

Figure 1.

# A PRELIMINARY REPORT ON THE ARCHEOLOGY OF NUNIVAK ISLAND, ALASKA <sup>1</sup>

by

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A number of recent archeological excavations have led to an increasingly comprehensive knowledge of Eskimo prehistory in southern Bering Sea Alaska. On the northern side of the Alaska Peninsula, extensive research over a five year period has led to the delineation of a fairly continuous 4000 year period of Eskimo prehistory (Cressman and Dumond 1962; Dumond 1963; 1964). One hundred and twenty miles to the northwest, Kowta (1963) has investigated a prehistoric site at Togiak, which spans several hundred years of the second millenium A.D. Larsen (1950) and Ackerman (1964), working in the Platinum area, have recovered materials which cover much of the Christian era. A presumably earlier collection from that area has apparently not yet been securely dated. At Hooper Bay, Oswalt (1952a; 1952b) has recovered and described late prehistoric materials, which appear to date back about 400 years.

Four years of extensive work in the Norton Bay area have led to a detailed knowledge of prehistoric activities dating back 4200 to 5000 years (Giddings 1964:250). Much of the discussion of the Nunivak collection will relate to materials which Giddings first defined and chronologically placed at Norton Sound.

There are still large regions within the area under discussion for which there is little knowledge of prehistory. Nunivak Island is one of these. Forty miles wide, and sixty

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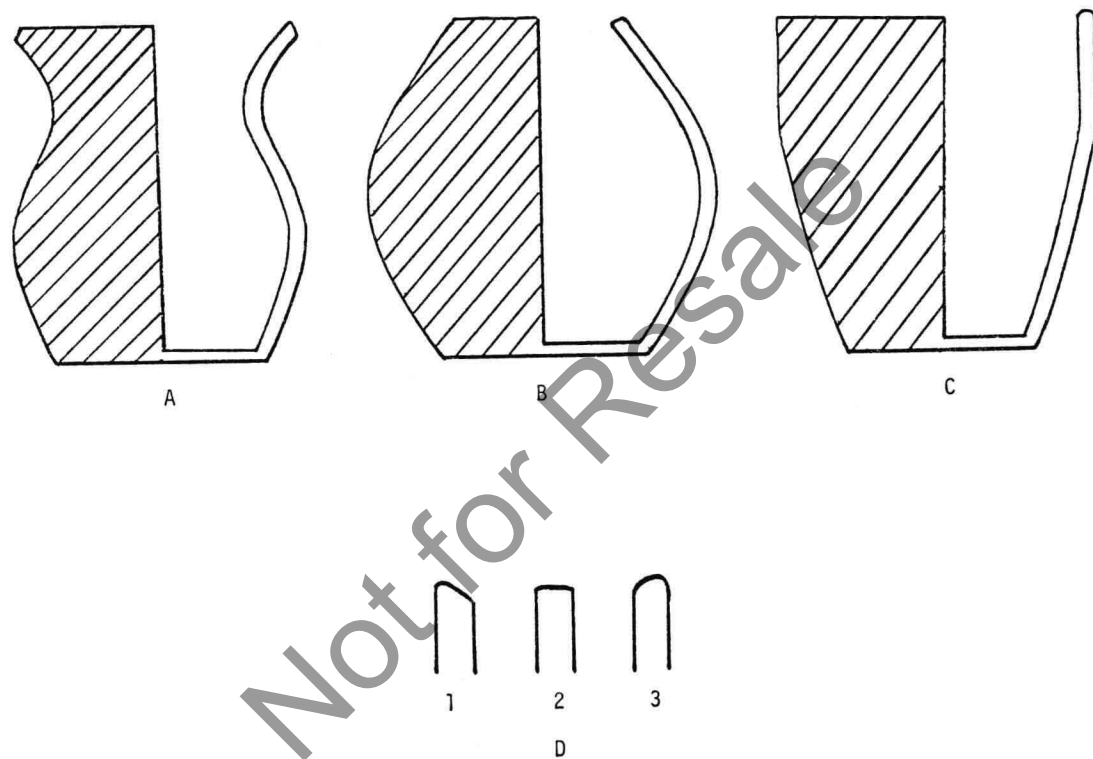


Figure 2. Nunivak Vessel and Rim Forms

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miles long, it lies about forty miles off the western coast of Alaska at latitude 60 . The Yukon River drains into the Bearing Sea 160 miles north of Nunivak, and the mouth of the Kuskokwim River lies about 120 miles to the southeast.

Despite the fact that Nunivak has been briefly tested archeologically on several occasions, intensive excavation had not been undertaken before the summer of 1969. Collins (1928) was the first archeologist to visit Nunivak Island. In the summer of 1927 he was there long enough to briefly test some ruins on the northeastern side of Nunivak. In 1952 VanStone (1957) spent approximately six weeks in an archeological reconnaissance of the island. Bad weather and lack of transportation confined most of his investigations to the vicinity of the (single presently inhabited) town of Mekoryuk, located on the northern side of Nunivak Island. Neither he nor Collins attributed any great age to the remains recovered on Nunivak, although VanStone admits that this conclusion is based on evidence from a very restricted area on the island (1957:111).

Both Collins (1928:255) and VanStone (1954:188) discuss check stamped pottery recovered from Nunivak, but neither regards this ware as representative of an early time period. Consequently, the presence of check stamped pottery was definitely established, but without any particular temporal reference. This question was one of the principal factors behind the archeological reconnaissance of the summer of 1967. On that eight-week survey, fifteen sites from all but the southwestern part of Nunivak Island were tested (Figure 1). Several of these sites consist of at least two components, and provide the data discussed in this report.

A Norton-like period has been clearly defined as an early component on Nunivak. The 1967 reconnaissance found it present in northern, eastern, and southern sites on the island. Check stamped pottery (Figure 3; u, y) associated with small, flaked bifaces of chalcedony (Figure 3; j-p, v-bb) constitutes the primary definition of the Norton-like assemblage on Nunivak Island. Where stratigraphy is not disturbed, this component is separated by 10-30 cm of sterile soil from a later component characterized by plain pottery (not pictured) and ground slate bifaces (Figure 3; a-f). This later component is usually associated with visible housepit depressions, and appears at many locations where the Norton-like component is not found.

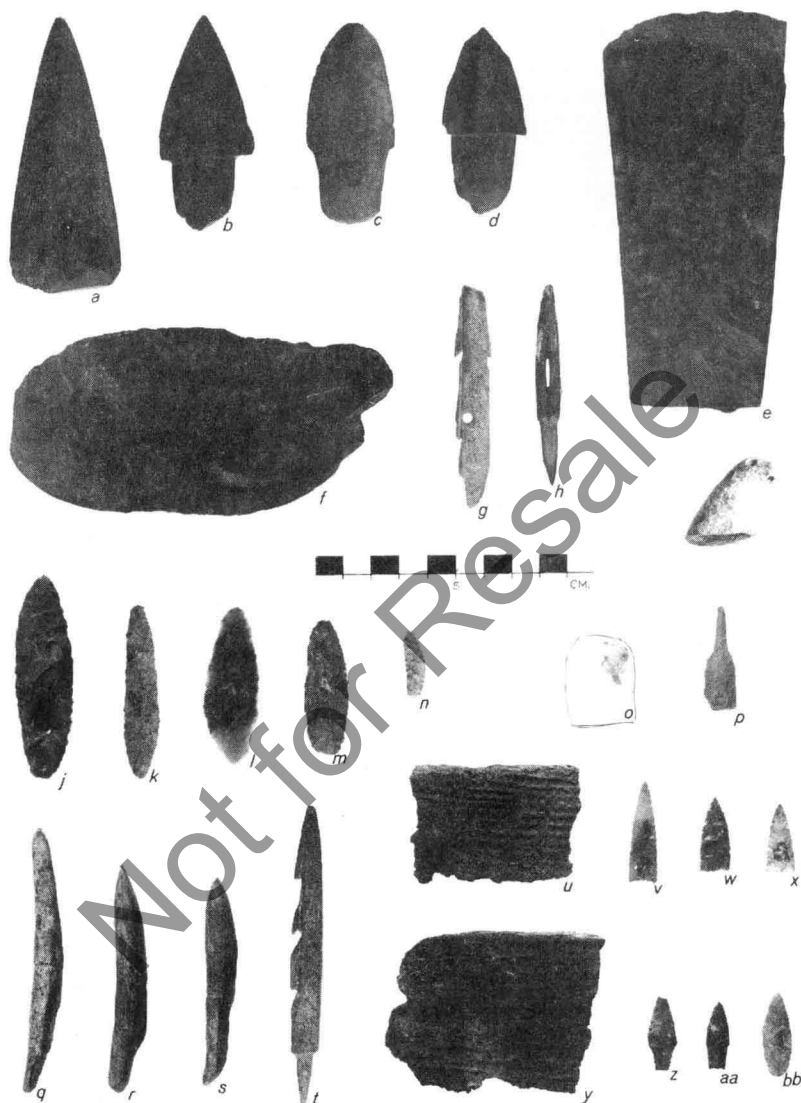


Figure 3.

Artifacts from Nunivak Island, Alaska. Late assemblage: a-d, slate knives or insert blades; e, slate adz; f, ulo; g, harpoon dart head; h, arrowhead; i, finger rest. Early assemblage: j-n, flaked knives or sideblades; o, scraper; p, drill bit; q-s harpoon heads; t, dart head; u, y, check stamped potsherds; v-x, z-bb, flaked points.

No housepit depressions have yet been found where only a Norton-like component is found.

## EARLY ASSEMBLAGE

Two sites (DT1 and MK2) provide the bulk of the materials discussed here. Both were excavated more intensively than other sites at which Norton-like implements were found.

### Ceramics

Four hundred and sixty check stamped potsherds were recovered from Nunivak Island. Surface decoration on these consists of square to rectangular checks which appear to have been impressed with a paddle rolled against the sides of an unfired pot. Some of the sherds show overlap of the check pattern where a successive band of check stamps was not precisely spaced in relation to the previous band. Checks range in size from 3 mm squares to 5 x 7 mm rectangles. Vessel shape is that of Figure 2-C. Rim diameter appears to have been 24-28 cm. Although sherds ranging in thickness from 6 to 10 mm have been found, the mode is 9 mm.

In contrast to Griffin and Wilmeth (1964:272), and Cressman and Dumond (1962:28), who describe the check stamped pottery found in Norton Sound and Bristol Bay respectively as fiber (generally plant) tempered, all of the check stamped pottery recovered to date on Nunivak Island has been sand tempered. Grains of this sand are predominately less than .25 mm in diameter, and a noticeable amount of it appears to be of igneous origin.

Three different lip forms (Figure 2-D) are represented in the check stamped pottery from Nunivak Island, although the flat or flattened lip is predominant. About 20% of the rimsherds examined have round or rounded lips, and 5% have tapered lips (Figure 2-D1). Texture is coarse and flaky, with sherds often splitting into layers. Mending (or suspension) holes appear in about 2% of the sherds.

### Lithic artifacts:

Forty-two small flaked bifaces of chalcedony or, less often, basalt (17%) were found at the sites from which check

stamped pottery came. Often the two were found in direct association. Sideblades, knives, a drill bit, and projectile points (Figure 3; j-p, v-bb) all exhibit fine, sometimes regular flaking. Giddings (1964:Pl.46-50) illustrates a variety of shpes for Norton bifaces from Iyatayet. All those found on Nunivak Island fit into types discussed by him.

Over 100 notched sinker stones have been recovered at sites which contained check stamped pottery. All of them have two notches or indentations, usually near the center of their short sides.

### **Bone tools:**

Only six bone implements were recovered from strata that contained unmixed, Norton-like materials. The tools that did come from these strata break down into four open-socketed harpoon heads (Figure 3, q-s), a unilaterally barbed dart head (Figure 3,t), and a tooth pendant with the face of a seal carved into proximal side (not shown). Once again Giddings (1964:Pl.36,17) describes and pictures a harpoon head from Norton levels at Iyatayet closely resembling the four found in the early component on Nunivak. All of the latter lack a line hole, but have about a 2 cm indented band, beginning just above the socket, for lashing. Larsen and Rainey (1948:83,5) illustrate a similar harpoon head from Ipiutak.

The similarities in ceramic, stone, and bone tools discussed above make it apparent that the early assemblage presently identified on Nunivak Island was part of a widespread Norton tradition which appears in Norton Sound as early as 500 B.C. (Giddings 1964:245), and reaches as far south as Bristol Bay by 200 B.C. (Cressman and Dumond 1962:33; Dumond 1964:35; personal communication, 1969).

### **LATER ASSEMBLAGE**

A second culture stage identified as Western Thule-like on the basis of ceramics, and lithithic and bone tools, is present on Nunivak Island by A.D. 1600. Probably by A.D. 900 Western Thule culture is widespread in Bering Sea Alaska (Oswalt 1967), and it appears that Nunivak Island was extensively occupied by people of this culture for perhaps several hundred years before contact.

Although it is likely that future investigations will show that some materials presently grouped with Nunivak's later assemblage may fall into an as yet unidentified intermediate component, neither excavations conducted nor artifacts recovered presently permit such an assignment.

### Ceramics:

The pottery included in the Thule-like component of Nunivak Island sites exhibits much more variation than does that of the Norton-like earlier period. Vessels are predominately situla shaped (Figure 2-A), although other forms are also seen. Rims are rounded to slightly flattened, with the majority of rimsherds exhibiting the form illustrated in Figure 2-D2.

Temper varies from sand to fiber and coarse gravel in this later pottery. One of the sites tested (NH1, see Figure 1) consistently yielded fiber and gravel tempered pottery in which much of the gravel is 5 mm and more in diameter. The vegetal fiber (grass) has a diameter between 0.5 mm and 2 mm, and is from 11 to 15 mm long. None of these sherds have any surface decoration. Thickness varies only slightly about a 9 mm mode. At Nash Harbor, vessel shape is predominately that of a flower pot (Figure 2-C).

Other fiber and gravel tempered pottery differs from that found at NH1, in that the gravel has a diameter of only 0.8 mm, while fiber size remains the same. This ware is slightly thinner, with a mean diameter of 8 mm, and has a less irregular, crumbly texture. Pottery containing fiber accounts for nearly half (623 sherds) of the non-check stamped pottery (1192 sherds) recovered.

Pottery tempered only with gravel appears at a number of sites scattered around the northern, eastern, and southern coast of Nunivak Island. This gravel is generally between 0.25 and 3.00 mm in diameter, with a modal size of 1 mm. Sherd thickness ranges from 5 to 14 mm and averages 10 mm. The curvature of the larger rim fragments suggests a 20-28 cm rim diameter. Present evidence suggests that most Nunivak pottery, both early and late, fits into this size range.

Although few sherds large enough to permit an estimate of shape were recovered, the information that is available suggests situla, globular, and flower pot shapes (Figure 2-A, B, C). The situla shape occurs in about 45% of large non-check stamped



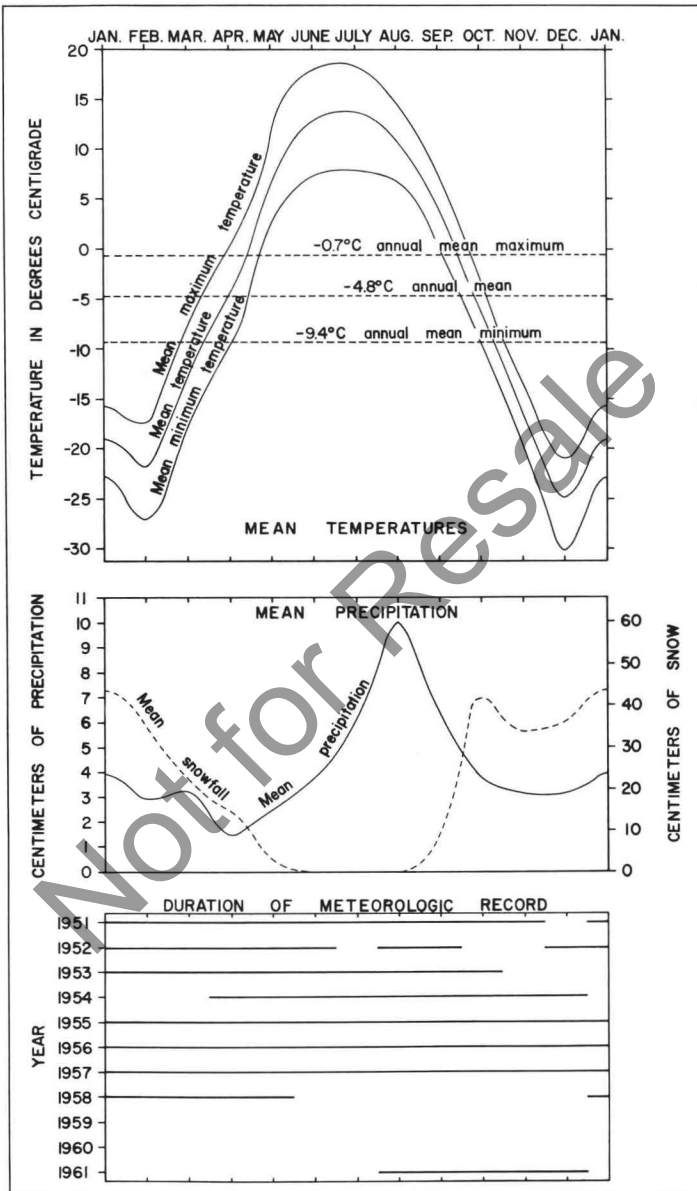


Figure 1. Mean monthly climatic data for Utopia, Alaska. Source is United States Air Force Climatic Center, 1962.

permit a good size and shape assessment, but vessel forms like that of Figure 2-B and 2-C are suggested.

Eleven clay lamp fragments were found in the late component. Size estimates based on the sections recovered suggest that the lamps are from 2-3 cm high, and 15-25 cm in diameter. Thickness varies from 11-28 mm. All of the fragments appear to be parts of oval or round lamps.

#### **Lithic implements:**

Sixteen projectile tips, predominately of a dark gray (N2-N3 on Geological Society of America Rock Color Chart) slate were found in strata bearing plain or Yukon Lined pottery. All have a diamond shaped cross-section, even though additional grinding to reduce the basal thickness of the implement has flattened many of the facets made in creating the edges. Length ranges from 3 to 9 cm, with thickness generally less than 7 mm.

Nine points have shoulder angles of 90°, four have rounded shoulders with a 120° shoulder angle, and two have 45° shoulders and stems that widen basally. Stemless points generally have a slightly rounded base, although one specimen has a concave base.

All of the 33 slate knives found on Nunivak Island show bifacial grinding. Of the four reasonably complete specimens, two are roughly rectangular with rounded corners and a short basal stem (Figure 3, f). One is a long, thin blade with an edge on one side. Another is a rounder corner, half-moon shaped ulu. Greenish grey (5GY611, G.S.A. Rock Color Chart) as well as black (N3) slate was used in the manufacture of knives.

Adz blades from Nunivak are generally rectangular in shape with a bifacially ground edge on the distal long axis (Figure 3, e). Not much variation in size is seen in the four specimens recovered.

Whetstones (27 specimens) are predominately composed of micaceous siltstone of a greenish color (5Y611). One or more facets exhibit smoothing by rubbing. Pumice abraders (8 specimens) have wear facets much like those of whetstones, but are softer and coarser.

#### **Bone implements:**

Slightly over 100 bone tools were found in the upper, Thule-like stratum on Nunivak Island. Eighteen of these are

in the late component of most sites on Nunivak Island, it is unlikely that the bulk of the artifacts now assigned to the late assemblage are more than 400-500 years old, although it is presumed that the charcoal dated from site DT1, mentioned above, should date some materials of that assemblage.

Cutting and thrusting implements of ground slate support such a dating. Giddings places Nukleet materials recovered at Cape Denbigh into a 1250 A.D.-1700 A.D. time span (1964:244). Many Nukleet artifacts, particularly of ground slate and bone, resemble those of the late component from Nunivak Island.

Final support comes from a second charcoal sample which was obtained at NH1, a site which consisted of only late component materials. The radiocarbon date from this charcoal is 350±95 B.P. (I-3132). Such a date (1600 A.D.) is consistent with other datings of Western Thule-like culture in Southwestern Alaska.

## CONCLUDING REMARKS

The 1967 archeological reconnaissance of Nunivak Island definitely established that a Norton-like people were living over much of the island, probably by the beginning of the Christian era. It also showed that a Western Thule-like culture was widespread on Nunivak Island during the second millennium A.D.

A gap of as much as 1000 years exists for which there is presently no record of human activity on Nunivak. It is unlikely that people were gone from the island during this time. Rather, a combination of factors seems to be responsible for this gap in Nunivak prehistory. The nature of the reconnaissance was such that extensiveness was emphasized rather than intensity. As a result, 15 sites were tested, but none longer than for a 10-day period. Only one site (DT1) was tested even that long, and only a small part of that site was excavated. Under such circumstances, chance appears as a likely factor in accounting for the fact that only Norton-like and Western Thule-like materials came from DT1.

The presence of rimsherds indicating globular vessel shape at some sites on Nunivak does suggest that further work will fill in the "missing" intermediate period between Norton and Western Thule times. Relatively dramatic changes in stone and

ceramic techniques make it relatively easy to separate Norton from Western Thule culture. Giddings (1964:268) describes Nukleet, the stratum that follows Norton at Cape Denbigh, as one that contains elements of both Punuk and Thule culture, suggesting that definition of the Nukleet culture involves more than a few highly diagnostic artifacts. In many instances such a definition rests on considerable patient field work, and use of statistical techniques later in the laboratory.

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