time and foresight to provide international leadership in this field in this way. This series of complimentary volumes shows a persistence of purpose which is exemplary. We all know that the problems of the Arctic are international in scope and that they can be

solved only through a focusing of international energies and will. Few of us are able to reach out beyond our immediate work and interests without help of this kind.

NHRI deserves our thanks for this series of valuable review volumes.

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**SHIELD COUNTRY: LIFE AND TIMES OF THE OLDEST PIECE OF THE PLANET.** By JAMIE BASTEDO. Calgary: Arctic Institute of North America, 1994. Komatik Series No. 4. x + 271 p., maps, b&w illus., colour illus., glossary, bib., index. Softbound. Cdn\$20.00.

Mr. Bastedo, a well-known northern naturalist and environmental consultant, is a long-term resident of the Shield country who operates out of Yellowknife, Northwest Territories. The style and content of this book are aptly described in the author's own words:

This book is part personal journal, drawing on events that illustrate my relationship with the land. It is also part storybook, portraying the land's past, present and future as I see it. It is also part reference book, complete with systematic descriptions of ecological phenomena, an extensive glossary of terms and a detailed index. And finally, it is part field guide, providing sufficient information on the region's geology, plants and animals for you to recognize the main ecological players on this particular northern stage. (p. 5)

It is obvious from first opening *Shield Country* to the final pages that Jamie has an unquenchable curiosity and passion for the Canadian Shield, which he infuses into his writing style and successfully passes on to the reader. This book is a delightfully insightful account of the Canadian Shield's last four billion years. The author's literary traverse over vast space and time has been exceedingly well researched. He writes in a refreshing style that puts the reader at ease. While tackling subjects as diverse as the development of plutons and the philosophies of bioregionalism, Jamie writes with clarity, spiced with humour and poetry.

The editors have done an excellent job of keeping this book free of irksome typos and errors. They have also included over 100 photos, diagrams, and drawings, which are interspersed throughout the text. The diagrams help the reader understand some of the more complex geological theories, while the archival and recent photographs visually connect the reader to the landscape and its inhabitants.

This is an ideal textbook for any university course dealing with Canada's North. In fact, I highly recommend *Shield Country* to all who are interested in the North, whether they are high school or university students, naturalists, scientists, consultants or the lay public.

In the introduction (p. 5), Jamie states: "In choosing to write a book about the taiga shield, my aim was as much to inspire as to inform." Congratulations, Jamie—you have succeeded!

**SKUA AND PENGUIN: PREDATOR AND PREY.** By EUAN YOUNG. Cambridge: Cambridge University Press, 1994. 452 p. ISBN 0 521 32251 0. Hardbound. No price indicated.

Adelie penguins are the most loved of all Antarctic animals, while south polar skuas have traditionally been cast as villains. Skuas steal penguin eggs and small chicks by stealth and cunning, while older penguin chicks are strong enough that killing them is a drawn-out, messy business. These conspicuous behaviours have attracted a plethora of subjective comment from laypersons and scientists alike, but objective accounts of the relationship between skuas and penguins have been few.

This long-awaited book is the result of five Antarctic summers, 1965 to 1970, spent documenting the relationship between skuas and penguins. To any biologist, Adelie penguin colonies with their attendant skuas raise a host of intriguing questions. Do skuas depend on penguins to breed successfully? Why do some skua territories have few penguins while others have many, and does breeding success vary with access to penguins? Why are skuas such inefficient predators and what do skuas feed on outside the penguin breeding season? These questions and many more are answered in Euan Young's book.

This is probably the most detailed account of the interactions between any predator and its prey. Young and his team recorded the activities of skuas in tremendous detail, but the results presented are equally intricate. This excessive detail makes the book cumbersome to read and difficult to use. Too often I found myself bogged down in detail, having lost track of the issue being discussed. The book contains a wealth of information and ideas for anyone interested in penguins,