

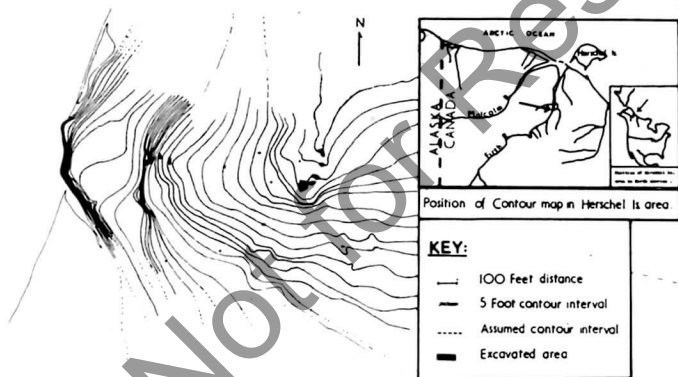
THE ENGIGSTCIAK SITE ON THE YUKON ARCTIC COAST

RICHARD S. MACNEISH

This paper is but a preliminary progress report on the activities of the National Museum of Canada in the northernmost Yukon. Excavation of one of the key sites will be continued in the summer of 1956 and more data should be forthcoming. Thus this report is in no way final. Much of the data is incomplete and any conclusions that I may draw are necessarily tentative.

I shall not endeavour to give full descriptions of the artifact types but merely mention them and refer to their illustration in the plates. The few comparisons that I shall make with other areas will, for the most part, be speculative and their purpose rather to define archaeological problems than arrive at any final conclusions.

FIGURE 1. Map of the Engigstciak site.



This site, called Engigstciak, was originally found in the fall of 1954¹ and the first excavations took place during July and August of 1955. It is located on a small erosional remnant at the foot of the British Mountains on the Arctic coast about 16 miles from the Arctic Ocean. (See Fig. 1). This mesa is along the east side of the Firth River about half a mile north of where the narrow steep canyon of the Firth gives way to the relatively wide valley that becomes the Firth River delta. For the most part the land to the north of the site is rolling and pitted with numerous small lakes and areas of muskeg. This territory is covered with tundra flora. North of the site there are only two side

¹I would like to thank Alex and Frank Stefansson who were guides and pilots during the original survey and Old Roland who led me to Engigstciak in 1954. During the 1955 expedition I was indebted to Mabel Steffansson, Georgina Steffansson, Frank Stefansson, Willy Stefansson, Sandy Stefansson, Alex Stefansson, Hugh Smith, Elijah Allen, and Jalil Jawad, who assisted in the excavations.

streams into the Firth. They have deep valleys and willows on their bottoms and along their sides. South of the site, upstream, the valley of the Firth River becomes narrower and steeper and the third steep canyon entering the Firth to the south sees the northern limit of trees. Here there are large stands of poplar and pine as well as willow, though for the most part the valleys are grassland or have a tundra-like flora. Because of this occurrence of trees only ten miles south of the site and the widening of the valley right at the site, there are to be found on the river flats large quantities of driftwood which enhance this location as a camp spot. The fauna of the region varies seasonally. Black bear, Alaskan brown bear, wolves, mountain sheep, and some caribou occupy this region the year round. In both the fall and spring there are large numbers of ducks and geese as well as ptarmigan. Early in the spring the salmon move down the Firth to the ocean and return in the fall. The site is at one of the most convenient spots for setting up nets in the Firth as to the south the canyon is too steep and the river too deep, while just to the north the many channels of the Firth give the fish a variety of routes to move up or down river. The major animal movement during the late summer and early spring is by the caribou. Both in moving down to the coast and in moving from the coastal plain back into the mountains extensive use is made of the Firth River valley. The site is situated just below the canyon at one of the best caribou crossings of that river while Engigstciak, a thrust of rock 200 feet high and just a few hundred yards east of the site, is an excellent observation post for anyone looking for caribou between the mountains and the Arctic Ocean.

The erosional remnant or small plateau on which the site is located is about a mile long and half a mile wide, most of its top surface being 200 ft. above the Firth River though the pinnacle at its eastern extremity rises to 400 feet above the Firth. Excavation and testing of this site has revealed that only the southwest portion of the plateau was occupied extensively, the occupation area encompassed being about 1200 feet by 600 feet. This portion of the mesa has the advantage of being on the southern slope of the plateau so that the inhabitants were partially protected from the icy blasts off the Arctic Ocean, and furthermore, their camps would have been hidden from the eyes of the caribou which might have traversed the coastal plain to the north.

In the beginning of our excavations a series of test pits were sunk into the site at regular intervals from east to west for a distance of 1200 feet. It soon became apparent that nowhere were there extensive deep deposits of human refuse but that certain areas had pits and patches of refuse that evidently represented occupations by small groups for a limited time. In a few areas on the top of the plateau where the pits were most numerous, different pits contained different artifact complexes and were intrusive either into another pit or into an area of refuse belonging to a different cultural complex. These pit areas or refuse patches yielded the largest amount of artifacts. However, along the flanks of the plateau the stratigraphy was rather different in that there were a series of thin lenses of refuse superimposed, one upon the

other, with intervening culturally sterile layers of loess or clay. In these areas the cultural stratigraphy was clear-cut but, unfortunately, the number of artifacts from each of these lenses was usually quite small.

As excavation progressed it became apparent that there were nine different archaeological complexes that re-occurred in different lenses or areas, or pits. Unfortunately, nowhere were we able to find all nine of these complexes, one on top of the other. Nevertheless from the areas where there were lenses of interdigitating refuse it became possible to align these archaeological complexes into a tentative sequence which we hope to further verify in our future excavations. One area in the southeast portion of the site was particularly enlightening from a stratigraphic standpoint. Here on the surface and in patches where the tundra had been removed by wind-action were found a few pieces of Thule Eskimo materials. In the underlying humus and in a pit intrusive from the humus, called Pit 11, were found a series of artifacts associated with combed pottery that I consider belong to my Firth River Combed horizon. One corner of Pit 11 had cut through a portion of Pit 7 that had an artifact complex associated with what I believe is cordmarked pottery. This complex I consider to represent the Firth River Corded horizon. Both of these pits were cut into refuse under the humus which contained still another artifact complex, without pottery. This complex is called the New Mountain Complex. In the eastern portion of the excavation this refuse overlay sterile loess or sand. In lenses in this sand and in a pit (Pit 7A) extending down from the sand were a few spear points and artifacts that I consider to belong to the Flint Creek horizon. The humus, Pit 11, 7 and 7A, the refuse under 11 and 7 and the sand all overlay a stratum of tightly-knit dark gray clay. This stratum varied between six inches and three feet in thickness and was present over most of the top of this plateau. Underlying this gray clay was to be found either the basic shales of the plateau or thin laminae of sand interspersed with dark layers of muck or ancient humus. A few of these dark layers contained bone materials, flint chips, and, in toto, ten very crude artifacts. These ten artifacts compose the ill-defined British Mountain Complex. It is hoped that future excavations will greatly enlarge as well as define this evidence of our earliest human occupation. Using the stratigraphy in this area as a basis, it was possible by comparison to align the other areas with cultural stratigraphy, as well as the individual pits with a single cultural complex, into a tentative sequence. The following chart presents the stratigraphies and the over-all sequence.

As may be seen from the chart, the top three cultural complexes cannot be aligned in order on the basis of the stratigraphy of this site though they are above all the earlier six horizons. Fortunately the artifacts from these three horizons belong to Eskimo complexes that have been placed in chronological order in excavations in Alaska.² It is assumed that their sequence is the same along the Firth River. Perhaps future excavations will find them stratified at this Yukon site. Of the earlier six horizons only one, the Firth River Dentate-impressed

²H. B. Collins, 1954.

STRATIFIED AREAS

Pit 9	Pit 4	Pit 1	Pit 7	Pit 3 and Pit 6	Pit 17	Pit 16 intrusive into Pit 18	Pit 22	Pit 14 area	Pit 12	Isolated sites or pits	TOTAL SEQUENCE OF COMPLEXES
			surface	surface					surface	NiVc 2 NhVc 1	Herschel Island Thule
							surface			NeVc 1	Whitefish (Early Thule-Late Birnirk)
								Level 1-2	1		Cliff (Norton Complex)
									Level 2-3		Firth River Grooved Horizon
		Level 1	Pit 11 and Level 1	Pit 6A	Level 1-3	Pit 16	Level 1-2			Pit 13	Firth River Dentate Horizon
	Pit 1-4		Level 2-4							Pit 19	Firth River Cordmarked
Level 1-4	Pit 15	Level 2-4	Refuse under Pit 7	Pit 3 Level 1-4 and Pit 6		Pit 18	Level 3-4	Level 3, 5, 6		Pit 21 Pit 5 Pit 2 Pit 20 Pit 8, Pit 9	New Mountain Complex
			Pit 7A Level 2-4		Refuse under Pit 17						Flint Creek Complex
Level 6	Level 6	Level 6	Level 6	Level 6 of Pit 3							British Mountain Complex

Complex cannot be aligned on the basis of stratigraphy. It has been placed in its chronological position on the basis of seriation. With the Dentate-impressed pottery three micro-blades were found. This would indicate that it is before the Eskimo-like Norton Complex without micro-blades and after the New Mountain Complex with micro-blades but without pottery. Whether it is before or after the Grooved Pottery or Cordmarked Pottery horizons cannot be surely determined, but since grooved pottery continues into Eskimo horizons it seems likely that it is before the Firth River Grooved Paddle horizon. It is hoped that future excavations will find this complex in stratigraphic relationship to the other horizons.

On the basis of the correlations shown above in the chart and by comparisons of artifact types, we have been able to definitely establish nine sequential artifact complexes. Some of these artifact complexes are represented by rather poor samples and undoubtedly there are included with them a few artifacts from early horizons that do not belong. These occurrences of earlier artifacts in pits or refuse areas belonging to later horizons is to be expected on a site where there are numerous occupations by people who were digging pits and who, of course, occasionally would dig into earlier refuse areas and thereby include earlier artifacts in occupation areas with their own.

The earliest materials found under the gray clay at four different spots at the site consist of two thin flake side-scrapers, (See Plate I, No. 19), two thick flake side-scrapers, two large bifacially chipped nodules with battering along one edge indicating their use as choppers (See Plate I, No. 20), and four large plano-convex crude scrapers with retouching along a small portion of an edge on the convex side which I am calling scraping planes (See Plate I, No. 18). These few artifacts compose the British Mountain Complex and are, of course, of a very generalized nature. Their position under gray marine clays³ and with a bone of an extinct bison⁴ may indicate considerable antiquity. Until we know more about the content and age of this horizon it seems useless to speculate about its cultural relationships.

The second complex in our sequence is called Flint Creek. Artifacts belonging to this complex were found in Pit 7A above those containing the British Mountain Complex and in sands which underlay refuse containing New Mountain artifacts. They also occurred in refuse underlying Pit 17 which contained comb-marked sherds. Actually 72 artifacts belonging to this complex came from these two areas. More than half of these were of a general nature and included one crude chopper, eight thick side-scrapers, ten thin side-scrapers, five spear tips, four large ovoid blades, two fragments of bone awls, and two tear-drop shaped points (See Plate I, No. 2). Also occurring was a large

³Dr. F. J. Wagner of the Section of Stratigraphic Palaeontology, Geological Survey of Canada, Department of Mines and Technical Surveys, identified the invertebrates in the gray clay as being of marine origin.

⁴Identification by A. E. Cameron of the Division of Zoology, National Museum of Canada.

ovoid end-scraper (See Plate I, No. 16), a small chipped disc chopper (See Plate I, No. 15), a small keeled end-scraper, a spoke shave (See Plate I, No. 12), and a small turtle-shaped end-scraper. Artifacts such as the latter group are also rather generalized but do appear with seemingly early complexes in the Northwest Territories⁵ and the Great Plains.⁶ However, diagnostic of this horizon are fragments of twelve Angostura points (See Plate I, No. 3-6), and one Plainview point (See Plate I, No. 7).⁷ Two other projectile points are of special interest. One (See Plate I, No. 1) has the general shape of a short wide Angostura point but it is made from a prismatic flake that has been retouched on only one surface like those from the Neolithic of Siberia.⁸ The other (which was not pieced together when the photographs were taken) is of the same shape but bifacially chipped and with a flute extending its whole length on one surface. Fourteen crude prismatic blades (See Plate I, No. 13), two of which have retouching, as well as a fragment of a polyhedral core (See Plate I, No. 14), of the conical variety from which these blades may have been struck occurred. There is also one small fragment of a micro-blade that appears to have been struck from a tongue-shaped polyhedral core. Perhaps of even greater significance with these Early Man points are the presence of five burins (See Plate I, No. 8-11). All of these are crude, not unlike those found with micro-blades in the interior of the Canadian northwest.⁹ Two of there are angle burins made from a flat flake without trimming (See Plate I, No. 9). A rectangular flat flake with bifacial retouching on its shorter ends and each of the four corners has received a number of burin blows. (See Plate I, No. 8). The other two burins are both flat flakes roughly half-moon in shape. The convex edge of both has crude bifacial trimming. One of these (See Plate I, No. 10) has an angular blow struck at its straight edge to form an angle burin, while the other (See Plate I, No. 11) has burin blows struck from opposite directions on its straight edge and one blow struck along the extremity of each of its convex edges. All these burins are extremely crude and their surfaces are not retouched and the trimming along their edges is poorly done when it occurs. Generally speaking, they are relatively thick and would have made rather wide slots. Burins such as these seem to be rare or absent in other Arctic sites belonging to the so-called Paleo-Eskimo cultures but are similar to some of the crude ones found in interior.¹⁰

As yet flint complexes like that of Flint Creek have not been found in the Arctic. The nearest thing to it seems to be that found in the Trail Creek cave where Angostura and Plainview points occurred with micro-blades.¹¹ In the Northwest Territories, the Artillery Lake, ¹²

⁵MacNeish, 1951, 1953, 1956.

⁶Hughes, 1949.

⁷Suhm, Krieger, and Selks, 1954, pp. 402 and 472.

⁸Okladnikov, 1950.

⁹MacNeish, 1954.

¹⁰Ibid.

¹¹Larsen, personal communication.

¹²MacNeish, 1951.

and Great Bear River complexes¹³ have Angostura or Angostura-like points but lack the burins and prismatic blades. The question is, are all these complexes with similar points related? If they are, does the Flint Creek Complex with its prismatic blades and burins represent an ancestral stage which loses its Asiatic traits as the complex moves south and east? Or does Flint Creek represent a late stage, being the result of a fusion of a complex with Angostura points that had long been established in the New World with a complex of tools (crude burins and blades) that more recently spread to the New World from Asia?

The next artifact assemblage that appeared at the Firth River site has been called the New Mountain Complex. This assemblage is represented by an adequate sample of over 600 artifacts. Particularly distinctive of this horizon is a large series of small bifacially chipped bladelettes which often have on their surfaces ripple or "Yuma" flaking. Thirty-eight fragments of these occurred. Most were half-moon shaped side-blades (See Plate II, No. 27). Also there were very small side-blades which were lenticular in outline (See Plate II, No. 4), unifacially chipped side-blades of roughly the same shape (See Plate II, No. 29), and one whole rectangular side blade (See Plate II, No. 28). Beside these side-blades there were small end-blades. In what seems to be the earliest phase of this culture there were 26 lanceolate-shaped arrow points with straight or slightly concave bases (See Plate II, No. 5 and 6). These look like diminutive Angostura points. In four pits that I consider to be late in this phase there were five contracting-stemmed points, one narrow-stemmed arrow point, three round-based arrow points, three double-pointed arrow points, and one triangular arrow point (See Plate III, No. 2). However, beside these smaller delicately chipped points are ten bases of Angostura points (See Plate II, No. 1), and 19 large projectile point tips and a single large triangular point (See Plate II, No. 2).

As distinctive as the small bladelettes are a wide variety of burin types. Forty-nine burins belonging to fourteen different varieties occurred as well as 42 burin spalls, 12 of which have retouched ends. Most numerous are angle burins with one edge trimmed and both surfaces well chipped to form a rounded base and a well blunted back (See Plate II, No. 8-15). Closely related to these small ones are two relatively large ones that look as though they had been fashioned from tear-drop shaped projectile points, and one of these has quite a bit of smoothing on its two surfaces adjacent to where the burin blow had been struck (Plate II, No. 8). A few of the burins (6) are relatively crude corner burins (See Plate II, No. 7) with no retouching and are like those found in the earliest horizon, as are two crude angle burins.

There are also a number of corner burins. Three of these are roughly rectangular in outline with one edge trimmed (See Plate II, No. 10) and the other three edges bifacially chipped (See Plate II, No. 11), and there are two that are chisel burins (See Plate II, No. 19 and 20). In a few cases some of these well-made burins are trimmed

¹³MacNeish, 1956.

at two or more corners (See Plate II, No. 9 and 16). However, these are rare specimens and seem to be but variations on a major theme. There are also three lamellar flakes that have had one of their sides trimmed to form a burin (See Plate II, No. 21). Besides these types that are dominant, three types of gravers appear in what seems to be a late part of this horizon and these types become more prevalent at a later time. The angle burins are characterized by retouching on only one surface. On three of these the retouching is opposite the trimmed portion (See Plate II, No. 18), while in one of these the retouching is adjacent to the trimmed portion. (See Plate III, No. 21). Also appearing late are three flakes that have pointed retouched ends (See Plate IV, No. 10). Besides piercing or drilling, these latter tools could also have been used for engraving and slotting bone. They became more prevalent in the later horizons and continue to be used after burins finally died out.

Numerically one of the dominant characteristics of this archaeological phase are micro-blades (or lamellar flakes) and larger crude prismatic blades. Ninety-one are micro-blades which are very narrow and relatively thick with one to five ridges on their raised surface (See Plate II, No. 24). These seem to have been made from tongue-shaped polyhedral cores, of which we found three (See Plate II, No. 26). Extremely similar to these micro-blades are 13 thinner and wider ones usually having a single ridge on one surface (See Plate II, No. 23). These micro-blades appear to have been made from crude conical polyhedral cores with the striking platform at an acute angle to the fluted sides. Four of this variety occur and all of them appear in pits of the late phase. Also in these same pits were two end-of-the-blade scrapers made from thin wide prismatic blades. Beside these neatly made micro-blades are 32 larger and cruder blades, 8 of which have retouching along their longer edges (See Plate II, No. 25).

There are a number of other tools with a variety of functions that make this horizon distinguishable, such as one bone foreshaft of a spear or dart with a clip base and a long groove for a side-blade (See Plate III, No. 29), 8 small double-pointed bone fish gorges appeared (See Plate II, No. 33) and there is a thin fragment of bone that may have been part of a needle. A hollow cut bird-leg bone with polishing at one end may have been a sucking tube (See Plate IV, No. 22), and there is a bone pentagonal pendant (See Plate II, No. 31), two bone rings, and a double-pointed fragment of a long bone, and a pierced caribou phalanx. There also are three fragments of antler that may be proximal ends of arrow points, and there is a single slotted distal end of an arrow foreshaft. Besides these relatively specialized traits there are many of a more general nature. These include 33 thick flake side-scrapers, 48 thin flake side-scrapers, three turtle-back scrapers (Plate II, No. 35-36), two thin scrapers that look like fish scales, one keeled end-scraper, 14 flat triangular end-scrapers (Plate II, No. 34), 6 rectangular flat end-scrapers (Plate III, No. 11), and a single spoke shave. Fragments of large bifacially-chipped knife blades are fairly common as 21 occurred. There are ten points roughly tear-drop shaped

in outline, along with a single chipped disc chopper, two hoe-like scrapers, and a single large half-moon shaped side-blade (See Plate II, No. 37).

In the latest part of this phase, and evidently continuing into the later phases, is a single chipped adze with truncated outline and with polishing on its surface perhaps due to use wear (See Plate III, No. 25). There also is a series of bone tools as well as 14 pieces of cut bone and antler that may very well represent unfinished tools. Thirteen of the tools are ulna awls, while there are 9 split bone awls, one antler flaker, one caribou rib that may have been used as a knife, two well-polished awls with pointed bases (See Plate II, No. 30), a mountain sheep horn made into some sort of a gouge, and a single small rectangular piece of bone with a single groove running lengthwise on each of its surfaces.

Along with these artifacts a vast quantity of bones was uncovered in refuse. They are predominately from caribou but a few teeth and limb bones occur belonging to buffalo, elk, muskox, and some variety of mountain goat that seems to be larger than those living in the regions today.¹⁴ Since all these animals are not present in the region, such material is significant. It may well indicate a slightly different climate and eventually may be brought to bear on the problems of the dating of this complex.

Though it perhaps is too soon to draw any conclusions about relationships of this horizon based upon comparisons of artifact types, it is obvious that the New Mountain Complex is somehow connected with those Cape Denbigh or Cape Denbigh-like horizons.¹⁵ It certainly might well fall within the 5,000 to 9,000-year-old range of dates that have been assigned to Denbigh.¹⁶ If the division of the New Mountain horizon into an earlier and later phase is valid, I can't help but wonder if the Cape Denbigh Flint Complex and the late phase of the New Mountain complex are not related, for besides a host of burin types, similar micro-blades, similar side-blades, and many similar general traits, they have in common such diagnostic traits as contracting-stemmed points, double-pointed points, and triangular points with concave bases. Also, the remains that Solecki¹⁷ and Hackman¹⁸ collected from Anaktuvuk Pass might belong to this horizon. Some of the remains that Irving found in the Brooks Range¹⁹ have only lanceolate-shaped projectile points as does Early New Mountain. These points as well as the burin types, micro-blades, side-blades, and other traits might be connected with the early phase of the New Mountain Complex. While in the realm of speculation, it seems worth while to consider the earliest remains found in the eastern Arctic. Sarqaq, the earliest levels of Disko Bay,²⁰ and other sites in Greenland,²¹ as well as the earliest

¹⁴Identified by A. E. Cameron, Division of Zoology of the National Museum of Canada.

¹⁵Giddings, 1951.

¹⁶Giddings, 1955.

¹⁷Solecki, 1951.

¹⁸Solecki and Hackman, 1951.

¹⁹Irving, 1953.

²⁰Meldgaard, 1952.

²¹Knuth, 1954.

remains from Igloodik in the central Arctic,²² and Thyazzi (Manitoba)²³ are very similar to the Cape Denbigh Flint Complex. These have contracting-stemmed, narrow-stemmed, double-pointed, and a few triangular points as well as triangular adzes, and thus seem related to the late phase of the New Mountain Complex. Thus it may well be that Early New Mountain and Irving's Brooks Range material are ancestral to other Arctic micro-tool cultures. All these relationships are highly hypothetical and must await further research in the Arctic.

Stratigraphically over the New Mountain remains occur the Firth River Cordmarked horizon. The 119 artifacts for the most part are very much like those found in the late part of the New Mountain Complex. With them are 315 pieces of pottery. This pottery has roughened surfaces that looks very much like cordmarking and is identical to those from Cape Denbigh that were considered to be cordmarked.²⁴ Dr. James Griffin, in studying these sherds, did not now think they had been struck by a cord-marked paddle but rather by some sort of a grooved paddle. Unfortunately none of the sherds we have at present allow for clear enough impressions to resolve this question. Associated with these sherds are ten micro-blades. Half-moon side-blades (See Plate III, No. 13-14), both large and small, occur as do snub-nosed scrapers (Plate III, No. 11), and an end-of-the-blade scraper (See Plate III, No. 12). Burins (21) still are present and most of them are of the corner variety with retouching on one of their flat surfaces (See Plate III, No. 21 and 22). Projectile points are much the same as those found with late Pointed Mountain remains (See Plate III, No. 1-10), and include double-pointed contracting-stemmed, narrow-stemmed, round-based, and lanceolate varieties. Also occurring are side-scrapers, a large bifacial blade (See Plate III, No. 23) and a chipped adze (See Plate III, No. 25). One bone fishhook (See Plate III, No. 24), and the front of a bone arrowshaft with a slot for a point (See Plate III, No. 28), complete the inventory.

On the basis of our present evidence, this complex certainly seems to have developed from that of New Mountain. The question now becomes, does this represent the first pottery in the Arctic area and does it have bearing on the problem of Woodland and Siberian ceramic relationships?

As I pointed out in the section on stratigraphy, the Firth River Dentate horizon may be next. There is as yet no stratigraphic evidence to confirm this assumption. The materials belonging to this complex came from one isolated pit not near the others and included mainly 916 potsherds (See Plate V, No. 9-11). These are relatively thick and appear to be coil-made. Their outer surfaces bear dentate-stamp impressions which have been applied haphazardly. Other artifacts include end-scrapers (See Plate V, No. 4), a few micro-blades (See Plate V, No. 5 and 6), contracting-stemmed (See Plate V, No. 1 and 3), and lanceolate projectile points (See Plate V, No. 2), a large side-blade (See Plate V, No. 8), and side-scrapers.

²²Meldgaard, personal communication.

²³Giddings, 1956.

²⁴Griffin, 1953.

The main problem at present is to obtain larger amounts of this artifact complex in better stratigraphic position. The pottery is certainly unique for the Arctic and, again, may have bearing on the Woodland-Siberian ceramic relationships.

The Firth River Grooved Pottery horizon occurs over both the Flint Creek, New Mountain, and British Mountain complexes. It is our second largest complex including 217 artifacts and 1,249 pieces of pottery. The pottery is all of a type defined by Oswalt as Norton Linear Stamp.²⁵ (See Plate IV, No. 14). It is associated with a number of smooth sherds with the same general paste. In one pit with it were three sherds of Norton Check-stamped.²⁶ The other associated artifacts give this complex a distinctive mien. Projectile points are five contracting-stemmed (See Plate IV, No. 4), four lanceolate (See Plate IV, No. 7), six round-based (See Plate IV, No. 5), three straight-stemmed points (See Plate IV, No. 2 and 3), and a double-pointed one (See Plate IV, No. 6). Half-moon side-blades, both large and small, are proportionately frequent (13), as are larger bifacially-chipped tear-drop shaped knife blades (Plate IV, No. 18). Micro-blades (See Plate IV, No. 19 and 20), are very rare even though we found two polyhedral cores (See Plate IV, No. 12 and 13), with an angle striking platform. Ten angle burins occur and, for the most part, are poorly made (See Plate IV, No. 15 and 16). They are made from flat flakes which are unifacially retouched. Two of them have smoothing on their surfaces. Along with these burins are flat flakes that have been chipped to a small beaked point (See Plate IV, No. 10 and 17). Snub-nosed scrapers (See Plate IV, No. 8-9), chipped adzes (See Plate IV, No. 11), and flake side-scrapers are fairly numerous. Bone tools for the first time appear in some numbers. They include a cylindrical antler flaker (See Plate IV, No. 26), a notched leister prong (See Plate IV, No. 25), marrow gouges (See Plate IV, No. 24), a sucking tube (See Plate IV, No. 22), bone awls, scraper handles and large antler scrapers (See Plate IV, No. 21). The most distinctive bone tool is a single detachable bone spear or arrowhead (See Plate IV, No. 27). It has a square wedge-shaped base, a diamond-shaped stem with a line-hole *not* made with a bow drill, bilateral single barbs, and a slot for an end-blade.

This complex of tools is not like anything previously found in the Arctic. Its few burins, micro-blades, and side-blades may indicate relationships with earlier cultures, while the Grooved and Check-stamped pottery, stemmed arrows, detachable bone point, and other tools, seem to indicate some sort of relationship with early Eskimo remains.

The next complex in our sequence is represented mainly by 2640 Norton Check-stamped sherds (See Plate V, No. 12 and 15) in a pit extending down from the humus.²⁷ This assemblage I call the Cliff Complex. It definitely seems to be connected with the early ceramic remains in Alaska. The only other tools with this pottery are two snub-nosed end-scrapers (See Plate V, No. 16-17), a half-moon side-

²⁵Oswalt, 1955.

²⁶Griffin, 1953.

²⁷Griffin, 1953.

blade (See Plate V, No. 14), a straight-stemmed point (See Plate No. 13), a bone ice pick (See Plate V, No. 18), and three net sinkers.

Certainly this pottery has affiliations with the Norton²⁸ and Near Ipiutak horizons²⁹ of Alaska. Just how close this relationship is can only be determined by the finding of more materials in better stratigraphic position at the Firth River site.

The two final complexes occur in the humus and on the surface of the Firth River site. Both of them are known from previous work along the Yukon Arctic coast. In one area a sherd of Barrow Curvilinear-Paddled (See Plate VI, No. 7),³⁰ was found with a piece of ground slate (ulu) (See Plate VI, No. 8), and a contracting-stemmed point (See Plate VI, No. 9). The sherd is very much like one that occurred at the Whitefish Station site along with an unbarbed arrow-point (See Plate VI, No. 10) and a large open-socketed harpoon with single bilateral barbs (See Plate VI, No. 11).³¹

On the east end of the site we picked up a number of sherds of thick fibre-tempered St. Lawrence Plain type (See Plate VI, No. 5).³² There are also a number of fragments of ground slate including a man's knife blade (See Plate VI, No. 1), and a triangular harpoon point. We never actually had time to dig in this region but there is probably a brief Thule occupation of the Herschel Island variety which has closed-socket harpoons (See Plate VI, No. 3-4), and straight-stemmed arrows (See Plate VI, No. 2).³³

SUMMARY

In conclusion, the preliminary excavation on the Firth River indicates a tentative sequence of nine culture complexes. The earliest one, the British Mountain Complex, is represented by a poor sample of generalized choppers and scrapers. At the present time its cultural affiliations are impossible to determine. The Flint Creek Complex appears above it. Its relationships are towards the interior of the Canadian Northwest (and perhaps further south) even though the presence of such Old World tools as burins and blades make it different from anything previously found. The Pointed Mountain Complex with its micro-tools, while bearing similarities to archaeological complexes in Siberia, shows the greatest resemblance to the earliest remains so far found in the western Arctic (Cape Denbigh Flint Complex) and in the eastern Arctic (Sarqaq and Thyazzi). Next are the Firth River Cordmarked and Firth River Dentate horizons whose small tools may have been derived from the previous complex but whose pottery gives them a distinctive mien. These pottery complexes, once they are well defined and dated may contribute to the solution of the problem of the Asiatic derivation of Woodland ceramics. The Firth River Grooved Pottery horizon has some tools indicating a possible derivation from

²⁸Giddings, 1951.

³⁰Oswalt, 1955.

³²Oswalt, 1955.

²⁹Larsen and Rainey, 1948.

³¹MacNeish, in press.

³³MacNeish, in press.

the earliest complexes of the Firth River, but its ceramics seem to tie it with the earliest Eskimo assemblages (Ipiutak excepted.) The Cliff Complex with its Norton Check-stamped pottery is obviously related to the Near Ipiutak and Norton complexes of Alaska. The Whitefish Station and Herschel Island complex are Thule and may well be ancestral to the Eskimo of the Yukon Arctic coast.

Bibliography

- Collins, Henry B.
1954. Archaeological Research in the North American Arctic. **Arctic**, Vol. 7, No. 3 and 4.
- Giddings, J. L., Jr.
1951. The Denbigh Flint Complex. **American Antiquity**, Vol. 16, No. 3. Salt Lake City.
1955. The Denbigh Flint Complex Is Not Yet Dated. **American Antiquity**, Vol. 20, No. 4 (Part 1). Salt Lake City
1956. A Flint Site in Northernmost Manitoba. **American Antiquity**, Vol. 21, No. 3. Salt Lake City.
- Griffin, J. B.
1953. A Preliminary Statement on the Pottery from Cape Denbigh, Alaska. **Memoirs of the Society for American Archaeology**, No. 9. Salt Lake City.
- Hughes, Jack
1949. Investigations in Western South Dakota and Northeastern Wyoming. **American Antiquity**, Vol. 14, No. 4. Salt Lake City.
- Irving, William
1953. Evidence of Early Tundra Cultures in Northern Alaska. **Anthropological Papers of the University of Alaska**, Vol. 1, No. 2. College, Alaska.
- Knuth, Eigil
1954. The Paleo-Eskimo Culture of Northeast Greenland Elucidated by Three New Sites. **American Antiquity**, Vol. 19, No. 4. Salt Lake City.
- Larsen, Helge and Froelich Rainey
1948. Ipiutak and the Arctic Whale Hunting Culture. **Anthropological Papers of the American Museum of Natural History**, Vol. 42, New York.
- MacNeish, R. S.
1951. Reconnaissance in the Northwest Territories. Bull. No. 123. **Annual Report of the National Museum of Canada for 1949-50**. Ottawa.
1953. Reconnaissance in the Mackenzie River Drainage. Bull. No. 128. **Annual Report of the National Museum of Canada for 1951-52**. Ottawa.
1954. The Pointed Mountain Site Near Fort Liard, Northwest Territories, Canada. **American Antiquity**, Vol. 19, No. 3. Salt Lake City.
1956. Two Archaeological Sites on Great Bear Lake, Northwest Territories, Canada. Bull. No. 131. **Annual Report of the National Museum of Canada for 1953-54**. Ottawa.
- In
press. Archaeological Reconnaissance of the Delta of the Mackenzie and Yukon Coast. **Annual Report of the National Museum of Canada**. Ottawa (in press).
- Meldgaard, J.
1952. A Paleo-Eskimo Culture in Western Greenland. **American Antiquity**, Vol. 17, No. 3. Salt Lake City.
- Okladnikov, A. P.
1950. Lenskie Drevnosti—Materialy po Istorii Yakutii. **Institut Istorii Material'noy Kul'tury imeni N. Ya. Marra**. Akademia Nauk S.S.S.R., Vol. 3.

Oswalt, Wendell

1955. Alaskan Pottery: A Classification and Historical Reconstruction. **American Antiquity**, Vol. 21, No. 1. Salt Lake City

Solecki, Ralph S.

1951. Archaeological Discoveries in Northern Alaska, 1950. **American Antiquity**, Vol 17, No. 1 (Part 1). Salt Lake City.

Solecki, Ralph S. and R. J. Hackman

1951. Additional Data on the Denbigh Flint Complex in Northern Alaska. **Journal Academy of Science**, Vol. 41, No. 3. Washington, D.C.

Suhm, D. A., A. D. Krieger, E. B. Jelks.

1954. An Introductory Handbook of Texas Archaeology. **Texas Archaeological Society Bulletin**, Vol. 25. Austin.

National Museum of Canada
Ottawa

PLATE I
($\frac{1}{2}$ natural size)

Flint Creek Complex—1-17

- 1 - 7. Projectile points
- 8 -11. Burins
- 12. Spoke shaver
- 13. Prismatic blade
- 14. Core

- 15. Bifacial disc

- 16-17. End scrapers

British Mountain Complex—18-20

- 18. Scraping plane
- 19. Side-scraper
- 20. Chopper

PLATE II
($\frac{1}{2}$ natural size)

Pointed Mountain Complex

- 1 - 6. Projectile points
- 7 -22. Burins
- 23-25. Prismatic blades
- 26. Polyhedral core

- 27-29. Side-blades

- 30-33. Bone tools

- 34-36. End scrapers

- 37. Large side blade

PLATE III
($\frac{1}{2}$ natural size)

Late Pointed Mountain and Firth River Corded Complex

- 1 -10. Projectile points
- 11-12. End-scrappers
- 13-14. Side-blades
- 15-17. Prismatic blades
- 18. Polyhedral core
- 19-20. Large side-blades

- 21-22. Burins

- 23. Large biface

- 24. Bone fish-hook

- 25. Chipped adze

- 26-29. Bone tools

PLATE IV
($\frac{1}{2}$ natural size)

Firth River Grooved Pottery Complex

- 1 - 7. Projectile points
- 8 - 9. End Scrapers
- 10 and 17 Beaked gravers
- 11. Chipped adze
- 12-13. Polyhedral cores

- 14. Grooved pottery

- 15-16. Burins

- 18. Side-blade

- 19-20. Micro-blades

- 21-28. Bone tools

PLATE V
($\frac{1}{2}$ natural size)

Upper half: **Firth River Dentate Complex**

Lower half: **Cliff Complex**

- 1 - 3. Projectile points
- 4. End-scraper
- 5 - 6. Prismatic blades
- 7. Beaked graver
- 8. Side-blade
- 9 -11. Firth River Dentate-stamped pottery

- 12 and 15. Norton Check-stamped pottery

- 13. Projectile point

- 14. Side-blade

- 16-17. End scrapers

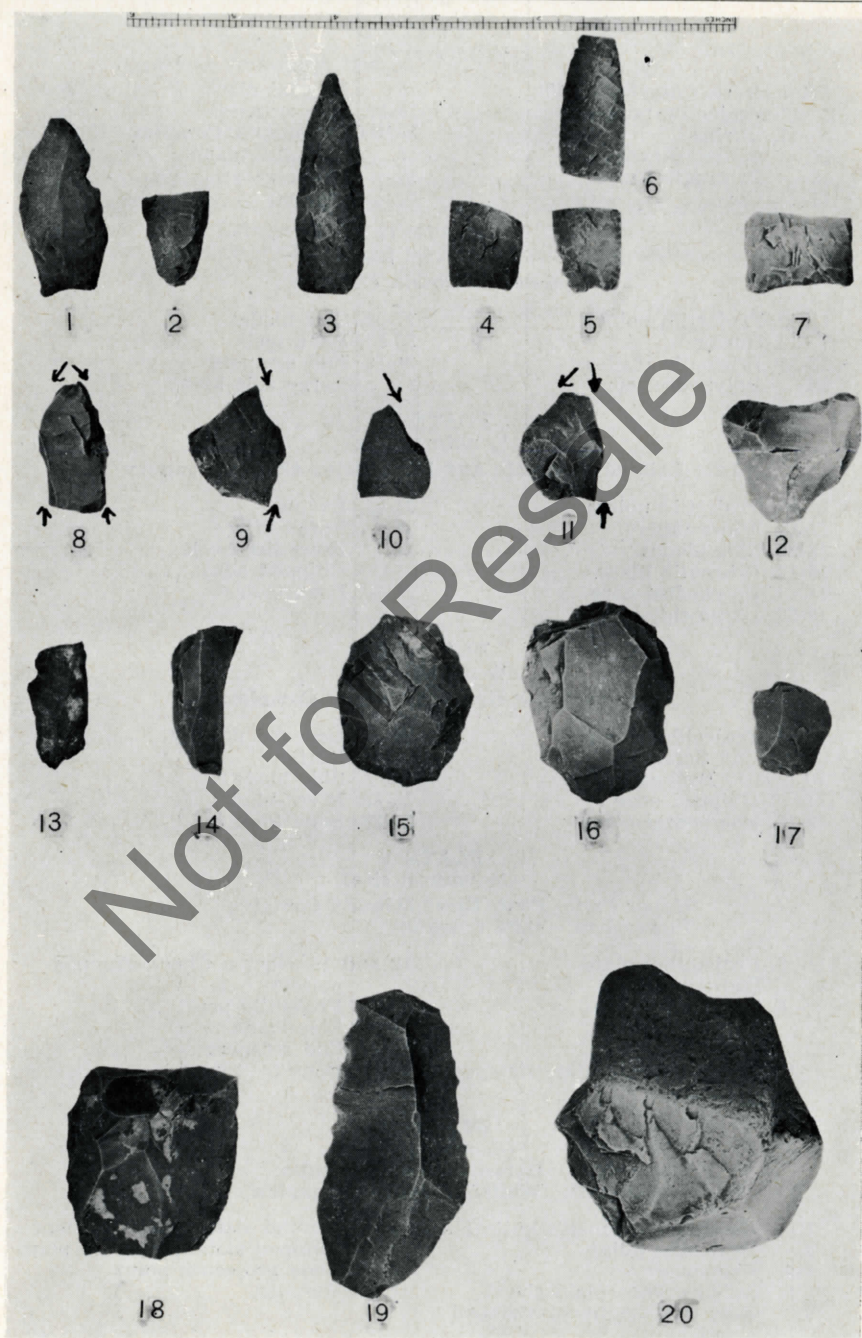
- 18. Bone ice pick

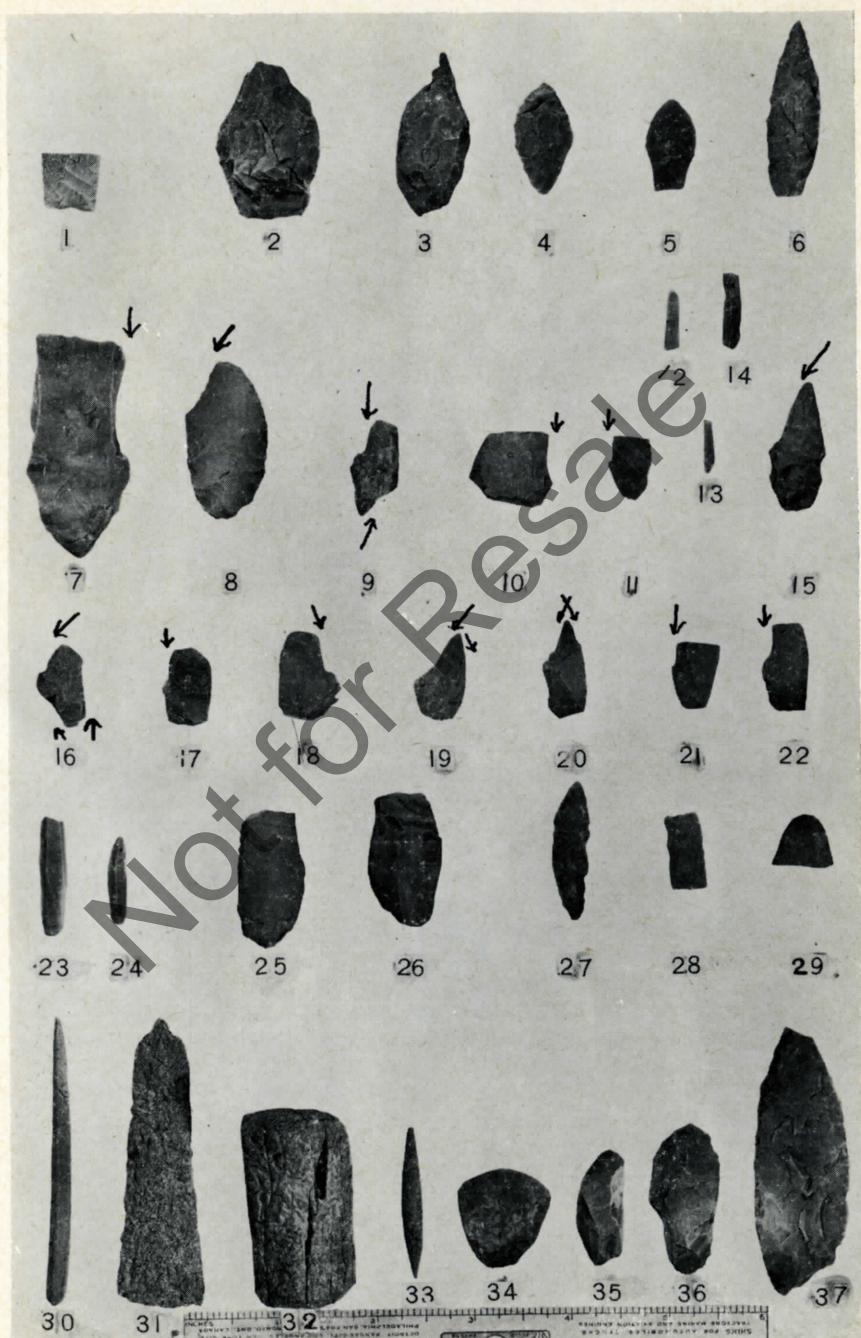
PLATE VI
($\frac{1}{2}$ natural size)

Upper half: **Herschel Island Complex**

Lower half: **Whitefish Station Complex**

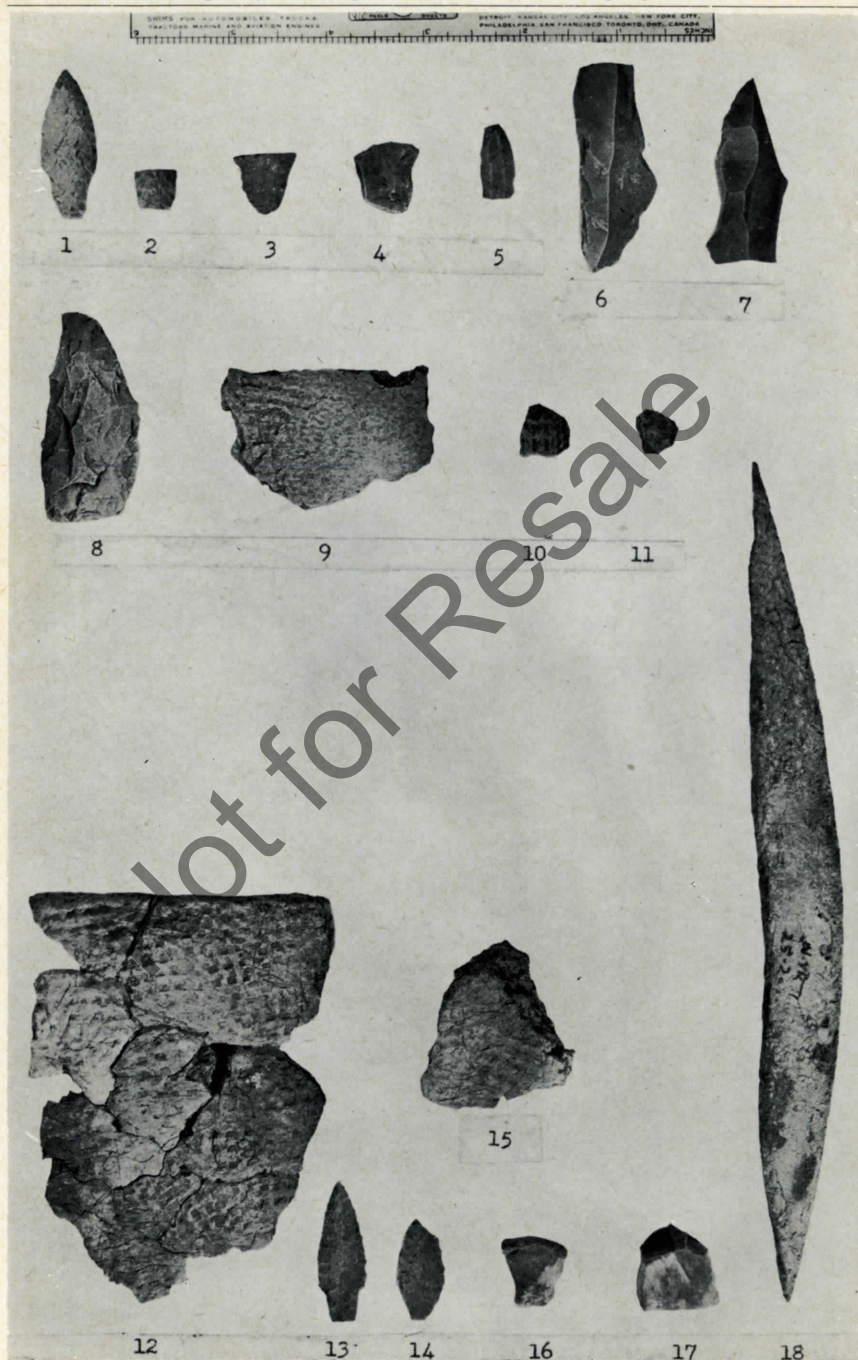
- 1. Ground slate man's knife blade
- 2. Projectile point
- 3-4. Harpoons
- 5-6. St. Lawrence plain sherd
- 7. Barrow Curvilinear-stamped sherd
- 8. Ground slate blade fragment
- 9. Chipped stone projectile point
- 10. Bone projectile point
- 11. Harpoon











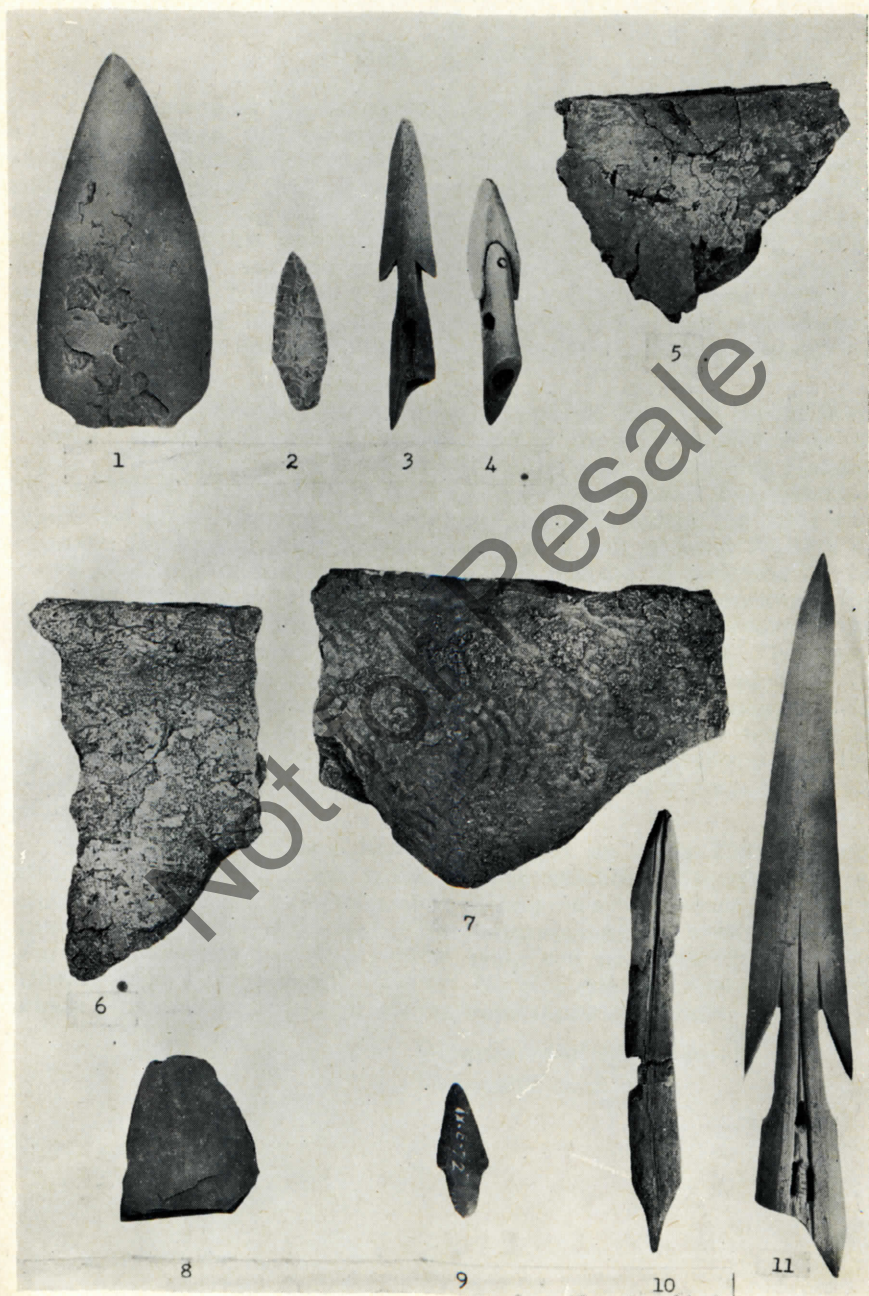


PLATE VI