

gress will be held in the same city, where the Arctic Institute's headquarters are located.

Section themes for the geographers which should be of particular interest to arctic people include: Heat and Moisture Balance of the Arctic and Subarctic; Studies of the Boreal Environment and of Tundra and Polar Biogeography; Exploration and the Development of Surveying and Mapping; The Geographical Study of Cultural Conflict; The Administration, Control and Allocation of Territory and Resources; and a series of themes dealing with: Quality of the Environment and Remote Sensing.

Both before and after the Geographical Congress special symposia will be held in various Canadian cities and on the road. Professor J. P. Johnson of Carleton University, Ottawa, is organizing a visit to Whitehorse, Yukon Territory, and thence to the Arctic Institute's Icefield Ranges Research Project at Kluane Lake; Professor J. R. Rogge of University of Manitoba is planning for a group to examine development in subarctic Manitoba and Keewatin.

Extensive field tours have been arranged both before and after the main congress. An eight-day tour (31 July—9 August) from Edmonton will visit by air a large section of the Canadian Northwest including Sachs Harbour on Banks Island, the Mackenzie Delta region, and Dawson in the Yukon.

On the same dates a tour from Montreal will go via Resolute Bay, Northwest Territories, to the glaciological research area of Axel Heiberg Island and Tanquary Fiord, Ellesmere Island. Another will visit southern Baffin Island and stay at several local Eskimo settlements there, observing cultural adaptation.

The Commission on Periglacial Geomorphology organized by Professor J. R. MacKay will meet at Inuvik 31 July to 7 August.

After the congress (17 August—25 August) a second high-arctic tour will fly to Resolute and spend 5 days in a field camp at Radstock Bay, southwest Devon Island.

It must be noted that these arctic tours are limited as to numbers, and also to registrants at the congress. Enquiries for such registration should be directed to the International Geographical Congress Secretariat, Box 1972, Ottawa, Canada, and firm applications made by 15 October 1971.

Eskimo Point Northwest Territories

Copies are still available of the attractive, hard-covered volume published by the Eskimo Point Residents' Association as a Centennial project.

The more than 100 pages of text in English and Eskimo are profusely illustrated with photographs and drawings. The contents include, as well as a history of the Point, its organizations and churches, Eskimo legends passed down from their ancestors, the many activities of the people are well portrayed and the book is certainly worth its price: \$5.25 including postage. Orders should be sent with a cheque or money order to Mr. Ernest L. Comerford, Project Co-ordinator, The Eskimo Point Residents' Association Inc., Eskimo Point, N.W.T. (via Fort Churchill, Man.), Canada.

Correction

Arctic, volume 23, number 4, December 1970, pages 240-53: "Geographic Variation in Body Size and Weight of Willow Ptarmigan." *Lagopus lagopus murei* should read: *Lagopus lagopus murei*.

Reviews

AKULIVIKCHUK: A NINETEENTH CENTURY ESKIMO VILLAGE ON THE NUSHAGAK RIVER, ALASKA. BY JAMES W. VANSTONE. *Fieldiana Anthropology*, volume 60. Chicago: Field Museum of Natural History 1970. 6 x 9 inches, 123 pages. \$5.00.

As part of a series of studies dealing with the Eskimos of the Nushagak River in Southwestern Alaska, "Akulivikchuk" is an outgrowth of an archeological survey which VanStone began in 1964. So far 58 historic sites have

been located in the Nushagak drainage by the author. Excavations at Akulivikchuk are the result of VanStone's desire to obtain information on the population centre along the middle Nushagak.

The monograph begins with a review of the historic literature available for Akulivikchuk, and this leads into a discussion of the units excavated. The materials recovered are dealt with in a subsequent section which is subdivided into "Locally manufactured goods" (items indigenous to Eskimo culture)

and "Imported manufactured goods" (materials of European or American origin). Both house types and artifacts are placed into wider context in a chapter that deals with the impact that access to trade goods has on the material culture of Eskimos. Finally, Akulivikchuk is placed into a "Central-Based Wandering" settlement type on the basis of subsistence patterns which appear to have existed in the middle Nushagak region during the nineteenth century.

"Akulivikchuk" closely follows the format of "Tikchik Village" (published in 1968 as Vol. 56 No. 3 of this series) in its descriptions of houses and other structures excavated. Illustrations (houseplan drawings) are generally adequate although not very sophisticated. Plates showing the recovered artifacts fare better.

Artifacts are discussed by type, without reference to their distribution at the site. One wonders if mention of their locational distribution might not provide worthwhile additional information. Description and discussion of the various artifact types is fairly detailed so that the reader is left with a good idea of the implement under discussion.

Analysis of more than 300 pieces of non-Eskimo pottery provides VanStone with a lot of information on 19th century trade ware. Most of it was made over too long a time period to be useful in the dating of the village of Akulivikchuk, but several pieces of crockery are impressed with manufacturers' marks that were only used in the middle of the nineteenth century. Four-holed buttons (manufactured after 1860), and several rifle cartridges provide additional clues that occupation at Akulivikchuk spans a good part of the 19th century.

Akulivikchuk is not an impressive site. Excavations there yielded relatively few artifacts which appear to be deposited without any kind of stratigraphy, and suggest only that the village was occupied during and immediately after contact. But it does provide evidence that peoples living along the middle Nushagak shared in the general culture change that affected much of Southwestern Alaska shortly after contact.

Michael Nowak

CIRCUMPOLAR CHARACTERISTICS OF ANTARCTIC WATERS. BY A. L. GORDON and R. D. GOLDBERG. *Antarctic Map Folio Series, Folio 13.* New York: American Geographical Society, 1970. 17 x 11 inches, 6 pages, 19 plates, 6 figures. \$6.00.

This volume, folio 13 in the 20-folio series

designed to summarize the present knowledge of Antarctica, is devoted to a description of the vertical and horizontal structure of antarctic waters. It is a colourful atlas portraying the most commonly measured physical and chemical properties of the sea from the antarctic continent to 40° S.

Data from more than 5,800 hydrographic stations occupied over the last 50 years include considerable new data from the R/V *Eltanin* as well as all available material from the National Oceanographic Data Center. They are dealt with in a short text and summarized in 19 beautifully executed colour plates. Thus this atlas affords a useful summary of the temperature, salinity and oxygen distributions.

General circulation and water masses; sources and reduction of data; and results are discussed, together with a smattering of oceanography including the location of temperature and salinity minima.

Three methods of data display are employed in the colour plates. Horizontal sections of contoured temperature (T), salinity (S), and oxygen (O) data (Plates 2 to 8) printed in 6 hues with shades and tints of each to make 18 variations, are a thing of beauty. The colours are intense and well chosen to show gradations in value of each property (T,S,O) and yet contrast with the other two variables. Less spectacular but still in three colours, the second method shows (Plates 9 to 16) the averaged temperature, salinity and oxygen data for areas within 5° latitude by 10° longitude. Plates 17 and 18 portray temperature, salinity and oxygen profiles in a N-S direction along 7 meridians. These latter are in the same beautiful colour array as are Plates 2-8.

There are 6 introductory figures within the text. A schematic representation of water masses and core layers, figure 1, aids in their visualization. Figure 2 delineates in polar projection location of the 7 vertical sections of temperature, salinity and oxygen shown in Plates 17 and 18, while figures 3 to 5 depict temperature/salinity (T/S) relationships along 3 of the profiles. The indicated depths, however, are in hundreds of metres and not in thousands as shown. The remaining figure is a polar projection of the location of minimum values of temperature (blue) and salinity (red) at the 200 m. level.

In a compilation where distribution is far from uniform, both time and space variations are inherent in the data and complicate its presentation. Most antarctic data derive from single cruises made within a circumscribed area. Since these observations are spread out over 50 years, and the use of