

briefly recounts in his introduction some nonarcheological experiences such as participating in the harpooning of bowhead whale from a skin boat (to collect the skull), helping castrate, mark, or kill (for skins and camp meat) 12,000 reindeer, traveling 1300 miles by Model-T Ford snowmobile (to secure supplies), and taking 200-mile dogsled jaunts (to collect asphalt for winter fuel).

The bulk of the report is a detailed description of the artifacts recovered, and the reader will agree with Ford's characterization of Eskimo culture as "gadget-burdened." Of particular interest is Ford's analysis of the chronological development of harpoon-head types in the Western and Canadian arctic areas (summarized in bar charts in Figs. 113 to 117). Trait-comparisons and frequency of shared-elements with other arctic culture complexes lead Ford to agree with earlier conclusions that the Birnirk culture phase at Point Barrow was derived from the Bering Strait region to the south, and that the Thule culture of the central and eastern arctic is derived from the Birnirk. Ford is able to tie the later Point Barrow site sequence in with the tree-ring dated sites of the Kobuk River to the south, but he believes that the radiocarbon dates for the Ipiutak culture are in error (much too recent). A valuable appendix by T. D. Stewart deals with the human skeletal material recovered and makes meaningful, at last, the information earlier provided for the Point Barrow materials by Hrdlička.

ROBERT F. HEIZER

Department of Anthropology,
University of California, Berkeley

International Directory of Radioisotopes. vol. 1. *Unprocessed and Processed Radioisotope Preparations and Special Radiation Sources.* International Atomic Energy Agency, Vienna, Austria, 1959 (order from International Publications, 801 Third Ave., New York). xiii + 264 pp. Paper, \$3.50.

For some years radioisotopes and radiation sources have found a ready use as tools for scientific research, and their application to such activities as agriculture, industry, and medicine is now steadily increasing. In view of this fact, the secretariat of the International Atomic Energy Agency has collected

information on the sources of supply, nomenclature, and procedures for obtaining radioisotopes, and the prices of the radioisotopes (when this information was available). This information is made available in the *Directory*, which will be published in two volumes.

The contents of volume 1 are: "Safe handling of radioactive materials"; "Suppliers of radioisotopes" (entries are alphabetically arranged and include mailing addresses); "Additional information on radioisotope production" (information that arrived too late for use in the main section or about activities still in the planning stage); "Definition of terms"; "Information on tables"; and "Tables of radioisotopes."

Volume 2 will contain a list of the labeled compounds of carbon-14, hydrogen-3, iodine-131, phosphorous-32, and sulphur-34.

The Open Sea: Its Natural History. Part 2, *Fish and Fisheries.* Sir Alister Hardy. Houghton Mifflin, Boston, Mass., 1959. xiv + 322 pp. Illus. + plates. \$7.50.

I don't know who will derive more pleasure from this book, the general reading public which will discover a new world, or the biologist who will find a most readable account of a vast and complex topic with which he may be, more or less, familiar. The book deals mainly with the natural history of fishes, around the British Isles. But since British fishermen go pretty far offshore to ply their trade, and since the North Sea and part of the adjoining North Atlantic are the oceanic areas about which we know the most (little as that may be still), Sir Alister has a lot to tell. With this selection of geographic area, it is only natural that the herring found on one side (chapter 3) and the plaice (chapter 8) and "Hake, haddock, cod and co." (chapter 11) found on the other side are treated in more detail than other fishes. The book deals not only with fishes and how they are caught, but as could be expected from the author of *The World of Plankton*, also with the invertebrates, whether they float in the open sea or crawl on the sea bottom. Some of the passages on the natural history of these benthic invertebrates and their relationships to the lives of fishes are every bit as fascinating as the treatment of the fishes themselves. Sir Alister belongs to the

outstanding group of British biologists who have been actively concerned with the fate of the North Sea fisheries. Two chapters, one a concise and hearteningly simple treatment of 'the overfishing problem' and the other entitled "The ecologist and the future," bear witness to this concern.

A reviewer of this book's companion volume, *The World of Plankton*, wrote of Sir Alister's exuberance and contagious excitement in dealing with his subject. This is also true for the present volume, and if you feel yourself side-tracked at one or two points, you will willingly follow the lead of the enthusiastic observer who says: "Now this is really interesting, come with me, I must show it to you and tell you more about it."

There is a chapter on marine mammals in which sea-going Eskimos are covered, and gigantic "sea serpents" get honorable mention.

If the book had only black-and-white drawings and photographs, it would be well illustrated. A friend who saw the original color sketches for the book says that the book's color plates have lost much in the process of reproduction. I quite believe this, but the photographs are still beautiful and set an example by their pleasing arrangement of that kind of information which only good, color pictures can convey.

JOHN E. BARDACH

School of Natural Resources,
University of Michigan

New Books

The Age of the World. Moses to Darwin. Francis C. Haber. Johns Hopkins Press, Baltimore, Md., 1959. 314 pp. \$5.

The Boy Engineer. Edward L. Thom. Golden Press, New York, 1959. 248 pp. \$3.95 (juvenile). The story of engineering is traced from the time of the cave dweller to the man who builds a machine to do his work—the tools of Peking man, the great pyramids of ancient Egypt, bridges and canals, and globe-encircling rockets.

Classic Papers in Genetics. James A. Peters, Ed. Prentice-Hall, Englewood Cliffs, N.J., 1959. 288 pp. Paper, \$3.95.

The Relationship between Nucleus and Cytoplasm. Proceedings of a symposium. Academic Press, New York, 1959. 276 pp. \$12. This symposium, organized by the International Society for Cell Biology, was held in Brussels, 9-13 June 1958.

What Is Cybernetics? G. T. Guilbaud. Translated by Valerie MacKay. Criterion Books, New York, 1959. 134 pp. \$3.50.

Zulu Journal. Field notes of a naturalist in South Africa. Raymond B. Cowles. Univ. of California Press, Berkeley, 1959. 281 pp. \$6.