Ancient Harpoon Heads of Nunavut: An Illustrated Guide

Sakkutuqait (Naulatuqait) Nunavutmi
Titiraujaqsimajut Qaujimajjutiit

Robert W. Park, Ph.D.
Douglas R. Stenton, Ph.D.
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PREFACE

Despite a broad interest in Inuit culture and history on the part of educators, northern residents, and visitors to Nunavut, there exists a shortage of basic information on many aspects of Arctic archaeology. Excellent guidebooks to individual archaeological sites are available (e.g., for Qaummarviit near Iqaluit, and Mallikjuak Island near Cape Dorset) but are highly specific to those particular sites. This guide is intended to complement existing resources by presenting information on an interesting archaeological topic that has relevance almost everywhere within Nunavut: harpoon heads. We intend this guide to serve as a resource for northern educators and as a source of information for the large component of the general public with an interest in Nunavut archaeology. Readers interested in learning even more about harpoon heads or about other aspects of Nunavut archaeology will find both a guide to further reading and the addresses of several cultural organizations at the end of this guidebook.

We would like to dedicate this work to the memory of Dr. Moreau S. Maxwell, who introduced one of us (DRS) to Arctic fieldwork and encouraged both of us to learn about the archaeology of Nunavut. We would also like to thank Allan Angmarlik for his assistance with Inuktitut terminology.

Robert W. Park, Ph.D.
Douglas R. Stenton, Ph.D.
March, 1998
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INTRODUCTION

Harpoon heads are among the most interesting and important artifacts made and used by circumpolar peoples. They provide archaeologists with many insights about the lives of the people who made them, and about the archaeological sites in which they are found. This guide draws upon the results of nearly a century of archaeological research, and provides an overview of the development of this technological innovation over 4000 years of human history in Nunavut.

HARPOONS AND HARPOON HEADS

In most parts of Nunavut the hunting of sea mammals has always formed the cornerstone of the economy of Arctic peoples. Seals, walruses and whales have provided generations of Inuit and their predecessors with food, fuel, and numerous other useful products such as baleen, bone, ivory and skin. As a result, the harpoon (unaaq), which was the principal implement used to hunt these animals, has for thousands of years been vital to human survival in the North.

In ancient times, when the most effective killing weapon possessed by a hunter was a lance (anguvigaq) that was thrust or thrown into the body of the animal, it was difficult to kill sea mammals instantaneously, especially large ones like whales. Wounded animals usually dive beneath the surface and swim away immediately, making it almost impossible for the hunter to deliver a second, killing blow or even follow the animal to recover its carcass if it eventually dies from the wound. The invention of the harpoon solved that dilemma. With skill or luck a single thrust with a harpoon
Thrusting Harpoon

- Harpoon head
- Fixed foreshaft
- Harpoon line
- Finger rest
- Shaft
- Ice pick
Throwing Harpoon
may kill an animal, but the full ingenuity of the harpoon’s design comes into play when the animal is not killed by the initial thrust. By embedding a harpoon head (sakku) into the flesh of the animal, where it acts as a kind of ‘anchor,’ the hunter is able to prevent the wounded prey from escaping while he gets close enough to kill it.

The harpoon is a complex instrument not only in terms of its design and technology, but also in the interaction of its various components. In addition to the harpoon head, described below, harpoons usually consist of at least four separate vital parts. The largest is the 1–2 metre long shaft (tigulia), which may be made of wood or, in its absence, of whale bone. Most harpoons have a socket piece (qijuksirvik) attached to the distal end of the shaft. The socket piece is equipped with a cup-shaped depression into which the base of a foreshaft is inserted. The harpoon head is attached to the tip of the foreshaft.

Harpoons that were intended to be thrown at the prey are equipped with a “loose” or “moveable” foreshaft (qaatilik)—i.e., one that is designed to come apart from the socket piece as soon as the animal is struck. This separation helps to ensure that the harpoon head detaches itself from the foreshaft and becomes set firmly in the animal’s flesh. A loose thong links the foreshaft to the harpoon shaft, ensuring that the foreshaft does not sink and become lost once the two separate. Harpoons intended for thrusting have a “fixed” foreshaft (ipiq)—i.e., the foreshaft is rigidly and permanently attached to the harpoon shaft. A thrusting harpoon does not require a loose foreshaft because a backward tug on the harpoon shaft as soon as the animal is struck serves to detach the harpoon head from the foreshaft.

The final critical part of the harpoon gear is the harpoon line (alinga), which is affixed to the harpoon head’s line hole (ijjirvik)—the harpoon line is what allows the hunter to restrain the harpooned animal. In addition to these key components the harpoon shaft may
also be equipped with a **finger rest** (*tikaagut*), which ensures that the hunter can propel the harpoon with as much force as possible. Harpoons intended for use on the ice also have an **ice pick** (*tuuq*), often made of ivory, mounted at the base of the shaft—this is especially useful for chipping ice away to enlarge a seal’s breathing hole after the seal has been harpooned.

The harpoon head itself is at least as complex as the rest of the harpoon. When a hunter throws or thrusts a harpoon at an animal, the harpoon head has to be sharp enough to puncture the skin and penetrate deep inside the animal’s flesh. But it also has to be designed in such a way that it does not simply pull or cut its way back out through the entrance wound once the injured animal starts putting a strain on the line. For sharpness, the tips of **self-bladed** harpoon heads taper to a finely shaped point, whereas other types
have a **slot** (*savillirvik*) into which a sharp stone or metal **endblade** (*savilinga*) is inserted. To prevent the harpoon head from pulling out of the wound, some are equipped with backward-pointing **barbs** (*aki*) while others are equipped with basal **spurs** (*pamiaq*) that cause them to “toggle,” or rotate ninety degrees within the wound.

When hunting from shore, from the **floe-edge** (*sinaa*), or at a **seal’s breathing-hole** (*aglu*), the harpoon line is held by the hunter, who uses his strength to keep the animal from escaping. Eventually he can pull it close enough to deliver the killing blow with a club or lance. Anthropologist Knud Rasmussen, who grew up in Greenland and who was part Inuk himself, describes the harpooning of a walrus in this fashion off the southeast coast of Melville Peninsula near the end of January 1922:

...Then suddenly Aua himself gave a start—he had been keeping a good look out all the time—and pointed to where Miteq was standing with his harpoon raised. Just ahead of him was a tiny gap in the ice, the merest puddle, with barely room for the broad back of a walrus that now appeared. Miteq waited till the head came up, and then, before the creature had time to breathe, drove his harpoon deep into the blubber of its flank. There was a gurgle of salt water, a fountain of spray flung out over the ice, and the walrus disappeared. But Miteq had already thrust his ice-axe through the loop at the end of his harpoon line, and the walrus was held. We hurried up and helped to haul it in, despatched it, and set about the work of cutting up. This was completed before dark... There was great rejoicing at our arrival; a full-grown walrus means meat and blubber for many days... There was no longer any need to stint the blubber for the lamps, and there was food in plenty for ourselves and the dogs.
When hunting from a kayak or umiak it would be dangerous for the hunter to hold the harpoon line the way Miteq did, since the sudden pull of the panicked animal on the line might tip the boat over. Therefore, the harpoon line is attached to a drag float (avataq) made from an inflated sealskin, much like a big balloon. As soon as the animal is harpooned the hunter tosses the float overboard. The direction of movement of the drag float on the water, or its reappearance after being dragged underwater by the diving animal, tells the hunter where to paddle his boat in order to harpoon the animal again or stab it with a lance when it resurfaces to breathe. Even if the hunter is unsuccessful in wounding the animal again when it resurfaces, he tries to force it to dive again before it has time to recover its breath. By doing this repeatedly the animal becomes so exhausted and winded that it can no longer dive. The hunter can now approach and deliver a killing blow with the lance. The drag float attached to the harpoon head ensures that the carcass can be recovered even if it sinks.
NUNAVUT ARCHAEOLOGY

As shown in the diagram on the next page, archaeological research has revealed that Arctic peoples have been using harpoon technology for over 4000 years.

FIRST PEOPLES

The oldest archaeological sites in Nunavut date to approximately 2300 B.C. when the climate was somewhat warmer than it is today. These earliest sites belong to two cultures known as Independence I and Pre-Dorset. Independence I is restricted to the High Arctic and northern Greenland, and seems to have appeared slightly earlier than Pre-Dorset, which is known from throughout Nunavut. Independence I disappears around 1800 B.C. but Pre-Dorset continues until around 700 B.C. by which time it had undergone a number of significant changes and became transformed into what archaeologists call the Dorset (Tunit) culture. World famous for their exquisite miniature carvings, perhaps the paraphernalia of shamans, the Dorset people appear to have adapted very successfully to a climate that had become colder than today. The Dorset people flourished for almost two thousand years but by about A.D. 800 the climate had again entered a warming phase and the effects of this change on the numbers and distributions of animals may have put the Dorset way of life under considerable stress. For reasons that are not well understood, Dorset populations appear to have undergone a dramatic decline and by A.D. 1000 they had virtually disappeared from most parts of their Arctic homeland. The Dorset occupation of Nunavut is usually subdivided into Early Dorset (circa 700 B.C. - 200 B.C.), Middle Dorset (circa 200 B.C. - A.D. 500), and Late Dorset (circa A.D. 500 - A.D. 1000) periods.
<table>
<thead>
<tr>
<th>Date</th>
<th>Climate</th>
<th>Cultural Tradition</th>
<th>Harpoon Types</th>
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<td>A.D. 1800</td>
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<td>Early Historic Inuit</td>
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<td>A.D. 1600</td>
<td>Colder than today</td>
<td>Postclassic Thule</td>
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<td>A.D. 1200</td>
<td>Cooling</td>
<td>Classic Thule</td>
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<td>A.D. 1000</td>
<td>Warmer than today</td>
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<td>A.D. 800</td>
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<td>Late Dorset</td>
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<td>A.D. 400</td>
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INUIT ANCESTORS

During the centuries when Pre-Dorset and Dorset cultures flourished in Arctic Canada, cultural developments amongst the peoples living on the Siberian and Alaskan sides of the Bering Strait led to the emergence of what is known as the Thule culture. The Thule possessed a new form of economic and social adaptation that centered on the open-water hunting of large sea mammals from skin boats. In winter, family groups occupied large semisubterranean houses, and subsisted largely on stored food obtained by hunting bowhead whales. Beginning around A.D. 900, small groups of Thule pioneers expanded eastward from Alaska into the Canadian Arctic and Greenland. Over the succeeding centuries and as the climate again cooled, their descendants created distinctive local adaptations to the different regions of the Arctic and developed into the Inuit groups who first encountered Europeans. However, Inuit oral traditions also record interactions with a people referred to as Tunit. These traditions are thought to relate to encounters between the Thule and the last of the Dorset people. The Thule occupation of Nunavut is usually subdivided into three phases: Classic Thule (circa
Ancient Harpoon Heads of Nunavut


The most well preserved artifacts from archaeological sites in Nunavut are usually found in the ruins of the semisubterranean winter houses built by the people of the Thule culture. The collapse of the walls and roofs of these structures have preserved many fragile artifacts, including harpoon heads, deep within permafrost. Artifacts lost or abandoned in the much less substantial dwellings that were occupied by the peoples of the earlier cultures, especially the tent rings of the Independence I and Pre-Dorset peoples, were buried much more shallowly if at all. This fact, plus the longer time for weathering and decomposition of artifacts made of bone, antler or ivory, means that objects such as harpoon heads are less often preserved at these older sites. In fact, Independence I and Pre-Dorset harpoon heads are comparatively rare.
Ancient Harpoon Heads of Nunavut

HARPOON HEADS AND ARCTIC ARCHAEOLOGY

Harpoon heads have many distinctive characteristics, referred to as attributes (nalunanngijjutingit), that are used to identify, describe and classify individual specimens—in archaeology, this technique is called 'typology.' When many individual specimens are found that all exhibit the same attributes, archaeologists group them into types (qanuittuuningit). For convenience, these types are often given names (e.g., “Tyara Sliced” and “Thule type 2”).

For Arctic archaeologists, harpoon heads are especially interesting artifacts for two reasons. First, some of the attributes of each harpoon head type reveal the intended method of hunting (e.g., open-water hunting as opposed to breathing-hole sealing) as well as what kind of sea mammal it was used to hunt (e.g., whether it was used to hunt large whales or small seals). This in turn provides valuable information about the activities of the people who lived at the archaeological site where the harpoon head was found.

Second, because harpoon heads were so important for hunting sea mammals, hunters usually invested considerable effort and skill in their manufacture, sometimes decorating these already complex implements in intricate ways. Hunters also appear to have experimented continuously when making new harpoon heads, altering slightly the size, proportions, or location of individual attributes in an effort to obtain even better results when hunting. Some of these experiments clearly proved to be successful, and archaeological research has shown that harpoon head characteristics gradually changed over thousands of years. For that reason, the association of certain attributes and types with particular time periods (which can be determined through radiocarbon dating) allows
archaeologists to identify both the cultural affiliation and the approximate age of the site or feature from which the harpoon head was excavated.

The attributes that are useful to classify any harpoon head from Nunavut include the material from which it is made (material attributes), its size (metric attributes), its shape (functional and stylistic attributes), and the presence of any decoration (symbolic attributes).

MATERIAL ATTRIBUTES

Perhaps the most basic attribute used to describe a harpoon head is the material from which it has been manufactured. Three primary raw materials were used during the pre-contact period: antler, ivory and whale bone. Each of these materials was readily available as a byproduct of wildlife resources. Metal was also used in limited amounts during the pre-contact period (e.g., native copper, meteoric iron), especially for harpoon end blades.

Antler

Caribou antler is a strong and durable raw material that could be readily obtained fresh through annual hunts; shed antlers could also be collected from the tundra. It is an ideal material for making resilient, sharp harpoon heads, especially self-bladed varieties. However, some Inuit belief systems prohibited contact between products of the land and the sea. Since caribou antler is a product of the land, for some groups it may not have been an appropriate material for harpoon heads. Interestingly, at least one archaeological site has been investigated in which none of the harpoon heads were made of antler, although the material was used extensively in the manufacture of arrowheads (which would have been used for hunting land mammals such as caribou and muskoxen).
Ivory

The ivory used to manufacture a harpoon head was obtained from walrus tusk. This is a very hard, dense material, and more difficult to work than antler. However, in the hands of a skilled craftsperson it yielded tools and weapons of exceptionally high quality and durability.

Whale Bone

The most common type of whale bone used in the manufacture of harpoon heads was obtained from the bowhead whale (Balaenidae mysticetus). The bowhead skeleton can provide an enormous quantity of dense, hard bone well suited for the manufacture of large and small harpoon heads. The largest harpoon heads, made for whale hunting, were invariably made of whale bone. However, this material has the reputation of being somewhat more difficult to shape than antler or ivory.

Metal

Modern harpoon heads are often made of a combination of brass and steel but, prior to contact with Europeans, native copper was frequently used by the 'Copper Inuit' (from the Coronation Gulf area) for harpoon end blades and rivets. In other areas, particularly the eastern High Arctic, meteoric iron was used for similar purposes. An important source of meteoric iron was the Cape York meteor in northwest Greenland. Copper and iron were highly valued commodities, and may have been traded over vast geographic distances.

METRIC ATTRIBUTES

Metric attributes are measurements taken on individual harpoon heads. The most common metric attributes recorded include length, width and thickness. Archaeologists sometimes take other
measurements, such as the width of the end blade slot, or the diameter of the line hole. Any of these measurements can be used alone or in combination with other attributes to define or describe a particular type of harpoon head. In this guide we have provided information on the length of the harpoon head types we describe.

**FUNCTIONAL AND STYLISTIC ATTRIBUTES**

Functional and stylistic attributes are of particular importance in the analysis of harpoon heads because they provide the foundation for the typologies currently used by Arctic archaeologists. Functional attributes generally involve the presence or absence of characteristics which are clearly involved in the successful operation of the harpoon head. Thus, functional attributes include such things as the presence of a socket with which the harpoon head fits onto the foreshaft, the presence of a spur which causes the harpoon head to toggle in the wound, and the presence of a line hole to which the harpoon line is attached. Yet, the socket can be open or closed, there can be one or two spurs, and the line hole can be single or paired, all without markedly affecting the successful functioning of the harpoon head. Choices between equally effective alternatives, made by the manufacturers of harpoon heads on the basis of tradition or personal preference, can be termed stylistic attributes.

**End blade** (*Savilinga*)

To penetrate the skin of an animal, the distal end of a harpoon head could simply be sharpened or beveled to a point. Such harpoon heads are termed 'self-bladed.' However, an even sharper (and replaceable, should it break) tip could be achieved by the use of a separate end blade. Harpoon end blades were fashioned from a variety of stone materials including chert, quartz, and slate, as well as from bone or ivory and, where available, metal (e.g., copper,
Ancient Harpoon Heads of Nunavut

meteoric iron, smelted iron). Endblades are usually triangular in shape, have bifacially flaked or ground and beveled edges, and range in size from 1 to 2 centimetres in length for the chipped stone blades used in Dorset harpoon heads, and up to 5 centimetres or more for the ground and polished Thule specimens. The orientation of the end blade relative to the line hole is also an attribute included in type classification. The end blade can be inserted either parallel or perpendicular to the plane of the line hole.

On Dorset harpoon heads, the chipped stone end blades were simply wedged into a cut slot. Many Thule harpoon heads were also slotted for end blades but these blades typically were made of ground slate or metal and had one or two drilled holes so that they could be held in place using small rivets (pauguaq).

**Barbs (Aki)**

Some harpoon head types are equipped with one or more backward-pointing barbs cut into their lateral margins. These barbs were designed to catch in the flesh of the harpooned animal to ensure that the harpoon head did not pull out of the wound. Raw material type may have influenced the size and shape of barbs; harpoon heads made of whale bone, which is rather brittle, tend to have shorter and thicker barbs. By contrast, ivory harpoon heads often have long,
Ancient Harpoon Heads of Nunavut

sharply-pointed barbs, the design of which undoubtedly relates to the strength of the material. Barbs are an attribute of some harpoon heads from all but the Dorset time periods.

A single barb on a harpoon head is described as unilateral; two or more barbs on opposite edges are described as bilateral. A harpoon head is said to be symmetrically barbed if they are positioned opposite each other (like a mirror image), and asymmetric in any other configuration.

**Side Blades (Kiinnirvik)**

As the name suggests, side blades are thin chipped or polished stone blades that are wedged into a slot cut into one or both of the lateral edges of the harpoon head. Presumably, their intended function was to make the entrance wound wider and perhaps cause the animal to lose blood more quickly, and therefore tire more rapidly. Harpoon heads with side blades are rarely found in Arctic Canada, and are restricted to the Pre-Dorset and very early Thule periods. Curiously, even after the use of sideblades on harpoon heads stopped, hunters sometimes cut a shallow groove into the lateral edge of the harpoon head in the same location. These seemingly decorative grooves are sometimes referred to as 'vestigial' side blade slots.

**Line Hole (Ijjirvik)**

The harpoon line, which is used to retrieve the animal, passes through one or more holes gouged or drilled through the body of the harpoon head. The perforations may be round, oval or roughly triangular in shape depending on the method of manufacture. Three basic types of line holes are recognized: single, double and transverse. Single line holes are positioned centrally along the long axis of the harpoon head, approximately one-third to one-half way from the proximal end (e.g., Thule), or near the lateral margin of the head on the side opposite the spur (e.g., Dorset). Double line holes are
Ancient Harpoon Heads of Nunavut.

Single line hole harpoon heads

Double line hole harpoon head

Transverse line hole harpoon heads

positioned on either side of the central axis. Transverse line holes, as the name suggests, are formed by the intersection of two holes cut across the ventral face of the harpoon head. Harpoon heads with transverse line holes are typically thicker than those having single or double holes.

‘Thin’ versus ‘Flat’ Harpoon Heads

Archaeologists make a distinction between thin harpoon heads and flat harpoon heads based on the orientation of the line hole. Thin harpoon heads have their greatest thickness at right angles to the axis of the line hole whereas harpoon heads are said to be flat when they have their greatest thickness in the same axis as the
line hole. Harpoon heads with transverse line holes tend to be categorized as flat.

**Socket (Tuurvik)**

The harpoon head socket is a hole or slot at the proximal (base) end of the harpoon head, for the purpose of fitting the head onto the distal end (tip) of the foreshaft. There are two basic types of harpoon socket: open and closed.

A closed socket is one that is cut or drilled into the proximal (base) end of a harpoon head and in plan view the interior of the socket is not visible. Because the Dorset culture did not use drilling technology, sockets on Dorset harpoon heads take the form of narrow rectangular slots, cut with a stone tool called a burin. Closed sockets on Thule and Inuit harpoon heads were made by drilling a circular hole using a bow drill.

An open socket is a rectangular slot or notch cut into the ventral face of the proximal end of a harpoon head, into which the distal end of the foreshaft is inserted. In plan view, the interior of the
Open socket lashing types

Lashing slots

Lashing holes

Lashing notches or beds
Ancient Harpoon Heads of Nunavut

socket is visible. The distal end of the socket may be square or rounded, and in some cases includes a narrow slot for a bone wedge. These sockets resemble the letter “T”.

The very earliest harpoon heads from Nunavut do not possess a socket—instead, they feature a tang which would fit into a socket in the distal end of the harpoon shaft or socket piece.

Lashing (Nimiq)

Harpoon heads with an open socket require some form of lashing to ensure that the harpoon head remains securely fastened on the foreshaft until it penetrates the flesh of the animal. Sinew or baleen were commonly used as binding materials, which passed through gouged slots, shallow notches, or holes drilled on both sides of the socket. Slots are a labour intensive type of lashing method to produce, and more susceptible to breakage during manufacture or use. Lashing notches are typically several millimetres deep, and in some cases may result from the breakage of a specimen that originally had lashing slots. Harpoon heads with two or three pairs of drilled lashing holes are quite common in the Thule archaeological record.

Spurs (Pamiaq)

Spurs are backward-pointing, tapered projections from the proximal (base) end of harpoon heads. Dorset culture harpoon heads often have two basal spurs; Thule harpoon heads typically have one spur. Spurs are an essential part of harpoon heads designed to “toggle.” After penetrating the body of an animal, its attempts to escape or the deliberate tug by the hunter places tension on the harpoon line. This has the effect of drawing the harpoon head backwards and, in non-barbed harpoon heads, it would come right back out the entrance wound if it were not for the spur(s). They catch in the flesh of the animal and, since the harpoon line is fastened to the line hole which is located near the middle of the harpoon
head, the combination of the spur catching and the tension on the harpoon line causes the harpoon head to ‘toggle’—i.e., rotate 90°. In the toggled position it is far too wide to come back out the narrow entrance wound and thus forms a very secure anchor within the harpooned animal’s flesh.

**SYMBOLIC ATTRIBUTES**

Harpoon heads occasionally display markings that are sometimes classified as decoration or ornamentation. It is very likely that these markings had important symbolic meanings to the people that made and used them. The ‘vestigial side blade slots’ described above presumably had symbolic import as well. And as noted above with respect to the use of antler, even the material from which a harpoon head was made may have had symbolic meaning.
How harpoon heads "toggle"

The harpoon head is inserted...

The harpoon head separates from the foreshaft and tension comes on the harpoon line, causing the spur to catch.

The harpoon head pivots around the line hole into the toggled position.
Decoration

Decorative attributes observed on some harpoon heads may occur alone or in combination and take the form of incised parallel lines, incised curvilinear lines, inverted ‘Y’ shapes incised distal to the line hole, incised triangles, and raised lateral ridges. Decorated harpoon heads are relatively rare in the Pre-Dorset and Dorset periods, although some Dorset harpoon heads have fine incised lines that depict facial features of animals or humans. Decorated Thule culture harpoon heads are generally restricted to sites of the early Classic Thule period of circa A.D. 900 - 1200.

Thule harpoon heads exhibiting incised "Y-motif" decoration [left] and curvilinear decoration [right]
Some archaeological sites and site localities in Nunavut at which harpoon heads have been found

1. Lady Franklin Bay
2. Bache Peninsula
3. Port Refuge; Porden Point
4. Truelove Lowland
5. Brooman Point
6. Resolute
7. Maxwell Bay
8. Bettison Point
9. Learmonth
10. Nunguvik; Saatut
11. Button Point
12. Mitimatalik; Qilalukan
13. Ekalluk River
14. Lady Franklin Point
15. Clachan
16. Malerualik
17. Igloolik
18. Naujan
19. Kuk
20. Silumiut
21. Rankin Inlet
22. Native Point
23. Mill Island
24. Cumberland Sound
25. Crystal II; Qaummaarviit; Tunngatsivvik
26. Lake Harbour
27. Belcher Islands
NUNAVUT HARPOON HEAD TYPES

The following section describes some of the more common types of harpoon heads found at archaeological sites in Nunavut. The list of site locations provided for each type, keyed to the map, is not by any means exhaustive but will serve to give the reader a sense of the distribution within Nunavut of these types.

INDEPENDENCE I AND PRE-DORSET HARPOON HEADS

These earliest harpoon heads have been recovered in very small numbers and, unlike later Dorset and Thule types, are not common or variable enough to have been given widely accepted type names.

<table>
<thead>
<tr>
<th>Date</th>
<th>Climate</th>
<th>Cultural Tradition</th>
<th>Harpoon Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 B.C.</td>
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<td>1200 B.C.</td>
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<tr>
<td>1400 B.C.</td>
<td>Cooling</td>
<td></td>
<td>Pre-Dorset</td>
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<td>1600 B.C.</td>
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<td>1800 B.C.</td>
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<tr>
<td>2000 B.C.</td>
<td>Warmer than today</td>
<td></td>
<td>Independence I</td>
</tr>
<tr>
<td>2200 B.C.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ancient Harpoon Heads of Nunavut

Culture:...... Independence I (2300 B.C. to 1800 B.C.)

Attributes:... Thin, tang base, with the line hole placed asymmetrically near the base; a single barb, often bifurcated, on the same side as the line hole; an inserted end-blade parallel to the axis of the line hole

Length:....... 6 to 9 cm

Material:..... Ivory, antler

Function: .... Hunting small to medium size sea mammals, especially seals

Locations: ... Port Refuge; Truelove Lowland

Comments:.. Because the line hole is placed so near to the base of the harpoon head, this kind of harpoon head will not toggle in the wound, relying only on its barb to secure the catch. This is the only non-toggling harpoon type found in Nunavut.
Culture: Pre-Dorset (1900 B.C. to 700 B.C.)

Attributes: Thin, open socket with lashing bed; two weak basal spurs; self-bladed, with one or sometimes two lateral barbs

Length: 9 to 11 cm

Material: Antler

Function: Hunting small to medium size sea mammals, especially seals

Locations: Bettison Point; Igloolik; Port Refuge

Comments: This appears to be the most common type of Pre-Dorset harpoon head, although found in only small numbers.
Culture:...... Pre-Dorset (1900 B.C. to 700 B.C.)

Attributes:...Thin, open socket with lashing bed; single medial basal spur; self-bladed

Length:........ 6 to 9 cm

Material:.....Antler

Function:....Hunting small to medium size sea mammals

Locations:...Ekalluk River; Igloolik; Port Refuge; Truelove Lowland
DORSET HARPOON HEADS

Unlike their Pre-Dorset ancestors and their Thule successors, the people of the Dorset culture did not have or use drilling technology. As a result, holes in Dorset harpoon heads were created by gouging and cutting, and line holes in Dorset harpoon heads tend to be oval, rather than circular. For this same reason the closed sockets on Dorset harpoon heads are rectangular or elliptical rather than circular.

Miniature Dorset harpoon heads are sometimes found, in some cases just one or two centimetres long. These tiny implements have been interpreted as the paraphernalia of shamans, and were almost certainly not actually used for hunting.

<table>
<thead>
<tr>
<th>Date</th>
<th>Climate</th>
<th>Cultural Tradition</th>
<th>Harpoon Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D. 1000</td>
<td>Warmer than today</td>
<td>Late Dorset</td>
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<td>A.D. 600</td>
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<td>Warming</td>
<td>Middle Dorset</td>
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<td>A.D. 200</td>
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<tr>
<td>A.D. 0</td>
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<tr>
<td>200 B.C.</td>
<td>Colder than today</td>
<td>Early Dorset</td>
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<tr>
<td>400 B.C.</td>
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<tr>
<td>600 B.C.</td>
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</tbody>
</table>
Type name: **Tyara Sliced**

*Culture:* Early Dorset (700 B.C. to 200 B.C.)

*Attributes:* Thin; “Sliced” closed socket that is elliptical in cross section; cut oval line hole; end-blade slot perpendicular to the axis of the line hole; flattened cross-section on the dorsal surface from the base to the line hole; the base curves gently into two weak symmetrical spurs

*Length:* 3 to 8 cm

*Material:* Ivory

*Function:* Hunting small to medium size sea mammals, especially seals

*Locations:* Bache Peninsula; Ekalluk River; Igloolik; Lake Harbour; Native Point; Nunguvik
Type name: **Kingait Closed**

**Culture:** Middle Dorset (200 B.C. to A.D. 500)

**Attributes:** Thin; rectangular closed socket; end-blade slot perpendicular to the axis of the line hole; flattened cross-section on the dorsal surface from the base to the line hole; notched base forming two strong symmetrical spurs

**Length:** 4 to 6 cm

**Material:** Ivory

**Function:** Hunting small to medium size sea mammals, especially seals

**Locations:** Igloolik; Lake Harbour; Saatut
Type name: **Nanook Wasp Waist**

Culture: Middle Dorset (200 B.C. to A.D. 500)

Attributes: Thin; rectangular closed socket; self-bladed; flattened cross-section on the dorsal surface from the base to the line hole; a "waisted" profile (i.e., seen face-on they are distinctly narrower medially); notched base forming two strong symmetrical spurs

Length: 6 to 7 cm

Material: Ivory

Function: Hunting small to medium size sea mammals, especially seals

Locations: Igloolik; Lake Harbour; Native Point
Type name: **Dorset Parallel**

*Culture:* Early, Middle and Late Dorset (700 B.C. to A.D. 1000)

*Attributes:* Flat; closed socket; transverse line hole; deeply notched base forming two sharp symmetrical spurs

*Length:* 4 to 9 cm

*Material:* Antler, ivory

*Function:* Hunting walrus as well as small to medium size sea mammals

*Locations:* Bache Peninsula; Igloolik; Lake Harbour; Mill Island; Native Point; Port Refuge; Saatut

*Comments:* This is one of the most common and longest-lived Dorset types
Type name: **Dorset Type G**

**Culture:** Late Dorset (A.D. 500 to A.D. 1000)

**Attributes:** Thin; paired line-holes which join on the ventral side of the harpoon head; end-blade slot perpendicular to the axis of the line hole; deeply notched base forming two sharp symmetrical spurs

**Length:** 4 to 7 cm

**Material:** Antler, ivory

**Function:** Hunting small to medium size sea mammals, especially seals

**Locations:** Bache Peninsula; Buchanan; Igloolik; Mill Island; Port Refuge; Resolute

**Comments:** This is a widespread type, found at Late Dorset sites throughout Nunavut. Similar but self-bladed harpoon heads are called "Dorset Type F."
Type name: **Dorset Type Ha**

Culture: ...... Late Dorset (A.D. 500 to A.D. 1000)

Attributes: ... Thin; open socket flanked by lashing grooves; self-bladed

Length:........ 6 to 11 cm

Material:..... Antler

Function: .... Hunting small to medium size sea mammals, especially seals

Locations: ... Crystal II; Ekalluk River; Igloolik
Type name: **Dorset Type J**

**Culture:** Late Dorset (A.D. 500 to A.D. 1000)

**Attributes:** Thin; laterally-placed line hole; self-bladed

**Length:** 6 to 11 cm

**Material:** Antler

**Function:** Hunting small to medium size sea mammals, and possibly harpooning fish

**Locations:** Button Point; Crystal II; Igloolik
THULE HARPOON HEADS

Thule harpoon heads were first studied in the 1920s by Danish archaeologist Therkel Mathiassen, who created the number designations still used for the most common types (e.g., “Thule Type 2”). As a group, Thule harpoon heads have a number of distinguishing features. Thule craftsmen made extensive use of the bow drill unlike their Dorset predecessors, and holes created with that implement tend to be circular and exhibit striations. This distinguishes them from the gouged, oval Dorset culture holes. End-blade slots on Thule harpoon heads are usually narrower than those found on Dorset harpoon heads because Thule end-blades were made of flat materials such as slate or metal, rather than of flaked stone. Finally, the lashing on open-socketed Thule harpoon heads was looped through cut slots or through drilled holes opening on either side of the socket, or simply wrapped around sunken lashing beds. Over time, the use of cut slots diminished, to be almost completely replaced by the use of drilled lashing holes.

<table>
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<td>Early Historic Inuit</td>
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<td>A.D. 1600</td>
<td>Colder than today</td>
<td>Postclassic Thule</td>
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<tr>
<td>A.D. 1400</td>
<td>Cooling</td>
<td>Classic Thule</td>
<td></td>
</tr>
<tr>
<td>A.D. 1200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.D. 1000</td>
<td>Warmer than today</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Type name: **Thule Type 1**

**Culture:** Classic and Postclassic Thule (A.D. 900 to A.D. 1600)

**Attributes:** Thin, open socket, with single asymmetrical spur; no barbs; self-bladed.

**Length:** 6 to 11 cm; average 8 cm

**Material:** Most specimens are made of antler

**Function:** Hunting small to medium size sea mammals

**Locations:** Clachan; Crystal II; Naujan; Nunguvik; Tunngatsivvik

**Comments:** In published specimens the socket lashing is most often beds or drilled holes, rather than cut slots. Most specimens do not exhibit decoration.
Type name: **Natchuk**

**Culture:** Early Classic Thule (A.D. 900 to A.D. 1000)

**Attributes:** Thin, open socket, with single asymmetrical spur; one lateral barb opposite the spur; self-bladed

**Length:** 7 to 13 cm; average 10 cm

**Material:** Antler is the preferred material

**Function:** Hunting small to medium size sea mammals

**Locations:** Kuk; Maxwell Bay; Naujan; Resolute

**Comments:** All specimens recorded from the Canadian Arctic have either lashing slots or lashing beds. Most exhibit no decoration.
Thule Type 2
Type name: **Thule Type 2**

*Culture:* .. Classic and Postclassical Thule (A.D. 900 to A.D. 1600)

*Attributes:* .. Thin, open socket, with single asymmetrical spur; two lateral barbs; self-bladed

*Length:* .... 7 to 20 cm; average 12 cm

*Material:* ..... Most are made of antler, followed by ivory; very few are made of bone

*Function:* .... Because of the potential fragility of the barbs, it has been suggested that this type was used for open water hunting of small to medium sized sea mammals, and not for hunting seals through their breathing holes.

*Locations:* ... Bache Peninsula; Belcher Islands; Brooman Point; Clachan; Crystal II; Kuk; Lady Franklin Point; Lake Harbour; Learmonth; Malerualik; Mitimatalik; Naujan; Nunguvik; Porden Point; Port Refuge; Qaummaarviit; Qilalukan; Rankin Inlet; Resolute; Silumiut; Truelove Lowland; Tunngatsivvik

*Comments:* .. Along with Thule Type 3 harpoon heads, this type is represented in almost every Thule site assemblage. Approximately one-quarter of published specimens exhibit incised Y-decoration. The socket lashing is most often cut slots, followed by drilled holes. Late variants have an inserted end-blade either parallel or perpendicular to the line-hole; these specimens usually have drilled lashing holes and no decoration.
Type name: **Thule Type 3**

_Culture_: Classic and Postclassic Thule (A.D. 900 to A.D. 1600)

_Attributes_: Thin, open socket, with single asymmetrical spur; no barbs; inserted end-blade parallel to the line-hole, non-waisted profile, oval cross-section

_Length_: 7 to 12 cm; average 9 cm

_Material_: Antler examples are most common, followed by ivory and bone

_Function_: Hunting small to medium size sea mammals

_Locations_: Bache Peninsula; Belcher Islands; Brooman Point; Clachan; Cumberland Sound; Kuk; Learmonth; Malerualik; Maxwell Bay; Naujan; Nunguvik; Porden Point; Qaummaarviit; Qilalukan; Rankin Inlet; Resolute; Silumiut; Tunngatsivvik

_Comments_: As with Thule Type 2 harpoon heads, this type is represented in almost every Thule site assemblage.
Type name: **Sicco**

Culture: .. Early Classic Thule (A.D. 900 to A.D. 1000)

Attributes: ... Thin, open socket, with single asymmetrical spur; no barbs; inserted end-blade parallel to the line-hole; a “waisted” profile (i.e., seen face-on they are distinctly narrower medially); a hexagonal cross-section, incised decoration

Length: .... 7 to 15 cm; average 10 cm

Material: .... Most specimens are made of ivory; antler and especially bone examples are much less common

Function: .... Hunting small to medium size sea mammals

Locations: ... Bache Peninsula; Brooman Point; Maxwell Bay; Naujan; Resolute

Comments: .. Sicco harpoon heads are a distinctive sub-type of Thule Type 3. They are characteristic of the very earliest Thule sites in Nunavut and Greenland. Specimens exhibiting the waisted profile and hexagonal cross-section characteristic of Sicco harpoon heads but without the incised decoration are sometimes called “Sicco-like.”
Type name: **Thule Type 4**

Culture: From Classic Thule through Historic times (A.D. 900 to the present)

Attributes: Thin, closed socket, with single asymmetrical spur; no barbs; inserted end-blade

Length: 5 to 12 cm; average 9 cm

Material: More than half of the specimens examined are made of bone, followed by ivory; only 11% are made of antler

Function: Hunting small to medium size sea mammals

Locations: Bache Peninsula; Belcher Islands; Brooman Point; Clachan; Cumberland Sound; Kuk; Learmonth; Nunguvik; Porden Point; Port Refuge; Qaummaarviit; Qilalukan; Resolute; Silumiut; Tunngatsivvik

Comments: The name “Thule Type 4” is really correct only for examples with the end-blade perpendicular to the line-hole; however, examples with the end-blade parallel to the line-hole are equally common.
Ancient Harpoon Heads of Nunavut

Type name: **Thule Type 5**

Culture: Postclassic Thule into Historic times (A.D. 1400 to A.D. 1600)

Attributes: Flat, closed socket, with two basal spurs; no barbs but inserted end-blade parallel or perpendicular to the axis of the line hole

Length: 6 to 13 cm; 9 cm

Material: Most are made of bone

Function: Hunting small to medium size sea mammals

Locations: Belcher Islands; Cumberland Sound; Lady Franklin Bay; Naujan; Porden Point; Qaummaarvit; Tunngatsivvik

Comments: This type clearly was modeled on the Dorset Parallel type. The fact that the Thule did not make this type before Postclassic Thule times suggests that they may have modeled it on Dorset harpoon heads recovered from ancient Dorset sites.
Whaling harpoon head
Type name: Whaling

Culture: Classic and Postclassic Thule (A.D. 900 to A.D. 1600)

Attributes: Thin, closed socket, with single asymmetrical spur; no barbs; end-blade perpendicular to the line-hole.

Length: 15 to 24 cm; average 20 cm

Material: Almost all examples are made of bone; none are made of antler

Function: Hunting bowhead whales

Locations: Brooman Point; Mitimatalik; Naujan; Porden Point; Resolute

Comments: Whaling harpoon heads are typologically identical to Thule Type 4 harpoon heads except that they are substantially larger in size
HARPOON HEADS TODAY

Following the arrival of Europeans in Nunavut, the rifle came to supplement the harpoon as the most important implement used to hunt sea mammals. Inuit, however, continue to use harpoons in the harvesting of seals and whales. There are obvious similarities between harpoon heads used by contemporary Inuit hunters and those made and used by their Thule ancestors, although the modern specimens are often made entirely of metal.

PROTECTING NUNAVUT’S ARCHAEOLOGICAL HERITAGE

Archaeological sites and artifacts in Nunavut provide a cultural anchor for contemporary Inuit and, for the rest of the world, a unique perspective on over 4000 years of arctic human history. However, as in other parts of Canada, Nunavut’s archaeological resources are threatened by both natural and cultural forces. As a result, all archaeological sites in Nunavut are protected by laws which prohibit the unauthorized disturbance or removal of artifacts or other objects. If you are a resident of Nunavut or a visitor, please do your part to preserve Nunavut’s cultural heritage for future generations.
GUIDE TO FURTHER READING

Individuals interested in reading more about Nunavut archaeology are encouraged to consult the following works:

Fagan, Brian M.

Maxwell, Moreau S.

McGhee, Robert
1990 *Canadian Arctic Prehistory.* Canadian Museum of Civilization, Ottawa.

McGhee, Robert
1996 *Ancient People of the Arctic.* UBC Press, Vancouver.

Schledermann, Peter
1996 *Voices in Stone: A Personal Journey into the Arctic Past.* Komatik Series No. 5. Arctic Institute of North America, Calgary.

Stenton, Douglas R.
GUIDE TO CULTURAL ORGANIZATIONS

Individuals interested in obtaining additional information about Nunavut's archaeological heritage can also contact:

Inuit Heritage Trust Incorporated*
P.O. Box 2080
Iqaluit, Nunavut Territory X0A 0H0

Prince of Wales Northern Heritage Centre
Box 1320
Yellowknife, Nunavut Territory X1A 2L9

Canadian Museum of Civilization
Archaeological Survey of Canada
100 Laurier Street
P.O. Box 3100, Station B
Hull, PQ J8X 4H2

*An attractive 70 x 30 cm full colour poster showing photographs of 17 different harpoon heads on the front and descriptive text on the back is available from the Inuit Heritage Trust Incorporated and Parks Canada – Pangnirtung Office. The cost is $15.00 including postage and handling.
ANCIENT HARPOON HEADS OF NUNAVUT: AN ILLUSTRATED GUIDE

Sakkutuqait (Naulatuqait) Nunavutmi Titiraujaqsimajut Qaujimajjutiit

Robert W. Park, Ph.D.
Douglas R. Stenton, Ph.D.
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The text appears to be a mixture of letters and numbers, with no discernible pattern or structure. It is not possible to extract meaningful text from this image.


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1. Lady Franklin Bay
2. Bache Peninsula
3. Port Refuge; Porden Point
4. Truelove Lowland
5. Brooman Point
6. Buckland Bay
7. Maxwell Bay
8. Bettison Point
9. Learmonth
10. North Bay; Icy Cape
11. Button Point
12. Frobisher Bay; Lief Bay
13. Ekalluk River
14. Lady Franklin Point
15. Clachan
16. Linsay Channel
17. Arctic Bay
18. Port Burrows
19. Point Hope
20. Fort Bethune
21. Prince of Wales Island
22. Native Point
23. Mill Island
24. Crystal Population Area
25. Crystal II; Whale Harbour
26. Point Vane
27. Cape Flora; Cape York
Locations: Ekalluk River; A^c-b; Port Refuge; Truelove Lowland
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Locations: Bache Peninsula; Ekalluk River; Native Point
Δσηηυγιςτε

Dimensions: 4 cm; 6 cm;

Locations: Δςςσ, ΡΗΓ, Ηςς
Δα-ρυζί: (200 Δωρ/Δαρήξη) Νο. 5-6 / 7 cm

Locations: Ας. Ρ. Ρ.; Π. Ρ.; Native Point
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Locations: Crystal II; Ekalluk River; Δ c b
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 Button Point; Crystal II; ""


\[
\begin{align*}
&\text{\cyr Dc} \ 4\text{\cyr Dc} \ (\text{\cyr Ac} \text{\cyr Dc}) \\
\text{\cyr Dc} \ 4\text{\cyr Dc} \ (\text{\cyr Ac} \text{\cyr Dc}) \ \text{\cyr AbAc\cyr Dc} \ 4\text{\cyr Dc} \ 4\text{\cyr Dc} \ (\text{\cyr Ac} \text{\cyr Dc}) \\
&\text{\cyr Dc} \ 4\text{\cyr Dc} \ (\text{\cyr Ac} \text{\cyr Dc}) \ \text{\cyr AbAc\cyr Dc} \ 4\text{\cyr Dc} \ 4\text{\cyr Dc} \ (\text{\cyr Ac} \text{\cyr Dc}) \\
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\end{align*}
\]
Δσήνος: Νεαρά ροδαλίκα μήκους 900-1600 μμ

ηλικίας... Αγγελιώτικο, δορυφόροι, ΑΣΚ.ΑΕ. ηλικίας 8-15 ετών.

ηλικίας: 6-11 εκατοστά; ηλικίας 8 εκατοστά.

Ρυγίδες: Κλαστικοί, ΑΣΚ.ΑΕ. Ηλικιώτικοι.

ηλικίας: Κλαστικοί, ΑΣΚ.ΑΕ. Ηλικιωτικοί.

αριθμός: Χρηστικόι; Crystal II; Αδιάφορο; Αναμνηστικό.

Διαστάσεις: Χωρίς ροζαλίκα, Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α. Χωρίς Δ.Α.Δ.Ρ.Τ.Υ.Α.

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22° (ΔαΔ αΗαρε) የ邯郸adelphia 2


dr. 3

C. 1600 (900 in 1200)

7 cm; DALD 9 cm

Bache Peninsula; Belcher Islands,
Brooman Point; Clachan; d;
Learmonth; Maxwell
Bay; d; Porden Point;
FORD; 2-G;
AC;

44
Δεδυάνη εει. 9

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Ανάπτυξηννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεννεν

7 Νπευ 15 cm; ΔΑΔεδυάνη εει. 9 cm

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Bache Peninsula; Brooman Point; Maxwell Bay; αδεδυάνη εει. 9

αδεδυάνη εει. 9
5

600 N.C. 13 cm; ΔLΔαυβα 9 cm

Belcher Islands; Lady Franklin Bay; Porden Point; τδ λεκαβη

(1400 N.C. 1600 Ν.Η.) Δτγλεονπονονον
Brooman Point; 

Porden Point; 

15 P.C.U. 24 cm; A.A.U. 20 cm

(900 P.C.U. 1600 A.A.U.)
Fagan, Brian M.

Maxwell, Moreau S.

McGhee, Robert
1990  *Canadian Arctic Prehistory.* Canadian Museum of Civilization, Ottawa.

McGhee, Robert
1996  *Ancient People of the Arctic.* UBC Press, Vancouver.

Schledermann, Peter
1996  *Voices in Stone: A Personal Journey into the Arctic Past.* Komatik Series No. 5. Arctic Institute of North America, Calgary.

Stenton, Douglas R.
Δc^sb\varphi_j\varphi_r\varphi_z^\circ \Delta^C^\circ\varphi_r^C \Gamma^\varphi_r^C

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