

The Late Prehistoric Period in the Mackenzie Valley

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ABSTRACT. Artifacts from more than 20 late prehistoric components in the Mackenzie valley are described and compared with those from contemporaneous assemblages from neighbouring areas. MacNeish's Spence River phase is expanded to cover this material, which seems to exhibit at least some integrity and distinctiveness, and which appears to date from about A.D. 700 to the time of European contact. Certain technological similarities are noted with the Klo-Kut and Aishihik phases to the West and the late Taltheilei tradition to the East, but these similarities are difficult to synthesize into any meaningful outline of Canadian Athapaskan prehistory.

Key words: archaeology, subarctic, Mackenzie valley, Spence River phase, Plains notched points

RÉSUMÉ. L'auteur décrit des artefacts provenant de plus de vingt composants de la période préhistorique supérieure de la vallée du Mackenzie et les compare à ceux des assemblages contemporains des régions avoisinantes. La phase de la rivière Spence de MacNeish est augmentée afin de toucher ces données qui semblent démontrer une certaine intégrité et un caractère plutôt distinct, datant d'environ 700 ans après J.C. jusqu'à l'époque du contact européen. Certaines ressemblances technologiques sont signalées entre les phases Klo-Kut et Aishihik dans l'ouest et la tradition Taltheilei supérieure dans l'est, mais celles-ci sont difficiles à synthétiser dans un cadre significatif de la préhistoire athapascane canadienne.

Mots clés: archéologie, sub-arctique, vallée du Mackenzie, phase de la rivière Spence, pointes à des Plaines

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INTRODUCTION

Current knowledge of the late prehistoric period in the Mackenzie River valley is limited by two factors. One is a sketchy data base, involving the small and usually impoverished site collections characteristic of subarctic archaeology in general. The second is more easily remedied. Despite over 30 years of research there remains the need for a regional synthesis which can examine and discuss broad topics and make comparisons at a regional level. Much of the pertinent information is still found only in unpublished manuscripts, whose general unavailability has hampered discussion. My purpose here is both to report and to synthesize, particularly with reference to the existing artifact collections, all of which are housed with the Archaeological Survey of Canada, National Museum of Man, Ottawa.

A few preliminary remarks are in order. The Mackenzie River valley is here defined fairly strictly to include only the western third of the Mackenzie District of the Northwest Territories, exclusive of the Delta and Great Slave and Great Bear lakes. I am thus not directly concerned with Noble's (1971, 1981) Taltheilei Shale tradition, and I am not at all concerned with the Eskimo prehistory of the Delta. So defined, the Mackenzie valley presents a fairly uniform general environment of closed boreal forest, generally low-lying but including some high country to the west, and outside the range of the barren-ground caribou herds. Important species historically include moose, woodland caribou, fish, and small game, including waterfowl, and these presumably formed the basis of subsistence in the late prehistoric period as well. Fish bone seems to be particularly abundant in those few sites with organic preservation (Millar, 1968; Gordon and Savage, 1973).

Provisionally, the Mackenzie valley is presented as a single cultural area. This is an assumption which should ultimately be tested, but it is dictated by the relative paucity and unevenness

of the present data, and is defensible ethnographically. The historic inhabitants of the valley were (and are) the Slave and Hare, marginally the Mountain Indians of the Mackenzie Mountains and, in the far north, the Loucheaux or eastern Kutchin. All of these except the Kutchin speak mutually intelligible dialects of the same language, referred to by Krauss as "Slavey-Hare" (Krauss and Golla, 1981:79). Non-linguistic cultural differences seem to have been minor, so that the designations Hare, Slave, and Mountain are themselves in part arbitrary distinctions of simple convenience, reflecting to some extent environmental differences (Asch, 1981; Gillespie, 1981; Savishinsky and Hara, 1981). The Hare, for instance, were distinguished primarily by their heavy dependence on the animal of the same name (Lamb, 1970:191-192). The Kutchin do stand apart, both linguistically and culturally, but in the Mackenzie valley they are restricted to the area north of Travaillant River, being mainly a people of the upper Yukon/Pacific drainage (Slobodin, 1981). This cultural uniformity over at least most of the valley can tentatively be extended to the late prehistoric past, when we are in all probability dealing with the cultural ancestors of these same people (for a discussion of population movements during the early contact period, see Janes, 1983:10-13, and references).

THE SAMPLE

This study focuses on finished artifacts from 22 archaeological sites in the Mackenzie valley, all of which appear to date at least in part to the late prehistoric period. A number of criteria were employed in selecting these sites, including the absence of microblades and the presence of small notched projectile points of a form generally considered late prehistoric, a stratigraphic position above the White River volcanic ash (now dated to about A.D. 700; see Lerbekmo *et al.*, 1975), or a suitable radiocarbon assay. No single site fulfilled all of the

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criteria; few radiocarbon dates are available, for instance, and White River ash is only spottily present as far east as the Mackenzie River. Generally speaking, however, there was little doubt as to which sites could be considered late prehistoric, although whether or not assemblages might be mixed was another problem. For initial purposes, the late prehistoric period is here defined as beginning sometime between about A.D. 500 and 700. In the extreme southwest of our area, this corresponds with what MacNeish (1954) and Millar (1968) have referred to as the Spence River complex, while chronologies in contiguous areas to the east (Gordon, 1977; Clark and Morlan, 1982:89) and especially the west (Workman, 1978; Shinkwin, 1979; LeBlanc, 1983) are essentially in agreement. Throughout the interior Northwest, the term late prehistoric generally implies that we are dealing with archaeological cultures which are immediately ancestral to those of historic Dene. No attempt was made to examine historic sites, although a few of the site collections include a small quantity of historic material.

Site positions are presented in Figure 1. As can be seen, a disproportionate number of sites are found in the Fisherman Lake area to the southwest, reflecting in part the inequalities of

field work. A consideration of site collections exacerbates the situation; almost all of the reasonably large collections come from the southern half of the valley, and these collections are almost entirely restricted to lithic tools. For one reason or another, those comparatively few specimens recovered from the northern half of the Mackenzie valley consist largely of organic tools of bark, bone, and antler, so that meaningful intra-regional comparison is at present impossible.

South Klondike site (JcRw-1): South Klondike is the first of the Fisherman Lake sites, and was found and reported by MacNeish (1953, 1954) as N.W.T. site 63. It was originally given the Borden number JcRw-3 (see MacNeish, 1964:325), but due to a later mistake is now designated as JcRw-1. The site is stratified, and the uppermost component is late prehistoric in date (Spence River complex). As well as flakes, the site collection includes two projectile points and a number of scrapers.

Klondike site (JcRw-3a): This is now known as the main Klondike site, and was excavated and reported by Millar (1968). The late prehistoric component is comparatively small; as well as flakes it produced a single projectile point, two bone artifacts, and a possible net sinker. There is also an historic component.

East Klondike site (JcRw-3b): Also a stratified site, JcRw-3b is one of the largest and most important in the Mackenzie valley (Millar, 1968). The present collection from the late prehistoric component includes eight projectile points, nine other bifaces, scrapers, and two bone or antler artifacts. There is also an historic component which could not, in all cases, be separated in the collections.

McLeod site (JcRw-8): McLeod is another stratified site, with an earliest occupation putatively dating to the end of the Pleistocene. The late prehistoric or Spence River component is restricted to the eastern section of the site, and comprises, along with waste flakes, a single projectile point (Millar, 1968).

Julian site (JcRw-13): This is another comparatively large and important site, excavated and reported by both Millar (1968) and Fedirchuk (1970). The late prehistoric unit produced 11 points, three scrapers, including a fragment, and two possible net sinkers. Again there is some confusion in the collections between late prehistoric and historic material. Fedirchuk (1970: Fig. 4,f), for example, illustrates as "historic" a point base catalogued as late prehistoric. For our purposes the matter is comparatively unimportant, since aboriginal material from the historic component seems in no way different from that in use immediately prior to contact.

Tsuelah site (JcRw-16): Tsuelah is a single-component buried site which produced a small lithic artifact collection and a quantity of fish bone. The single small notched projectile point and the stratigraphic position indicate a late prehistoric date (Millar, 1968).

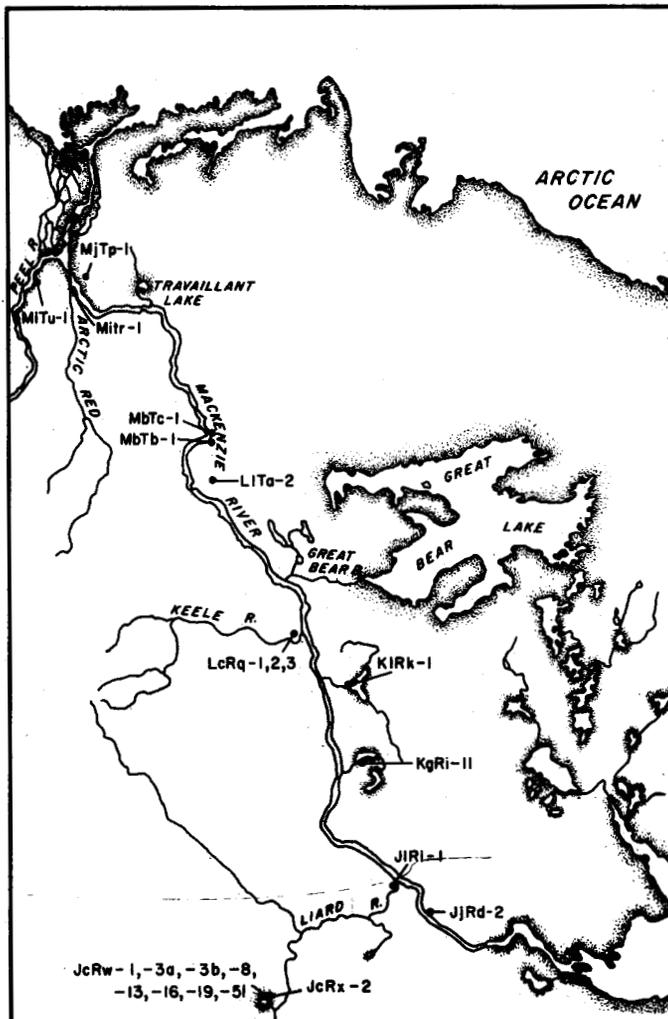


FIG. 1. Mackenzie valley site locations.

Kraus site (JcRw-19): The Kraus site produced an isolated projectile point (Millar and Fedirchuk, 1972).

JcRw-51: JcRw-51 is a single-component buried site which has not yet been described in detail (Millar, 1971). It has produced one of the largest lithic artifact collections in the area, including five projectile points, four other bifaces, and more than 10 scrapers. There does not seem to have been any organic preservation.

Pointed Mountain site (JcRx-2): Pointed Mountain might be considered the type-site of the problematic Northwest Microblade tradition (MacNeish, 1954), and both of its excavators originally considered it as a single component (MacNeish, 1954; Millar, 1968). However, Millar (1981) has recently identified Plano components, and to this may be added a definite late prehistoric occupation as well, marked by at least two small notched points. Since the various occupations have not yet been sorted out, only these two points can be considered here.

Spence River site (JjRd-2): This, the type-site for the Spence River complex, was originally found and reported by MacNeish (1953:27, 1954:249-250) as N.W.T. site 47. Artifacts include three points, a broken point or fine biface knife, a chi-tho or tabular biface, six complete scrapers, and a possible burin. The site is located on a high terrace immediately downstream from Jean Marie River. Millar and Fedirchuk (1975:87) report a small undiagnostic collection with the same Borden designation, but it is excluded from this study as it is not clear that the two sites are the same.

JIRi-1: This designation, also known as N.W.T. site 5, represents a bone flesher and an antler arrowhead. All that is known of their provenance is that they were found "in the town" of Fort Simpson (MacNeish, 1953:25).

Esker Bay site (KgRi-11): The Esker Bay site presents two stratigraphic components, separated by a patchy White River ash horizon. The Lower component produced microblades, while the upper produced a notched point which has been compared with late Taltheilei specimens. A few microblades were also found in the upper component, strongly suggesting that it is mixed (Losey *et al.*, 1978). The site is located near the western end of Fish Lake, just east of Wrigley.

KIRk-1: KIRk-1 is a culturally-mixed surface site, located on Blackwater Lake to the east of the Mackenzie. Among its artifacts is a single small notched projectile point (Millar, 1972). Since it is a mixed site, it is again only possible to consider the projectile point here.

Stewart Lake spit site (LcRq-1): This is another surface site, and while it is probably the product of a number of occupations it seems to date largely if not entirely to the late prehistoric period. It is located on Stewart Lake, part of the Keele system, and produced a good collection of lithic artifacts, in-

cluding two small notched points and a number of other bifaces, scrapers, and a possible burin (Cinq-Mars, 1971, 1973:15).

Stewart Lake site (LcRq-2): Stewart Lake is a single-component buried site, which produced cultural material from above a (presumably) White River ash layer. The artifact collection consists entirely of lithic artifacts, including several small notched and teardrop-shaped points (Cinq-Mars, 1971, 1973:15).

Seismic site (LcRq-3): Seismic is another buried, single-component site producing an entirely lithic artifact collection (Cinq-Mars, 1971, 1973:15). The assemblage was originally compared with the middle prehistoric Mackenzie complex of the Fisherman Lake area (see Millar, 1968), but a recent radiocarbon date of 335 ± 80 B.P. (I-7788) suggests the probability of a late prehistoric affiliation (Cinq-Mars, pers. comm. 1983 and 1984).

Chick Lake site (LITa-2): Chick Lake is a stratified site, with two components separated by a presumed White River ash layer. The upper component is artifactually impoverished, and has been affiliated with the Taltheilei tradition solely on the basis of its apparently late date (Chambers, 1975). The artifacts themselves were never turned over to the National Museum of Man after analysis, and are presumed lost.

MbTb-1: MbTb-1, also known as N.W.T. site 57, comprises a bone beamer and awl, found in the Roman Catholic Mission garden at Fort Good Hope (MacNeish, 1953:31).

MbTc-1: MbTc-1 (or N.W.T. site 61) comprises a donated antler arrowhead, apparently from the Fort Good Hope Ramparts area (MacNeish, 1953:31).

MiTr-1: This site, originally recorded as N.W.T. site 58 (MacNeish, 1953:31), includes mainly bone and antler artifacts, excavated from a series of buried hearths in the modern settlement of Arctic Red River. On the basis of two glass beads, the site dates to the early historic or protohistoric period.

MiTU-1: This is another MacNeish discovery, originally recorded as N.W.T. site 59 (MacNeish, 1951:31). The collection includes both excavated and donated material from Fort McPherson, all bone or antler artifacts. Again, this site (if it is a single site) dates to the early historic period, for the collection includes a point with an iron endblade, and a bone pipe stem.

Whirl Lake site (MjTp-1): Whirl Lake is a buried, stratified site located immediately east of Arctic Red River (Gordon and Savage, 1973). The lower component produced microblades, and the upper comprised a late prehistoric Kutchin pit house, with associated fish caches. Artifactual material is comparatively abundant, but includes few diagnostics. It is, how-

ever, one of the few sites in the area to produce both lithic and organic artifacts, as well as two eighteenth-century radiocarbon dates.

ARTIFACT COLLECTIONS

1. LITHIC TOOLS

PROJECTILE POINTS

Forty-six projectile points were recovered from late prehistoric sites, almost all of them from the southern half of the study area. They may be described in terms of four general morphological categories.

Small Triangular Notched Points

Small triangular notched points are the most common form in the study area. All are <37 mm in length, intergrade between side- and corner-notched, and have unground, generally straight bases. In particular, they are thin, light, and comparatively fragile, and presumably represent arrow points. Most are made of dark chert. They are certainly the most distinctive hallmark of the late prehistoric period in the area, and are crucial to the definition of the Spence River complex (MacNeish, 1954; Millar, 1968). Twenty-six specimens have been recovered from 12 sites from as far north as the Keele River.

The earlier-found of these points were classed by MacNeish as Prairie side-notched or as Stott points (MacNeish, 1964:406-408), types which were first defined in Manitoba (MacNeish, 1955). They carry with them the implication of cultural influence from the northern Plains, where similar points are characteristic of the late prehistoric Old Woman's phase (Forbis, 1962; Reeves, 1983) and have an ancestry going back to Avonlea (Adams, 1977). They are best known from the finely stratified Gull Lake site where, on the basis of hundreds of specimens, Kehoe (1966) has defined what he terms "the small side-notched point system" of the Northern Plains, based on three types and 20 varieties. The three types are temporally distinct and include Avonlea (further divided by Reeves [1983:60-62] into the Head-Smashed-In corner-notched and Timber Ridge side-notched types), dating to between about A.D. 200 and 700; Prairie side-notched, dating to about 700 to 1400; and Plains side-notched, dating from about 1400 to the end of the prehistoric period.

All three type designations may be applicable to the Mackenzie valley. Two specimens from LcRq-2 at least generally resemble the Avonlea-Timber Ridge side-notched type (Fig. 2, a-b). Characteristically, they have obtuse shoulders and slightly concave bases, and are notched nearer to the base than other specimens. The notches are small (1.0-2.0 mm across and 1.5-2.0 mm deep) and well defined, and both specimens are made of fine-grained quartzite. Only one is complete; it is 36.5 mm long, with a blade width of 14.0 mm, a base width of 11.0 mm, and a thickness of 4.0 mm. The second specimen appears to have been smaller.

We are on firmer ground with the Prairie side-notched type (Fig. 2, c-j). Twenty-two specimens seem to fit within the range of this type, although Kehoe's (1966) varietal distinc-

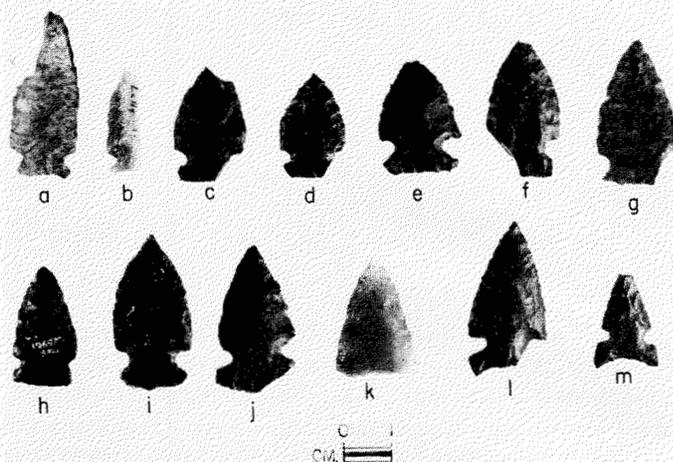


FIG. 2. Examples of side-notched points of the northern Plains.

tions appear to have little relevance. Compared with the Avonlea-like points, flaking is of mediocre quality and retouch flake scars are broad and conchoidal. All seem to have been made on flakes, and in the case of five specimens, retouch on the ventral face is limited to margins. Characteristically, specimens intergrade between side- and corner-notched, bases are comparatively straight and show little or no evidence of grinding, and notches are comparatively wide, shallow, and usually slightly asymmetrical. One specimen is made of fine, light-coloured quartzite; the others of dark chert. The sample also includes an unnotched triangular specimen, again of light quartzite, which is presumed to be unfinished (Fig. 2, k). Metric data, presented in Table 1, are in good agreement with those recorded for northern Plains specimens (Kehoe, 1966:830).

TABLE 1. Metric data on Mackenzie valley Prairie side-notched points

Notch Height (above base)	mean= 3.4 mm	SD= .9 mm
Notch Depth	mean= 1.7 mm	SD= .7 mm
Notch Width	mean= 4.0 mm	SD=1.3 mm
Notch Depth/Width Ratio	mean= .43	SD= .16
Blade Width	mean=15.1 mm	SD=1.7 mm
Base Width	mean=14.4 mm	SD=2.4 mm
Thickness	mean= 4.0 mm	SD= .9 mm
Length	mean=27.8 mm	SD=3.7 mm

Only two specimens can be compared with the Plains side-notched type. Both are well made of dark chert, with symmetrical well-defined outlines, sharp lateral angles, and high, deep notches. One specimen (Fig. 2, l) comes from the Pointed Mountain site. The base is broken but has at least one lateral spur, and is markedly concave. The extant notch is 4.5 mm high, 3.0 mm deep and 3.0 mm wide (depth/width ratio: 1.0); overall dimensions are 31.5 × 16.5 × 4.0 mm. The second example is also from the Fisherman Lake area (Fig. 2, m), and again has a concave base. Notches are small, deep, and narrow (depth/width ratio: .75), and placed comparatively high (4.5 mm), and the base is markedly wider than the blade (13.5 mm vs. 9.5 mm). The specimen is a small one (19.0 mm long and 2.5 mm thick). Both examples come from site collections which also produced Prairie side-notched specimens (see Table 4).

Discussion

Although MacNeish was prone to make typological comparisons from very far afield indeed, the Prairie side-notched type appears to be a valid entity in the Mackenzie valley. Reeves (1983:163) and others suggest that its presence indicates not only cultural influence from the Plains, but specifically the northward spread of the bow and arrow, a reasonable observation considering the large, unnotched points of the preceding Mackenzie complex (Millar, 1968). Certainly, there is no reason to agree with Kehoe (1966:840) on a specifically northern, Athapaskan origin for the Plains side-notched point system. Cross-dating from the Plains, this southern influence, and the Late Prehistoric period which it marks, date largely to the period after A.D. 700. Contact does not seem to have been continuous, since the development of the Plains side-notched type seems to have had little impact in the Mackenzie valley.

If this identification is correct, we would expect to find similar small notched points in the intervening southern boreal forest, specifically in northern Alberta. Unfortunately, archaeology in this area is no better developed than in the Mackenzie valley, and the literature is still dominated by preliminary reports. Small notched points have been reported from a number of surveys and excavations, but have often been compared with late Taltheilei specimens from the eastern Great Slave Lake area (Ives, 1977; Pollock, 1977:13; Gruhn, 1981:87; McCullough, 1982:34-35), and only occasionally with Prairie side-notched specimens (Gruhn, 1981:88; McCullough, 1982:110-112; Stevenson, 1982:3). Judging from illustrations, the latter comparison is to be preferred in most cases.

The great majority of late Taltheilei notched points are, in fact, quite different. In particular, late Taltheilei specimens have much wider, shallower notches, so that they range from corner-notched to stemmed (Fig. 3), whereas Prairie side-

notched points vary from side- to corner-notched. Metric data on a sample of 19 late Taltheilei small notched points collected by Gordon from the Thelon drainage are presented in Table 2. Comparison with Table 1 supports the distinct identity of these two point types, although it must be pointed out that raw material differs fairly consistently between the two samples (all of the Taltheilei specimens are made of a pinkish quartzite). Rather than any direct relationship, they may indicate borrowing or cultural influence from the same Great Plains source (see Gordon, 1976:176). Notched points appear quite abruptly in the Taltheilei sequence at about A.D. 800.

TABLE 2. Metric data on late Taltheilei notched points: Thelon drainage

Notch Height (above base)	mean= n.a.	SD= n.a.
Notch Depth	mean= 2.1 mm	SD= .7 mm
Notch Width	mean= 9.5 mm	SD=2.1 mm
Notch Depth/Width Ratio	mean= .23	SD= .09
Blade Width	mean=17.6 mm	SD=1.7 mm
Base Width	mean=14.3 mm	SD=2.5 mm
Thickness	mean= 6.4 mm	SD=1.0 mm
Length	mean=33.5 mm	SD=5.8 mm

Looking to the west, small late prehistoric notched points have been reported in small numbers from the southwest Yukon (MacNeish, 1964:406, 408; Workman, 1978:216-217) and, apparently in slightly modified form, from the British Columbia plateau (Sanger, 1970:122; Helmer, 1977). They have not yet, however, been found in Alaska or the northern Yukon. In all cases, a Great Plains origin may be indicated.

Small Notched Bipoints

Two small notched points are not included with the Plains side-notched point system, being nearly bipointed rather than triangular in form. The larger specimen (Fig 4,c) comes from the Fisherman Lake area (JcRw-3b) and is made of dark chert, while the smaller (Fig. 4,a) is from the middle valley (LcRq-2) and made of light quartzite. Neither shows any evidence of grinding, and presumably they are arrow points. Metric attributes are presented in Table 3.

Two other specimens, both from LcRq-2, are almost identical except in being unnotched (Fig. 4,b,d). The larger is of dark chert and the smaller of light quartzite. They are 45.0 and 34.0 long, respectively, and may simply be unfinished.

TABLE 3. Metric data on Mackenzie valley notched bipoints

Notch Height	6.5 - 7.5 mm
Notch Depth	1.0 - 2.0 mm
Notch Width	2.0 - 3.0 mm
Notch Depth/Width Ratio	.50 - .67
Width	14.5 - 16.5 mm
Thickness	4.0 - 6.0 mm
Length	37.5 - 38.5 mm

Discussion

Similar points at a similar time period seem to be absent from northwestern North America. They have been included

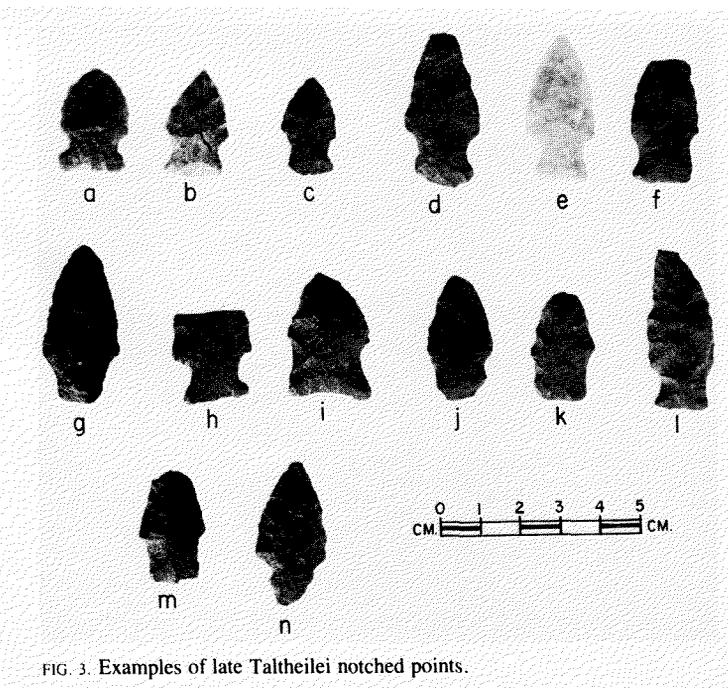


FIG. 3. Examples of late Taltheilei notched points.

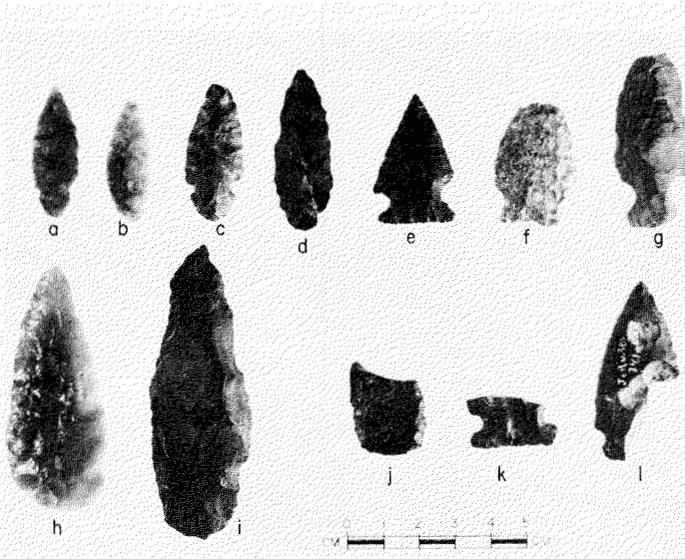


FIG. 4. Notched points from the Mackenzie valley.

by Millar (1968: Fig. 30,b) within the same type as the triangular notched points.

Large Notched Points

Seven triangular notched points are distinguished by their size, which suggests that they might represent spear points. Since it is not clear that they represent any single type, they are described individually.

The shortest specimen (Fig. 4,e) just overlaps with the small notched points in length (36.5 mm), but is much broader (22.5 mm) and heavier (thickness: 6.5 mm). It has well-defined corner notches, 3.5 mm deep and 7.5 to 9.5 cm wide (notch depth/width ratios: .47 and .37), and a straight, lightly ground base. It is neatly flaked of dark chert; the asymmetry of the notching may be due to re-working a break. The specimen illustrated in Figure 4,f is also corner-notched, and is well made of dark chert. The notches are rather broad (6.5 and 7.5 m) and shallow (1.0 - 1.5 mm), with depth/width ratios of .23 and

.13. The base is concave, and the tip damaged. The overall length would have been about 40 mm, the width is 23.0 mm, and the thickness 6.5 mm. Another nearly complete specimen (Fig. 4,g) is also broadly notched, and could even be classified as expanding stemmed. The notches are 2.0 mm deep and 8.0 mm wide, for a depth/width ratio of .25. It has a convex, rather narrow base 14.0 mm wide, a damaged tip and an elongate blade section, and is made of a poor-quality siltstone. The workmanship is haphazard, and the ventral face shows only intermittent marginal retouch. It is 7.0 mm thick and, undamaged, was about 53.5 mm long. Four other specimens are more fragmentary and exhibit smaller notches. One of them (Fig. 4,l) has only one extant notch; it is 1.5 mm deep and 4.5 mm wide (depth/width ratio: .33). Overall, the specimen is 50.0 mm long and 5.0 mm thick, made of dark "pot-lidded" chert, and appears to have had a slightly convex base. Another example (not illustrated) is a side fragment of dark chert, with only one notch extant. The notches are comparatively high (5.5 mm), with a notch depth/width ratio of .57 (depth: 2.0 mm; width: 3.5 mm). A basal fragment (Fig. 4,k) is straight-based and side-notched (notch height: 4.5-5.5 mm). The notches are 3.0 mm deep and 4.5 mm wide (depth/width ratio: .67), and overall the base is 25.0 mm wide and 5.0 mm thick. The final example is a blade section, extending only to the top of the notching. Both of these final samples were made of dark chert, and neither shows any but light basal grinding.

Discussion

The specimen illustrated as Figure 4,g has been compared with late Taltheilei notched points (Losey *et al.*, 1978), and the form of the notching indicates that this may be a reasonable suggestion, although a difficult one to evaluate. Otherwise, this collection of large notched points has few late prehistoric counterparts. One of them (Fig. 4,f) loosely resembles the Oxbow-like points which appear sporadically in the North at about 2000 B.C. (Millar, 1968:172; Noble, 1971:106;

TABLE 4. Distribution of Mackenzie valley projectile points

Site	Small Triangular Notched Points			Bipoints N ¹ U ²	Large Notched Points	Tear-drop Points
	Avonlea-like	Prairie Side-Notch	Plains Side-Notch			
JcRw-1		2				
JcRw-3a				1	3	1
JcRw-3b		2				2
JcRw-8		1				
JcRw-13		9			1	1
JcRw-16		1				
JcRw-19		1				
JcRw-51		2	1		2	
JcRx-2	1	1	1			
JjRd-2		3				
KgRi-11					1	
KIRk-1		1				
LcRq-1		2				1
LcRq-2	2			1	2	
LcRq-3						2
MjTp-1						2
TOTALS:	2	24	2	2	2	9

¹N = Notched
²U = Unnotched

Workman, 1978:212-213), and may thus be intrusive in this component. Shinkwin (1979:Fig. 34,f) illustrates a large notched point from the upper level at Dixthada, but the notching is more barbed than that exhibited by any of our Mackenzie valley specimens. Another specimen from Colville Lake, north of Great Bear, is perhaps more similar, but has an unknown cultural affiliation (Clark, 1975:Pl. 4,h). Millar (1968:Fig. 29,b) illustrates at least one of the Fisherman Lake examples among his "corner-notched" type, which he in turn extends back to the Northwest Microblade tradition (Millar, 1968:Fig. 27). Considering the time span involved, this is probably not a viable type. Generally, these points seem to exhibit more variability than the small notched points.

Teardrop Points

Nine specimens have a teardrop shape, i.e. unnotched and more or less round-based, with their greatest width toward the base. Only three are complete. Two are large specimens, 68.0 and 81.0 mm long, 30.0 and 28.0 mm wide, and 8.5 and 10.5 mm thick, respectively (Fig. 4,h-i). The longer is unfinished, and would perhaps have been more lanceolate than strictly teardrop-shaped. The third is much smaller, only 28.0 mm long. Other examples are all basal fragments, with widths ranging from 15.5 to 28.0 mm, and thicknesses ranging from 3.5 to 6.5 mm (Fig. 4,j). All are made of dark chert or, in two cases, light-coloured welded tuff. None shows any sign of basal grinding, or even a clear haft element. The quality of flaking is uniformly poor, especially considering the excellent quality of some of the raw material. One specimen, for instance, has a striking platform remnant which, while trimmed, is still visible on the basal corner.

Discussion

Within the study area these points have been classified as "Type Q Round Base" points (Millar, 1968:179-180), while similar specimens from the southwest Yukon have been termed Catan points (MacNeish, 1964:407) or, more simply, teardrop points (Workman, 1978:209-210). In both areas, they seem to be primarily late prehistoric in date, although Millar (1968: Fig. 27) notes a few Mackenzie complex examples, and Workman mentions a specimen from immediately below the White River ash level in the southwest Yukon. A general comparison might also be made with a few specimens from the upper levels at Klo-Kut in the northern Yukon (Morlan, 1973: Pl. 5,a-c). With two specimens from MjTp-1, these points are the only "type" which has yet been found throughout the entire Mackenzie valley, as well as the only one with a local ancestry going back prior to A.D. 700.

It is perhaps doubtful that these are all actually projectile points. One complete specimen, for instance, has an impact burination near the tip on one margin, but the material (welded tuff) is so brittle that this is not necessarily indicative of function. The same specimen has a polished area on the margin which seems to suggest that it may have actually functioned as a biface knife. The absence of a clear haft element also points to this conclusion.

FINE BIFACES

Fine bifaces (f.b., Table 5) are distinguished from projectile points on the basis of size and morphological characteristics; the teardrop points, already described, seem to occupy an ambiguous middle-ground. These are all comparatively thin specimens, completely flaked on both faces, with no haft element and a regular if occasionally asymmetrical outline. They are believed to be knives. Most have regular marginal retouch, but I am less strict than Morlan (1973b:27-29) in distinguishing finished from unfinished examples. The seven complete examples seem to represent a single series in terms of outline, ranging from elongate (Fig. 5,a) to broad (Fig. 5,f) and broadly asymmetrical (Fig. 5,g). Lengths range from 70.0 to 125.0 mm, widths from 33.0 to 55.0 mm, and thicknesses from 9.0 to 13.0 mm. Thickness seems to be largely a function of the quality of workmanship. Ends vary from pointed to rounded. The sample also includes four large fragments (Fig. 5,h-j), all seemingly elongate, and five smaller edge fragments. Dark chert is the most common raw material, but two specimens are made of light-coloured welded tuff.



FIG. 5. Fine bifaces from the Mackenzie valley.

Discussion

Fine or finished biface knives seem to be comparatively rare in late prehistoric assemblages in the Mackenzie valley. They are outnumbered by projectile points, for instance, by about three to one, whereas in earlier time periods the ratio seems to have been more evenly balanced (see Millar, 1968:Figs. 27,31). The same situation has been noted in the southwest Yukon (Workman, 1978:225). Morphologically, the Mackenzie valley specimens cross-cut three of Workman's (1978: 225-230) more important biface categories, and similar examples occur in most archaeological cultures.

CRUDE BIFACES

There are three crude, heavy bifaces (c.b., Table 5) in the

collection, two of basalt and one of coarse quartzite. All have an elongated oval outline, with rounded ends and a biconvex cross-section, and are crudely flaked with blunted edges (Fig. 6,f-g). Two exhibit some facial cortex, and one of these has part of an edge which is unflaked, but otherwise flaking is continuous. Lengths range from 131 to 183 mm, widths from 81 to 89 mm, and thicknesses from 24 to 32 mm. Considering the coarse quality of the raw material, it seems unlikely that these specimens could have been flaked into sharp-edged tools; quite possibly they represent unfinished axes or adzes, so that the distal end (at least) would have been ground into shape. Certainly they are heavy enough, with weights ranging from 473.5 to 560.5 g.

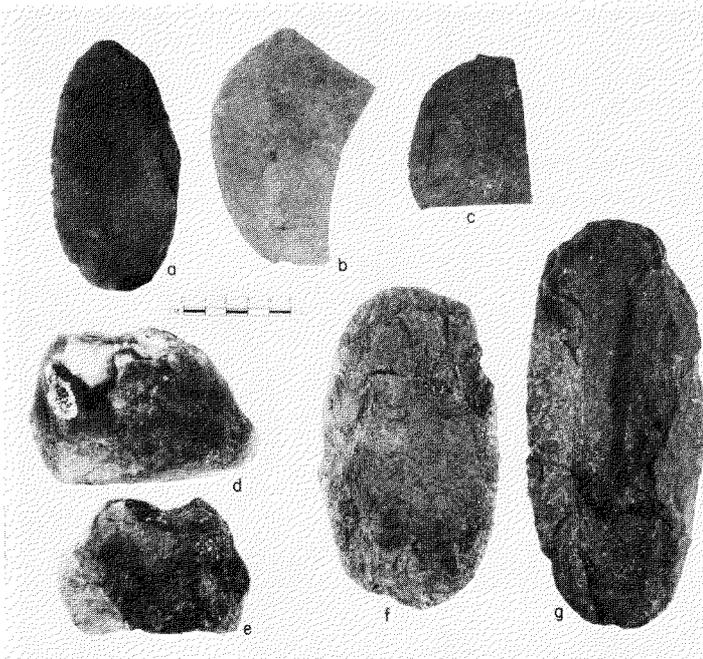


FIG. 6. Crude and tabular bifaces from the Mackenzie valley.

Discussion

As they stand, these tools do not compare well outside the study area, being, for instance, heavier and blunter than the heavy flaked tool category of Workman (1978:317) or Morlan

(1973b:35). Chipped and ground basalt axes and adzes, however, are widespread in the North.

TABULAR BIFACES

Five tabular bifaces (or chi-thos; t.b., Table 5) have been recovered. All are made on flat plates of shale or bedded sandstone/quartzite 5-12 mm thick. Retouch is limited to the edges, where it is usually continuous and blunts rather than sharpens the edge, presumably to facilitate hide-scraping. Only two are complete. One is irregular in outline, and has been worked along one margin only. The other (Fig. 6,a) has an elongate oval outline (117.5 × 61.5 mm). At least two of the fragmentary examples appear to have been more round-edged (Fig. 6,b-c).

Discussion

In the western Subarctic, tabular bifaces are mainly but not entirely a late prehistoric tool type, being fairly common, for instance, at Klo-Kut (Morlan, 1973a:257-258), in the upper levels at Dixthada (Shinkwin, 1979:119-120), in the Aishihik phase in the southwest Yukon (Workman, 1978:237-239), and in Taltheilei tradition sites (Noble, 1971:111).

SCRAPERS

Scrapers are divided into three categories: endscrapers (e-s), side scrapers (s-s), and end and side scrapers (e&s-s) (abbreviations refer to Table 5). An endscraper has steep retouch along a short side, normally the distal end of the flake, whereas a side scraper is retouched along a long margin. An end-and-side scraper, of course, is retouched along both a short and a long margin. Specimens exhibiting a retouched margin less than 3 mm high are somewhat arbitrarily regarded as worked flakes, and have not been included in this analysis.

Endscrapers

Twenty endscrapers can be divided into four groups on the basis of working-end morphology, following the approach outlined by Workman (1978:268-270). Generally, endscrapers are among the most common of artifacts, and come in a

TABLE 5. Distribution of some lithic artifacts in the Mackenzie valley

Site	f.b.	c.b.	t.b.	e-s I	e-s II	e-s III	e-s IV	e&s-s ang.	e&s-s round	s-s	burin?
JcRw-1								3	1	1	
JcRw-3b	7	2		2	2	1	1		1		
JcRw-13					1*	2*					
JcRw-16										1	
JcRw-51	4				1	1	2	4	2		
JjRd-2	2		1				1	1	2	1	1
JIRi-1	1										
KgRi-11							1				
LcRq-1	2	1	2	1*	2*	2			2	3	1
LcRq-2	1										
LcRq-3											1
MjTp-1			2	2							
TOTALS:	17	3	5	5	6	6	5	8	8	6	3

* Includes one margin of double-bitted endscraper.

bewildering variety of shapes. The significance of this variation is far from clear, but much of it seems to be idiosyncratic or expedient, being barely amenable to typology. Certainly gross outline terms such as "thumb-nail" or "triangular" describe categories that do not seem to vary in meaningful ways through time or space. Another typological approach emphasizing the distal end, and hence presumably function, results in the creation of categories whose significance is still unclear, but which nevertheless may be useful. The following variables have been employed.

Chord of Working End: When plotted, chord lengths from the sample describe a simple bell curve. Dividing along the mean, a narrow chord is defined here as one which is <23 mm long, while a wide chord has a length of >23 mm.

Maximum Thickness of Retouched End: The distribution for this measurement is trimodal for the sample, so that retouch height is described under three headings: thin (<6.1 mm), average (6.1-9.0 mm), and thick (>9.0 mm).

Chord/Thickness Ratio: The distribution of chord length/thickness of the retouched end also proved trimodal. Specimens can be described as narrow and/or thick (<4.01), average (4.01-5.50), and broad and/or thin (>5.50).

Weight: There is again a trimodal distribution, and specimens can be described as light (<5 g), average (5-8 g), or heavy (>8 g).

It should be stressed that these numeric criteria apply only to the present sample, and are different, though not greatly so, from those employed by Workman (1978:269-270). As he notes, "investigators working in adjacent areas will have to derive their own magic numbers." Four groupings result when these criteria are applied to the sample.

Group I Endscrapers (e-s I): These are narrow endscrapers, with thin working edges and low-to-average chord/thickness ratios. There are five specimens, including one margin of a double-bitted endscrapper. Weights range from 1.7 g (light) to 7.2 g (average). These specimens are all made on the distal

ends of chert or welded tuff flakes, and tend to be flat-topped, irregular, and rather poorly made (Fig. 7, a-b).

Group II Endscrapers (e-s II): These are narrow endscrapers, with average-to-thick working edges and low chord/thickness ratios. There are six examples, including single margins from two double-bitted endscrapers. Weights range from 3 to 8 g (light to average). Specimens tend to be more regular in outline, better made, and to have a triangular cross-section (Fig. 7, c-e).

Group III Endscrapers (e-s III): This grouping describes wide endscrapers with a thick-to-average working end and low chord/thickness ratios. Weights range from average (6 g) to heavy (16 g). The six examples again include one margin of a double-bitted specimen. Examples tend to be regular in outline and flat-topped (Fig. 7, f-g).

Group IV Endscrapers (e-s IV): This last category describes wide, thin, and comparatively flat endscrapers with average-to-high chord/thickness ratios (Fig. 7, h). There are five examples, all light to average in weight (2.7 - 7.8 g).

Discussion

It is difficult to equate these groupings with those formulated by Workman, but there is a general equivalency between my Group I and his "Narrow Relatively Thin-Bitted Endscrapers", my Group II and his "Narrow Thick-Bitted Endscrapers", my Group III and his "Large Moderately Thick Endscrapers", and my Group IV and his "Broad Thin Endscrapers" (Workman, 1978:271-278). All appear in late prehistoric assemblages in the southwest Yukon, or are rare enough that their absence may be fortuitous. What may be significant is the absence from our sample of what Workman terms "Typical Endscrapers". This is the single most common form in the southern Yukon but, as is apparently the case in the Mackenzie assemblages, seems to be absent from the late prehistoric period. The two double-bitted endscrapers (Fig. 7, i-j) represent a rare form which seems to be usually associated with middle prehistoric assemblages in the western Subarctic (Millar, 1968:240; Workman, 1978:271).

End-and-side scrapers

End-and-side scrapers are divided into two major categories — rounded and angular, depending on the angle of the lateral-distal juncture. As Workman (1978:280) notes, the distinction may be functional, since the projecting edges of the angular form would have made them unsuitable for hide-working.

Angular End-and-Side Scrapers (e&s-s ang.): Eight specimens are included in this category. All are made of dark chert, and tend to exhibit the highest, steepest retouch distally. Lateral margins are variable in form. One (Fig. 7, q) is markedly concave with a graver spur at the point of juncture with the distal end. Three others are more mildly concave, and the lateral-distal juncture, while pointed, shows no signs of use (Fig. 7, n-p). Weights vary between 5 and 10 g. Applying the classifying criteria described above to the distal end, one of these specimens would be classed as Group I, one as Group II, three as Group III, and three as Group IV.



FIG. 7. Endscrapers from the Mackenzie valley.

Rounded End-and-Side Scrapers (e&s-s round): This is a very haphazard grouping, for out of nine specimens six are broken. All, however, are (or were) ovate in outline, and were retouched around the entire circumference at a fairly constant angle and height. Two of the better-made examples exhibit bifacial chipping but have the plano-convex profile which distinguishes scrapers (Fig. 7,m). Another (Fig. 7,l) has an isolated graver spur. Retouch heights vary from 3.0 to 12.0 mm, weights from 4.0 to 11.0 g. The sample includes one welded tuff and one quartzite specimen, and the remainder are of dark chert.

Discussion

Wilmeth (1978:105; see also MacNeish, 1954:250) has suggested that angular scrapers with a concave lateral margin, and often a graver spur, represent a late prehistoric Athapaskan horizon-marker. As well as specimens from his own investigations in central British Columbia, he cites examples from Klo-Kut (see Morlan, 1973a:Pl.3,a), the southern Yukon (see Workman, 1978:281), and the Dismal River aspect on the Great Plains. Several of the angular end-and-side scrapers from the Mackenzie valley fall into this category. Nonetheless, Wilmeth's suggestion is difficult to evaluate, and it can be pointed out that there are examples in the clearly non-Athapaskan Shield Archaic tradition in the Keewatin District (Wright, 1972:Pl. IV,7). Workman (1978:286) has noted that end-and-side scrapers are very rare in late prehistoric levels in the southern Yukon, but this does not appear to be the case in the Mackenzie valley.

Side Scrapers (s-s)

Only six side scrapers have been recovered from late prehistoric components in the Mackenzie valley. All are double-edged and roughly parallel-sided, with retouch along the length of both long sides (Fig. 7,r-s). None possesses spurred or denticulate margins, or spokeshave concavities. Two examples exhibit extensive dorsal thinning, but are still the thickest specimens in the collection (13.5 and 15.0 mm, respectively), having been made on unusually thick flakes. Thickness of retouched margins otherwise varies between 3.0 and 7.0 mm. One welded tuff specimen is quite small, weighing only 2.8 g, but with this exception these are unusually large scrapers, weighing between 14.5 and 25.5 g.

Discussion

Side scrapers are relatively simple artifacts and tend to be treated casually in the literature. In possessing two roughly parallel working margins, these scrapers, at least, seem distinct from specimens reported from the southwest Yukon (Workman, 1978:289-307).

Miscellaneous Scrapers

Six fragmentary scrapers are too badly broken to be classified. Five, however, have a rounded scraping margin

suggestive of end or end-and-side scrapers, while one has a straight margin similar to those exhibited by side scrapers. A seventh unclassifiable specimen exhibits an area of retouch 4.5 mm high and with a 25.5 mm chord on a markedly convex margin of an irregular flake. It seems to be a "tool of the moment."

BURINS

There are three possible burins in the sample. One, from JjRd-2, is a thick chert flake with a possible transverse burin facet at the proximal end. Forming an acute angle with it is another facet, this time ground and polished, located on the former striking platform remnant of the flake. Both margins of the possible struck facet show heavy wear and crushing. This specimen was not apparently noticed by MacNeish (1953:31). A specimen from LcRq-3 is similar, in that its technological status as a burin is questionable but there is clear evidence of wear. It is made on a twisted side-blow flake of light welded tuff, and has two burin-like facets on either end of a long margin. There is heavy wear on adjacent edges, but it is possible that at least one of the facets is actually a twisted hinge fracture. The third specimen (from LcRq-1) is even less convincing. It is a fragment of light-coloured welded tuff with an apparently struck facet along one margin, but no apparent wear. As a kind of glass, welded tuff is very brittle, and frequently breaks in a burin-like fashion (see Cinq-Mars, 1973:4).

Discussion

From a technological point of view none of these burins is entirely convincing. However, simple flake burins do appear, if rarely, in late prehistoric contexts at Dixthada (Shinkwin, 1979:125), Klo-Kut (Morlan, 1973a:125), and possibly the southwest Yukon (Workman, 1978:259). They are apparently absent in the Taltheilei tradition.

"MICROBLADES"

The presence of true blades or microblades in late prehistoric assemblages has been claimed only in the Fisherman Lake area, where Millar (1968:207-212) lists a total of 18 "fine" and three "coarse" "prismatic blades" from late prehistoric components at JcRw-3a, -3b and -13. The fine specimens, in particular, are described in terms of true blades and are not distinguished, for instance, from undoubted and much earlier Northwest Microblade examples (Pointed Mountain complex). This notwithstanding, the specimens are best considered as blade-like, and not as true blades, in that they are more or less linear but otherwise give no indication of purposeful, repeated, and controlled production. The presence of microblades, this time real ones, in the upper component at the Esker Bay site has already been mentioned, and is attributed to mixing from the lower microblade level.

Discussion

There is little doubt that microblades had gone out of use

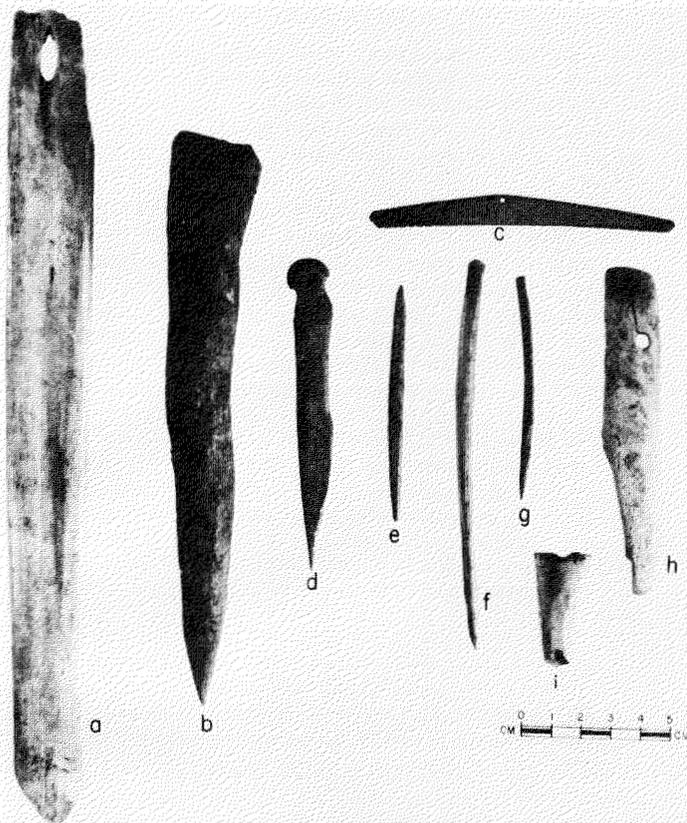


FIG. 10. Bone and antler tools from the Mackenzie valley.

and Savage (1973:8) have suggested that it may be a tool for removing bark from trees.

MISCELLANEOUS SPECIMENS

Modified Deer Phalange

A moose or caribou phalange has been whittled into a hollow open-ended cone (Fig. 10,i), identified by MacNeish (1953:31) as a cup for a cup-and-pin game. It comes from the same site as the pins with the same suggested function (MiTu-1).

Knife Handle

A flat bone piece (Fig. 10,h) has two gouged holes near one end, one of which holds a copper rivet. It has been plausibly identified as a knife handle fragment (MacNeish, 1953:31), and comes from MiTu-1.

Crude Bone Point

A caribou or, more likely, moose metapodial section with an elongate, parallel-sided outline has a crude, sawed point at one end (Fig. 10,a). The other end has a medial hole which is simply the result of cutting through a natural declivity in the bone. The lateral margins have been smoothed and thinned on both surfaces, but are quite dull. It has been identified, rather implausibly, as a netting needle (MacNeish, 1953:31, Pl. IV, Fig. 1), and comes from MiTr-1.

"Beaver Tooth Gouge"

A beaver tooth identified as a gouge by MacNeish (1953:31) shows no evidence of cultural modification (MiTr-1).

Snowshoe Needle

A bone snowshoe needle has a laterally-placed eye at the midpoint and incised decoration on both faces (Fig. 10,c; Fig. 11). Depicted are two horned or eared animals connected (tethered?) to a central structure, possibly a tent or lodge. The motif is similar on both faces, but has been somewhat obscured by root etching. The animals have been variously interpreted as muskrat, moose, or caribou (Gordon and Savage, 1973:8-9). The lateral margins have been scored for whittling. This uniquely decorated piece comes from the Whirl Lake site (MjTp-1).

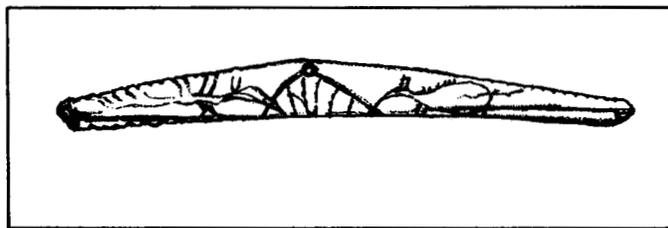


FIG. 11. Decorated snowshoe needle.

CONCLUSIONS

During the late prehistoric period the Mackenzie valley apparently was occupied by a reasonably uniform cultural entity extending from at least the Fisherman Lake area to the Keele River or Fort Good Hope, and possibly all the way to the Delta. This cultural entity does not seem to have been particularly distinctive; its most characteristic hallmark (the Prairie side-notched point), for instance, is a borrowing from the Great Plains. Nevertheless, the status of phase seems warranted, and the name Spence River phase (after MacNeish, 1954) is suggested. Presumably, the Spence River phase is the cultural ancestor of the Slavey-Hare speakers who occupied the valley historically, but it must be pointed out that this is an argument from parsimony alone, and is not strongly warranted by the interpretation of the actual archaeological data.

There are at present two fairly coherent late prehistoric cultural entities in the western Subarctic with which one can compare the Spence River phase. One centres on what LeBlanc (1983) has recently termed the Klo-Kut phase in the northern Yukon, based on the Klo-Kut and Rat Indian Creek sites. Slightly distinctive but still very closely related is Dixthada (Shinkwin, 1979) on the upper Tanana, and a number of small Brooks Range sites including Kavik (Campbell, 1968). Linking traits include the tapering stemmed Kavik point; flake burins; a fairly well developed copper industry (especially at Dixthada); tabular bifaces; conically tanged, unilaterally barbed bone and antler arrowheads; and sagittally-split, often decorated two-handed beamers (Campbell, 1968; Morlan, 1973a:471-481; Shinkwin, 1979:164-168; LeBlanc, 1983:

everywhere in the interior Northwest by A.D. 500 (see Shinkwin, 1979; Clark, 1981), and in some locations much earlier. In the southwest Yukon, for instance, they disappear by about 2500 B.C. (Workman, 1978), and they may have a similarly early demise in at least the southern part of the Mackenzie valley (Morrison, 1984).

NOTCHED PEBBLES

Notched pebbles, presumed to be netsinkers, have been reported from several sites, but the two reported from JcRw-13 and one from JcRw-3a (Millar, 1968:Fig. 51) could not be located in the artifact collections. This leaves only two possible netsinkers from MjTp-1. Both are made on broken sandstone cobbles and have a slight notch on one side (Fig. 6,d-e). It is unclear whether they were notched deliberately.

Discussion

Notched pebbles have a long history in the western Subarctic (Workman, 1978:328). Whatever their function, it seems clear that net fishing, at least, was an aboriginal practice (see Lamb, 1970:208).

2. BONE AND ANTLER TOOLS

WEAPON POINTS

Barbed or Bladed Arrowheads

Three barbed or bladed arrowheads made of bone or antler have been recovered from sites north of Fort Good Hope. One specimen (Fig. 8,f) has a triangular, sharp-edged cross-section, with five unilateral barbs cut into one edge, flanked on either side by a double incised line. The tang is plain and conical, and the shoulder above it poorly defined. The overall length is 149 mm. A similar example, 212 mm long, is more biconvex in section (Fig. 8,e). It also has been barbed along one edge, with four barbs flanked by a single incised line. The tang is again conical, but the shoulder above it is well marked. A distal fragment differs from either of these in having an iron endblade, secured with a copper rivet (Fig. 8,d). The shaft is cylindrical, and has been broken above any hafting element. Its iron endblade dates it to the protohistoric or early historic period.

Blunt Arrowheads

Three blunt arrowheads all come from the same site (Table 6), and each exhibits a different style of hafting element. The first specimen is damaged, but has a closed, gouged socket (Fig. 8,a). It also has a four-lobed tip, and is encircled by two incised lines. The second (Fig. 8,b) has a bifurcated V-shaped socket, formed with a drill and whittling knife and having a slight lashing bed near the end. It has a three-lobed tip, and has been decorated with an encircling spiral line. The third blunt arrowhead (Fig. 8,c) has a conical pointed tang like the barbed arrowheads, set below well-marked shoulders. The tip is again three-lobed, and there are two encircling decorative lines.

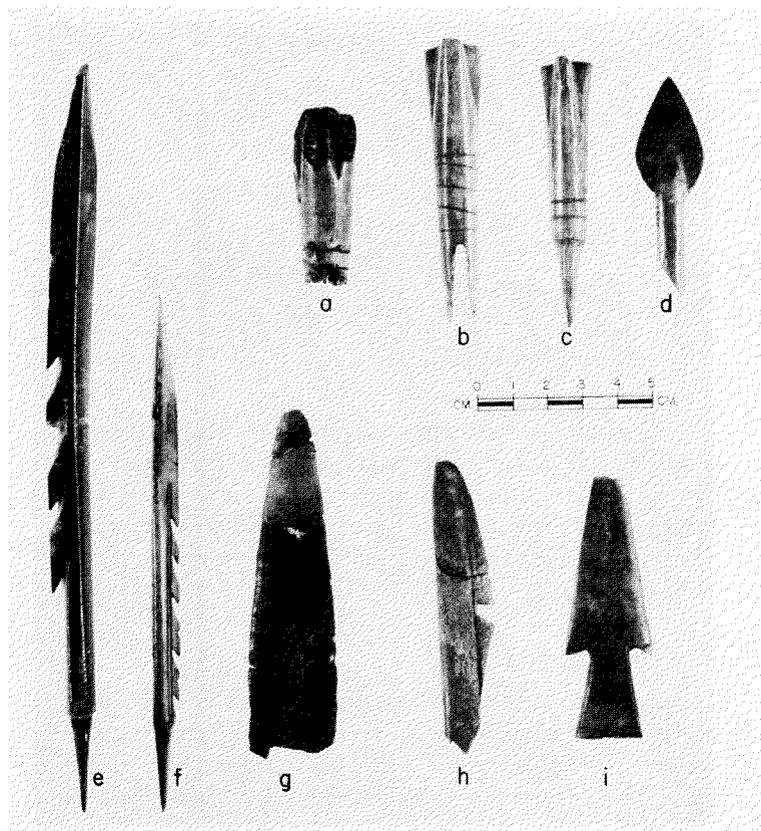


FIG. 8. Arrowheads from the Mackenzie valley.

Discussion

Bone and antler arrowheads essentially identical to these have been reported from several sites in the northern Yukon and Alaska, including Klo-Kut (Morlan, 1973a:278-287, 295-296), Rat Indian Creek (LeBlanc, 1983:318-321), and Dixthada (Shinkwin, 1979:108-109). Common traits include the plain, shouldered, conical tang, the small unilateral barbs, the incised barb lines, and, in the case of the blunt arrowheads, the lobate tip. Because of poor organic preservation, little is known of bone and antler arrowheads in the southern Yukon (Workman, 1978:331-337), but apparent differences include the absence of barb lines, and a tendency towards placing a single barb well down from the tip. Even less is known of the bone and antler points in Taltheilei, and their use is largely a matter of inference (see Gordon, 1977:76). Even in the Mackenzie valley, these six specimens all come from the area north of Fort Good Hope, and are not necessarily characteristic of the whole region.

As well as having similarities in the northwest interior, these arrowheads resemble Thule culture specimens from the Eskimo area. Morlan (1973a:477-478; see also Campbell, 1962:49) has stressed this observation for the Klo-Kut arrowheads, using them, among other traits, to posit a Kutchin origin in a Brooks Range Inuit/Dene "Arctic Woodland Culture" (cf. Giddings, 1952). Further work has made this suggestion less tenable. Within the Dene sphere, similar arrowheads have now been found well outside the Kutchin area, e.g. at Dixthada. Furthermore, as LeBlanc (1983:431) points out, the resemblance is not an exact one, since the con-

TABLE 6. Distribution of bone and antler artifacts in the Mackenzie valley

Site	Barbed/Bladed Arrowheads	Blunt Arrowheads	Misc. Points	Beamers	Flesher	Awls/Pins
JcRw-3a			1			
JcRw-3b			1			1
JIRi-1			1		1	
MbTb-1				1		1
MbTc-1	1					
MiTr-1						4
MiTU-1	2	3		1		3
MjTp-1				1		15
TOTALS:	3	3	3	3	1	24

sistently small and unilateral barbing of the interior specimens cannot be matched in Thule collections. The unadorned, plain tang is another distinguishing characteristic; these occur on Thule culture arrowheads but are comparatively rare in comparison with spurred, ringed, and knobbed conical tangs (see Morrison, 1983:112-116).

Miscellaneous Weapon Points

Three apparent weapon tips are too fragmentary and too poorly preserved to be further classed. One (Fig. 8,i) is made of bone. It has a flat cross-section and two large opposite barbs, a damaged tip, and a sawed/snapped proximal end. Figure 8,h illustrates an antler weapon tip with a single notched barb, flanked by an incised line on either face. The cross-section is teardrop-shaped, with an edge above the barb on the outer or barbed margin. It is dull enough that it could probably only be the tip of a fish spear or harpoon. The final specimen (Fig. 8,g) is a tip fragment from a large, biconvex, sharp-edged, comparatively flat antler point. There are strong scraping and gouging marks visible on both faces, along with evidence of some rodent gnawing. Both edges have been dulled just distal to the broken end, probably for hafting. From its size and comparative sharpness this specimen may be a spear point.

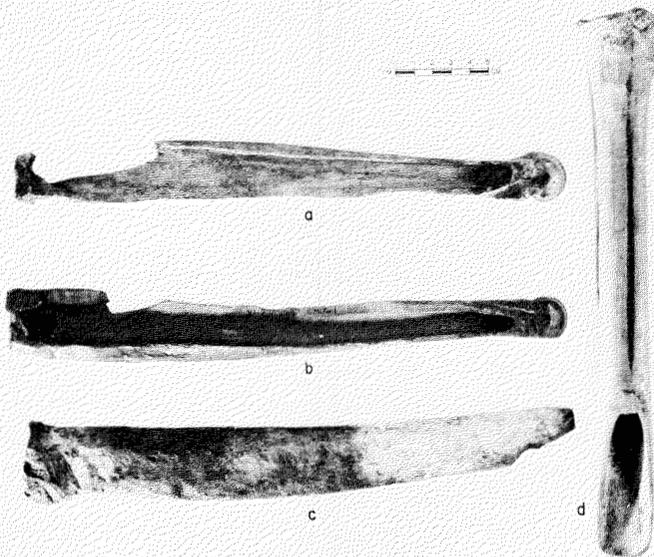


FIG. 9. Hide-working tools from the Mackenzie valley.

HIDE-WORKING TOOLS

Beamers; or Two-Handed Scrapers

Two beamers were made on caribou metapodials, split on the sagittal plane, and with the condyles still intact (Fig. 9, a-b). A third (Fig. 9,c) was probably made on a moose metapodial, judging from the size. It lacks condyles, but was again split on the sagittal plane.

Discussion

Two-handed beamers made on split metapodials are a common artifact throughout the north. However, as Morlan (1973a:305) points out, beamers from coastal Eskimo sites are characteristically split on the coronal plane (see, e.g., McGhee, 1974:68; Stanford, 1976:55) whereas beamers from the interior, including our Mackenzie valley specimens, have been split sagittally (see also Shinkwin, 1979:115; LeBlanc, 1983:321-322).

Flesher

A bone fleshing tool (Fig. 9,d) was made on the metapodial of an immature moose. The distal end was removed on an oblique angle, and the leading edge was then notched with seven teeth. The shaft has been thinned and smoothed by whittling.

Discussion

LeBlanc (1983:322) has suggested that end-of-the-bone scrapers made on whole limb bones, such as this one, represent a technological adaptation to metal tools, while prehistoric specimens are made on shaft segments (see also Morlan, 1973a:307; Irving and Harington, 1973). There are, however, no obvious file marks.

Awls and Pins

Out of 24 specimens, only one is fine enough that it may represent a needle. It is broken, and has been slightly notched on one side just above the break. Two larger pins (Fig. 10, f-g) are also slightly notched at the base, presumably to hold a string; MacNeish (1953:31) suggests they are pins for a cup-and-pin game. Two others are clearly powerful awls made from moose splint bones (Fig. 10,d). The sample also includes a heavy antler point, crudely chopped at one end and sharpened to a slightly spatulate tip at the other (Fig. 10,b). Gordon

434-438). Further removed but still related, at least by the Kavik point, is the Aishihik phase in the southwest Yukon (Derry, 1975; Workman, 1978). LeBlanc (1983) suggests that these assemblages and phases be grouped into the same "technocomplex."

The second major cultural entity is the less distinctive but apparently more homogeneous Taltheilei (or Taltheilei Shale) tradition, of which only the later phases are of concern here. Taltheilei is distributed throughout the eastern half of the Mackenzie District, much of interior Keewatin, and the northern fringe of the prairie provinces, and is perhaps best known from eastern Great Slave Lake (Noble, 1971) and the stratified MiGod site north of Dubawnt Lake (Gordon, 1976). Projectile points include unground lanceolates, but are characteristically notched; the distinctive Kavik point type is absent, as are burins; copper is rare; and nothing, really, is known of the bone and antler industry. Much of the rest of the assemblage is comprised of rather undiagnostic chipped stone tools which have not yet been presented in analytical form. Tabular chithos are among the few specific similarities with the Yukon/east Alaskan assemblages.

The Spence River phase shows a general relationship with both these cultural spheres, especially with the Taltheilei tradition on one hand, and the southwest Yukon Aishihik phase on the other. A few fairly detailed similarities with the Aishihik phase have been noted, including "Catan" or teardrop points, Prairie side-notched points (rare in the Yukon), possible flake burins, and some aspects of scraper morphology. Probably the most important trait shared with Taltheilei is a negative one: the absence of the distinctive Kavik point type. As well, both assemblages are dominated by generally unground notched points which, while not identical, may have been derived from a common source. Detailed similarities with Dixthada and the Klo-Kut phase seem largely limited to the bone and antler industry, and are difficult to evaluate without good organic preservation elsewhere. Even if they proved quite specific, the similarities may still have relevance only to the northern end of the Mackenzie valley.

Following LeBlanc (1983), it is suggested that the term "technocomplex" rather than tradition be used to describe the kind of cultural relationships apparent between the Mackenzie valley and areas to the east and west. A technocomplex has been identified as "a group of cultures characterized by assemblages sharing a polythetic range but differing specific types of the same general families of artifact types, shared as widely diffused and interlinked responses to common environment, economy and technology" (Clarke, 1978:206). The very vagueness of the term, I think, is a good reflection of the current status of archaeological data in the Mackenzie valley.

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