

manipulated with sophistication in what is one of the most elegant treatments ever made of arctic material. The result is impressive and convincing.

*Don E. Dumond*

**MODERN ALASKAN NATIVE MATERIAL CULTURE.** Edited by Wendell Oswalt. *University of Alaska Museum, 1972. 8¼ x 11 inches, 130 pages, map and tables. \$2.50.*

The research project on which this report is based was conceived in two phases. The first involved the collection and identification of artifacts and information illustrating the continuity of traditional elements in Alaskan native material culture, and the documentation of changes which have occurred since the beginning of historic contact. In the second, the University of Alaska Museum hoped to encourage interest and pride in the preservation of culture elements by returning material and information, obtained during phase 1, to the native villages in the form of interpretive packages. At the same time, the museum would circulate an exhibit dealing with acculturation to the various urban centres in Alaska.

The results of phase 1, supported by a grant from the National Foundation for the Humanities in 1970-71, are the subject of the five papers in this volume. Phase 2 was to be supported by the same federal agency in the following year and its effectiveness will presumably be evaluated in a future publication. The first phase was under the direction of Wendell Oswalt who also served as field investigator for the western Eskimo area. Four other field investigators were sent to nine northwestern Alaskan Eskimo villages, three Kutchin Athapaskan communities in the upper Yukon drainage, three Aleutian settlements, and two villages near the mouth of the Kuskokwim River. In addition to over 500 artifacts, information was collected on habitation patterns, household inventories, housing, the seasonal round, and crafts. A photo documentary series of people, objects and activities was also obtained.

In the introduction, L. J. Rowinski, Director of the University of Alaska Museum, explains that as the project was originally conceived, one investigator would have coordinated the collection of material and information in order to achieve comparability from one area to another. It is regrettable that this plan did not prove feasible since the quality of the papers produced by the field investigators varies considerably and virtually no coordination of the research effort is visible in the published results.

The most detailed and knowledgeable paper in the volume is by Wendell Oswalt, the senior investigator. His study, based on research in four western Eskimo communities, emphasizes historical background with special reference to the introduction of trade goods in the nineteenth century, and a description of contemporary material culture on the basis of a classification formulated prior to the field work. This classification involves the identification of four material culture clusters defined as follows: western Eskimo (Yuk) continuities are forms perpetuated from aboriginal times; Yuk-derived forms are those manufactured locally, often of exotic materials, and modeled after aboriginal types; western-derived forms are the locally made exotic counterparts of Yuk-derived forms; direct western imports constitute the fourth form.

This useful classification could have constituted an ideal research design to provide continuity and comparability for all the papers in this volume. And yet only one, Vera Lustig-Arecco's study of Kutchin material culture, follows it to even a limited extent. The others are either shallow and impressionistic or attempt to disguise paucity of relevant data with pseudo-theoretical rhetoric. The volume concludes with a collection inventory, but it is regrettable that a study dealing with material culture and based in part on photo documentary evidence contains no illustrations.

Unfortunately, this volume does not do justice to a stimulating and virtually unique research concept, the study of material culture in transitional situations. Nevertheless, anthropologists, educators, administrators, and indeed, anyone with even a peripheral interest in Alaskan Eskimo and Indian ethnology will await with interest the published results of the innovative second phase of this project. If the University of Alaska Museum can develop successful travelling exhibits, brochures, films, and other museum-oriented information outlets that will increase understanding of the acculturation process and help Alaskan natives achieve a greater understanding of their own adaptation, a significant break-through in material culture research and museum-community relations will have been achieved.

*James W. VanStone*

**NUSHAGAK: AN HISTORIC TRADING CENTER IN SOUTHWESTERN ALASKA.** BY JAMES W. VANSTONE. *Fieldiana: Anthropology, Volume 62. Chicago: Field Museum of Natural History, 1972. 6¼ x 9¼ inches, 93 pages, illustrated. \$4.25.*

As VanStone notes in his preface, this ". . . study is the last of a series of publications dealing with the culture of the Nushagak River region in Southwestern Alaska during the historic period" (p. 2). As a background to this last piece of research, a short précis of VanStone's investigations into the pattern of Eskimo settlement and culture-change during the historic period in the Nushagak River region is in order. His research approach can be characterized as a historical study of culture contact with inputs from ethnography and archeology. Two of his publications deal rather exclusively with the ethnohistory of the region<sup>1,2</sup>.

Beginning in 1964, VanStone made an archeological survey of the Nushagak River and its major tributaries — the Wood, Nuyakuk, and lower Mulchatna Rivers, in order to delimit the Eskimo settlement patterns<sup>3</sup>. In 1965, the nineteenth century village of Tikchik at the mouth of the Tikchik River (on the upper reaches of the Nushagak River) was excavated<sup>4</sup>. Survey work was done west of the Nushagak River in the Tikchik and Wood River Lake areas in 1966<sup>3</sup>. During the 1967 field season the historic village of Akulivikchuk on the middle reaches of the Nushagak River was excavated, and further surveys were conducted along the middle Nushagak River, lower Mulchatna River, and Nushagak Bay<sup>3,5</sup>. The last field season in the area was spent at the Nushagak site (Alexandrovski Redoubt), the Russian and then later American trading post for the Nushagak River region. It is with this last research effort that this particular review is concerned.

Before 1969, VanStone had concentrated his investigations on those Eskimo settlements that were upriver from the Russian and American settlement at Nushagak. These were studies of changes in the material culture of the outlying settlements as a result of the Russian and American contact. The 1969 investigations were focused upon the distribution centre of the new material goods, the trading post of Nushagak. With a considerable body of historical and ethnographic information available for the village, VanStone decided to limit the archeological testing; he later felt that that was perhaps an unfortunate decision (p. 3). The site area had been considerably altered since the initial period of Russian occupation (1818-1867) by cannery construction (1899), shifts in native house locations, and the levelling of the bluff for church and school building sites (1904, 1908). There were no surface indications of the Russian or early American structural complexes. With a limited amount of time set aside for excavation, and no evident midden deposits available, VanStone selected four house pits on the west side of the village area for inves-

tigation. The inventory from the four houses, occupied around the turn of the present century, thus constitutes the archeological sample from the site.

Despite the problem of archeological sampling, there is much to be gleaned from this monograph. The first chapter (Historical Dimension, pp. 5-24) deals with the Russian occupation of the bluff fronting Nushagak Bay and the subsequent history of the village after the purchase of Alaska by the United States in 1867. Photographs of the village in the 1880's and around the turn of the century are particularly valuable additions to the historic presentation. In the chapter on Nushagak material culture, VanStone describes the objects from four ethnographic collections made at Nushagak between 1882 and 1886 (pp. 25-40), and those from the archeological collections of 1969 (pp. 40-70). The ethnographic materials are well described, but not illustrated. The author does provide detailed references to publications where the objects have been previously illustrated. The ethnographic collections contain objects not recovered from the archeological excavations and thus provide additional insights into aspects of change in the material culture towards the end of the nineteenth century. The description and illustration of the archeological collections (locally manufactured goods and imported manufactured goods) completes the chapter.

In the concluding chapter (Interpretations, pp. 71-86), VanStone considers the position of the Nushagak site in relation to the entire region, and the specific contributions of historic, ethnographic, and archeological investigations to the interpretation of the Eskimo settlement patterns in the Nushagak River region and the changes in the Eskimo way of life brought about by Russian and American contact. He concludes that at the Nushagak site the historic investigations have been considerably more productive than either the ethnographic or the archeological investigations. The ethnographic and archeological data were felt to be of descriptive value, providing fragmentary bits of a once extensive material culture, but insufficient for filling the matrices of a model for culture change. The situation may be ethnographically irreversible, for most of the data base is gone, but archeologically, VanStone's expectations would appear to be unreasonable, considering the brevity of his site testing. Research problems involving the dynamics of culture changes require an elaborate archeological research strategy with extensive testing of a site area. Such a research approach was obviously not utilized at the Nushagak site. An appendix with an archeological trait listing by house location is given after the final chapter.

VanStone's study is, aside from the limitations of the archeological research program, a major contribution to the ethnoarcheology of Southwestern Alaska. He has clearly led the way in ethnohistorical investigations and has demonstrated the value of ethnographic data in historic site interpretation. He has additionally shown that the relatively small-scale archeological testing program can provide valuable descriptive materials, but for the greater demands of problem-oriented archeology it is rather unproductive. The author is to be commended for his diligence in turning out readable and useful reports. This monograph, as well as those previously cited, is recommended to scholars interested in the problems of ethnohistory and ethnoarcheology.

## REFERENCES

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- <sup>2</sup>———. 1968a. An annotated ethnohistorical bibliography of the Nushagak River region, Alaska. *Fieldiana: Anthropology*, Vol. 54, no. 2, pp. 149-189. Field Museum of Natural History, Chicago. 189 pp.
- <sup>3</sup>———. 1971. Historic settlement patterns in the Nushagak River region, Alaska. *Fieldiana: Anthropology*, Vol. 61. Field Museum of Natural History, Chicago, 149 pp.
- <sup>4</sup>———. 1968b. Tikchik village: a nineteenth century riverine community in southwestern Alaska. *Fieldiana: Anthropology*, Vol. 56, no. 3, pp. 215-368. Field Museum of Natural History, Chicago. 368 pp.
- <sup>5</sup>———. 1970. Akulivikchuk: a nineteenth century village on the Nushagak River, Alaska. *Fieldiana: Anthropology*, Vol. 60. Field Museum of Natural History, Chicago. 123 pp.

Robert E. Ackerman

**POLAR GEOMORPHOLOGY.** Compiled by R. J. Price and D. E. Sugden for the British Geomorphological Research Group. Institute of British Geographers, Special Publication Number Four, 1972. 7½ x 10 inches, 215 pages, illustrated.

Members of the British Geomorphological Research Group, following a symposium on Polar Geomorphology at the University of Aberdeen, January 4-5, 1972, contributed the 14 papers constituting this volume. Drs. R. J. Price and D. E. Sugden shared the responsi-

bility of organizing the symposium and of compiling the publication. Limited pertinent discussion from the symposium is included. Abstracts and figure titles are printed in English, French, and German.

Individual papers range from 9 to 19 pages. Six papers relate to the Canadian Arctic: valley asymmetry and slope forms, erosional modification of levee morphology, process and form on debris slopes, ice-foot of beaches, and two on limestone solution. Four papers deal with Antarctica: radio echo sounding inland of the Transantarctic Mountains, volcanic record of the glacial history, South Shetland Islands' contribution to the glacial history, and tors and rock weathering. Papers on deglaciation of part of northeast Greenland and on turf-banked solifluction lobes in Norway complete the presentations resulting from field studies. A synthesis of a laboratory study of the wear of sandstone by cold sliding ice, and a deductive yet mathematical treatment of the role of thermal régime in glacial sedimentation complete the book.

It should be clear to the reader that the book is not intended to be a review of the geomorphology of the polar regions. The subject matter is specialized, and as such must be fitted into an established framework of knowledge. Such a diverse and disjunct collection of research papers is perhaps more appropriate for journal articles than a hard cover book. Cost of an individual paper, or even the 4 or 6 papers of Antarctica or Canada respectively, becomes excessive. Most students and researchers will depend on library copies rather than purchase it.

Aside from those drawbacks, all articles have considerable merit. American geologists need to be reminded that in Europe geographers in general carry the brunt of the study of geomorphology and glacial geology and that they do not eschew the geologists' methodologies. Moreover, most methods cited in the book attempt quantification. These papers are not mere descriptive discussions. Hence, many of the papers are qualified to appear in our own geological journals.

Only a few papers can be singled out here for further comment to illustrate their diversity, major new or different contributions, or defects. G. S. Boulton's paper on "The role of thermal régime in glacial sedimentation" is certain to arouse comment from various points of view. It is timely, succinct, overly simplified (by necessity?), incompletely documented, admittedly speculative, and not quite up to date. Boulton seems not to have been aware that publications on a bore hole through the Antarctic ice sheet had been available more than three years before the submission of his manuscript, and numerous