has relied heavily on manuscript materials, for example, Leigh Smith's own journal of his first voyage on board *Sampson*, held by Special Collections, Edinburgh University Library, and a range of journals and logs held in the archives of the Scott Polar Research Institute, such as the journal of Lt. Herbert Chermside for the 1873 voyage in *Diana* or the log of the 1881 voyage kept by Captain William Lofley. Capelotti is also to be commended for having contacted Leigh Smith's great-great-grand-niece, Charlotte Moore, whom he visited on several occasions and who gave him access to family correspondence in the archives of the family home at Hancox, East Sussex. Capelotti has made a valuable contribution to Arctic historiography by so effectively bringing this brilliant, publicity-shy eccentric out of the shadows. Those interested in Arctic exploration and science, especially with regard to Svalbard and Franz Josef Land, will find this book captivating.

William Barr
Senior Research Associate
Arctic Institute of North America
University of Calgary
2500 University Drive NW
Calgary, Alberta T2N 1N4, Canada
wbarr@ucalgary.ca

CHANGING COLD ENVIRONMENTS: A CANADIAN PERSPECTIVE. Edited by HUGH FRENCH and OLAV SLAYMAKER. Oxford: Wiley-Blackwell, 2012. ISBN 978-0-470-69969-0. xviii + 321 p., 16 contributors, maps, b&w illus., 20 colour plates, index. Softbound. Cdn$74.95.

Canada's cold environments encompass a wide diversity of geography, ecology, and culture, and the theme of climate change is now central to any serious discussion of this immense region. *Changing Cold Environments: A Canadian Perspective*, edited by Hugh French and Olav Slaymaker, is a compilation of chapters by leading scientists on a broad range of geographic topics that define Canada's changing cold regions. Readers are introduced to physical, ecological, and societal aspects of Canada's cold regions, with specific focus on the cryosphere and environmental change. Several recurrent themes, including spatial and temporal variability, the notion that contemporary conditions of the cryosphere bear the legacy of the past, and the implications of environmental change on society, help to link the diverse topics. However, these threads are not consistently woven through all chapters of the book, and although the technical content of individual chapters is strong, some sections of the book lack connectivity.

The primary strength of *Changing Cold Environments* is the high technical quality of individual chapters. The book is divided into three sections: 1) Spatial and Temporal Variation in Canada's Cold Environments, 2) The Cryosphere, and 3) The Ever-Changing Scenery. The first section features chapters on the spatial and temporal aspects of landscape and ecosystem evolution that have given rise to the present day landscape. A bridge to the second section of the book—The Cryosphere—is provided by a good summary by Roger Barry and Mark Serreze entitled "The Changing Climate," which places contemporary climate change into the context of climate history over the past 3.5 Ma. The remaining chapters provide concise overviews of fundamental cryospheric components, including hydrology, permafrost, lake and river ice, and sea ice. This section of the book is well written and rich in content. The final section of the book—The Ever-Changing Scenery—comprises an eclectic mix of chapters that integrate some of the themes and materials presented earlier in the text through the topics of the changing tree line, geomorphic change in the Arctic and in temperate mountains, cold-climate mountain hazards, and societal aspects of cold-regions environmental change. The application of knowledge on environmental systems and climate change to infrastructure design, adaptation planning, ecosystem management, and environmental assessment are enormous challenges that are faced in Canada's cold regions. These topics receive brief attention from some authors and more focused attention in the chapters entitled "Risk in Cold-Climate Hazards in the Cordillera," by Jim Gardner, and "Societal Aspects of Changing Cold Environments," by Gita Laidler.

The text is appropriate for senior undergraduate students and graduate students interested in cold climate science and Canada's North. Each chapter is accompanied by ample references that allow the reader to pursue further research if desired. There are numerous informative figures and maps, and the majority of illustrations serve well to support the authors' points. The broad-scale hydro-climate or sea ice maps vary in the quality of their reproduction and sometimes lack adequate reference points, which can make their interpretation challenging. The introductory chapter by French and Slaymaker provides an overview of Canada's cold regions. The authors begin this chapter by outlining publications with contrasting positions on contemporary climate change. I was surprised by French and Slaymaker's reluctance to comment on these conflicting views and found this a curious tone to set in the introduction of a book on changing cold environments. The introduction also contained a section that emphasized the ambiguity of available data on climate change impacts. While a cautionary approach can be viewed as commendable, and the need to continue long-term data collection is critical, the message here did not seem consistent with the detailed evidence of climate warming impacts on cold regions found in other chapters. The objective may be to stimulate discussion, but the materials as presented could be confusing to the uninitiated reader. For example, the authors correctly state that the temperature of cold permafrost in the northern Mackenzie Valley has risen over the past few decades, and the lack of significant increases in the temperatures of warm permafrost in the southern Mackenzie Valley is used as an example of ambiguity. However, the authors neglect to explain

that the absence of a trend or reduced increase in temperature of warm permafrost is likely due to the absorption of latent heat required for phase change (Riseborough, 1990) and is therefore an expected characteristic of warming permafrost as ground temperatures approach 0˚C. The explanation for this phenomenon is only provided much later (p. 139) in a chapter by Chris Burn on "Permafrost Distribution and Stability."

A particular theme in the book which I enjoyed was the emphasis on spatial and temporal variation of physical processes and the role of past processes, specifically glaciation, on shaping the current landscape and its vulnerability to change. This context is set early in the text by French and Slaymaker, who remind readers that Canada's cold regions are characterized by diversity and that many landscapes, be they geomorphic or ecologic, may be thought of as transitional, as most of Canada's cold environments bear the legacy of glaciation. David Evans' chapter on "The Late Quaternary Glaciation of Northern Canada" and Konrad Gajewski's "The Evolution of Polar Desert and Tundra Ecosystems" both follow these themes nicely. The longer-term perspective of environmental change recurs in some chapters, notably in those on geomorphic change by French and Slaymaker. The concept that landscapes are in transition and that glacial and post-glacial histories influence their potential for change is an idea that should prove to be increasingly useful in anticipating which cold environments are most vulnerable to future modification.

The book also provides a chapter authored by Laidler that discusses the societal and governance systems that characterize the Canadian North. This is an important component of the text, as Aboriginal perspectives of environmental change and evolving northern governance set critical context that cannot be ignored when considering resource development, community adaptation, and the implications of climate change in Canada's cold regions.

The strong technical content and the diversity of materials and perspectives presented make this text a valuable resource not only for senior undergraduate and graduate students, but also for professionals working in related environmental fields. The book will complement courses on the geography and ecology of cold regions and can help to set context for courses on northern resource management.

REFERENCE

Riseborough, D.W. 1990. Soil latent heat as a filter of the climate signal in permafrost. Proceedings of the Fifth Canadian Permafrost Conference. Collection Nordicana 54. Québec: Centre d'études nordiques, Université Laval. 199–205.

Steven V. Kokelj
Northwest Territories Geoscience Office
Government of the Northwest Territories
Yellowknife, Northwest Territories X1A 2R3, Canada
Steve_Kokelj@gov.nt.ca

TO RUSSIA WITH LOVE: AN ALASKAN'S JOURNEY. By VICTOR FISCHER with CHARLES WOHLFORTH. Fairbanks: University of Alaska Press, 2012. ISBN 978-1-60223-139-9. xv + 405 p., b&w and colour illus., chapter notes, index. Hardbound. US$27.95.

Firsthand encounters with momentous challenges mark the author's life, from the early 20th into the 21st century. Son of two authors, American Louis Fischer and Latvian-born Markoosha, Victor ("Vic" to his friends and colleagues) reached adolescence as "Vitya" in Moscow, USSR. Vic's fascination with the North and Alaska began there, at the Fridtjof Nansen School, where élite students learned to admire pioneering feats, exemplified by the Norwegian polar pioneer for whom the school was named. Thus Vic, his older brother George, and two close chums, Lothar Wloch and Koni Wolf, celebrated Soviet polar achievements of the 1930s. Those included icebreaker developments, the airplane rescue of SS *Chelyuskin*'s crew from Chukchi Sea ice, and "firsts" by aeronauts and pagonauts of 1937–38 (Papanin, 1939). Stalin's purges, begun in 1936, intensified for several years, draining school faculty and claiming relatives of schoolmates. Markoosha's desperate perseverance, and ultimately intervention by Eleanor Roosevelt, won permission for Markoosha and her boys to leave the Soviet Union and rejoin Louis in 1939.

After reuniting, the Fischers were invited to the White House for dinner. To accommodate his awe of polar explorers, no doubt, 15-year old Vic was seated between Mrs. Roosevelt and Admiral Richard Byrd. He struggled to follow conversations in unfamiliar English while imitating the sequence of silverware that guests chose for successive dinner courses.

World War II lured the separated friends from the Nansen School into the military services of different nations, Lothar to serve as a Luftwaffe officer, Koni as a conscript in the Red Army, and George and Vic in the U.S. Army. America's postwar boom and his graduate degree in planning from MIT allowed Vic to choose among job offers in 1950. He and his wife Gloria chose a federal post in the Territory of Alaska over settling into "the cluttered prettiness of New England" (p. 104).

The 1952 national elections roused Vic's indignation over Alaska residents' ineligibility to vote. Crisscrossing Alaska for his job while honing his sense of effective democracy led Vic ardently to support Alaska Statehood. Campaigning for statehood strengthened Vic's skills at forging friendships and agreements across political lines. Vic was elected delegate to Alaska's Constitutional Convention of 1955–56 in Fairbanks. Colourful depictions of delegates' arguments and agreements on provisions of the Constitution occupy 50 pages (p. 133–182) and update Vic's book on the Convention (Fischer, 1975). Policy development sensitized him to enthusiasm emanating from the Kennedy administration in Washington.

After 11 heady years in Alaska, Vic and Gloria followed Alaska Senator Bob Bartlett's advice and returned to