like "disease and diet" (chapter 8), a discussion of different cosmologies and, thus, understanding and treatment of dogs in Inuit culture and the explorers' culture (chapter 6); the bonds between dog and driver (chapter 9); and the companionship of other animals when dogs were unavailable (chapter 10). Other chapters provide useful contextual information for the period of time analyzed in the book. After an engaging initial account of dogs in 19th century literature that went to the North Pole, Nickerson elaborates in chapter 2 on the role of the Greenland dog for Arctic expeditions. The difference between sledge and sled is explained in chapter 4; various explanations for the bonds between humans and dogs are provided in chapter 22; and the author's thoughts on the commemoration of dogs can be found in chapter 24. A list of references, sometimes infused with the author's personal comments (found in the "Notes"), as well as a detailed bibliography and index, can be found at the end of the book.

Harnessed to the Pole tells stories of compassion, gratitude, and excitement, but also of hardship, harshness, and exasperation, and its emphatic and vivid descriptions enable the reader to feel almost a part of the journey. Nickerson's focus on dogs in selected Arctic explorations enriches the understanding of polar expeditions in general, but also provides the reader with a human perspective; alongside enthralling descriptions of interactions between dogs and humans, careful readers can also learn about Inuit culture and cosmology (e.g., the importance of naming dogs, which could have been dealt with in a separate chapter). Occasional anecdotes portray the whole spectrum of human life in the Arctic: for example, in chapter 14. Nickerson describes how Inuit meet cats for the first time. and in chapter 17 the reader learns about how a crew member on a doomed expedition fastened a dog's collar around his arm "so that it might identify his corpse when it washed up on the coast" (p. 186). The correct plural form of one of the Arctic's Native inhabitants is Inuit, which means "the people;" unfortunately, the author lists them incorrectly as "Inuits" in the index and describes them as "Inuit people" throughout the book.

Detailed chronological accounts throughout the book mark its strength and weakness at the same time: whereas reading can become somewhat cumbersome at times, they serve to provide credibility and depth.

Harnessed to the Pole serves as a significant contribution to the recently developed field of human-animal relations. Although the book might be of particular interest to (Arctic) historians and ethnologists as a primary audience, it is also an enjoyable and approachable book for everyone interested in the topic. In Harnessed to the Pole, Nickerson's call to recognize the contributions of sledge dogs in Arctic explorations culminates in an eloquent, at times emotional, new perspective on American Arctic explorations in the late 19th century. The book provides an insightful piece of the larger, yet mostly unknown, mosaic of human-animal relations during Arctic expeditions. It serves

as inspiration to reach beyond its scope to find and describe more traces of sledge dogs in the Arctic.

> Lydia Schöppner Arthur V. Mauro Centre for Peace and Justice St. Paul's College University of Manitoba Winnipeg, Manitoba R3T 2N2, Canada lydia.schoeppner@gmx.de

WHITE ESKIMO: KNUD RASMUSSEN'S FEARLESS JOURNEY INTO THE HEART OF THE ARCTIC. By STEPHEN R. BOWN. Vancouver: Douglas and McIntyre Ltd., 2015. ISBN 978-1-77162-001-7. 341 p., maps, b&w illus., note on sources, selected bib., index. Hardbound. Cdn\$34.95.

I believe that it is fair to say that nearly everyone who has conducted Arctic research in North America and Greenland has had occasion to refer to the voluminous reports of the 5th Thule expedition, possibly Knud Rasmussen's crowning achievement as an Arctic researcher. Yet, as Stephen Bown makes clear in *White Eskimo*, the 5th Thule expedition was but one chapter in the amazing life of Knud Rasmussen.

In the Prologue, the reader gets a glimpse into the successful and hectic life enjoyed by a mature man who found his place in two widely different worlds. But the success had been hard won. Presenting a historical perspective of someone like Knud Rasmussen has to be quite a challenge. The reader needs to get a sense not only of who the main character is, but also of how his life made a difference on a broader scale of human endeavour. To accomplish this, Bown presents Knud's life in four parts: The formative years in Greenland and Denmark; the growing taste for adventure and exploration of the far North; the recording of numerous volumes of Inuit myths and legends across Arctic North America; and, finally, the portrayal of a vanishing way of life through film.

In Part 1, Bown provides a masterfully condensed version of the formative years of Knud's life in a coherent sequence of events, each as important as the next, beginning with the cultural duality that did so much to shape Knud's personality, life pursuits, and goals. Knud Rasmussen was born in Jakobshavn (Illulissat) on the west coast of Greenland, the son of a Danish missionary and a mother with Inuit ancestry. His childhood was spent in the small and relatively isolated Greenlandic settlement where his father's position as pastor and his mother's deep roots and broad connections in the Inuit world ensured his dual acceptance and placement on the upper social rung of the little society. His father traveled extensively, often accompanied by his young son, who soon mastered the art of driving dogs and, along with his sister and brother, became fluent in both Danish and Greenlandic.

Knud's world changed drastically at the age of 12, when his father brought the family to Denmark. An even greater surprise awaited young Knud when he realized that he was to stay in Denmark while the rest of the family returned to Greenland. His father, whose own alma mater had been Herlufsholm, a boarding school for boys, was keen to have his son enrolled in the reputable educational facility. However, Knud failed the entrance exam, reflecting his limited educational background, especially in mathematics, and was spared the experience of boarding school life.

The author convincingly identifies the major forces that shaped Knud's future, perhaps foremost the struggle to find a niche in the stifling social hierarchy of Danish society. Bown explores how Knud began to find his way, first in Copenhagen and later on the world stage, by leaning on his "Eskimo" background. It was a restless, impatient search for recognition, and school was not his forte. Only on his third attempt did he pass his "studenter exame" at Nørrebros Latin-og Realskole in Copenhagen. He did enter the University of Copenhagen, but with little enthusiasm. He tried acting and even opera singing before he achieved some success as a writer. A life-changing opportunity came his way through his association with the university, in the form of a Student Society trip to Iceland working as a freelance correspondent for a Christian Daily newspaper. The leader of the trip, Ludvig Mylius-Erichsen, was a young man whose energy and determination matched Rasmussen's. Their association eventually led to the Danish Literary Expedition (1902–04) and the future path of Knud Rasmussen. The two strong-willed characters rarely coexisted peacefully for long, as Bown points out in his excellent account of the expedition. A milestone was reached for Rasmussen when he made his first contact with the Inughuit, also known as the Polar Eskimos, the northernmost inhabitants in the world. Meeting them had been a longstanding goal of his and one that would direct his future life. In 1903, when the expedition headed north across Melville Bay, northern Greenland was not under Danish administrative rule and therefore not suffering under the very restrictive controls imposed by the Danish government. Beginning with John Ross's 1818 encounter with the Inughuit, European and American contact had been sporadic and mostly confined to Franklin search expeditions and various quests to reach the North Pole. Of these, Robert Peary's expeditions had resulted in some degree of dependency on Western goods among the Inughuit. Following Peary's and Cook's questionable claims to have reached the North Pole, Western interaction with the Inughuit came to an end, leaving a void in trading relationships with the south. In filling this void, Knud found his calling.

In Part Two, the author covers the longest segment of Rasmussen's hectic life, beginning with his return to Denmark and his marriage to Dagmar Andersen. It was a strong and supportive marriage, as it would have to be with someone of Knud's temperament and extensive absences from home. While in Denmark he completed several writing assignments, the most prominent being *The People of the Polar North* (Rasmussen, 1908). Before long, Rasmussen headed back to Greenland and the Cape York district. Early

in 1908 he crossed Smith Sound to meet up with some of the Inughuit, who regularly hunted on Ellesmere Island, an area the Canadian government thought of as Canada's sovereign land. As far as Rasmussen was concerned, Ellesmere was no-man's land. During the trip he hunted and collected hundreds of Arctic fox pelts worth a considerable sum. A plan already brewing came closer to fruition when Knud, most opportunistically, met a tall, bearded, and equally restless soul: Peter Freuchen. The two men could hardly have been better matched and became lifelong travel companions and friends. In late summer of 1910, following an intense period of fundraising in Denmark, the two partners steered their fully loaded vessel into North Star Bay and established a trading station at the foot of the distinctive, flat-topped Mount Dundas. At Freuchen's suggestion, they named their new abode "Thule Station" from "Ultima Thule," the farthest north.

For the rest of his days, Knud Rasmussen's life was in one fashion or another tied to his new life as station manager, expedition leader, ethnographer, writer, celebrity, and international adviser. The second half of Bown's book (Parts 3 and 4) is dedicated to the extraordinary expeditions carried out under the rubric "Thule Expeditions," of which there would be seven. As readers we get vivid insight into how incredibly dangerous these expeditions were. The first expedition, a torturous 1000 km dog sled trek across the inland ice to Peary Land, easily could have ended in the death of the participants. Only by sheer will and toughness (as well as luck) did the men manage to stagger back to Thule Station. The second expedition to the north coast of Greenland did result in the death of two participants. Bown expertly illuminates a risky flaw in Knud's early expeditions, a swaggering tendency to test skill and luck to a dangerous extent. By the time the 5th Thule expedition was launched in 1924, much had changed, and the success of the scientific expedition could in large measure be credited to Knud's meticulous planning and choice of participants, including two newly minted young scholars, Therkel Mathiassen and Kai Birket-Smith, who would go on to make extraordinary contributions in their respective fields of archaeology and anthropology. The expedition headquarters was their prefabricated hut "Bellows" assembled on Danish Island in the central Canadian Arctic.

On March 10, 1923, as the rest of the expedition members began wrapping up their activities and heading for home, Knud Rasmussen, with two Inuit companions, Miteq and his cousin Arnarulunguaq, set out on what would be the longest sled journey in polar history. About 18 months and 18 000 km later, they completed their journey in Nome, Alaska. As Bown points out, a tremendous amount of credit for the successful completion of the journey must go to Arnarulunguaq, also called "little woman." Stephen Bown's skill as a popular historian and biographer is amply demonstrated as he takes the reader along on the remarkable sled journey, highlighting Rasmussen's unmatched ability to establish trust with complete strangers, which enabled him to record myths and legends and open up the rich inner

world of the Inuit. The results of all the scientific studies conducted during the Fifth Thule Expedition, 10 volumes in all, were gradually published in the years following the return of all expedition members. A summary report of the expedition, written by Therkel Mathiassen (1945), was published more than a decade after Rasmussen's death.

Rasmussen's last expeditions shifted to the shores of East Greenland, where he produced a traditional feature film (*Palos Bryllup*), with a Greenlandic cast. The filming was well under way when Rasmussen became ill. Hurriedly he was transported in his vessel *Kivioq* to a hospital facility in south Greenland and eventually brought to Denmark, where he died on December 21, 1933.

I highly recommend *White Eskimo* for anyone interested in the transitional days of Arctic exploration, adventure, and Bown's keen insight into the life events that shaped Dr. Knud Rasmussen into the extraordinary person he became.

REFERENCES

Mathiassen, T. 1945. Report of the Fifth Thule Expedition, 1921–1924: The Danish Expedition to Arctic North America in charge of Knud Rasmussen. Vol. I, No. 1. Copenhagen: Gyldendal, Nordisk Forlag.

Rasmussen, K. 1908. The people of the polar North. London: Kegan Paul, Trench, Trubner.

Peter Schledermann 320 Silvercreek Green NW Calgary, Alberta T3B 4J8, Canada schleder@ucalgary.ca

WOLVES ON THE HUNT: THE BEHAVIOR OF WOLVES HUNTING WILD PREY. By L. DAVID MECH, DOUGLAS W. SMITH, and DANIEL R. MACNULTY. Chicago: University of Chicago Press, 2015. ISBN 978-0-226-25514-9. xiii + 187 p., b&w illus., 28 colour plates, literature cited, author and subject indexes. Hardbound. US\$50.00; £35.00. Also available as an eBook.

Among nature's compelling interactions is the pursuit of prey by wolves. Both predator and prey are well adapted to the interaction, and for those fortunate to witness such an event, it may unfold as a spectacular and dramatic scene with multiple attempts by the prey to escape, and swift, relentless, and persistent attack by the wolves. The book, Wolves on the Hunt: The Behavior of Wolves Hunting Wild Prey, by L. David Mech, Douglas W. Smith, and Daniel R. MacNulty, represents a collection of wolf hunting observations. These observations come in the form of written narratives and supporting videos available online, from which the authors infer the behaviors of wolves as they hunt prey and the defenses of prey and evaluate what factors affect the success or failure of the hunt. The authors are well qualified on the subject: Mech has studied wolves for more than 50 years

and is an internationally recognized wolf authority, Smith has documented the dynamics of wolves and their prey following wolf reintroduction to Yellowstone National Park for more than 20 years, and MacNulty has devoted much of his research to understanding wolf hunting behavior.

Chapter 1 introduces the wolf as a hunter. Wolf adaptations to hunting are described. Included is that wolves may range far and wide to locate vulnerable prey, with an impressive rate of travel of 8.7 km/hr and total distances of 76 km in 12 hours mentioned. Besides physical adaptations for capturing prey, such as keen olfactory senses, fasting ability (up to 17 days without eating), body size, and bite force, wolves employ the advantage of working together and may use cognitive strategies or hunting strategy to tip the scales in their favor. Wolves are quick learners, and the strategies of ambushing prey, using a decoy wolf to distract prey, and driving prey toward hidden wolves or into favorable terrain have all been described. Despite all of this, however, most often the hunt ends in failure for the wolf. Importantly, this dispels the common perception that wolves kill whenever and whatever they want. Specific defenses of prey to wolf hunting are left for description in the subsequent chapters.

Chapters 2 to 8 are the core of the book. These chapters are organized by prey type, with chapters specific to white-tailed deer, moose, caribou, elk, mountain sheep and goats, bison, muskoxen, and miscellaneous prey, including pronghorn antelope, wild horses, wild boars, seals, beavers, Arctic and snowshoe hares, salmon, waterfowl, and small mammals. Each chapter begins with an introduction of the prey species, including its distribution throughout the world, body size, favored habitats, and general vulnerability to wolves. Antipredator strategies are discussed, such as caribou living in herds to reduce predation risk to individuals, or moose spacing out to minimize the rate of encounters with wolves. The chapters then transition to individual accounts of wolves hunting prey. These accounts begin with the date, location, and observer(s), followed by a narrative of the interaction. I found the narratives to be factual and informative. In some instances, such as with bison, only a sample of the narratives is presented for brevity. Readers are also directed to videos online. Each chapter ends with conclusions regarding wolf-hunting behavior from the observations. As was documented in a study by coauthor MacNulty, the pursuit of prey by wolves can be broken down into six stages: search, approach, watch, attack-group, attack-individual, and capture. Conclusions drawn from the observations generally follow this convention. Most commonly it seems prey simply outrun wolves and the wolves give up. If prey cannot outrun wolves, they may escape to rugged terrain (e.g., mountain sheep) or form a circle to face the attack (e.g., muskoxen). In the case of Arctic hares, wolves run about the same speed, but wolves cannot match the sharp zigzagging of the hares. When the wolf is successful, factors that affect success are discussed, such as the greater vulnerability of young prey or severity of winter; of factors that may influence the wolf hunting success, snow depth was the