

RINGED SEALS IN THE NORTH ATLANTIC. Mads Peter Heide-Jørgensen and Christian Lydersen (Editors). 1998. Tromsø: North Atlantic Marine Mammal Commission. 273 p, illustrated, hard cover. ISBN 82-91578-04-4. NOK350.

Ringed seals (*Phoca hispida*) are uniquely important in the Arctic. Their extensive range around the pack and fast ice at high latitudes, as far north as the North Pole, has sustained remote Inuit populations through many centuries, providing year-round food, clothing, and fuel. More recently they have provided hunters with a variable financial income through the vicissitudes of the international trade in seal products. Ringed seals are equally vital for polar bears, providing breakfast, lunch, and dinner.

Yet their extensive and remote distribution, which supports the wide-ranging activities of their predators, makes it exceedingly difficult to census and monitor population parameters and to establish and implement management plans. *Ringed seals in the North Atlantic* is a response to a request from the North Atlantic Marine Mammal Commission to review the present knowledge of ringed seals so that gaps, essential to informed management, can be identified.

The first chapter reviews the current patchy knowledge of the biology of ringed seals and provides an introduction to the remainder of the book. The uncertainty involved in censusing ringed seals is emphasised by the phrase that the world population is 'at least a few million.' Six following chapters provide detailed regional accounts of the abundance and population trends of ringed seals. Equally important is the documentation of the variety of methods used to obtain these estimates. The reader is immediately aware of the logistic and statistical difficulties involved in studying animals that spend a variable portion of their time hauled out on (or in) the ice and that range to the remotest corners of the polar ice. This had led to a variety of methodologies. Aerial survey counts, classified by ice type, are extrapolated to regional estimates. Indirect measures include surveying breathing holes and breeding lairs. Population size is also estimated from the number of ringed seals required to sustain the polar-bear population. The documentation of such diverse methodologies and varying statistical treatments draws attention to the wide confidence limits, when they exist at all, associated with such estimates. It is to be hoped that a rational comparison of techniques may lead to increased co-ordination and comparability of regional surveys.

Two chapters deal with the analysis of hunting records from Canada and Greenland. At the peak of hunting, approximately 100,000 ringed seals were taken annually from each country. However catch levels are subject to international market forces and were often significantly less. It is obvious from these chapters that interpretation of catch records requires insight into the social imperatives of the hunters, as well as an occasional pinch of salt!

The final four chapters deal with reproduction failures, tag-recapture studies of movement, diet, and the uptake of

heavy metals. The last of these chapters documents elevated, although variable, levels of heavy metals in some ringed seals. This reviewer would, however, have liked to see some interpretation of these levels, as far as is possible, in terms of clinical dysfunction and morbidity.

The major achievement of this book is that it makes many studies that were previously spread throughout the mists of the grey literature, or in languages other than English, available to a wider audience in one volume. It does so with an authoritative style and includes many tables and figures. Most importantly, it is fully and extensively referenced. It is set out in an attractive and readable style and includes more than 20 colour photographs.

The future of the ringed seal is uncertain. The fates of northern hunters and polar bears are thus similarly uncertain. Ringed seals face threats from pollution and the unknown, yet potentially dire, consequences of global warming. Current work on their movements and association with ice will indicate how they may adapt to changing conditions. But there is still much to be learned about the basic ecology of ringed seals. In summary, this reviewer strongly recommends this book as both a synthesis and bibliography of current knowledge up to 1998. It is an essential foundation on which to plan future studies of this key Arctic species. (Bernie McConnell, Sea Mammal Research Unit, Gatty Marine Laboratory, St Andrews University, St Andrews, Fife KY16 8LB.)

ALASKA AND THE U.S. REVENUE CUTTER SERVICE 1867–1915. Truman R. Strobridge and Dennis L. Noble. 1999. Annapolis: Naval Institute Press. xiv and 226 p, illustrated, hard cover. ISBN 1-55750-845-3. US\$32.95.

The US Revenue Cutter Service was active in Alaskan waters between the region's purchase from Russia in 1867 and the service's amalgamation with other departments to form the US Coast Guard in 1915. Indeed, for much of this period, it would not be an exaggeration to state that the service *was* the US government, at least as far as the coasts of the territory and the offshore islands were concerned. The cutters, a generic term including some substantial vessels, of which at least one, which was a river steamer on the Yukon, performed law-enforcement duties, particularly with regard to fur-seal exploitation, and a wide range of other tasks, both for governmental and other official bodies and also for private individuals.

Most of those with polar interests will be aware of the most famous cutter of all, *Bear*, and of the most notorious cutter officer, Captain Michael A. Healy. They may also know of the involvement of the cutters in the search for *Jeannette*, and of the famous overland relief expedition of 1897–98, during which men of the service drove a herd of reindeer to provide food for beset whalers. But few will be aware of the other tasks that the cutters undertook throughout the period in question. These included the mounting of exploratory expeditions, often inland, the provision of

medical aid to isolated communities, and the transport of government officials.

To that extent, this is a book that has long been awaited and that will be read with interest by Alaskan and polar historians. The book starts with a general introduction to Alaska and the service, which dated from 1790, and which was originally founded to enforce customs tariffs. This includes an analysis of the fur-seal problem, which led to the 1911 treaty between the US, the UK, Russia, and Japan. Later chapters cover such topics as the recruitment and employment conditions of the men of the service, and details of the career of *Thetis*, much of which was concerned with the Greely expedition and was before *Thetis* was taken over by the service. There is a chapter on exploration, and in particular the expeditions of J.C. Cantwell, and further chapters covering the efforts of the service in acting on behalf of American scientists and on its role in bringing aid to those in need.

Scattered throughout the book are sections and chapters devoted to the career of Healy, who rejoiced in the sobriquet 'Hell Roaring Mike.' There is a good deal of political correctness about this, since Healy had a mulatto mother who was a slave. Even though his subordinates and colleagues in the service had no suspicion of this, and indeed his origins were not detected until the 1960s, he is roundly labelled as 'black' in the blurb on the inside of the dust cover, which seems, to this reviewer at any rate, to be a plain usurpation of language. That Healy was a formidable, not to say difficult, character and an excellent navigator emerges clearly from the book, and enough information is presented almost to constitute a short biography. But the authors have deliberately chosen to omit material relating to other topics that are at least as interesting. These include the history of the ship *Bear* and of the overland relief expedition, on the grounds that they have been dealt with adequately elsewhere. The result is that the book is distorted; it would have been far better for the subjects omitted to have been included and then the volume would have had a claim to be a complete coverage of the subject.

A serious omission in the book is a statement of statistics relating to the service. Figures are scattered throughout, but there is no coherent presentation. How many cutters were there at any one time? How many of them visited the northern coast of Alaska? How much revenue and how many fines did they collect? Was this cost-effective? How many fur-seal poachers were intercepted? How many government officials were transported? And so on. This is the sort of material, often included in equivalent books as an appendix, that would enable the reader to gain an impression of the significance of the service as a whole. There is also no comparative element. Beyond a brief statement about the Royal Canadian Mounted Police, there is no assessment concerning how effective the service was in comparison with the equivalents in Canada and Russia.

There are a few irritating slips. One was startled to see reference to Roland Amundsen, and the indexing is not as

thorough as it should be. For example, it includes reference to HMS *Osprey* and *Ospry*, with the latter being incorrect, and one of the two substantial notes on the overland relief expedition, on page 118, is not indexed at all.

Happily, and to balance these deficiencies, the book has great strengths. It is very clearly, even entertainingly, written by authors whose enthusiasm for their subject is obvious. This brings an immediacy to their prose that it would be difficult for those with less personal involvement to replicate. They have undertaken a major piece of research and are to be congratulated on their diligence. Readers will gain an appreciation of the work of this largely unsung service completed often in conditions of great difficulty and, besides, will have a thoroughly enjoyable experience.

As seems to be the case in all the publications of the Naval Institute Press, this book is very attractively presented. One would advise some other publishers to study their methods. There are many illustrations that are well-selected and convey a good impression of the work of the cutters. There are two maps that are helpful, but one would have wished for more detail to be included, and full source notes and selected bibliography. The binding is a delight.

To sum up: a good narrative account of the work of a very little-known service. It is hoped that a more substantial work, perhaps extended beyond 1915, may be forthcoming in due course. (Ian R. Stone, Laggan Juys, Larivane Close, Andreas, Isle of Man IM7 4HD.)

THE FIFTH MAN: HENRY R. BOWERS. C.H. Lagerbom. 1999. Whitby: Caedmon of Whitby. xii + 239 p, illustrated, hard cover. ISBN 0-905355-51-2. £18.00.

This new biography of Henry Robertson ('Birdie') Bowers is timely in as much as George Seaver's standard biography was published as long ago as 1938 and is now out of print. A re-evaluation of this indefatigable little Scotsman, linchpin of Captain Scott's last expedition, is therefore to be welcomed. The author, C.H. Lagerbom, a schoolteacher from Belfast, Maine, was inspired to write about Bowers after experiencing something of the rigours of Antarctica while geologizing in the Dry Valleys and visiting the historic huts on Ross Island. The author has made good use of Seaver's 'life,' which contains numerous extracts from Bowers' letters home and his South Pole journal. He also quotes from Apsley Cherry-Garrard's *The worst journey in the world*, which, likewise, reproduces extracts from the journal. Other secondary sources listed in the author's bibliography include Scott's own and other expedition narratives, as well as the recently published journals of Charles Wright, Frank Debenham, Trygve Gran, and Edward Wilson. There is no evidence that Lagerbom used the Bowers archive held by the Scott Polar Research Institute.

The opening chapters are concerned with Bowers' early upbringing and career. He was born in Greenock, Scotland, in 1883 and brought up along with two sisters by