

assertion with skill and firmness. The crisply-written text is admirably illustrated by John Busby and many maps, diagrams and fine photographs. The detailed support for the author's arguments is mainly provided by a series of appendix tables and each chapter is concluded by a useful summary.

In order, the book deals with the following topics: plumage, structure and voice; numbers and distribution; breeding behaviour and ecology; migration; the Gannet family and order and the relations between Gannet and man.

An adult Gannet's white plumage and streamlined shape are related to its far-flying habits and plunge-diving for fish. The near-black plumage of the mature juvenile may be a device to avoid eliciting attacks from the highly aggressive male.

The past and present world population size of the Atlantic Gannet are probably better known than for any other animal save man. The present population is concentrated in the north-east Atlantic, particularly north-west Scotland. About one seventh of the world population breeds in the St. Lawrence estuary at present, but Bird Rocks, Québec, once supported over 100,000 breeding pairs, before wanton destruction reduced numbers twentyfold. Since man stopped harvesting most of the world's gannetries in the early 1900's, numbers have increased about 3 per cent annually and many new colonies have been established. One of the most interesting points in the book is the effect of colony size on breeding success. In most large gannetries, over 70 per cent of pairs fledge their single young successfully, but in new colonies of a few pairs, birds rarely raise young. Such colonies therefore grow only by immigration from other colonies. However, when the colony reaches about 30 pairs, success improves dramatically to the level found in large colonies. Nelson argues that social stimulation from many colony members is a necessary condition for successful breeding. The continued increase of Gannet populations argues strongly that they are not food-limited, as does their ability to raise two chicks successfully if a second is experimentally provided.

After fledging, young Gannets are fully independent and move rapidly to warm seas, where they spend a year or more. They return to breed in their fourth or fifth year. Cape and Australasian Gannets are very similar to their North Atlantic counterparts and perform reverse northward migrations as young. Gannets share many traits with their more distant relatives, the boobies, notably many of their displays and the plunge-diving habit.

Differences in ecology can be explained by the lower productivity, and more marked seasonality of tropical waters.

Man's association with Gannets has been a richly complex, but mostly exploitative one. Some human communities, e.g. on St. Kilda, Scotland, have depended largely on Gannet chicks for food and Gannets are still harvested in Iceland, Scotland and the Faeroes. Pollution of the continental shelf areas used by Gannets may yet prove to be a more serious threat to the Gannet than culling. Low breeding success in the Bonaventure, Québec, colony, by far North America's largest gannetry, has been attributed to the effects of toxic chemicals.

This magnificent book is warmly recommended to all those interested in seabird biology.

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E.W. NELSON'S NOTES ON THE INDIANS OF THE YUKON AND INNOKO RIVERS, ALASKA. Edited and with an introduction by JAMES W. VANSTONE; *Fieldiana, Anthropology, Vol. 70; Field Museum of Natural History, Chicago, U.S.A.*; 1978. i-ix, 80 pp. 3 illustrations, 2 maps, notes, references, index. \$3.75.

E. W. Nelson was a fortunate young naturalist and ethnographer. Even though the Alaskan Inuit and Indians among whom he lived and traveled just about a century ago had been badly decimated by the smallpox epidemic of 1838-1839 and by other misfortunes, he was nevertheless able to attend an Indian Festival of the Dead on the Innoko River, to learn from the elders of Anvik about the winter festivals in that village and to observe other aspects of native life which are now totally gone. In November of 1880, Nelson set out from St. Michael where he had been stationed as a weather observer for the U.S. Signal Service since April of 1877. He traveled by sledge and dogteam along the lower-middle Yukon River and part way up its Innoko tributary. As VanStone explains, this kind of arduous journey had become almost routine for Nelson although almost anybody else would have counted it "remarkable".

The notes from the trip, which until this publication were only available in the National Anthropological Archives of the Smithsonian Institution, contain data not included in Nelson's major 1899 publication, *The Eskimo About Bering Strait*. The information is not only

from a little known area, it also fills a gap in our ethnographic knowledge for the period between Zagoskin's 1844 explorations and the arrival of missionaries in 1877. VanStone has skillfully edited the manuscript, providing a helpful introduction as well as generous and scholarly footnotes.

The native peoples concerned are the Ingalik, so fully reported in this century by Cornelius Osgood; the Holikachuk as designated by the linguist Michael Krauss, and possibly some Upper Kuskokwim Athapaskans. (The exact route of Nelson's journey is not fully known). Chief emphasis is on winter festivals and myths, but there is also unique material on the life cycle, subsistence patterns, inter-native trade and manufactures. In short, VanStone has given us yet another valuable contribution to the ethnography of northwestern North America. Together with his own more recent *Ingalik Contact Ecology* (1978), his *Historic Ingalik Settlements Along the Yukon, Innoko, and Anvik Rivers, Alaska*, (1979), and Osgood's monographs, this work helps to bring alive the past of the Ingalik Indians and their near neighbors. After contact their history was often a tragic one, but nobody who takes the trouble to read these reports can dismiss these northern Athapaskans as "simple" hunters and gatherers leading unchanging and colorless lives. We are indebted to VanStone for publishing Nelson's slim but important manuscript.

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ESKIMOS AND EXPLORERS. BY WENDELL H. OSWALT: Novato: *Chandler and Sharp*, 1979. 349 pp. illus. \$15.00.

In this skillful blend of historical and anthropological scholarship, Wendell H. Oswalt has put together a picture of aboriginal Inuit culture based on documentation by early northern explorers. Geographical and temporal factors provide the main obstacles to a task of this nature: the immensity of the area concerned, and the length of time required to bring the Inuit fully into the historic period. As a result, Oswalt has had to condense, mention only in passing, or even omit, many events of historical importance. Nonetheless, *Eskimos and Explorers* provides an excellent overview of the topic, and is a sound base for anyone contemplating in-depth ethnohistorical research in this area.

In the first part of the book, Oswalt deals primarily with exploration. The historical perspective on the process of Inuit contact begins with the tenth-century Norse expansion into Greenland. Although the available sources are second hand at best, they indicate that an aura of mystery and the supernatural was built up around the "Skrellings", probably due to ignorance and misunderstanding. Similar misapprehensions developed following the renewal of European interest in the northern waters of North America in the sixteenth century. The prime goals of this historical episode were geographic discovery and cartography. Encounters that did occur were often less than peaceful, and the Inuit were commonly described as "sun worshippers and cannibals". Contacts intensified as traders, who were often more interested in exploitation than information, became more active, and as the long-enduring interest in discovering a sea route through the arctic increased, reaching a peak in the nineteenth century. There are a few notable exceptions, but most accounts of Inuit dating from this period are incidental, and far from complete. The sad fact is that interested and trained observers were late in reaching the arctic, and met a people already in the process of being acculturated.

In spite of these limitations, Oswalt has managed to bring together in the second part of the book in impressive array of data with which to describe patterns of aboriginal Inuit culture. The theme here centers on Inuit variability, stressing the different 'types' of Inuit culture encountered by the explorers. The inhabitants of West Greenland were the first Inuit to be studied in detail. Their way of life is compared to that of the Polar Eskimo to the north, and to the Angmagsalik of East Greenland. The latter two groups were geographically isolated in what can best be described as "marginal" environments, and illustrate the adaptability of Inuit culture. Turning westward, the Central Eskimo of the Canadian Arctic possessed what has come to be a stereotyped notion of "typical" Inuit culture: people living for much of the year in snow houses at seal hunting camps on the sea ice. Oswalt takes pains to point out that although theirs was the most widespread aboriginal pattern, it was only one of the specialized ways of life found amongst the Inuit. This "typical" pattern was replaced by others as one moves farther west among the Inuit of the Beaufort Sea, and then south through the Bering Strait and finally onto the Pacific shores of Alaska. Amongst other details that were found to be different in these areas were the more complex social and ceremonial lives, due in part to the more secure resource base available.