

diverse regional needs and cultural influences of ten provinces and three territories.

From the author's perspective, the Rangers' ultimate achievement was their success in fostering acceptance of the Canadian military among Inuit and First Nations communities. As described in the final paragraph (p. 481):

The Canadian Rangers are not an anachronism; nor are they broken and in need of retooling. Sometimes, in unexpected places, and in unexpected ways, the most successful of relationships take shape—at their own pace and in unique forms that both reflect and shape the world in which we live.

Shelagh D. Grant
Adjunct Faculty, Canadian Studies Department
Research Associate, Frost Centre, Trent University
Home address: 581 Weller Street
Peterborough, Ontario K9H 2N9, Canada
sdawng@bell.net

THE REINDEER BOTANIST: ALF ERLING PORSILD, 1901–1977. By WENDY DATHAN. Calgary, Alberta: The University of Calgary Press and the Arctic Institute of North America, 2012. Northern Lights Series No. 14. ISBN 978-1-44238-586-9. xxii + 726 p., map, b&w illus., notes, selected references, index. Softbound. Cdn\$44.95. Also available as a free, open access e-book from www.uofcpress.com.

There is a general tendency to distinguish between the bygone age of Arctic exploration and the more modern era of Arctic science. Yet often, quite a bit of science took place on early expeditions to the Arctic, and many scientists working in remote regions and habitats still do a fair bit of exploration to this day (think seafloor vents and sub-glacial lakes). In the first half of the 20th century, these two vocations were joined seamlessly in the person of Alf Erling Porsild, one of history's premier Arctic scientists, whose life and times are captured in colourful and gripping detail in this long overdue biography by Wendy Dathan. The book provides front-row insights into a nearly forgotten world in which researchers interacting between Europe and North America crossed the Atlantic by steamer, vast stretches of the Canadian Arctic were traversed by dog sled, by riverboat or on foot, and the flora and phytogeography of the region were still poorly understood.

As a Master's student botanizing in interior Alaska in the mid-1980s, I began coming across the name of A.E. Porsild, who was known among his contemporaries as Erling. I was lugging around the massive tome *Flora of Alaska and Neighboring Territories*, by Erling's erstwhile Nordic colleague and occasional sparring partner Eric Hultén (Hultén, 1968). Within its 1008 pages, Porsild's key works on the botany of the Canadian Arctic were cited liberally. The next year, when I was an incoming doctoral student in

biogeography planning fieldwork in the High Arctic, my mentor at McGill University recommended the *Illustrated Flora of the Canadian Arctic Archipelago* (Porsild, 1964), which had already been out of print for many years. I easily picked up a crisp, virtually new copy in a Montreal used bookstore. Spending the next few summers huddled in a tent and filling plant presses while consulting this Porsild classic and his posthumously published masterwork *Vascular Plants of Continental Northwest Territories* (Porsild and Cody, 1980), I became familiar with the breadth and depth of Porsild's contribution to Arctic botany. Yet I had no idea about the strong personality of the man who braved considerable hardship and privation over many years to bring this knowledge to the wider public. I got a hint that his background went beyond mere "hay gathering" when I came across a reference to his work on reindeer grazing in northwestern Canada (Porsild, 1929). The latter report was cited in the masterwork of yet another botanical colleague and occasional competitor, Nicholas Polunin, who gave the first detailed description of the flora and vegetation of Clyde River (Kanngiqtugaapik), Baffin Island (Polunin, 1948), my main study site. Intriguingly, many of the vascular floras and atlases treating the North American Arctic were written by Europeans such as Hultén (Swedish), Porsild (Danish), and Polunin (British) (Forbes, 2013). All of these people and many more from Alaska to Ottawa, Boston, and Fennoscandia come vividly alive in this volume, which tracks closely some of the most challenging decades of Arctic research in the Western Hemisphere through the keen and discerning eyes of one of its central participants.

Erling was raised in and around Qeqertarsuaq (formerly Godhavn, 69° N) on Disko Island, Greenland, where his father, Morten—an eminent and internationally known Danish botanist himself—ran the first permanent Arctic research station. Erling and his older brother Bob were both well schooled in the fundamentals of plant taxonomy, field collecting, and herbarium protocols, even if Erling (in his father's assessment) was apparently the keener of the two from an early age. Equally important was his total immersion in all aspects of life on the land and sea: hunting, fishing, dog-mushing, capricious weather, and long, dark winters. In the process he became fluent in the Greenlandic language and intimately familiar with the indigenous Inuit and their culture. One could presume, given this pedigree and background, that he was destined to make a big splash in the relatively small pond of Arctic botany as it was practiced in the early to mid 1900s. Yet such an assessment would be unfair. By the time he turned 21, Erling yearned for an education and life beyond what Greenland could offer, but he saw few options on the horizon and began to despair. While he certainly gained a toehold a few years later because of his father's friendship with Chief Botanist Oscar Malte at the National Herbarium of Canada, his navigation of a somewhat tortured career pathway and his ultimate success at the herbarium were in fact due to his personal skill, charm, dedication, grit, and patience. Despite his obvious scientific talent and administrative and

technical prowess, Porsild was seriously hampered in gaining a permanent position by the fact that he did not “have a university degree of any kind” (p. 21). We see evidence of Erling’s selflessness after Malte’s death. He confided to Rudolf Anderson, chief biologist of Ottawa’s Victoria Memorial Museum, that he did not feel qualified to fill Malte’s place, but instead suggested Dr. Hugh Raup as the best man he knew for the position. Erling had good measure of his own abilities and was, as history proves, able to replace Malte. The incident reveals that he had the judgment to know when and where to press his considerable, albeit non-academic, experience. Later in life, when “public recognition and honours were heaped upon him” (Raup, 1978:68), this same level of humility was readily apparent to those who knew him best. Yet at times we see him critical of others who in his opinion push their academic credentials too far.

Given the title, this book will surely find a home on the shelves of botanists, geographers, zoologists, earth scientists, rangeland managers and historians and laypersons interested in Arctic exploration. However, it might not be obvious that there is also a wealth of material to whet the interest of social anthropologists. Encounters with coastal Inupiat and inland Athabaskan tribes could be fleeting and were relatively infrequent given the huge amount of territory covered at a time when indigenous peoples of the region were still largely living on the land and sea and dependent on hunting, trapping, fishing, and gathering with few fixed settlements. In the background, whaling on the coast had been winding down since the turn of the 20th century, at the same time that foxes had been overhunted inland and people were looking for other sources of revenue in the newly mixed economy. Observations and interpretations of events are detailed and intriguing and in some cases encompass luminaries of early 20th century ethnography of the North American and Greenlandic Arctic. Diamond Jenness, Vilhjalmur Stefansson and “old friend” Peter Freuchen all make appearances. Key moments in time are also captured in the socio-cultural narrative, such as the breakthrough in relations between Eskimos and Satudene of the Great Bear Lake region. An interesting example (p. 201–204) concerns an insightful deconstruction of the term “chief” as applied to ostensible indigenous leaders. Equally entertaining are the contrasting accounts of this historic meeting, with Stefansson’s version being clearly at odds with that of Satudene “Chief” Jimmy Soldat. Porsild has his own biases and prejudices, which are on display in his many ethnographic asides. These extend to greedy white hunters and trappers who consistently overcharge them (p. 62), uncharitable missionaries (p. 59), despondent and lazy Eskimos (p. 42 and 223), and evasive and indecisive Norwegian Lapps (Sámi) (p. 42–43 and 262), all of which are illuminating for what they reveal about human behaviour in these particular times and circumstances. Yet not all of his stereotypes are negative. For example he opines that, “any one who has to deal with reindeer must, like the Lapp, possess an infinite amount of patience. Whether this is natural to the Lapp or

whether the trait has been developed through countless generations of reindeer herders I am not prepared to say. The fact however remains that the Lapp possesses an amazing capacity for waiting, and in this quality even surpasses the stoical Eskimo” (p. 297–298).

The biography is broken into three parts. The first two, comprising nearly half of the book, are thematically similar. Part I encompasses the Porsild brothers’ epic survey of reindeer rangeland in Alaska and northwest Canada while Part II chronicles their overseeing the relocation of nearly 3500 animals from Kotzebue to the east channel of the Mackenzie River delta. The detailed account of daily routine during the two-year expedition can become repetitive at times. On the other hand, it serves to remind readers how very long the Porsild brothers were toiling away at alternatively pioneering scientific achievements and mundane personal tasks associated with survival, while constantly on the move over long distances in an utterly unforgiving environment. The amount of time and effort they spent simply to procure enough food for themselves, and especially for their dog team, far from any human presence and under all manner of conditions in all seasons, is staggering. The moment when Erling finally trades his beloved dog team and sneaks off, thus free of their daily commitment, is bittersweet. The official rationale for this grand experiment in what amounted to social-ecological engineering stemmed from a 1922 Royal Commission report recommending that “small experimental reindeer herds should be established in Canadian locations that had been carefully chosen for greatest need for native food supply” (p. 136). The commission resulted from reports reaching Ottawa of starving indigenous peoples in parts of the Keewatin and the Mackenzie District. In 1930, Erling himself eventually encountered starving Eskimos in the Barrenlands between Yathkyed Lake and Chesterfield Inlet (p. 246), an incident that came back to haunt him more than two decades later. Part III, which covers his career at the herbarium and his service as Canadian vice consul to Greenland during World War II, is notable for the large amount of verbatim personal correspondence between the principals. The many maps needed to track such a broad geographic palette are clear, the bibliography is thorough, and the numerous black-and-white photos are well reproduced and complement the text nicely. The printing quality is high, and the text is remarkably free of typos.

Given the level of detail that suffuses virtually all aspects of his professional career within these pages, relatively little is revealed about Erling’s private life with his three wives and two daughters, one adopted. First wife Asta is a somewhat spectral presence in the book; she appears with no warning on p. 260, and after only a few brief mentions, we learn of their “failed marriage” (p. 320), after which she returned to her native Denmark “for the rest of her life.” Their daughter Edith features more prominently, and her experiences shed a bit more light on Erling at home. For example, during Hultén’s second visit to them in Ottawa in 1938, Edith “dreaded the silent mealtimes and the evenings

when the men retired to her father's study for long and angry arguments" (p. 336). The incident is revealing because the rivalry between the two men was real and clearly affected Erling and those closest to him, including lifelong friend and author of his obituary Hugh Raup (Raup, 1978), in whom he confided his fears about his most potent competitor. In his later years, the misunderstandings at the base of their rancor were eventually resolved and Erling was able to admit to both Hultén and Raup that he had let his young ego get in the way of what could have been timely and mutually shared scientific advancement. Like Asta, second wife Elizabeth similarly pops up out of nowhere when Erling describes their wedding. She and her daughter Nette from a previous marriage merit more coverage than Asta, but Elizabeth's illness and eventual death, without Erling by her side, leave another question mark. True to form, Erling took his colleagues by surprise with his final marriage to third wife Margit. His herbarium assistant, Miss Harkness, noted that "Mr. Porsild went to Europe with no wife and no car, and he came back to Canada with a new Mercedes Benz and a new wife!" (p. 631). On the same page, the author points to the dearth of information on this topic in Erling's journal entries, which, coupled with the level of mystery surrounding his two previous marriages, means some key aspects of his character will remain unknown.

The one true bombshell and most cringe-inducing incident of the book is Erling's very public spat in 1952 with Farley Mowat over that author's self-serving and demonstrably fictional account concerning the extent and circumstances of the "starving" Eskimos in Keewatin, *People of the Deer* (Mowat, 1952). Erling had agreed to review the book for the *The Beaver*, published by the Hudson's Bay Company. The description of the ensuing struggle between the protagonists is utterly engrossing and, in the end, there were no real winners. But what a saga! The pithiest quote encapsulating the entire episode is by the late Edmund Carpenter, then at the University of Toronto, who wrote to Erling that "Mowat suffers from an inability to tell the truth" (p. 592).

Readers of *Arctic* will be interested to learn that Erling was a founding member of the Arctic Institute of North America. The like-minded group present at the first brainstorming meetings in Ottawa and New York in 1943 included, among others, Jenness, Stefansson, geographer Trevor Lloyd, and permafrost scientist Lincoln Washburn. Throughout the book there is a wealth of information concerning reindeer rangeland dynamics and prescient comments on Arctic climate change. Erling's concise notes on grazing and trampling impacts on vegetation and soils in all seasons read like the findings of contemporary peer-reviewed literature on this topic. Similarly, the author notes that Erling, while personally observing the effects of warming during the 1940s on both vegetation and marine ecosystems, "felt that the present amelioration of the climate might not continue." She adds that "Greenland in postglacial time had had alternating periods of warmer and colder climate. In historic time, there had been two such periods, known in the previous century, when the Atlantic cod had been as

abundant in Greenland waters as it was at present and later it disappeared again. Since most Greenlanders obtained their living from the sea, changes in marine life were of fundamental importance to the country and its economy" (p. 479–480). More than half a century later, his off-the-cuff comments have been borne out by recent research into this very topic (Hamilton et al., 2003).

It should not be forgotten that Erling expended considerable effort on making science palatable to the general public. He lectured far and wide and on different aspects of life and science in the Arctic. He provided one of the first and best scholarly overviews of the tundra biome available to a lay audience (Porsild, 1951), which is still useful for the entry-level student more than 60 years later (Forbes, 2013). He also did applied research on edible tundra plants during World War II and later published those findings as well (Porsild, 1953). Erling Porsild was a complex man, utterly dedicated to the Arctic, who was clearly ahead of his times on several issues. Author Wendy Dathan and the publishers can be proud of this fine book: it was well worth the wait.

REFERENCES

- Forbes, B.C. 2013. Biome, tundra. In: Gibson, D., ed. Oxford bibliographies in ecology. New York: Oxford University Press. <http://www.oxfordbibliographies.com>.
- Hamilton, L.C., Brown, B.C., and Rasmussen R.O. 2003. West Greenland's cod-to-shrimp transition: Local dimensions of climatic change. *Arctic* 56(3):271–282.
- Hultén, E. 1968. Flora of Alaska and neighboring territories: A manual of the vascular plants. Stanford, California: Stanford University Press.
- Polunin, N. 1948. Botany of the Canadian Eastern Arctic. Part III: Vegetation and ecology. National Museum of Canada Bulletin 104, Biological Series 32. Ottawa: Canada Department of Mines and Resources, Mines and Geology Branch.
- Porsild, A.E. 1929. Reindeer grazing in northwest Canada: Report of an investigation of pastoral possibilities in the area from the Alaska-Yukon boundary to Coppermine River. Ottawa: Department of the Interior.
- . 1951. Plant life in the Arctic. *Canadian Geographical Journal* 42:120–145.
- . 1953. Edible plants of the Arctic. *Arctic* 6(1):15–34.
- . 1964. Illustrated flora of the Canadian Arctic Archipelago. Bulletin 146. Ottawa: National Museum of Canada.
- Porsild, A.E., and Cody, W.J. 1980. Vascular plants of continental Northwest Territories, Canada. Ottawa: National Museum of Canada.
- Raup, H.M. 1978. Alf Erling Porsild (1901–1977). *Arctic* 31(1): 67–68.

Bruce C. Forbes
Arctic Centre
University of Lapland
Box 122
FI-96101 Rovaniemi, Finland
bforbes@ulapland.fi