The book could have benefited from a circumpolar map indicating the location of the communities being studied. Although the colour photos in the centre of the book are informative, the black and white photographs, local maps, and charts in the individual chapters are sometimes of poor quality and difficult to understand. The book also could have benefited from a more thorough editorial review. There are numerous errors, particularly in the first half of the book. For example, on p. 27, we read "celcius" rather than "Celsius"; on p. 56, "slate" instead of "sleet'; p. 113 says that most snowfall falls between May and November instead of between November and May; on p. 133, we see "evading" rather than "avoiding"; and on p. 248, "CYSN" is given as abbreviation for Council of Yukon First Nations (CYFN), and the Yukon Environmental and Socioeconomic Assessment Act is referred to as the "Yukon Environmental Assessment Act."

I recommend this book particularly for Arctic researchers, whether they are physical or social scientists; such readers will understand the framework and methodology of this approach and gain a fuller understanding of the social and environmental conditions such as climate change that affect Arctic communities across the North. The book is also recommended for students in the social sciences, who can increase their understanding of the vulnerability of Arctic communities and apply the framework and knowledge developed by the multidisciplinary team in their studies and future careers.

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SEALS OF GREENLAND. By AQQALU ROSING-ASVID. Translated by DAID YOUNG. Nuuk: Ilinniusiorfik Undervisningsmiddelforlag, 2010. ISBN 978-87-7975-540-6. 144 p., maps, colour illus., charts, figures, further reading, index. Softbound. Available online at http://www.atuagkat.com/. DKK160.00, €20.00.

Seals of Greenland, by Aqqalu Rosing-Asvid, is the fourth in a series of books on the marine mammals of Greenland, following volumes on walrus, polar bears, and ice-adapted whales (bowheads, belugas, and narwhals). The series is published by the Greenlandic educational publishers Ilinniusiorfik, and English, Danish, and Greenlandic editions are available. The books, co-operatively produced by Ilinniusiorfik, the Greenland Institute of Natural Resources (GINR), and the Aage V. Jensen Foundation, are written for educational institutions (secondary school and college levels) and for those with a general interest in Greenland's wildlife. Dr. Rosing-Asvid, a research scientist at GINR, is an expert on the seals of Greenland, with over 15 years of experience with polar bears and seals. The author has conducted much of the primary research described in the book, including studies on movements and migrations, diving behaviour, feeding and predation, ecological interactions, relationships with climatic and environmental conditions, reproduction, and harvest management.

Marine mammals are of significant cultural and socioeconomic importance to residents of Greenland, and the various phocid seal species (the "true" seals of the family Phocidae) are perhaps the most important of all. Seals play a large role in the lives of Greenland residents, and around 150 000 are harvested annually. The meat is eaten by much of the population, and sealskins are the main source of income for most of the ca. 2500 full-time hunters. Six species of Arctic and Subarctic seals are included. Four are ice-adapted (pagophilic, or "ice loving") species that pup on sea ice: bearded seal (*Erignathus barbatus*), hooded seal (*Cystophora cristata*), harp seal (*Pagophilus groenlandicus*), and ringed seal (*Pusa hispida*). The other two species give birth on land: common (or harbour) seal (*Phoca vitulina*) and grey seal (*Halichoerus grypus*, a recently confirmed species for Greenland).

The goal of the book is to make the latest scientific information about Greenland's seals accessible to everyone, and it certainly accomplishes this. Dr. Rosing-Asvid describes the features and characteristics common to the different seal species, but his overall focus is on the various specializations of the six species, their ecology and life history, and their role in the marine ecosystem. The book begins with a brief but effective summary of the evolution of the group, its approximate time of origin and phylogenetic relationships, and the origin of the extant species. Pinnipeds evolved from terrestrial carnivores, and the author describes the oldest known transitional fossils, including the recently discovered *Puijila darwini* (Rybczynski et al., 2009). The next section describes the various pinniped adaptations to life in the sea, including diving, sensory perception, adaptations to living in salt water, and sleep patterns.

The next section (p. 20–56) describes the six species and their ecology, life history, and seasonal cycle. Species descriptions are augmented by a variety of excellent photographs, described in further detail below. The species descriptions are followed by a thorough section (p. 57–78) on the role of the different seal species in the Greenlandic marine environment. This section includes topics on how seal food preferences are studied, the important prey items for the various species, seal interactions with other marine mammals, and the relationships between seals and the fishing industry. This leads into a discussion of the ways in which seal populations are regulated (the longest section in the book, p. 79–133), which include natural population dynamics, food availability, predation by polar bears and other species (Arctic fox, Atlantic walrus, Greenland shark, killer whales), human harvesting, climate and climate

changes, disease, and pollution. The section on population regulation includes an excellent layperson's description of the relationships between sea ice and polar bears and ringed seal catches that has previously appeared in the primary literature (Rosing-Asvid, 2006). The book ends with a brief description of the history of the Greenlandic seal hunt and some thoughts on the future of seal harvesting, management, and conservation in Greenland.

The book contains more than 80 high-quality colour photographs, most of which were taken by the author. Dr. Rosing-Asvid is an accomplished photographer, and the quality of the images is excellent. The photos show the key identification and descriptive features for the different seal species and include close-ups of all the various life stages of harp seals and hooded seals. Other photos show Greenland seals in the natural environment, seals foraging, prey items, and predators, including killer whales, polar bears, and man. Nine maps are included—one showing the communities in Greenland; six range maps, one for each of the species discussed (including Greenland and surrounding areas, eastern Canada, etc.); and two showing movements of satellite-tagged harp seals and hooded seals. The 23 figures (line graphs and bar charts) provide information on a variety of subjects, including diving depths of the different species, sea-ice volume and extent, skin purchases, seal harvest levels, and relationships between climate and polar bear and ringed seal catches.

The book ends with a "Further reading" section, but rather than provide a list of sources, it directs interested readers to the website of the GINR, where updates on Greenland research findings are available. Information in the book is current and based on the best available information, even including a section on grey seals, which were not confirmed as present in Greenland until autumn 2009 (see Rosing-Asvid et al., 2010). A draft of the book was already submitted for translation as these observations were being made, and the book was updated accordingly (p. 53).

Overall, this is an excellent book for researchers, students, and the public. It is thorough and informative, yet appropriate for a general audience, and is in fact worth the price for the photos alone. The reproduction and printing are of high quality, and the editing and translation are well done, with only minor typographical errors (e.g., *Pujilia Darwinii* for "*darwini*" on page 12). It is a good reference book on Greenland seals, and the information is relevant to interested persons outside of Greenland as well, as these seal species are found throughout the North Atlantic.

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