

Plate I. Kavik stone points and other bifaces. 1 - 7, points; 8, 9 bases of large, well made lanceolate bifaces. To scale, length of 1,  $1\frac{1}{4}$  inches.

# THE KAVIK SITE OF ANAKTUVUK PASS CENTRAL BROOKS RANGE, ALASKA<sup>1</sup>

by

# John M. Campbell

This paper treats a prehistoric arctic dwelling site, the contents of which may testify to an Athapascan occupation of the tundra zone of north Alaska within the past few centuries.

In the summer of 1958, following an adventuresome, if rather unproductive archaeological survey of the lower 70 river miles of the John River, I returned to Anaktuvuk Pass, at the head of that stream, for one week at the end of the season. During those few days two Nunamiut Eskimo members of my field party discovered the Kavik site in a reconnaissance we made northward, in the direction of Tuluak Lake and the northern mouth of the Pass.

Upon discovery, Kavik was most promising. It yielded an interesting carved antler piece and several thin, lozenge-shaped stone points. However, further excavations in 1959, the following season, produced relatively very little in addition to what we had found in a day or two in 1958, and with the discovery of other, highly productive sites in the general area, we abandoned Kavik.

<sup>&</sup>lt;sup>1</sup>As the reader will note, this paper except for the postscript, was written in the Brooks Range. In late August 1967 I mailed the handwritten copy, together with a roll of uncertainly exposed 35mm. color film, to the Editor in Fairbanks. There, she typed my field copy and insured that the film was developed. Subsequently, at the 1967 Alaska Science Conference, Professor Douglas D. Anderson delivered the paper and heroically interpreted the accompanying color slides. In expressing my gratitude to Professors Gunther and Anderson I want the record to show that they accomplished this extraordinary yeoman service in and around the great Fairbanks flood of '67; during all of which time, as Ben Gunn would have said, I was safely mastheaded in them mountains.

The excavations of Kavik were supported mainly by the Arctic Institute of North America; and the Office of Naval Research, United States Navy. The United States Government is permitted to reproduce this paper in whole or in part.

In 1962 I briefly described and interpreted the Kavik artifacts in a paper entitled "Cultural Succession at Anaktuvuk Pass. Arctic, Alaska," published by the Arctic Institute of North America. I do not recall word for word what I said about Kavik then, and I do not have a copy of the paper with me now, as I write this at Anaktuvuk. But, to summarize my interpretation at that time, after describing the very small artifact series, I remarked something to the effect that while the Kavik tool assemblage did not very closely resemble any other that had been described, the stone points at least, reminded me of those from certain time horizons in J.L. Giddings' ARCTIC WOOD-LAND CULTURE and that given this, and given the very nicely, if simply carved antler specimen, I would place Kavik in the Eskimo continuum. (Needless to say, I considered then, as I do now, the Arctic Woodland Culture to be Eskimo). Further, I considered that Kavik was not many centuries old; both because of the types of its artifacts, and because of the perishable nature of some of the organic remains we encountered in the site.

That, in brief, was what I knew and thought about Kavik until about two years ago. During the past two years several scholars have informally raised the possibility, on the basis of artifacts similarities, of Kavik being representative of Indian rather than of Eskimo culture; and most recently, in a paper delivered at the annual meeting of the Society for American Archaeology at the University of Michigan, in May 1967, William N. Irving tentatively related Kavik to an Athapascan site at a caribou crossing on the Porcupine River, near Old Crow, Yukon Territory.

Because of these sorts of questions and comments relative to the cultural affiliations of Kavik, I have recently returned to Anaktuvuk - this season I am assisted by my colleague, Dr. Loren D. Potter, Chairman, Department of Biology, University of New Mexico, and by my son, Donald M. Campbell - for a further examination of the site. At this writing, our 1967 excavations are incomplete, and as I expected, our finds have been few in number. However, we have now, I think, acquired enough knowledge of Kavik to warrant a further brief report.

# The Site

Kavik is situated on the south bank of the Anaktiktoak (Anaktuvuk) River, 5 air miles north of the summit of Anaktuvuk Pass, at a place where, in most years, several tens of thousands of caribou ford the shallow river on their spring and fall migrations. The site lies on a kame terrace 20 feet above the flood plain of the river. This slight elevation permits an unobstructed view for several miles to the north, east and west. Southward, visibility is limited to 200 yards or less because of slightly higher ground.

Two, and perhaps several areas of debris belonging to the Kavik complex occur in the site locality. The first, Site Area 1 roughly measures 30 feet to the side, and it nearly covers a relatively dry, natural, very slightly elevated mound or hummock, which has apparently resulted from the action of permafrost. It is grown with Dryas and dwarf willows (*Salix*), the latter of which are less than 20 inches tall. The northernmost limit of Kavik Site Area 1 lies 8 feet from the edge of the kame terrace, and at present is 375 feet W.S.W. from the river, although it is quite possible that when the site was occupied Area 1 was much closer to the stream.

Kavik Site Area II occupies a very slightly smaller, but nearly identical natural mound, 225 feet S.E. of Area I. The mound rises a few inches - less than 1 foot - above the surrounding, wetter tundra. It lies within 5 feet of the edge of the kame terrace and is 130 feet from the river, at its nearest point.

A third area of debris concentration occurs on another similar mound, away from the edge of the terrace, and about 300 feet south of Area I. I believe that it also represents Kavik; the numerous bone and antler fragments it contains are of the same degree of preservation as those from the other two areas, and it is similar in some other respects. However, to date we have recovered no implements from it. Other low natural mounds in the locality - not excavated but observed to contain bone and antler fragments - may also be Kavik dwelling sites.

In each of the three areas, all archaeological remains were encountered in or just under the sod. No cultural traces of any kind occurred at depths of more than 6 inches below the present ground surface, and two antler artifacts and

#### THE KAVIK SITE - Campbell

several bone and antler fragments were found protruding above the surface, through the two-inch sod layer. The thin level containing the debris was heavily stained with ash, charcoal, and various other organic materials. Below, lay undisturbed glacial gravels. Except for the implements and the bone and antler fragments that are found protruding through the sod, these characteristics are typical of the numerous other sites and site areas that we have discovered in Anaktuvuk Pass, including those of the very large Tuktu-Naiyuk locality which lies a few hundred yards south of Kavik.

## Features, Artifacts and Other Remains

Features consisted only of a blackened fire place, and a large long bone fragments – almost certainly reflective of a common, old technique of rendering grease - Site Area II. The fire place which measured roughly 24 inches in diameter and 2 inches in depth, had been built directly on the ground surface, and had not been ringed or otherwise worked with stone. The large lens of light gray ash, elliptical in outline, and measuring about 36 inches in length and 3 to 4 inches in depth, lay 3 feet from the fire place. Its presence is somewhat puzzling. Although smaller, it is reminiscent of the ash lens in one of the Anaktuvuk Ipiutak, or Anaktuvuk Norton, if you prefer – areas of the Kayuk Site, five miles south of Kavik. I cannot explain the occurrence of either of these lenses. They would appear to indicate prolonged hot fires.

A few boulders, the largest having maximum dimensions of 18 inches, were found scattered on all three site areas. Because glacial boulders abound in the locality, some of them may have occurred there naturally. Others were probably carried to the site areas by man. Perhaps they had once been used to hold down the covers of Kavik houses, although no other traces of any such structures were found.

Kavik site floral and faunal remains, while hardly abundant, are informative. The floral collection is represented by a single piece - a sliver - of spruce (*Picea*). The bone and antler collection has not yet been determined, nor have the pieces been counted - there are several hundred specimens in the series. I would guess that more than 97% of all Kavik faunal remains are of caribou (*Rangifer*). A very large proportion of the

caribou bone and antler consists of long bone fragments. It is noteworthy that we also recovered pieces of caribou crania broken mandibles and fragments of skull caps. This season we also found a few bones that I have tentatively identified as those of the ground squirrel (*Citellus*), and one or two that represent the marmot (*Marmota*). In a previous season we found, at Kavik, one bone of a goose of the genus *Branta*. This year we found a few bones of other birds. I would guess that at least one duck is represented, and perhaps one or both of the resident ptarmigan.

The Kavik artifact series is very small. To date, we have recovered a total of 18 - 7 of stone and 11 of antler - during the 1967 season, and while I cannot remember the number found in past years. I doubt that we have a total of more than 70. The hallmark of Kavik stone implements is a high-shouldered, lozenge or nearly lozenge-shaped projectile point for which we have found complete or nearly complete examples of about eight, and fragments of a few more, (Pl. 1). Kavik points are not all exactly alike, but they share certain notable characteristics. Beside having high shoulders, they have pointed bases and sharp unground edges, and while they are usefully and fairly fashioned they are not expertly fashioned, not at least, if they are compared with the beautiful flint work of numerous other prehistoric northern North American cultures and complexes. Examples of most other Kavik flint knapping are so poor and nondescript as to be crude. Not illustrated are several complete specimens and fragments of what might be knives or scrapers, or for that matter, both. They are typical of Kavik stone artifacts, other than projectile points. In addition to artifacts of specific types we have also recovered, this season, about 100 unworked, untouched spalls. With the exception of one obsidian scraper, found in 1958, all Kavik stone specimens are of chert, and chalcedony - no ground stone has yet been discovered at Kavik.

Among the antler artifacts we have found this season, are two leister prongs (Pl. II, 7), one fish spear center prong (Pl. II, 8); two well worked pieces, one of which appears to be a rough blank, and the other a hand or something similar, two rectangular objects, probably discarded ends, possibly gaming pieces; one long, worked piece, showing a cutting tool scar; and

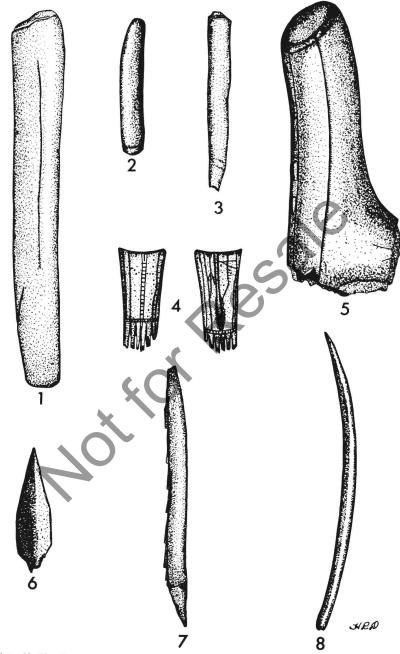


Plate II. Kavik antler artifacts. 1, sharp wedge, dorsal view; 2, sinew twister; 3, fid, probably; 4, comb; 5, decorated beam section; 6, arrowhead point fragment; 7, leister prong; 8, fish spear center prong. To scale, length of 1, 6 3/8 inches.

one, broken, hollowed out, carved piece that may have been a portion of a flint flaker, specifically that part that held the flaking tip.

Much of Kavik antler work is more than ordinarily good, as can be seen in a comb, and in another ornamented piece of unknown use (Pl. II, 4, 5).

It is possible that among the antler specimens, the two leister prongs (Pl. II, 7) hold the greatest promise of telling something about Kavik cultural identity. These prongs are flatlenticular in cross section. The peculiar outline of the tang and the flatened barbs along one edge are distinctive. The barbs, on each example are bordered on either side by a single, incised, decorative line that runs the length of the barbed portion. Both of the prongs appear exactly of the same type, although the tang is missing from one.

## CONCLUSIONS

The Kavik site and its contents represent a camp or camps of a people who lived in small groups, moved frequently, and depended heavily upon caribou, but who also took other mammals and were fowlers and fishermen as well. They traveled both the forest and the tundra. (As a matter of interest, the present, northernmost limit of spruce trees in the John River valley, an extension of Anaktuvuk Pass, lies about 25 air miles S.W. of the Kavik site and its splinter of spruce wood.)

That Kavik was an autumn encampment is witnessed by our recovery of caribou cranial fragments bearing antlers when the caribou move north in the spring, they are antlerless - and also by the location of the site, from which one can readily determine the movements of caribou moving southward, but cannot see the animals when they are traveling northward until they are past or nearly past the place.

The way of life reflected by the Kavik site is one that has been followed by a variety of human inhabitants of Anaktuvuk Pass for several thousand years, and in itself it tells us very little about the cultural affiliation of the Kavik people. However, in addition, to the previously noted possible Kavik - Indian affiliation based on supposed artifact similarities, I believe that Kavik is perhaps an Athapascan site for the following different reasons. First, Kavik cannot be more than a very few centuries old – note the spruce wood, the antler artifacts exposed on the surface, and the very fragile bird bones lying just under. With the exception of one reported incursion – of several years' duration – of Athapascans into the Anaktuvuk region, within the past century and one-half, Anaktuvuk has been exclusively occupied by Nunamiut Eskimo for approximately the past three centuries. Second, however, the Kavik collection does not reflect Nunamiut Eskimo culture, as we know it from an archaeological collection of several hundred artifacts.

In some respects, the Kavik stone points continue to remind me of certain projectile points of the Eskimo Arctic Woodland culture of the Kobuk River, but the Kavik collection, as a whole, is to me much less Eskimo now than it was before this season's excavations. Since it is recent, if it is not Eskimo, what is it? The most reasonable alternative is that it is Athapascan. It will be interesting to compare the Kavik series now with the Old Crow, Athapascan remains exhumed by Dr. W.N. Irving this summer.

## POSTSCRIPT

In May, 1967, a seminar on the Kavik complex and its affiliates was held in the Department of Anthropology, University of New Mexico. Among the several northern prehistorians who participated, Hervert L. Alexander, Jr., John P. Cook, William N. Irving, and Richard E. Morlan contributed particularly pertinent comparative opinions, based on their own field researches and on examinations of the total Kavik collection (specimens in the Maxwell Museum of Anthropology, University of New Mexico; and specimens on loan from the Peabody Museum of Natural History, Yale University; and the United States National Museum.) Thus, the following comments reflect, in part, their views as well as my own.

No other site locality has yet yielded an artifact series which, as a complex, very closely corresponds to the Kavik collection (see Arctic Institute of North America Technical Paper No. 11 for Kavik implement types not noted here.) Further, those complexes to which Kavik appears most closely related have not yet been described in print. Therefore, this discussion is limited primarily to comparsons of three rather distinctive Kavik artifact types: stone projectile points (Pl. I, 1-7), antler leister prongs (Pl. II, 7), and cut antler rectangles (not illustrated). The Kavik stone point type, or types, resembles very few reported from elsewhere in the American far north. It is most similar to specimens, examples of which I have examined, from the previously noted Athapascan locality near Old Crow, slightly more than 300 air miles east of Anaktuvuk Pass. (That Vunta Kutchin site is called Klo-kut by Irving and Morlan). Other correspondences between Kavik and the Old Crow site include similar leister prongs, similar antler wedges (Pl. II, 1), and nearly identical ladder - like decorative elements. (Left, Pl. II, 4). These corresponding Klo-kut traits, including the stone points, appear to be no older than about 500 years.

In addition to similarities between Kavik and Klo-kut leister prong types, a specimen nearly identical to the illustrated Kavik example (Pl.II, 7) is reported by Cook from the Athapascan, Chimi site on Aishihik Lake, Yukon territory, more than 600 air miles southeast of Anaktuvuk Pass. Other implements from Chimi include stone scrapers of several types, one of which is rather similar to a Kavik scraper, not illustrated here. Chimi has an age of about 700 years.

Closer to Anaktuvuk, Alexander reports a leister prong almost identical to the Kavik type from a riverine, Atigun valley locality, about 100 air miles east of the Pass. The Atigun leister prong was associated with rude bifaces similar to Kavik examples (not illustrated here), and with antler rectangles of apparently exactly the same type as Kavik specimens (not illustrated here). A Kavik antler rectangle, of several found, is  $2\frac{1}{4}$  inches long,  $\frac{1}{2}$  inch wide, and slightly more than 1/8 inch thick; cut out and shaped with a stone tool. The use of these objects is unknown but a number have been recovered from both Kavik and the Atigun locality. Alexander thinks that the Atigun component in question has an age of about 400 years.

On the evidence from Klo-kut and Chimi it would seem that Kavik is related, at least to a degree, to northern Athapascan culture. However, other artifacts associated with the Atigun leister prong, rude bifaces, and antler rectangles appear to quite directly relate that component to the Kobuk River, and particularly to Ekseavik, of 568 years ago. Alexander sees a number of resemblances between Atigun and Ekseavik; an outstanding example is that of an Ekseavik stone point type, and an Atigun point type, which are identical. The problem of Kavik relationships is further complicated by the fact that the Kavik leister prong type is resembled, not exactly, but in certain stylistic respects, by leister prongs or by other projectile heads occurring in old, Alaska coastal sites from at least Norton Sound in the north, to at least Angoon in the south.

The plot, therefore, thickens.

Department of Anthropology, University of New Mexico, Albuquerque, New Mexico