Archaeological Research in Arctic North America: 1958-1960

BY ELMER HARP. JR.

Although the North American Arctic does not exactly reverberate with the pick, shovel, and trowel sounds of thronging archaeologists in any given summer, it is encouraging to survey the quantity of field work accomplished there during the past three years. Some 26 summer projects may be counted in that period, including 10 in 1958 and 9 in 1959, with 7 planned for 1960. (The apparent downward trend in activity does not belie optimism, for it may be interpreted as a mere short-term oscillation.) In general terms of applied manpower, approximately equal treatment seems to have been accorded Alaska, Canada, and Greenland, but on the basis of integrated field programs, whether institutional or individual. Canada leads with 8. This is both appropriate and satisfying when one considers the vastness of the Canadian sector and realizes that. after all, there is only one National Museum in Ottawa with prime-movers MacNeish and Taylor mounting constant attack on archaeological problems. For Alaska, the University, and Giddings and Campbell as well, have maintained continuing programs there, and Greenland, of course, is systematically investigated by the Nationalmuseet, Copenhagen. Much additional work has been done by a few other individuals. but their field ventures have often tended to be more sporadic. Although his most recent researches at the T-1 and other sites on Southampton, Walrus, and Coats Islands are prior to the time range of this survey, no review of Arctic archaeology could be complete without acknowledgement of the many and enduring scientific contributions of Henry B. Collins of the Smithsonian Institution.

ALASKA

Kotzebue Sound

In 1958 J. L. Giddings of Brown University initiated a program of "beach ridge archaeology" which has continued through this last summer with a supporting grant from the National Science Foundation. At various times he has been accompanied in the field by members of his family. students from Brown, and Professor Hans-Georg Bandi of the Bernisches Historisches Museum, Switzerland, Part of the first season was devoted to the excavation of two large, oval houses of the Choris culture, estimated to be more than 3000 years old, and, subsequently, explorations by small boat were made along the entire coastline of Kotzebue Sound. At Cape Krusenstern Giddings found an extensive succession of old beachlines, none of them more than 3 meters above present sea level, which represent, by his estimate, the last 5-6000 years of post-Pleistocene history. There are approximately 114 such ridges at the cape. many of them liberally endowed with cultural deposits. Assuming that most of these sites were contemporaneous with, or close to, active beach lines, the relative cultural succession may be correlated with the history of beach formation. As clarified so far, this sequence includes the following phases or manifestations: on the outermost beach, recent houses: on Beach 10, a western Thule house estimated to be 1000 years old; between Beaches 30 and 34, Ipiutak culture, essentially like Point Hope. and spreading laterally for a distance of some 6 miles: from Beaches 41 to 56 there are occurrences of Norton culture, including flints and check-stamped pottery, and above these are flints and linear-stamped pottery that seem related to Choris culture: on Beach 56 an early notched-point horizon associated with a driftwood house; on Beach 80, the lowermost trace of burin spalls; and on Beaches 101-103, material of the Denbigh Flint complex. Other finds of the Denbigh Flint complex were made on higher terraces of Bumblebee Mountain, beyond the lagoon at Krusenstern. Above these came another and different notchedpoint horizon which has not vet been adequately related to the

general sequence. During 1960, in an attempt to clarify the context of the side-notched points, Giddings planned intensive investigations on Beach 56. His ultimate analysis of culture-historical development at Krusenstern will be supplemented by detailed studies of microfossils and pollens which are currently being made in the beach ridge succession there.

Brooks Range

John M. Campbell of The George Washington University, supported by grants from the Arctic Institute of North America, spent four seasons from 1956-1959 in the Anaktuvuk Pass area. His first operations there were concentrated on delineation of the Kayuk complex, with excavations in one large site close to the summit of the pass. In 1959, after being thwarted earlier by severe flood conditions, he made a successful reconnaissance of the headwaters of the John River which heads in the pass and flows southward into the Kovukuk drainage. Thus, his archaeological coverage now extends from the borders of the forest zone, south of the pass, to the Arctic Slope on the north side. On the typological evidence of his sizable collections, Campbell suggests that at least 7 distinct complexes are represented in the area, the oldest of them dating back possibly as much as 6-8000 years. In each case the ecological orientation appears to have been summer caribou hunting. Because of scattered local settlement patterns throughout the prehistoric sequence, Campbell has experienced difficulty in establishing possible relationships among the various artifact complexes; there is no apparent stratigraphy, but rather a homogeneous deposition of cultural materials to a maximum depth of 12 inches beneath the surface. Although these complexes have not all been entirely clarified at present, one of them is an Ipiutak-like series which Campbell equates with the type site at Point Hope. He believes the major Kayuk complex is at least as old as the Denbigh Flint complex. Thus, we see here another key area in the North American Arctic which, with evidence of human occupation over some thousands of years, promises many important new data for students of New World prehistory.

Central and Southern

Ivar Skarland of the University of Alaska reconnoitred the Denali Highway area from 1957 to 1959. A considerable collection of early lithic materials has resulted from a number of open hunting sites in blowouts on glacial deposits and along ancient caribou migration routes.

In 1958 Frederick Hadleigh-West, also of the University of Alaska, worked under contract with the National Park Service and located the old Tlingit Fort at Sitka, destroyed by the Russians in 1804. The following year Hadleigh-West surveyed around Cape Thompson under contract between the University of Alaska and the Atomic Energy Commission. This is the proposed site for Project Chariot, a test in harbor construction by means of underground nuclear explosion. His salvage archaeology there discovered only very recent Eskimo sites.

Alaska Peninsula

In 1960 the University of Wisconsin began a long-term research program here, and the first expedition planned to make a general survey of the Peninsula, outside of Katmai monument, with test excavations at Port Moller and Chignik. This effort is being directed by W.S. Laughlin, with C.S. Chard in charge of the archaeology. They will be assisted by H. Befu and C. Merbs, and working with them in close collaboration will be a party from Meiji University, Tokyo, directed by S. Sugihara and including M. Tozawa, H. Okada, M. Higashi, and K. Kobayashi.

CANADA

Yukon Territory

Richard S. MacNeish, Human History Branch of the National Museum of Canada, accompanied by Gordon Lowther.

McCord Museum of McGill University, made a full-length reconnaissance of the Firth River in 1958 and subsequently excavated for 3 weeks in the Engiasticak site. Additional representation was obtained for 6 of the 9 known archaeological phases in the area, and one highly important result of the season's work was the location of 6 new Flint Creek components which vielded 150 specimens and now allow the Flint Creek phase to be clearly recognized as a separate entity, earlier than New Mountain. It appears to have basic affinity with the cordilleran area in terms of its scraper planes, pebble choppers, Agate Basin-like and Lerma-like points. MacNeish believes that it is older than he has previously estimated. The 1958 program led to further clarification of the British Mountain phase, through isolation of one small component, and 4 additional New Mountain sites were also tested. Other checks were obtained on the near-Ipiutak Cliff phase, and some late Eskimo materials, belonging to the Whitefish Station or Herschel Island phases, were collected. In 1959 MacNeish excavated 3 stratified sites in the southwest Yukon. One of these on Kluane Lake contained 4 complexes which are named from early to late as Little Arm. Gladstone. Tave Lake, and Bennett Lake. The first three of these complexes contain microblades. and MacNeish is now clarifying the picture of the incidence of microblade tradition in this area. As the complexes develop there, they seem to represent an increased adaptation to a forest environment, showing a gradual loss of burins and microblades. In 1960 MacNeish returned to the same area in order to enlarge his sample of the Gladstone phase and to attempt bridging the gap between the microblade culture and Athabascan. He also planned to investigate a very early site near Fort Liard which may belong to the Cordilleran tradition.

Keewatin District. N.W.T.

In 1958 Elmer Harp, Jr. and Robert A. McKennan, both of Dartmouth College, made a reconnaissance into the central Barren Grounds, beginning at the western end of Baker Lake and proceeding westward up the Thelon River for a distance of about 150 miles. The expedition was sponsored by the Arctic

Institute of North America. In addition to work in two sites previously discovered at Baker Lake by Father Guy Mary-Rousselière, O.M.L. and also in the Grant Lake site discovered in 1955 by the late Arthur Moffat, 42 new sites were found and investigated. These were all associated with prominent river crossings or narrows between lakes, either as habitation areas or lookout-workshop sites. It is clear that all known aboriginal occupations of that country have been based on summer and fall hunting of the caribou. Harp has distinguished five phases in the area, beginning sometime after 3000 B.C. and continuing sporadically to the present day; early Indian hunters from the transitional forest zone, exhibiting limited trait diffusion from Early Lithic stage, bison-hunting cultures on the High Plains: pre-Dorset Eskimos from the central Arctic region; Archaic stage Indian hunters from the interior forest: Eskimos of the Thule culture: and, finally, Caribou Eskimos of the recent period who, according to the evidence at hand, derived from the Thule people.

Southampton Island, N.W. T.

In the summer of 1959 an intensive research project combining objectives in the realms of physical anthropology and archaeology was staged on Southampton Island by a group from Canada and the United States. Members of the party were Bruce Chown and Marion Lewis of the Rh Laboratory at Winnipeg, Ralph Chown of Acadia College, W.S. Laughlin and C.S. Chard of the University of Wisconsin, James Van Stone of the University of Toronto, and Charles Merbs, a graduate student at Wisconsin. Their aims included blood-typing and genealogical charting of the resident Aivilik and Okomiut Eskimos, and the excavation of Sadlermiut, and perhaps earlier, Eskimo burials in cultural context. A large skeletal collection was recovered, mostly from Native Point. The series consists of some 182 individuals, including about 59 infants and children. and the sex distribution of adults is adequate for comparative studies vis a vis Greenlandic, Labrador, and Alaskan series. The vertebral anomalies and extensive loss of teeth are particularly noteworthy in the Native Point skeletal collections. It is known

that the Sadlermiut became extinct in 1903, but, contrary to current belief, it is possible that starvation played a major role in their disappearance and that some of its effects will be manifest in the skeletons. Comparative studies of blood groups, burial practices, and settlement patterns are now being made to establish the relationships between the people of Native Point, Prairie Point, Walrus Island, and Coats Island.

Ungava, P.Q.

From 1957-1959 W. E. Taylor, Human History Branch of the National Museum of Canada, worked at Payne Lake in the Ungava interior and around the Ungava coast at Payne Bay, Sugluk and Ivugivik as well as on Mansel, Nuvuk, and Sugluk Islands. At various times he was accompanied by Mrs. Taylor, Charles A. Martijn, and Eskimo helpers. At Payne Lake in 1957 inland Dorset villages were found. In 1958 he excavated 11 sites ranging in age from pre- to post-Dorset and obtained a collection of more than 5000 artifacts, together with important skeletal material which is Eskimo in type and may represent Dorset burials. One of the Sugluk Island sites, terminal Dorset in period, included a semi-subterranean house that was strikingly similar to the palaeo-Eskimo, double-ellipse form in northeast Greenland. The 1959 season, centered on further investigations in the Ivugivik area and on Mansel Island, brought discovery of 12 additional sites. Among the significant results were Taylor's explorations in 5 pre-Dorset stations. yielded only lithic materials and test-pitting was found to be unproductive. Nevertheless, two of these sites on Mansel Island were of extraordinary interest because of their extensive size and profusion of surface materials. Both were situated on barren, gravel terraces, with faintly remaining signs of house structures. The smaller of them was 3000 feet long, while the larger extended for more than a mile. Taylor notes that the side scrapers, endblades, and abundant burins in these sites, as well as identical types in his 3 pre-Dorset sites at Ivugivik, show marked similarities to West Greenland Sargag and the Arctic Small Tool tradition. Thus, the geographic range of pre-Dorset culture in the eastern Arctic has been considerably extended.

although the exact placement of the new sites in pre-Dorset chronology has not yet been ascertained.

Canadian Arctic Archipelago

In 1958 Moreau S. Maxwell, on temporary leave from Michigan State University, represented the National Museum of Canada on the IGY project. Operation Hazen. sponsored by the Defence Research Board of Canada. On northern Ellesmere Island he carried out reconnaissance around Lake Hazen and explored the fiords east of the lake in Coneybeare and Lady Franklin Bays. At one time he also joined Eigil Knuth in northwest Greenland for an inspection of the palaeo-Eskimo site that Knuth was investigating there. In the Hazen area itself, Maxwell found surprisingly few signs of prehistoric Eskimo occupation. There were several winter houses, tent rings, fox traps, and meat caches, and rare artifacts indicated the presence of "developed Dorset" culture. However, these did not occur in sufficient numbers to postulate an actual movement of Dorset people into the area. The same condition applies to signs of early Thule culture there, whereas the majority of artifacts found seem to date from the Inugsuk period of the 14-15th centuries A.D. One operation at the Ruggles Outlet of Lake Hazen involved the excavation of a winter house that contained the skeletal remains of presumably an elderly male and a young female. About 200 artifacts of 15th-century Inugsuk culture were obtained there, with evidence that this particular house had been occupied and rebuilt three different times within a century. In 1960 Maxwell is investigating for the National Museum of Canada what is believed to be a stratified site on Juet Island, off the south shore of Baffin Island near Lake Harbour. A sample collected by an Eskimo suggests Dorset and pre-Dorset occupations in this site.

The Arctic Institute of North America is sponsoring an interdisciplinary expedition to Devon Island, one that will be maintained from 1960 until 1963 at least. G.R. Lowther, McCord Museum, McGill University, will initiate the archaeological work in 1960 by survey and excavation about Cape Sparbo. His

plans include a testing of the Dorset-Thule site sampled by T.C. Lethbridge in 1937. A future season will see work done at Maxwell Bay, for the National Museum of Canada has from there a small collection of very early Thule material and remarkably well-preserved late Dorset material. If the site that produced these is found, it might lighten the darkness that obscures the nature of the Dorset-Thule contact.

GREENLAND

Thule District and Hall Land

In 1958 Eigil Knuth, with the co-operation of the American "Operation Groundhog" of the Air Force Cambridge Research Center. conducted several spot investigations in northwestern Greenland. During his stay at Thule he found a number of sterile tent rings on terraces around the outskirts of the base. Later in the summer he succeeded in locating the first reported Dorset culture site in the Thule District itself, on the 10-15 meter terrace behind the old Eskimo settlement of Nugdlit. A helicopter visit to Parker Snowbay led to the discovery of a neo-Eskimo site with nearby semi-circular "tent houses", probably of the Dorset culture, about 30 meters above sea level. Transported farther north by the American ice breaker Atka. Knuth then camped on the "Atka-Delta" in Hall Land to explore raised beaches in that area. At a distance of 1.5 kilometers from the front of the delta, on a 20-meter terrace called "Solbakken", he found a palaeo-Eskimo site with dwellings and flint artifacts corresponding to the Independence I culture, including burins, spall implements, and microblades. The dwellings consisted of elliptical stone settings, internally divided by a median "fire-passage" built up of two rows of flat stones standing on edge. At Kap Buddington he rechecked the house ruin discovered in 1922 by Lauge Koch, since recognized as Dorset, but was able to add only a few microblades to the inventory from that site. In 1960 Knuth once more joined "Operation Groundhog", this time for work in northeastern Greenland in the area of Centrum Lake. A helicopter circuit was also planned to visit Danmark Fjord, Brønlund Fjord, Cape Morris Jesup, Herulfsholmstrand, Cape Ludovika, and Station Nord.

West Greenland

In 1958 Helge Larsen, National Museum of Denmark, accompanied by Mrs. Larsen, made a four-week reconnaissance of palaeo-Eskimo sites in Godthaab and Ameralik Fjords, discovering 10 new locales of the Sargag culture. The most important finds of the summer, however, came from Itivnera, a site found in Godthaab Fjord in 1957 by Jens Rosing, Director of nearby Reindeer Experimental Station. This occupation area approaches 200 square meters in extent, and is covered with a willow thicket and a 60-centimeter layer of peat and sphagnum. With the assistance of Rosing, Larsen excavated one of about 10 dwellings concealed by the thicket and obtained over 300 specimens which fit the general Sargag inventory. One peculiarity of the collection is the predominance of quartzite raw material for stone implements, instead of the more customary anamag. Of prime significance, however, is the yield of antler and bone artifacts, the first artifacts of organic material to be found in West Greenland Sargag. Food bone debris was plentiful also and consisted mostly of caribou remains, although some seal and bird bones were present. In the same year a Danish geological party found another palaeo-Eskimo site with two welldefined levels at Ikorfat on Nugssuag Peninsula, Umanag District. A lower Sargag horizon was separated from an upper Dorset level by a sterile layer of beach pebbles, and the latter occupation disclosed two harpoon heads of early type which support the belief that West Greenland Dorset culture was earlier than classical Dorset

The Nationalmuseet maintains a systematic topographic project in which Robert Petersen, since the year 1956, has mapped 49 sites in the southern part of the Sukkertoppen District. In 1959 Petersen conducted test excavations in this area revealing two more Dorset sites.

Iørgen Meldgaard moved into the Godthaab area for intensive operations in 1960. He was accompanied by Mrs. Meldgaard. Iens Rosing, Bent Fredskild who is a botanist, S. Bue-Madsen, and H. Berg, and was joined in the field by 6 more helpers from the Godthaab Seminary, the highest level teacher-training school in Greenland. Major excavations were planned for Itivnera, the Sarqaq site tested in 1958 by Larsen and Rosing, and a second project was to be carried out on a Norse farm at Hop, in the near vicinity. The medieval Icelandic sagas mention this locale, and it was hoped that investigations there might shed some light on the development and extinction of the Norse colonies in West Greenland, their relationships with the Eskimos, and possibly also on the characteristics of Hop, Vinland, where Leif Ericsson settled. Further coastal reconnaissance was also projected aboard the MS *Inuk*, a substantial, steel-sheathed boat acquired this year by the Nationalmuseet for the Greenland archaeological campaign.

East Greenland

In 1959 Helge Larsen, with the co-operation of "Operation Groundhog", planned to explore palaeo-Eskimo sites in the Zackenberg and Dove Bugt areas of northeastern Greenland. His passage aboard the ice-breaker Atka to that far point was prevented, however, by extremely severe ice conditions, and archaeological work was perforce limited to chance discoveries made farther south. At Umivik in Angmagssalik Fjord Larsen found Dorset and Sarqaq culture beneath a 19th-century house ruin, and at Cape Tobin and Cape Hope in Scoresby Sound he again discovered Sarqaq culture.

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Such, in brief, is the story of archaeological discovery in the North American Arctic during the last three years. Despite the measurable progress being made there, it is obvious that the profession must cry for fresh recruits to explore the unknown reaches of this tremendous circumpolar region. It promises no crumbling, vine-clad temples, no Rosetta stones, no watch-towered highways. Yet it holds vestiges of prehistoric societies which faced problems of survival and cultural development that were every bit as compelling and fascinating as those met by other men, anywhere, at any time.

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REFERENCES

The following are the currently available and forthcoming reports based on field research mentioned in this survey:

- CAMPELL. John M., "The Kayuk Complex of Arctic Alaska". American Antiquity, vol. 25, no. 1, pp. 94-105. Salt Lake City (1959).
 - "Cultural Succession at Anaktuvuk Pass". From a symposium entitled Cultural Relationships Between the Arctic and Temperate Zones of North America, Diamond Jenness, Chairman, held at the 25th Annual Meeting of the Society for American Archaeology, New Haven. May 1960. I.M. Campbell, editor. In press.
- GIDDINGS, I.L., "Side-Notched Points Near Bering Strait" (1960). From the symposium noted above.
- HARP, Elmer, Jr., "Ecological Continuity on the Barren Grounds". Polar Notes, no. 1, pp. 48-56. Hanover (1959).
 - The Archaeology of the Lower and Middle Thelon, N.W.T., Canada. Unpublished ms., Terminal Report on Project AINA-42 (1960) on file with the Arctic Institute of North America.
 - "The Culture History of the Central Barren Grounds" (1960). From the symposium noted above.
- LAUGHLIN, W.S., and TAYLOR, W.E., "A Cape Dorset Culture Site on the West Coast of Ungava Bay". Contributions to Anthropology, 1958. National Museum of Canada Bulletin 167 (1960).
- MACNEISH, Richard S., "Men out of Asia: As Seen from the Northwest Yukon". Anthropological Papers of the University of Alaska, vol. 7, no. 2, pp. 41-70. College (1959).
 - "Sites of the Yukon Territory" (1960) . From the symposium noted
- MAXWELL, Moreau S., See this issue of Anthropologica.
- SKARLAND, Ivar, and KEIM, C.J., "Archaeological Discoveries on the Denali Highway, Alaska". Anthropological Papers of the University of Alaska, vol. 6, no. 2, pp. 79-88 College (1958).
- TAYLOR, William E., "Pre-Dorset Occupations at Ivugivik in Northwestern Ungava" (1960). From the symposium noted above.

N.B. First reports from archaeologists returning from the Canadian arctic sector indicate that G.R. Lowther found Pre-Dorset material on the north shore of Devon Island, that M.S. Maxwell tested 2 stratified Pre-Dorset sites near Lake Harbour, that W.N. Irving found material of the Lockhart River Complex at Ennadai Lake, and that R.S. MacNeish, near Fort Selkirk, found Yumoid materials associated with buffalo bones stratigraphically below the earliest microblade level in that area. W. E. Taylor, Jr.