# Historic Archaeology and Ethnohistory at Healy Lake, Alaska JOHN P. COOK<sup>1</sup>

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ABSTRACT. A habitation site at Healy Lake in eastern Alaska was occupied by Alaskan Natives more or less continuously for more than 10 000 years. After contact, Euro-American traders entering the area in the nineteenth century influenced the subsistence patterns of the Native people to the extent that a Native village evolved at Healy Lake, and this led in turn to the founding of a local trading post — Newton's — at the mouth of the Healy River nearby. In this way, a fixed Native community developed at Healy Lake in the late nineteenth century, with members of this community dealing with early Hudson's Bay and American traders on the Yukon River. In the early twentieth century — some time after 1910 and perhaps not until after 1917 — the community became permanent, and more sedentary, with more focussed trading patterns. Thus, trade became more localized (to Healy Lake and neighboring Tanacross) and Native interests shifted away from the Joseph winter village, and from the Fortymile and Yukon rivers.

Key words: Alaska, trading patterns, Healy Lake, habitation, subsistence, village, Natives, traders

RÉSUMÉ. Un site de peuplement à Healy Lake dans l'est de l'Alaska a été occupé par des autochtones alaskiens de façon plus ou moins ininterrompue pendant plus de 10 000 ans. Après le contact, les commerçants euro-américains qui vinrent dans la région au XIX<sup>e</sup> siècle influencèrent les schémas de subsistance du peuple autochtone au point qu'un village autochtone fut établi à Healy Lake, ce qui entraîna la création d'un poste de commerce local, le poste de Newton, à l'embouchure de la rivière Healy voisine. C'est ainsi qu'une communauté autochtone fixe s'est développée à Healy Lake à la fin du XIX<sup>e</sup> siècle, dont les membres faisaient le commerce avec la Compagnie de la baie d'Hudson et les commerçants américains sur le fleuve Yukon. Au début du XX<sup>e</sup> siècle — un peu après 1910 et peut-être pas avant 1917 —, la communauté est devenue permanente et plus sédentaire, avec des schémas commerciaux plus prononcés. Le commerce est ainsi devenu plus localisé (à Healy Lake et à Tanacross tout proche), et les autochtones n'ont plus porté autant d'intérêt au village d'hiver de Joseph ainsi qu'au fleuve Yukon et à la rivière Fortymile.

Mots clés: Alaska, schémas commerciaux, Healy Lake, habitation, subsistance, village, autochtones, commerçants

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#### INTRODUCTION

In 1968, excavations began at the Healy Lake Village site (XDB-020) in east central Alaska (Fig. 1). Supported by the National Museum of Canada and the National Science Foundation (Grant GS-2584), the primary focus of the project was an explanation of the earlier prehistory of the upper Tanana valley. Robert McKennan, of Dartmouth College, was principal investigator; the present author was in charge of the excavations and has previously reported some of the findings (Cook, 1969, 1972, 1975).

Although previous archaeological discussions of Healy Lake have emphasized the early prehistoric components, the historic village site material is also important. It is the only major site that has been excavated in the upper Tanana valley, a large area in the eastern interior of Alaska that is still poorly known archaeologically. The late component at the Healy Lake site is particularly valuable and interesting because pertinent historic and ethnographic data can aid substantially in interpreting the archaeological record. The historic data include, among other sources, records, photographs, and oral history from descendants of a white trader who owned a post near the village. The ethnographic data include information drawn from notes by Robert McKennan during his fieldwork in the region. Together, these sources give us a fuller picture of historic Healy Lake than any one of them could supply independently. I will begin by discussing the archaeology, continue with the ethnohistory and ethnography, and conclude by looking at the composite picture we get by incorporating information from all three sources.

# ARCHAEOLOGY

The site is located at an abandoned Tanana Athapaskan village on the northern shore near the outlet of a shallow lake. The village was abandoned during the early 1940s after many of the people, especially children, succumbed to a severe respiratory sickness; most of the survivors moved to the nearby communities of Tanacross and Dot Lake, situated along the Alaska Highway. Some historic structures, including cabins and caches, are still present, although deteriorated (Fig. 2). Several other sites around the lake were located, tested, but not excavated, including the Ashes Point site (XMH-205), which appears to be late prehistoric and may document the time immediately prior to the historic component(s) at the village site. Cook (1969) gives additional data on all the sites, including background environmental information.

Between 1968 and 1972, more than 170 units (5 x 5 ft.) ( $1.5 \times 1.5 \text{ m}$ ) were excavated; these constitute only about 20% of the total site (Fig. 3). The historic, or upper cultural, components of the site were primarily contained in a variably thick (1-10 in.) (25-250 mm) mat of grass and sod above loess that contained earlier cultural materials. Excavations extended, in arbitrary 2-inch (50 mm) levels, down about 2 feet (0.6 m) within this loess.

The upper cultural unit contained more than a fifth, or about 2500 specimens, of the total inventory from the site (Table 1). Much of it has still not been fully analyzed; a large amount of "rock" (fire-cracked and miscellaneous) has been counted but not further examined. Although the faunal material from the site that had not been burned could be attributed to these late times simply because it had not decomposed, there is not very much and it is quite fragmentary. The material has been counted and weighed but not identified to species.

# Lithic Material

Most of the lithic material from this level could not be confidently attributed to the historic period, since dis-

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FIG. 1. Southeastern Alaska showing Healy Lake 160 km upstream from Fairbanks.

placement from lower and earlier levels is evident. This mixed situation was due to digging by dogs and people excavating features such as post holes and cache pits. Thus, except for stone artifact types that were *only* found in the upper cultural level, lithic material is excluded from the analysis.

# Metal

One-half of the historic artifacts that are analytically useful are made of metal. Most of these are fragments of cans, only a few of which can be recognized for their former contents. Some of these include Clabber Girl baking powder, Lipton tea, Spam (meat), Edgeworth plug tobacco, Copenhagen snuff, and a Mentholatum cap.

Wire of all sizes was common; much of it was likely used for snares, but this cannot be corroborated. Snaps and swivels, some of which are connected to chain, and lengths of chain were presumably used for restraining dogs. This category of artifacts was not common and it is presumed that not many dogs were maintained, at least in the area excavated. Lending credence to this is the low number of distinctive hollows made by dogs to escape summer heat.

More than 600 nails were recovered; about 10% of these were square-cut; the rest were wire nails of various sizes. Other items include a number of knives and knife blades, scissors, files (which may have been used as metal stock), axe heads, and hammer heads. Thre is a fine thimble, a large hairpin, spoons, an 1899 Indian Head penny, buckles (7), various buttons, four clock parts, and a variety of hardware. The latter include such things as things as hinges, doorknobs,

and locks. There are also three metal hide scrapers, or *tchithos*, continuing a precontact pattern (Fig. 4).

Implements for food procurement, primarily hunting, account for more than a fourth of the metal artifacts. A secondary function would, of course, have been for use as defensive or offensive weapons. There are seven metal arrowheads (Fig. 5); five of these are blunt, for use with small game or birds. Spent cartridge cases were utilized in this fashion for two of them. However, most of the artifacts in this category relate to firearms. Some parts from smoothbore rifles and three musket balls were recovered. One nearly complete rifle proved to be a Model 1894 Winchester (.25-35 caliber) with a shortened barrel (Flayderman, 1980:274). However, the number and variety of cartridge cases are more informative. There are 249 of these; 23 are for shotguns. Except for .22 caliber cases, no rim-fire specimens have been identified. Table 2 lists the type of cartridge cases at the village site. The out-of-use date is an approximation, of course, since the traders may well have had old stock. But it should be noted that some were discontinued well before the 1930s (Barnes, 1980).

Net fishing is reflected by 36 lead net weights; evidence for line fishing may be seen in two fish images, one made from bone and the other of non-native copper. Only three trap parts were found at the village site.

#### Glass and Ceramic Products (20%)

More than 270 pieces of glass were found. The majority of these are flat glass, like window glass. A small percentage

TABLE 1. Synoptic summary of excavated material

Description	(Total N = $2386$ )	N	Description	N
1. Bone (N = 211) $8.8\%$			fork, spoon	8
1.0 bone (unworked)		180	fountain pen	1
1.1 antler, worked		1	harmonica	2
1.2 bone, teeth		9	metal comb	1
1.5 bone (worked)		20	safety pin, frag	1
1.9 snail shells		1	scissors	2
2 Motol (N = $1242$ ) 52 10%			stove lid	1
2. Metal $(N = 1242)$ 52.1%		200	thimble	1
2.0 metal, miscenaneous		62	2.9 miscellaneous	42
2.1 containers/cans		27	battery frag	1
can tabaaca		27	bottle cap	2
metal tuba		1	brake shoe	1
nill her		1	Indian Head cent	1
2.2 clothing parts		26	key	1
2.2 clothing parts		10	metal bar	12
button metal		10	sled bracing	1
2.3 hunting /fishing /tranning		320	spark plug	1
aun parts		5 <u>2</u> 5 8	wheel, cogged	1
gui parts		285	3 Lithics $(N - 388)$ 16 3%	
bullets		18	3.0 flakes	129
musket hall		3	3.1 rock	122
net sinker		36	3.3 flaked artifacts	136
metal arrowheads		6	3.4 ground stone	150
trap part		3	3.5 ochre	2
2.4 wire/chain		<u>00</u>	5.5 benne	-
dog chain		8	4. Wood (N = 51) $2.1\%$	
2.5 tools/hardware		42	4.0 wood	18
doorknob		1	4.1 bark	. 22
file		6	4.2 charcoal	4
iacknife		Š	4.3 seeds	3
lock		7	4.4 wood, worked bow tip	3
scraper metal		â		1
2.6 fasteners		319	5. Glass (N = 494) $20.7\%$	
bolt/nut		14	5.1 bottles, complete	3
nails		275	glass	269
rivets		4	5.2 china	73
SCIEWS		5	5.3 beads	116
snikes		6	5.4 buttons	32
2.7 household		23	radio tube	
clock/watch part		4		

N.B. Figures reflect catalog numbers, not individual artifacts; some numbers may include more than one artifact.

is composed of other kinds of glass, such as a Worcestershire sauce bottle stopper, some fragmentary sauce dishes, and a few other pieces presently unidentified. Three small complete medicine bottles were found. Two were still full; the Chemistry Department at the University of Alaska identified the contents as water purification tablets (Clausen, pers. comm. 1988).

However, there are a large number of beads (1584, not counting a single specimen of dentalium). A comparison and analysis of these glass trade beads in Alaska is well overdue. There are Russian beads, Hudson's Bay beads, and those brought in by American traders. How and when the Natives acquired these are questions that remain unanswered and hardly raised. Even the typology of beads in Alaska has not been formally addressed, except in some preliminary investigations (e.g., Ketz, 1983), most of which have tried to fit the beads to Kidd and Kidd's (1970) analytical structure. Although this framework appears to accommodate most of the specimens from the village site, there are a number of beads that do not fit, particularly regarding color. There also seems to be a blurring of the divisions regarding shape between tubular and round. Table 3 gives a general summary of the Healy Lake beads.

It may be significant that only a small proportion are "very small," or seed, beads, since it has been presumed, on very little authority, that seed beads were introduced at a later time than the larger types. There are more than 60 categories of colors and color combinations. These include versions of coraline d'Aleppo beads — red with white centers (63) and red on green (13). The latter are thought to be earlier in Alaska (Ketz, 1983:215; Morlan, 1972:47). Other varieties of the same type have red on ruby or red on black. Overall, color preference slightly favors blue; one-third of the beads are blue; nearly a fourth are red. Other major colors are black, white, and green. In a small minority are such colors as lavender, orange, pink, and yellow. These "exotic" varieties are almost entirely restricted to the small or very small beads.

In comparison to glass, there are relatively few specimens of "china ware" and very little iron ware.

# HISTORY

Some of the overall historic trading development in Alaska has been described by others (Brooks, 1973; Ducker, 1983; Hulley, 1953; Mercier, 1986); a brief summary is sufficient for this presentation.



FIG. 2. Historic structures, including cabins and caches, at the Tanana Athapaskan village on the north shore of Healy Lake, abandoned in the early 1940s.

The Russians began formal trading along the lower Yukon at St. Michael's in 1833 and farther up the river at Nulato in 1839. From the east, the Hudson's Bay Company (HBC) founded Ft. Yukon in 1847 in the upper reaches of the Yukon drainage. After the sale of Alaska to the Americans in 1867, several posts were established along the Yukon River. The one at Nuklakayet (at the confluence of the Tanana and Yukon rivers), established in 1868, was situated at the site of a well-known pre-contact meeting place. Others were opened by the HBC in the Yukon Territory, at Ft. Reliance in 1874 and at the mouth of the Fortymile River in 1887. An additional Fortymile trading post was established by J.J. Healy in 1893 for the North American Trading and Transportation Co. (NAT&T). The post at Belle Isle (present-day Eagle) was initiated in 1880 by the Western Fur and Trading Co. (WF&T).

It seems that more Euro-Americans had come to the Tanana valley before the Fairbanks gold rush in 1902-03 than most researchers have believed.

It has long been known that Arthur Harper and a man known only as Bates (or Beates) travelled across the divide from the Yukon and Fortymile rivers and down the Tanana in 1881; Bates kept a diary and made notes of the new country (Schwatka, 1893:302). He was a shareholder in the WF&T from San Francisco and returned there the following summer (Mercier, 1986:61); no more is known of him or his diary and map. Lt. Allen and a party of four descended the Tanana in 1885, visiting Kheeltat's village at nearby Lake Mansfield. He does not mention Healy Lake or Healy River (Allen, 1887), although he encountered several, mostly uninhabited, Indian camps along the river and made careful maps of his route.

The Episcopalian Minister Jules Prevost, with a local trader and Native helpers, travelled up the Tanana River and across to the Fortymile River in the early 1890s (Prevost, 1893). The primary purpose of the winter trip was to make contact with as many Indians as possible; he did not specify the 19 villages that he visited. His travel route between the Tanana and the Fortymile was a common one in early Euro-American exploration of the Alaskan interior, the major nexus being the trails from the Lake Mansfield area across to the South Fork of the Fortymile River. Another connection during the 1890s was that between the upper Chena River and the upper Birch Creek area, as prospectors from the Circle Mining District spread out in the search for paying creeks (Currier, 1898).

By 1900, there were more than 2600 Euro-Americans in interior Alaska and nearly 4000 more embarking at Nome and St. Michaels, many of whom would be heading for the interior. Although most of these people listed their current occupation as prospector or miner, there were 75 who were agents, clerks, bookkeepers, and freighters for the trading companies or working as independent traders or merchants (U.S. Bureau of the Census, 1900).

John Dodson, the census enumerator from Circle, counted only 37 prospectors in the winter of 1899-1900 along the Tanana, mostly in the vicinity of present-day Fairbanks. He also counted 48 Natives, including one who was a Kobuk Eskimo (attached to one of the prospecting parties). However, he did not list any from Healy Lake, although he must have travelled near the village on his census rounds, since he counted "Kheeltat's village" near Lake Mansfield.

In 1901, John Geoghegan prospected on the Healy River, but apparently nothing came of it (Geoghegan, n.d.), although later prospectors did find some gold. In 1906, John Hajdukovich went to Healy Lake, also on a prospecting trip; he later became the primary trader on the upper Tanana (Hajdukovich, n.d.). A year later, William Newton established a trading post at the mouth of the Healy River (Fig. 6), although he may have been preceded by Josh Ray, an agent for the Northern Commercial Co. (McKennan, 1929). Apparently, Newton took over Ray's business and ran it until 1925 or 1926, when the post burned, destroying all of the trading records. However, Newton's twin son and daughter, who were born there, remember some of the operation and have provided invaluable information, including some of the photographs reproduced here (Shafer, pers. comm.).

Kathleen Newton Shafer, Newton's daughter, recalls some of the goods that were traded to the local Indians. Particularly, she remembers the beads, with which she used to play; none of them were of the large variety; all were "small." Similarly, she says that there were no guns other than the common .30-30 and .22 calibers. Blankets were important items, as was cloth, e.g., for dress-making. Mr. Newton never had a phonograph for sale, although record fragments were found in the excavations. Various hardware, including building material, found at the site may have come from his store.

Shotguns (N = 24)   Peters Cartridge   1896   1920   PC.C.; No. 10; League     2   10 ga   Peters Cartridge   1890s   1912   UMC Co; No. 12; Smokeless (brass shell)     3   12 ga   Winchester   1890s   1912   UMC Co; No. 12; Smokeless (brass shell)     3   12 ga   Remington   c. 1900   ?   Nitro; 12 ga; Express     4   12 ga   Remington   1911   ?   1901; No. 12; Leader     2   12 ga   Remington   1912   1930   Rem-UMC; No. 12; Arrow     6   12 ga   Winchester   1926   1935   No. 12; US. Made in USA; Super-X     1   16 ga   Western   1935   Western; No. 16; Made in USA; Super-X     1   16 ga   Western   1935   Western; No. 16; Made in USA; Super-X     1   20   Winchester   ?   ?   WRA; 20 WCF (prob 25-20?)     2   22   Remington   ?   ?   Western; 1918     2   23   22 short   ?   ?   ?   ?     3   22.4   ? <td?< td="">   ?   ?</td?<>	
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1   20   Winchester   ?   ?   WRA; 20 WCF (prob 25-20?) Rem-UMC; 22 HP     2   22   Remington   Rem-UMC; 22 HP     10   22   Winchester WRF   1930   (common until '30s)     25   22 L/LR   22 short   (common until '30s)     3   224   ?   ?   ?     2   25?   Western   ?   ?     2   25?   Winchester   ?   ?     1   25   Frankfort Arsenal?   ?   ?     2   25.20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Peters   1930s   Peters; 25-20     13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25.20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30   Super-X; 30-30	
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10   22   Winchester WRF   1930   (common until '30s)     25   22 L/LR	
25   22 L/LR     23   22 short     3   224   ?   ?     2   25?   Western   ?   ?     2   25?   U.S. Cartridge   ?   ?   U.S.C. Co.; *18*     1   25   Frankfort Arsenal?   ?   ?   F A; 25R     3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Peters   1895   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900 <td></td>	
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3   224   ?   ?   ?     2   25?   Western   ?   ?   Western; 1918     2   25?   U.S. Cattridge   ?   ?   U.S.C. Co.; *18*     1   25   Frankfort Arsenal?   ?   ?   F A; 25R     3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Rem-UMC; 25-20     2   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20   14     30   Winchester/Western?   1935   Super-X; 30-30   14     30   Winchester/Western?   1935   Super-Speed; 30 WCF   1     1   30   United Metallic   1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30	
2   25?   Western   ?   ?   Western; 1918     2   25?   U.S. Cartridge   ?   ?   U.S.C. Co.; *18*     1   25   Frankfort Arsenal?   ?   ?   F A; 25R     3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Peters   1930s   Peters; 25-20 HV     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906	
2   25?   U.S. Cartridge   ?   ?   U.S.C. Co.; *18*     1   25   Frankfort Arsenal?   ?   ?   F A; 25R     3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     30   Peters   1920   1930   Pete	
1   25   Frankfort Arsenal?   ?   ?   F A; 25R     3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1912   1960s   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30	
3   25-20   Winchester   1895   1932   WRA; 25-20 WCF     5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
5   25-20   Peters   1895   1960s   Peters; 25-20     13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     2   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
13   25-20   Remington   1912   1960s   Rem-UMC; 25-20     2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-X; 30-30     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     30   Winchester   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
2   25-20   Peters   1930s   Peters; 25-20 HV     5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-X; 30-30     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
5   250   Remington   1920s   1930   Rem-UMC; 250 HP (250-3000)     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
1   30   Winchester/Western?   1935   Super-X; 30-30     1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
1   30   Winchester/Western?   1935   Super-Speed; 30 WCF     2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
2   30   U.S. Cartridge Co.   c. 1900   ?   U.S.C. Co.; *30 WCF*     1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF     1   30   ??   ?   ?   30-30; S.A. Corp.	
1   30   United Metallic   1900   ?   UMC; 30 SAV     4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF     1   30   ??   ?   30-30; S.A. Corp.	
4   30   Remington   ?   ?   Rem-UMC; 1906     2   30   Peters   1920   1930   Peters; 30-30     73   30   Winchester   WRA Co; 30 WCF     1   30   ??   ?   30-30; S.A. Corp.	
2 30 Peters 1920 1930 Peters; 30-30   73 30 Winchester WRA Co; 30 WCF   1 30 ?? ? 30-30; S.A. Corp.	
73     30     Winchester     WRA Co; 30 WCF       1     30     ??     ?     30-30; S.A. Corp.	
1 30 ?? ? ? 30-30; S.A. Corp.	
7 30 United Metallic 1894 1912 UMC; 30-30	
1 30 Winchester 1895 1932 WRA Co; 30 U.S.G. (30-40 Krag)	
2 30 Peters 1906 1915 Peters; 30 G. 1906	
27 - 30 Remington 1912 1960s Rem-UMC; 30-30	
1 303 Winchester 1897 1932 WRA Co; 303 SAV	
2 38-55 Winchester 1884 1932 WRA Co; 38-55	
1 44-40 United Metallic 1873 1912 UMC; 44 CFW	
4 44-40 Winchester 1873 1920 WRA Co; 44 WCF	
2 7 mm Winchester 1899 1932 WRA Co; 7 M-M	
1 8 mm Winchester 1914 1932 WRA Co.; 8 M/M	

TABLE 2. Identified cartridge cases from Healy Lake village site (N = 254)

WRA = Winchester Repeating Arms Company.

Rem-UMC = Remington-United Metallic Cartridge Company.

F A = ?Frankfort Arsenal USC = U.S. Cartridge Company.

UMC = United Metallic Cartridge Company

Comments by: Herbert G. Houze (Winchester Arms Museum, Cody, Wyoming); Louis F. Behling (Picatinny Arsenal, New Jersey).

In 1913, a minor gold rush on the Chisana River attracted more than 500 men to the upper Tanana area (Capps, 1916:22). Many of them came up the Tanana River from Fairbanks and undoubtedly had an impact on Newton's business and, at least indirectly, on the Indians along the way. Most of the stampeders, though, came by way of the White River from Canada and from the south over the Gulkana-Chisana trail (Fairbanks Daily Times, Sept. 15, Sept. 28, 1913). Although there had been a few earlier attempts to ascend the Tanana by boat, to supply Newton's store as well as one farther up near the mouth of the Nabesna River, commercial navigation of the Tanana did not begin until the Chisana rush. Both the Northern Navigation Company and the American-Yukon Navigation Company offered passage up the river. At least 14 sternwheelers or gas launches made trips to the upper Tanana in 1913 (Cole, 1979:20).

The following year, prospectors returning from the Chisana rush prospected other tributaries of the Tanana, including Healy River. The Fairbanks newspapers contain conflicting reports of the validity of a strike on the Healy. However, during August 1914, at least 16 miners were prospecting and two parties took in a prospecting boiler. "There are several outfits preparing to spend the winter prospecting in the Healy river county, and all are convinced that they will strike the pay" (Fairbanks Daily Times, Sept. 16, 1914). Some of their prospecting holes are still visible about a mile north of the village site.

In 1917, a molybdenite-bearing quartz prospect was found on the upper Healy River, 40 miles (64 km) from the trading



FIG. 3. Archaeological excavations carried out in 1968 and 1969-72 at the Healy Lake village site.

post. The U.S. Geological Society report does not mention the Indian community at the lake (Chapin, 1919).

A variety of owners followed Newton (Strelick, Hammer, Lowell), but there are no trading and inventory records. Instead, John Hajdukovich appears to have become the main resident trader in this part of the Tanana. His records from the late 1920s are nearly complete, although many of them were also burned after his retirement. He kept detailed accounts of whom he traded with, what they bought, and what they brought in for trade (Hajdukovich, n.d.).

It is clear that he did not have anything but .22, .30-30, and .30-40 caliber ammunition, did not have anything but "bunches" of beads (which is the way very small and small beads were sold, but not the larger beads), and a lot of blankets (550 in one year — 1932). His account books specify five Healy Lake people, including Johnny Healy, who brought in 200 beaver pelts in one year. Hajdukovich also sold a lot of clothing and cloth goods, just as Newton had. In 1932, he also had five used phonographs in stock.

In addition to his trading, Hajdukovich acted as a hunting guide. In 1927, he led a party for Wendell Endicott, a wellto-do hunter from Boston. Endicott brought along a cinematographer to keep a record of the trip, which included a visit to Healy Lake, and as a result we are fortunate to have some footage of the trading post and the village. In a book about his hunting expedition, Endicott reported in some detail about the large potlatch given at Healy Lake in July 1927 (Endicott, 1928:93ff). It was also reported in the *Fairbanks Daily News-Miner* (July 25, 1927) and attended by the Newtons, who took pictures of the gathering (Fig. 7).

Although Healy Lake has been called a village, the population was not large. In his *Report of Official Visit to Upper Tanana and Copper River Valleys*, Beck (1930:35) said that Healy River "is a small native village, with a population of fifteen natives, located . . . on the Tanana river." In 1937, the missionaries took a very detailed census, including Native names and birthplaces. They enumerated only 34 people (Wright, 1937). This was at the "hey-day" of the village, just before a respiratory disease, probably pneumonia, according to some of the survivors, essentially decimated the group.

# ETHNOGRAPHIC INFORMATION

The following information derives from McKennan's field notes from his late 1920s work and from his 1962 trip as well as his published accounts (McKennan, 1959, 1969, 1981). His information about Healy Lake came mostly from Margaret Kirsteatter, a grand-daughter of Chief Healy. Other data came from a variety of informants, both up and down river from Healy Lake. The information and oral traditions are usually definite and precise when considered individually, but there are some contradictions among informants.



FIG. 4. Metal hide scrapers, *tchithos*, continuing a pre-contact pattern at Healy Lake.

All of the informants seem to agree that the Healy Lake village was established shortly after Newton began managing the trading post in 1907. Before that, the informants say that there was simply a fishing camp at the lake, with a single cabin and a number of tents, and that the "village" was on the south bank of the Tanana, across from the mouth of the Healy River and the trading post. Although he does not call it a village, the census agent, Robbins, counted 30 Indians here in 1910 (U.S. Bureau of the Census, 1910). There were other camps around the periphery of the lake, and one was situated up the Healy River about half a mile (1 km) or more from the lake itself. A secondary village was located near the tree line, about 15 miles (24 km) up the river where there was a caribou fence about 2 miles (3 km) long.

The name of the lake, area, and band derives from Chief Healy, who was born in 1849, apparently up at Joseph Village on the Middle Fork of the Fortymile River, although one informant says down the Tanana River. Chief Healy took his (English) name from the trader John J. Healy at Fortymile, where the NT&T post was established in 1893; Chief Healy's son was also named John(ny) (Fig. 8).

These ties with the Fortymile drainage were undoubtedly enhanced by fall and winter occupation for caribou hunting of Joseph Village, on the Middle Fork of the Fortymile River. This settlement was apparently abandoned during the middle

TABLE 3. Size and type summary for glass beads

Type:	I	II	III	IV	Wire	Total	(%)
Very large					1	1	(+)
Large (6-10 mm)	6	36	2	34	28	106	(7)
Medium (4-6 mm)	69	272	14	110	6	471	(30)
Small (2-4 mm)	4	753	3	51	_	811	(51)
Very small	2	191	1			194	(12)
Total	81	1252	20	196	35	1584	
(Percent)	(5)	(79)	(1)	(12)	(2)		

Explanation: Types I-IV are made from sections of a long, slender tube that has been drawn from a bubble of molten glass.

Type I: Tubular, monochrome. Type II: Rounded by reheating and tumbling, monochrome.

Type III: Tubular, polychrome.

Type IV: Rounded by reheating and tumbling, polychrome.

Wire: Individually made by winding molten glass around a wire.

1920s. Travels over to the Yukon and Fortymile rivers were common. The annual cycle included Joseph, which also provided an easy access to the mouth of the Fortymile River, where Harper, and then McQueston (and Healy) operated the trading posts. Informants specifically mentioned tea, tobacco, and shotguns as objects of the trade. Tobacco (leaf) was also obtained from the Kluane Indians and earlier from Fort Yukon. The men would go down the Yukon River in the spring and return when the ice froze.

Travels down the Tanana were infrequent but not unusual. Chief Walter, born in 1883, and David Paul, born in 1887, both told McKennan that the Indians had gone to Nuklakyet (near present-day Tanana) by birch bark canoe in June, returning in September (the year was not specified).

When Joe Joseph, who was born in 1885, was small, flintlock guns were introduced. On McKennan's first field trip, John Hajdukovich presented the Dartmouth College Museum with two rifles he had collected in the upper Tanana. One was a Russian double-barrel cap and ball muzzle-loader; the other was a long cap and ball rifle made by Johnstone of England. Joseph indicated that these flintlocks were followed by .45-70 caliber, then .44 caliber rifles. After these came the .38 Winchester and later the .30-30s and .30-40s. All of these, he said, came from the Yukon, specifically the stores at Fortymile and Stewart rivers. He, himself, had only been to Joe Ladue's store at Sixtymile, just below Dawson.

He also told McKennan that some trade — with Indians, not white traders — was conducted both down the Tanana and south to the Copper River. "Big beads" were obtained this way in trade for moose and caribou skins. Some copper was also brought back.

# CONCLUSIONS

The first question to be addressed in light of the foregoing evidence is the dating of when the village was established as a village. Although the site has been occupied more or less continuously for more than 10 000 years (Cook, 1975:131), a permanent village probably was not present until sometime after 1910, and perhaps not until after 1917, since the mining prospect on the upper Healy River did not mention the village. The Native band as a unit was present by 1910, as shown by the thirteenth census, and probably earlier, or Newton would not have established his trading post at the mouth of the river in 1907. However, since neither Allen in 1885 nor the enumerator for the twelfth census in 1900



FIG. 5. Metal arrowheads; blunt ones were intended for use with small game or birds.



FIG. 6. Newton's trading post, 1916.

encountered the band, it is possible that it did not exist as such then. It would seem unlikely that their presence would be overlooked unless the band was still in their winter camp(s) on the Fortymile River or upper Healy River, and this is not likely. Both of these sources found Kheeltat's band at Mansfield Lake, which is closely linked ethnographically to the Healy Lake people and should reflect a similar annual cycle.

On the other hand, the archaeological evidence would suggest a historic occupation both early and late. Neither Newton nor Hajdukovich stocked the larger beads or some of the ammunition; the presence of both indicates earlier trade contacts. The quantity of both of these items also indicates a somewhat settled occupation of the site. The beads, of course, may have been curated for a generation or two, but McKennan's notes indicate that personal possessions of this nature were cremated at death. Pictures of Little White Man (Fig. 9) and Chief Healy (McKennan, 1981:Fig. 8) show large beads, but not in sufficient quantity to account for the excavated specimens. Some of the cartridge cases were no longer in use by 1915, and it is unlikely that they were curated; the same is true for the musket balls.

Whatever the situation regarding the origin of the village, it seems clear that the annual subsistence cycle facilitated early trading along the Yukon. As more non-Natives occupied the Tanana River valley, the Indians established a more permanent village at the lake, which in turn made the establishment of Newton's post at the mouth of the Healy River feasible. This further strengthened the refocussing of Native interests and weakened the interaction to the Fortymile and Yukon rivers. Reliance on this new post, and that at Tanacross, probably was instrumental in the demise of the winter village at Joseph and the increasing permanence and/or visibility of Healy Lake Village. The same pattern is probably also valid for the neighboring Lake Mansfield Indians.

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FIG. 7. Large potlatch given at Healy Lake in July 1927, as photographed by Wendell Endicott of Boston.



FIG. 8. Chief John Healy and family, photographed during the period 1910-12.



FIG. 9. Photograph of Little White Man, indicating availability of "large" beads in 1920 or before.

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