

WHALING AND ESKIMOS: HUDSON BAY 1860-1951. BY W. GILLIES ROSS. *Ottawa: National Museums of Canada, 1975. 10 x 6½ inches, soft cover, 164 pages. \$9.00.*

My 1958 edition of the *Encyclopedia Canadiana* says that "Whaling, an industry that has operated from shore stations on the Atlantic and Pacific coasts, was introduced by Norwegians at the end of the 19th century." Thus has 50 years of Arctic whaling — one of the most colourful interludes in Canadian history — been dismissed.

Whaling in the waters of the Arctic has received less literary and scientific attention than its counterpart in warmer seas, and W. Gillies Ross draws attention to this lack of balance. The one hundred and forty-six voyages into Hudson Bay have been neglected in favour of concurrent activity in Davis Strait and the Beaufort Sea. In fact, the taking of almost seven hundred huge right (bowhead or Greenland) whales from Hudson Bay was a significant factor in the world economy of the nineteenth century, and irrevocably changed the lives of the native inhabitants, the Inuit.

Explorers, traders and ships' passengers recorded their impressions of Eskimo life in northern Hudson Bay during the nineteenth century, but no one made a systematic study of Inuit culture and the changes brought about by the whaling crews. Professor Ross decided to look through the logbooks of the whaling ships, their lists of trade goods, records or work contracts with the Inuit, and other writings pertaining to the industry. He found a treasure-trove of arctic research, and made the most of it, with a thorough scrutiny of the papers from sixty-nine whaling voyages — almost half the total made into Hudson Bay from 1860 to 1915. The task took him not only to Hudson Bay, but also to shipping offices, museums and other institutions in New England and several European countries.

Ross examines the various whaling journals in considerable detail and in the light of better-known sources such as exploration records, Hudson's Bay Company reports and ethnological studies by Boas and the Fifth Thule Expedition. He compares the conduct of whaling in Hudson Bay to that elsewhere in the Arctic, and on both sides of Cape Horn. The first chapters summarize contact between the Inuit and outsiders, and the author shows the development of a definite pattern, adapted to the conditions of northern Hudson Bay. The growth of trading between Inuit and whalers is followed from the early stage of goodwill and curiosity to reciprocal exchange, with the Inuit acquiring technolog-

ical aids in return for supplies of meat to scurvy-haunted ships' crews; and then, as the whales grew scarce, their turning to trade in furs and ivory.

The succeeding chapters deal with the contractual relationship between the Inuit and whale-hunters, the growth of mutual dependency, the introduction of guns and wooden whaleboats into the Inuit economy, the depletion of wildlife, and the effect upon the Inuit of epidemic disease. Ross challenges the popular notion that whaling brought about the decimation of the Inuit in and around Hudson Bay, and concludes that alcohol played a minor role in social change compared to conditions in Herschel Island and other "contact" areas. He lists the technological and other benefits which, he feels, at least balanced the negative effect of the whalers on the Inuit. Further, he takes issue with the theory of regular linear progression in the acculturation of the Inuit, pointing out that only during the whaling days was there sustained, intimate and formal contact between natives and "outsiders." To take Ross's ideas about whaler-Inuit partnership a little further, it seems likely that in the forecables, bunks and whaleboats, the football and flensing, there was a greater equality of contact, a more honest intercourse than was possible in the colonial setting of the post and camp period.

After the whales and the whalers had gone, there followed another stage of Arctic history, also lasting about half a century. This was the period when the Inuit returned to the scattered small camps of pre-whaling days, this time, however, concentrating on fox-trapping with trade focused on the posts established by traders, police or missionaries.

This book was originally written as a doctoral thesis, and its language is fittingly concise and factual, leaving it to the imagination of the reader to fill in the wealth of odours, colour and drama of sixty-five years of whaling. Such solid detail — the faces of the Inuit photographed around an iron stove in the tiny cabin of the *Era*, the diary of the captain who entertained two hundred Inuit and his own crew of twenty-five to Christmas dinner, the map of voyages made in open boats from the floe edge by Inuit and whalers alike, the details of life in winter harbour for eight months — could provide the bases of several good novels.

It might have helped some readers if the author had explained briefly how a demand for animal oils and stiffeners for corsets and hooped skirts brought about the expansion of whaling into Hudson Bay, and that whalebone in the whaling trade was not in fact bone, but fibrous baleen from the mouth of the

bowhead whale. The "irretrievable loss of the Eskimo viewpoint" on the whaling era, to which he refers, might have been lessened by seeking out those few Inuit, still alive during the nineteen sixties, who had witnessed the closing decades of whaling, and had heard from their parents about the industry in its heyday.

All told, however, the book is excellent. The abundant maps and tables are clear and striking, the notes thorough, the references exhaustive, and the two photographs evocative. The small print used by the National Museum of Canada publishers is hard on the eyes, but the strain is compensated for by a pleasing layout, a firm register and bold headings.

The author has dedicated his book to the late Dr. Don C. Foote, and was inspired in part by the late Dr. Diamond Jenness. He does them both honour.

Keith J. Crowe

CYTOTAXONOMICAL ATLAS OF THE ARCTIC FLORA. BY ASKELL LÖVE AND DORIS LÖVE. *Lehre, Germany: Cramer 1975. 9 x 6 inches, hard cover, 598 pages. DM 200.*

In this book are listed all of the chromosome numbers that have been published for the vascular plants that occur naturally in the Arctic. Introduced weeds and obvious aliens, even though long naturalized, are excluded. The area covered is the tundra, broadly defined as the practically treeless islands of the northern oceans and the mainly treeless lands north of the continuous taiga forests in the mainland areas. The atlas also serves as a checklist of the genera and species found in the Arctic. The authors accept 404 genera and 1,629 species of vascular plants, compared to 230 genera and 892 species in Polunin's 1959 book *Circumpolar Arctic Flora*. The differences in the numbers of genera and species recognized are due to the quite divergent taxonomic views taken by the respective authors.

Polunin's taxonomic treatment was very conservative, whereas Askell and Doris Löve have split not only genera and species but also families. They have divided the family *Caryophyllaceae* into three families, *Illecebraceae*, *Alsinaceae* and *Caryophyllaceae* and the genus *Polygonum* into five genera, *Polygonum*, *Bistorta*, *Persicaria*, *Aconogonon* and *Fallopia*. They use the basic chromosome numbers of groups of taxa as a diagnostic character delimiting genera. Fortunately the authors have cross-indexed the unfamiliar family and generic names to the scientific names that are familiar to most readers. However, they have recognized many species solely upon the outmoded concept that every good species has only one chromosome number. The authors consider chromosome number to be a characteristic that can be considered as a criterion independent from all other taxonomic criteria. Consequently they have recognized many species that are of dubious value.

The one species — one chromosome number — concept is partially abandoned when they recognize the chromosome numbers $2n = 28$, 42 and 56 for *Eutrema edwardsii* R. Br. However, the three chromosome numbers for *Braya humilis* (Meyer) Robinson of $2n = 28$, 42 and 56 reported by me in 1965 are conveniently listed in the atlas only as $2n = 42$ for *Torulularia arctica* (Böcher) Löve and Löve. I do not know how the authors reach this conclusion since they never saw the voucher specimens of *Braya humilis* that are in the herbarium in Ottawa. They state that "chromosome studies by numerous workers have already been instrumental in solving critical taxonomic problems or misconceptions of at least two scores of genera and more than two hundred species pairs represented in the arctic tundra". There is no doubt that chromosome numbers have often been instrumental in revealing the presence of taxa that had previously gone undetected. However, to recognize taxa solely on differences in chromosome number is mischievous and ignores the findings of most recent cytotaxonomists.

In spite of these limitations, the atlas contains a wealth of information on vascular plants of the Arctic and could be extremely useful to all students concerned with them. The book is well-organized and has a format far superior to that of any of the recent chromosome atlases. The bibliographic completeness is of the high standard to be expected of a master of cytotaxonomic compilation. Unfortunately the price is probably beyond the means of most readers.

G. A. Mulligan