long-nurtured idea of establishing a museum in Nuuk. His plan bore fruit after he left, when the building became Greenland's first museum. In 1978, the museum moved to its present location in the "Colony Harbour," and after a thorough restoration, the Moravian building opened in 1987 as the University of Greenland.

This volume is not a textbook, but it is packed with knowledge and facts. It places the Greenland Moravians in an international framework and relates them to movements of the time like the Enlightenment, national Romanticism, and of course, religion. The book is highly recommended in itself for anyone who wants to know about these matters and as a gateway to further knowledge through the extensive, up-to-date bibliography.

The quality of the layout, print, and illustrations is good, but the size of the book $(15 \times 21 \text{ cm})$ makes some of the plans and maps, which were not printed in full-page size, difficult to read properly.

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BERING: THE RUSSIAN DISCOVERY OF AMERICA. By ORCUTT FROST. New Haven, Connecticut and London: Yale University Press, 2003. ISBN: 0-300-10059-0. xxii + 330 p., maps, b&w illus., notes, bib., index. Hardbound. US\$30.00.

The Bering Sea and the Bering Strait between Alaska and Asia were named by the famous English explorer James Cook (1728–79) for Vitus Bering, the leader of major expeditions that explored and mapped eastern Siberia and the west coast of Alaska. Professor Orcutt Frost has written a fascinating biography of this great Danish explorer.

Vitus Bering was born in 1681 and entered the Russian Navy in 1703. He served the Russian Empire until his death, which occurred on Bering Island in the western Bering Sea during his return trip from Alaska in 1741. No other Dane has given his name to so large a part of the globe.

The first third of the book deals with Bering's life and career during his first 59 years, but additionally gives some insight into the Admiralty, the Orthodox Church, and the regime of the Russian Tsar. This section describes Bering's duties related to his appointment as commander of the First Kamchatka Expedition, an enormous logistical challenge, as well as the conflict between the attitudes of the officers, soldiers and craftsmen on one side and the academicians with their claims for their daily wine, etc., on the other. Bering's difficult tasks were to organize the transport through unmapped mountainous areas and establish new quarters for the hundreds of men involved in the expedition, which included setting up a residence, barracks, warehouses, shops, guardhouses, clinics and even

chapels. These tasks were additionally complicated by misleading or conflicting orders from the Russian bureaucracy and a lack of support from local administrators.

The geographic exploring and mapping of eastern Siberia were Bering's first priorities, and he had little interest in ethnological and environmental conditions. Frost's account of the expeditions through Siberia is somewhat confusing to follow and would have benefited from more and better maps and photos of higher quality.

Frost gives the reader quite new information about Bering's private life and new facts about the two Russian Kamchatka Expeditions that have emerged as the result of geopolitical changes and the opening of Russian territories. For example, the Danish-Soviet Expedition found Bering's grave on Bering Island in August 1991, 250 years after his death. And several letters written by Bering and his wife in 1740 have been uncovered in the archives of the Russian foreign ministry, to which scientists were granted access in 1996.

At an international workshop at the University of Copenhagen in December 1998, entitled "Recent Results and New Perspectives in the Study of Vitus Bering and the Two Russian Kamchatka Expeditions," new information was discussed, including the private letters referred to in Frost's sixth chapter, "Letters Home." These letters were published in English for the first time in the proceedings of the workshop, edited by Peter Elf Moller and Natasha Okhotina Lind (2003).

The final two-thirds of Frost's book deals with Bering's last expedition from Kamchatka to North America, with *St. Peter*, under his own command, and *St. Paul*, under Aleksej Chirikov. Frost describes in detail the journey of the two ships and also comments on the problems encountered, basing his account on information from the vessels' logbooks, final reports by senior officers, reports and publications by the biologist Georg Wilhelm Steller, and other journals compiled from diaries kept during the voyage.

After the departure from Kamchatka, Bering was back in his right element: at sea. He had spent years organizing the expedition, fighting not only the practical logistical problems, but also the conflicting orders from Moscow. One would have expected Bering to be relieved at finally being at sea on the *St. Peter* with 77 men on board; however, he was not only aloof, but remote. Bering took his responsibilities very seriously.

After two weeks, the two ships lost contact with each other. Independently, Chirikov on *St. Paul* observed islands in the Alexander Archipelago on 15 July, and Bering on *St. Peter* observed the St. Elias mountain range of Alaska on 16 July. On 20 July, *St. Peter* anchored off the shore of Kayak Island in the Gulf of Alaska, and crew from the ship visited the Island. Drawing from several reports, Frost describes and gives interesting comments on the conflict between the young, enthusiastic, impatient, and inexperienced academician, Steller, and the older, responsible (but also tired) commander, Bering.

Frost not only details the different landings on Alaskan Islands and the accounts of Steller's investigations, but also judges his work on the basis of what we know today. Further-

more, he describes the traditional conflict between the navy officers, with their nautical and geographical background, and the scholarly, biological approach of Steller.

After the Russians discovered the coast of Alaska, their return voyage turned into a disaster, caused by bad weather, lack of food and drinking water, and the outbreak of scurvy among officers and crew. Although the two ships crossed paths several times on the return voyage, they never made contact. Frost describes the miserable journey in the unknown archipelago before St. Peter ended its voyage as a wreck on Bering Island, only about 120 miles east of Kamchatka. This section of the book also suffers from a lack of detailed maps. Although commander Vitus Bering and many of his crew died here on the uninhabited island, most recovered thanks to Steller's treatments with green plants rich in vitamins and fresh meat from sea otters, as well as his general care, encouragement, and organization. The atmosphere charged with the animosity between Bering and Steller, which culminated while St. Peter was anchored near Kayak Island, changed to one of respect and admiration for Steller from the crew and officers, including Bering, before his death on Bering Island.

Frost has provided a thorough depiction of the 1741 voyage, drawing upon both the old reports and present knowledge. I have read the book with great interest, and though I knew quite a bit about Vitus Bering, I have learned much more. While the conference proceedings volume mentioned above draws upon various specialists and will appeal primarily to a similar audience, Frost's book will also be appreciated by people interested in geographic exploration or Arctic research and by those with a more general interest in history, human relations, and logistical problems.

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IMPROBABLE EDEN: THE DRY VALLEYS OF ANT-ARCTICA. Essay by BILL GREEN; Photography by CRAIG POTTON. Nelson, New Zealand, Craig Potton Publishing, 2003. ISBN 1-877333-07-7. 128 p., color illus. Hardbound. NZ\$59.95.

This colorful book on the Dry Valleys—"a wilderness of stone surrounded by a wilderness of ice" (p. 10)—gives a striking view of one of the more beautiful parts of our planet. The area was first seen during Scott's expedition of 1901–04,

and since the beginning of the International Geophysical Year (1957–58), numerous visitors have been to this remarkable place on the west side of McMurdo Sound. Why are the Dry Valleys considered to be so important? The ecosystem there contains geological and biological features that date back not only thousands, but millions of years. The synergy of its location (a relatively short helicopter ride from the U.S. McMurdo Station and New Zealand's Scott Base) and a variety of compelling research projects has resulted in a large number of scientific discoveries. A few examples are endolithic algae living within interstices of rocks; mummified seals that crawled inland from the sea thousands of years ago to meet death upvalley; ice-covered lakes that are stratified by temperature and salinity (one of the lakes—Don Juan Pond—is so saline that it doesn't freeze in winter); and glacier-carved valleys once inundated by the sea. Concomitant studies show a complicated glaciated history, which produced a terrain so analogous to Mars and the Moon that astronauts have trained there. The Dry Valleys are part of the Transantarctic Mountains, which form a barrier to the ice sheet flowing slowly from East Antarctica toward the Ross Sea. That feature in itself has proved to be of tremendous value in the mining of thousands of meteorites found on the ice surface west of the Dry Valleys. Although several other "oases" of this sort (large areas free of snow and ice) exist in Antarctica (e.g., Bunger Hills, Larsemann Hills), no other has produced such a wealth of scientific return as the Dry Valleys of Victoria Land.

Because of the pristine nature of the area, strict controls are placed on all visitors, scientists and tourists alike. (Tourists make annual visits to Taylor Valley under the guidance of New Zealand and U.S. authorities, which manage their presence there so they do not interfere with science programs.) One of the valleys (Barwick) has been declared off-limits to everyone in an attempt to isolate the valley as an environmental baseline—an example of what they all may have looked like prior to discovery. Barwick provides a means of comparison with the other valleys, where considerable presence for science has occurred.

This book, however, is not about science, although a few comments related to science have found their way into parts of the text. The author (Bill Green), a chemistry professor from Miami University in Ohio, conducted research on geochemical processes in the ice-covered lakes in the Valleys during nine seasons, beginning in 1968. Some of the content, excerpted from his field journals and diaries, reflects the magic that he experienced while working there. The main text, p. 8-35, describes the uniqueness of the Dry Valleys and their charm, and the remainder of the book, starting with p. 37, consists of color photos of Taylor Valley, Wright Valley, and Victoria Valley, three of the more prominent features of the carved topography. The photos, accompanied by short captions, were taken by Craig Potton from New Zealand, a leading wilderness landscape photographer, as well as the publisher of the book. A map, or perhaps a satellite image of the area, shows the main features, bounded by about 77.25° to 78° S latitude and 160° to 164° E longitude. The