unusually cold weather. From February 27 to March 19, 1912, the temperatures encountered were -30°F to -40°F , which is 10°F to 20°F lower than the average for that time of year.

These temperatures had a devastating effect on the abilities of the men to pull their sleds. (Unlike Amundsen, they did not use dogs on the final push to the Pole.) The runner of a sled or a ski runs on a microlayer of melted ice that lubricates the surface. If the temperature is lower than -20°F , the snow does not melt, and the sled runs as though on desert sand. These were the conditions that Scott's men fought, gaining only 6 miles per day rather than the expected 12 to 15 miles per day. There were other problems. Their food was running low, and the cans of kerosene necessary for cooking and melting ice had leaked. Their intakes, therefore, of both calories and fluids were dangerously inadequate.

For those of us brought up on the dangers of wind chill, it is hard to believe that wind can actually raise the temperature. In Antarctica, the layer of air close to the snow is colder than the layers higher in the atmosphere. A wind stirs up the warmer, higher air, bringing it down to raise the temperature. During the period of extreme and unusual cold that affected Scott, there was very little wind, which kept the temperature bitterly low. Oates' and Scott's feet froze. Oates' frostbite was so severe that one night he walked out into a storm, knowing that he would not return. Scott's feet soon became as bad as those of Oates and, during the last week, when they all lay in their tent waiting for the weather to improve, Scott became so weak that he could not walk. They were 11 miles from the nearest food depot, and the diary of one of the men suggests that 2 of them were going to try and reach the supplies. The dash for the depot was never made, and all the men died, leaving behind tragic and heroic messages for their families.

No one will ever know why an attempt was not made to reach the food (although even if they had reached the depot, they still would have had 170 miles to travel), but one possibility suggested by Dr Solomon is that Scott was too sick to travel and that Wilson and Bowers made the decision, out of loyalty, to stay with him to the end.

This book is not just a bare-bones scientific comparison of the weather and conditions that prevailed in 1912 with those of modern times but is a well-written account that grips the reader, bringing the harshness of Antarctica to life. As a recounting of the Scott expedition, it is objective and praises where praise is due and acknowledges the mistakes that led to the final disaster. If you think you know all about the Scott expedition, read the book to be reeducated. If you know nothing about the expedition, read the book and come

away filled with awe for the trials, courage, and endurance of the explorers.

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This Cold Heaven: Seven Seasons in Greenland

Gretel Ehrlich
New York, NY: Pantheon Books, 2001
US \$27.50, 377 pages, hardcover

North to the Night: A Year in the Arctic Ice

Alvah Simon
New York, NY: McGraw-Hill, 1999
US \$14, 329 pages, softcover

The harsh environments of the Arctic and Antarctic have attracted adventurers and scientists ever since Frobisher and Davis made the first probing voyages toward the Northwest Passage between 1576 and 1585 and Capt James Cook reached $67^{\circ}15'S$ on January 15, 1773. The authors of these books did not make any great modern explorations, but both vividly describe the beauty and harshness of Greenland, a land that few of us will be able to visit.

Gretel Ehrlich, the author of 7 other highly acclaimed books of fiction, nonfiction, and poetry, first went to Greenland in 1993 after recovering from a lightning strike that damaged her heart. She was so entranced by the country, its people, and its history that she returned 7 times to the northwest coast, living with friends that she made, going on extended hunting trips, riding sleds, and falling in love with the beauty of the land.

The Inuits of Greenland are going through the trials of social change. The older generations, brought up without modern comforts, learned to cope with the elements. They sustained themselves by hunting and fishing and making their clothes from the hides of animals they killed. Now that the "advantages" of civilization have been brought to them, the number of people who follow the old ways is decreasing, and the younger generation is torn between the enticements of an easier life and the excitement of ancient traditions.

This Cold Heaven describes these conflicts: the problems with alcohol, child abuse, and domestic violence contrasted with the ancient skills of traveling on the ice, the drama of the hunt, and the lyrical beauty of the land. Ehrlich traveled with her friends in all seasons and under all conditions, meeting hunters whose uncanny knowledge of the ice saved her—and themselves—from disaster and experiencing "the wild genius and second sight

of the Eskimo traveling by dogsled and hunting every day to feed themselves and their families as well as their dogs.”

Interspersed with accounts of her own journeys and experiences are descriptions of the classic explorations of Knud Rasmussen and Peter Freuchen at the beginning of the 20th century. These are names no longer well known except to aficionados of arctic exploration, but the journeys they made and the descriptions they wrote of Eskimo culture are as graphic and important today as when they were written. They lived, dressed, hunted, and traveled as natives, experiencing to the fullest the hardships and the triumphs of Eskimo life. Their journeys, extending from Greenland across the north of Canada, make the trips of the modern ecotraveler seem like Boy Scout outings.

Ehrlich's writing is poetic and descriptive. “The landscape itself with its shifting and melting ice, its mirages, glaciers and drifting icebergs, is less a description of isolation than an ode to the beauty of impermanence.”

This is a magical book that brings to life both past and present in a place few of us will be privileged to visit.

North to the Night is also about Greenland, but it is a tale of isolation and near madness that, fortunately, has a happy ending. Alvah Simon is the fourth of 9 children from upper New York State who developed a serious case of wanderlust and, in his late 20s, left Key West in a leaky sloop to sail around the world. Later, he married Diana White, a New Zealander with an equally adventurous nature who had been wandering from one remote country to another. For the next few years, they sailed together, finally ending up in Florida with the intention of settling down. But it was not to be. As a young man, Simon had seen a picture of Knud Rasmussen and Peter Freuchen and, tucked in the back of his mind, was the urge to sail to *Ultima Thule*—the Last Unknown—and test himself by spending a winter in a boat trapped in the ice off the far northwest coast of Greenland. His wife was eventually persuaded to go along with the plan. Two years after making the decision, selling their old boat and buying a new one, the *Roger Henry*, they set sail in June 1994, headed for Greenland.

They slowly made their way north, finally deciding to spend the winter in Tay Bay, 100 miles north of the nearest settlement at Pond Inlet. They knew that the ice would trap the boat and that there would be no hope of help if disaster struck. Their first visitor was a huge male

polar bear that crashed through the ice as though it was paper and was only persuaded to back off by blasts from an air-powered horn. They were in the country of the Ice Bear and would never be allowed to forget it.

A message came on the radio that Diana's father was terminally ill in New Zealand, and the Canadian Coast Guard humanely, but illegally, airlifted her out on their last flight of the season.

They rose in a snow cloud, turned, and were soon a speck on the vast Arctic sky. I stood there for a very long time, watching the sun and my wife, both sources of warmth and light in my life, disappear over the southern horizon. I have never known such silence.

The sun fell below the horizon and would not reappear, even as a faint rosy gleam, until February. During those long, terrible months when the ice crushed and tilted the boat, when fuel for the stove ran dangerously low, and there was nothing to do but try and keep warm in a sleeping bag, Alvah might have gone mad had it not been for the company of their cat, Halifax. They took walks together, spoke to the ravens, watched out for the ever-present polar bears, and waited out the winter blizzards. During some of this time, a tenuous contact was kept with the outer world through a Canadian radio operator, until even that failed.

When the sun finally returned, a group from Pond Inlet visited on sleds, probably expecting to find a dead man. Diana returned on March 13, after her father's death. She arrived to find a man changed by his long solitude, and time had to pass before they renewed their close relationship.

Eventually, the ice broke, and they sailed for home. But Alvah was to have one last definitive encounter. While walking on the tundra, he suddenly came face to face with a polar bear that rose on its hind legs in front of him: a terrifying sight towering over him. Alvah laid down his gun and walked slowly toward the bear, his arms upraised. The bear looked at him, long and hard, and then dropped to all fours and turned away. This was not an act of bravado but an affirmation of the gift of life that the bear had given him.

This is a truly amazing, graphically written story of courage, love, near madness, and endurance in the ultimate wilderness that has, rightly so, been awarded several prizes for literature and outstanding seamanship.

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