Assessment of Cultural Heritage Monuments and Sites in the Arctic

Arctic Council (SDWG) Project #P114

Final Report January 2013

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Front cover photo: Trapper`s cabin in Svalbard reverting back to nature. (Susan Barr)

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Final report January 2013

Foreword

The Arctic is full of history, stretching over thousands of years and leaving behind a wealth of cultural heritage sites that are current witnesses to the stories of the past. Despite their often extreme modesty in an overwhelming natural landscape, the sites are as important to the complete history of mankind as more-imposing sites such as the pyramids in north Africa and South America are. Without the Arctic sites we would know far less about the spread of mankind from Asia, across the high north of Alaska and Canada and down the coasts of Greenland. It would be difficult to piece together the history of the earliest peoples who appeared and disappeared as living conditions tipped back and forth from the barely possible to the impossible. And it would be difficult for us to imagine and understand how early entrepreneurs scraped their living in a climate that cost hundreds of explorer lives.

For decades or centuries many of the cultural heritage sites have seemed to have been *frozen in time* – protected from human impact by the sea ice surrounding them and preserved from natural degradation by the cold, dry climate. In actual fact nature has both protected and degraded the heritage at the same time, but the changing climate of our time is rapidly tipping the balance towards greater and more rapid degradation.

Therefore, acknowledging the importance of the cultural heritage sites of the Arctic to both native Arctic peoples and visitors alike, and given the knowledge that these sites are essential to the understanding of our past and therefore our present and future in the region, together with the increasing and negative effects of climate change, it is of the utmost importance that we do our best to ensure optimal protection and management of the sites.

Choosing a small number of internationally significant sites from the whole Arctic has not been easy and all those involved in the choice have had to make hard decisions. We particularly wish to draw attention to the criteria which have been used in order to make the selection we present here. It is crucial to understand that this list is not a simple statement of historical significance that has been applied to only a few sites. With this as the main criterion we would have included many more, such as those that have great symbolic significance in light of the information that archaeologists have extracted from them, but where there is little of the original authenticity left to protect. Museums and publications now present their stories, together with the landscape itself. Our aim is a contribution to the protection of sites that have much or most of the heritage values still intact.

We have not included in the list sites that already have been designated as having significant international value and appropriate management regimes through World Heritage listing. Such sites can stand as examples of good management that others may strive to match. An example that can be mentioned is the **Laponia Area** of Saami culture in Sweden which was already recognized to have international significance through World Heritage designation in 1996. In 2011 it was agreed that Saami representatives would be in the majority on the board for the future management of this World Heritage site.

The project aimed at presenting a short list of 20-30 cultural heritage sites in the Arctic which are of particular international importance. While each Arctic nation already has a process for ranking and a management strategy for its own national sites, the project aim was to identify sites that have significance which transcends national boundaries. We have had to look past sites with great regional significance or significance for specific groups. Again there are many that could have been listed given those criteria. However, we hope that the concentration here on the international aspect of certain sites will help to draw attention also to all the other sites in the Arctic, those which have not met our criteria, but which have other types of significance.

This report has been finally discussed by the Arctic Council Sustainable Development Working Group at its meeting on 25 January 2013. The choice of sites on the list and the Recommendations in this report are, however, the work of the project group of experts and remain their responsibility.

Susan Barr
Project leader

January 2013

Background

The project was initiated by Norway and was accepted by the SDWG in 2010 as part of its Priority Area for Education and Cultural Heritage. The Project recognises that information and designations of cultural heritage monuments and sites already exist in each of the Arctic countries, but that there is no international agreement on which monuments and sites are in the class of particular international importance. Such importance could be of World Heritage scale; but it could also be sufficient that they have international significance as Arctic sites. The proposal also recognises that cultural heritage sites in the Arctic are being affected by new challenges that have arisen in connection with accelerated climate change and economic development.

Aim of the project

The project aimed at presenting a *short list of 20-30 cultural heritage sites in the Arctic* which are of particular international importance. While each Arctic nation already has a process for ranking and a management strategy for its own national sites, the project aim was to identify sites that have significance which transcends national boundaries.

It was not a criterion that the final list should contain an equal number of sites from each country or region, or even a minimum of one from each country or region. It is the *international* criteria which decided the listed sites, while "non-listed" sites of course may retain their national importance and designations. This same principle is reflected in the World Heritage List which, although it ideally may seek equal representation from all nations and themes, will not accept nominations solely to fill these criteria. A larger number of heritage sites was originally proposed and formed the basis for the selection of the few proposed here.

Before nominations to the list could be initiated, it was necessary to develop a *set of criteria for the designation of sites in the Arctic* in order to clarify the international significance. These criteria are presented in this report.

In addition the project aimed to present a *Statement of Best Practice* for the protection and management of these designated sites. The Statement is presented in this report with the hope that the practices described in it will contribute towards ensuring sound management of the listed sites and of other important sites not on the list.

Project group

The project has been open for representatives of all Arctic States and Permanent Participants. In addition the project group members have used their contacts and networks to ensure broad participation. Canada, for example, consulted 133 communities across their Arctic territories, in addition to consulting with experts from its three northern territories.

The main working group has consisted of the following representatives:

Susan Barr: Project leader. Senior Advisor in polar matters at the Directorate for Cultural Heritage, Oslo, Norway and President of the International Council on Monuments and Sites' (ICOMOS) Polar Heritage Committee (IPHC).

Audhild Schanche: Senior Advisor at the Norwegian Saami Parliament and representative for the Saami Council.

Pauline Kleinschmidt Knudsen: Museum Curator, Greenland's National Museum and Archives.

William Fitzhugh: Curator of Archaeology and Director, Arctic Studies Center, Smithsonian National Museum of Natural History, USA.

Marty Magne: Director, Cultural Sciences Branch, Parks Canada Agency.

Pavel Filin: Director, Museum "Krasin", St Petersburg, Russia.

In addition direct input has been received from, amongst others:

Louwrens Hacquebord: Professor and Head of Willem Barentsz Polar Institute, Arctisch Centrum, University of Groningen, Netherlands.

Dag Avango: Researcher in polar industrial history, School of Architecture and the Built Environment, KTH Royal Institute of Technology, Sweden and contact person for a group of Swedish Arctic experts.

U.S. National Park Service, Alaska Office

Jim Gamble, Aleut International Association

Finnish National Board of Antiquities, Sámi museum Siida and Natural Heritage Services of Metsähallitus

Armgarð Weihe, Ministry of Culture, and Hanna í Horni, the Foreign Service, Faroe Islands

Working method

The group held meetings in Oslo, Washington DC and Nuuk. In addition several telephone meetings have been held and contact and exchanges have occurred through email. The group members' own institutions have paid for travel expenses, with some contributions from the Norwegian Foreign Office.

Cultural heritage in the Arctic

The Arctic is full of history, stretching over thousands of years and leaving behind a wealth of cultural heritage sites that are current witnesses to the stories of the past. Despite their often extreme modesty in an overwhelming natural landscape, the sites are as important to the complete history of mankind as more-imposing sites such as the pyramids in north Africa and South America are. Without the Arctic sites we would, for example, know far less about the spread of mankind from Asia, across the high north of Alaska and Canada and down the coasts of Greenland. It would be difficult to piece together the history of the earliest peoples who appeared and disappeared as living conditions tipped back and forth from the barely possible to the impossible. And it would be difficult for us to imagine and understand how early entrepreneurs scraped their living in a climate that cost hundreds of explorer lives.

Acknowledging the importance of the cultural heritage sites of the Arctic to both native Arctic peoples and visitors alike, and given the knowledge that these sites are essential to the understanding of our past and therefore our present and future in the region, together with the increasing and negative effects of climate change, it is of the utmost importance that we do our best to ensure optimal protection and management of the sites.

Broadly speaking, the cultural heritage of the Arctic has two main categories: indigenous heritage and the heritage which has its origins in cultures further south, usually individuals or smaller groups which moved north mainly to exploit natural resources by hunting, trapping, fishing, whaling and mining, but also for other purposes such as exploration, research and social work.

Climatic conditions in the Arctic have ensured exceptional preservation of organic materials, including human remains and artifacts that would have disappeared long ago at sites in warmer climates.

Because the sea is an important source of food in the exacting northern environment, together with the transportation opportunities provided by the sea in the summer and sea ice in the winter, the main bulk of heritage sites in the Arctic are found around the coasts. However, there are also inland sites of great significance, many connected to inland resources such as reindeer and caribou.

The primary agents of degradation of this cultural heritage have been the realities of nature itself. These include strong winds which can rip planks off wooden buildings; erosion of the shoreline and thus of coastal heritage sites; polar bears which may break into wooden cabins out of curiosity or because they smell stored food; freeze and thaw cycles which split stone and other materials; and chemical degradation caused by the salts blown in from the sea.

Traditionally Arctic sites have been protected from serious impacts from human action (particularly visitation) where summer sea ice has caused barriers. In addition, polar areas were not considered typical tourism areas. This has changed in recent years. The climate changes that now can be seen around the world have hit the Arctic particularly hard, and sea ice in the Arctic Ocean has decreased dramatically in both extent and thickness. Shorelines exposed to erosion are now even more at risk, and visitation to previously-sheltered heritage sites has increased rapidly. Increased shipping across the Arctic Ocean and around its shores, as well as industrial development, can bring both benefits and negative impacts to Arctic heritage, as documented in the recent AMSA IIc report.

The Arctic is at the very edge of the climatic comfort zone for vegetation. The fragile plants that manage to grow there gain extra nourishment from organic materials connected with heritage sites, and this vegetation growth in turn helps to protect and preserve archaeological sites. It takes very little impact from visitors' boots before the vegetation is damaged and removed, and regrowth may never occur. Thus the dilemma arises which is familiar to many managers of heritage sites: sites can become "loved to death". Visitors who have no desire to damage or destroy either vegetation or heritage sites may do just that either by unwittingly tramping on building remains and artifacts or by contributing to the formation of paths and other vegetation-free areas around the sites.

The changing climate in the Arctic affects everything, whether it concerns humans, flora and fauna, or cultural heritage. In this regard, by far the most serious threat to Arctic sites, both on the coast and interior, is the warming climate. Coastal sites are eroding because of sea level rise, increased wave action and absence of buffering sea ice, and coastal and interior sites that have been frozen for thousands of years are thawing and losing their faunal remains and rare bone, wood, and ivory artifacts. More organic decay is occurring and the biological conditions around the sites are changing.

Recognising that negative impacts of climate change for people living in the Arctic are the primary concern we will, however, point out that effects on, for example, polar bears receive a huge amount of publicity while threats to the cultural heritage of the Arctic receive little attention. Many people outside the region associate the Arctic wilderness only with nature, even though this "wilderness" has been used by humans through thousands of years. We are therefore pleased that the Arctic Council has encouraged and supported this project with the aim of promoting and preserving the little-known but significant material heritage throughout the Arctic.

The cultural sites and landscapes of the Arctic are many-facetted. They have values that are important to people, from the individual to the international level. They are our main sources of knowledge of how humans have interacted with Arctic nature over time. They reflect the motives behind this interaction and the ways the Arctic has been understood and interpreted. They are the inspiration for stories of human endeavours and achievements. For indigenous peoples, they are also associated with both the intangible heritage and contemporary living, thus forming a basis for self-definition and sense of place in an historical context that stretches into the future.

Internationally significant Arctic sites have qualities that are different from many other sites seen as internationally important. They tend to be less recognizable as physical structures and they challenge the notion of culture as being separate from nature. At the same time they are not hidden by the growth of higher vegetation and by later cultural layers and the climatic conditions have up to the present time ensured a remarkable preservation of organic materials not seen further south. In addition, the sites reflecting the early explorers in the Arctic have gained a mythical quality that has been disseminated in art and literature through many generations.

Recommendations from the project group

1. We recommend that the Arctic Council create a List of Arctic Heritage Sites of International Significance and inscribe on the list the 30 sites described in this report.

2. We recommend that the Arctic Council encourage member states to promote implementation of the Statement of Best Practise for Site Management included in this report at the sites inscribed on the List of Arctic Heritage Sites of International Significance.

3. We recommend that the Arctic Council conduct a review of the List of Arctic Heritage Sites of International Significance at a future point - in 5 years or 10 years - to determine whether there is a need to add sites to the list or remove sites from it. In undertaking such a review, we suggest that the Council develop criteria for removing sites from the list, for example in cases where the site no longer fulfils the criteria which initially justified its inclusion on the list or when the state of conservation of the site has suffered due to inadequate management.

The project group remarks in addition that:

Cultural heritage professionals are racing against time to document sites that are being eroded. We emphasize the importance of documenting and securing where possible heritage sites under threat and recommend that this important challenge be addressed by the Arctic countries.

Knowledge about Arctic sites comes from a constellation of sources, including local knowledge, indigenous belief, historical documentation, and scientific research. Listed sites should be given special consideration for knowledge generation and dissemination to all interested parties. We emphasize the importance of facilitating indigenous and local participation in future consideration and management of the sites.

The project group has proposed sites with exceptional international value, but strongly emphasizes that the listed sites are only a small selection of the sites and material remains in the Arctic that are important for people, both indigenous and others, who recognise the efforts and activities of those who through history contributed to exploration of and knowledge about the Arctic. We recommend that the listed sites must therefore not receive all the attention to the exclusion of others, but function as a door-opener to the multitude of heritage sites throughout the Arctic region.

Amongst other results the work on this project has made it clear that all archaeological sites in the Arctic, especially those that have not been excavated or disturbed in a major way, are a limited resource. We strongly recommend that reviews of research permits, excavation plans, and resources management issues recognize that some sites are more in need of attention than others. Maintenance of undisturbed sites should be given prime attention in connection with the resource management process, at the same time as such factors as research, public education and recovery of endangered sites are considered.

"Exceptional International Significance" related to a cultural heritage site means:

The site (site, complex or entity) is a rare or unique example, following the criteria below, with significance for all peoples with interests in the Arctic and should be preserved for future generations.

The inscription of sites on the Arctic Council's List is independent of the World Heritage listing process.

For the purposes of the Arctic Council list, a site may be, but is not limited to, a monument, a landscape, a settlement, an historic route, a natural feature with particular cultural meaning, a series of sites, or a cultural environment[1].

To be included on this list, a site must meet one or more of the following criteria:

1. The site is an outstanding illustration of human adaptation to and interaction with nature;
2. The site is directly linked with a key person or event(s) in the history or exploration of the Arctic;
3. The site provides exceptional insight into the cosmologies and social values of Arctic cultures;
4. The site provides exceptional insight into a technical, cultural or historical activity through its materials, design or method of construction;
5. The site is an outstanding illustration of cultural history over a long period of time;
6. The site has outstanding international commemorative or symbolic value.

Sites that no longer fulfil the original criteria for which they were listed may be removed from the list – see Recommendation 3 above.

[1] A cultural environment is an area where monuments and objects form part of an integrated whole

Statement of Best Practice for Site Management

Best practice for site management consists of:

- a legal or proper framework for protection and management;
- a thorough understanding and documentation of the values which make the site significant;
- a cycle of site planning, implementation, monitoring, evaluation and feedback, based on the site's values;
- stakeholder and community involvement in the decision-making processes directly affecting the site;
- outreach measures to educate and promote understanding;
- management of access and use;
- allocation of appropriate financial and human resources for management; and
- an accountable, transparent description of site management.

The Arctic Council does not require that sites included on the list be managed according to this Statement of Best Practice for Site Management as an absolute condition for inclusion on the list, but encourages those responsible for managing the sites to achieve best practice. However, if a site's state of conservation suffers as a result of poor management practices, the Arctic Council may remove it from the list as suggested in Recommendation 3 above.

Internationally significant cultural heritage sites in the Arctic

List prepared by the project group

Norway – Svalbard

1. Smeerenburg, 17th century Dutch whaling station.
2. Virgohamna, base for pioneer North Pole attempts by air 1896-1909.

Greenland

3. Eastern Midsommersø and Jørgen Brønlund Fjord. The world's northernmost settlement complexes from the first inhabitants of NE Greenland 2500-1700 BC.
4. Lake Tasersiaq and its immediate shores. 300+ structures from Thule caribou hunting.
5. Kangeq – Illuerunnerit. Many sites from all cultural periods in Greenland except the Norse.

Canada

6. Fort Conger, Nunavut. American scientific base during the 1st IPY.
7. Kodlunarn Island, Nunavut. Site of Martin Frobisher's 16th century mining activities and early cultural contact with the Inuit.
8. Herschel Island, Yukon coast. Thule and American whaling remains, establishment of Canadian sovereignty in the western Arctic and meeting of cultures.
9. Saoyú-?ehdacho, NW Territories. Cultural landscape showing strong native ties to the land.
10. Beechey Island, Nunavut. Central landmark for the whole history of the exploration of the NW Passage and Sir John Franklin's last expedition.
11. HMS Investigator and McClure's Cache, NW Territories. Wreck in 11 m of water of one of the most famous Franklin search vessels and associated cache and artifacts.
12. Alpine Ice Patches, Yukon and NW Territories. Well-preserved caribou-hunting artifacts stretching back 9000 years in age.
13. Dawson Historical Complex. Centre for the Klondike Gold Rush 1897-98.

USA – Alaska

14. Agiak Lake archaeological district. Evidence of caribou hunting for millennia.
15. Cape Krusenstern archaeological district. Artifacts and sites from c. 7000 BC to historical times.
16. Ipiutak site, Point Hope. Prehistoric remains from c. 1400-2000 years ago from a culture considered to be the forerunner of later Eskimo societies.
17. Kijik archaeological district, Lake Clark. 10 settlements and 200 dwellings from a Dena'ina Athabascan community c. 1600-1910.
18. Attu and Kiska, Aleutian Islands. Remains from the Japanese invasion of these Aleutian Islands during World War II and the American recapture of the islands.
19. Shaw Creek Flats archaeological district. 3 of the oldest, well-dated sites in Alaska, up to 14 400 years old.

Sápmi

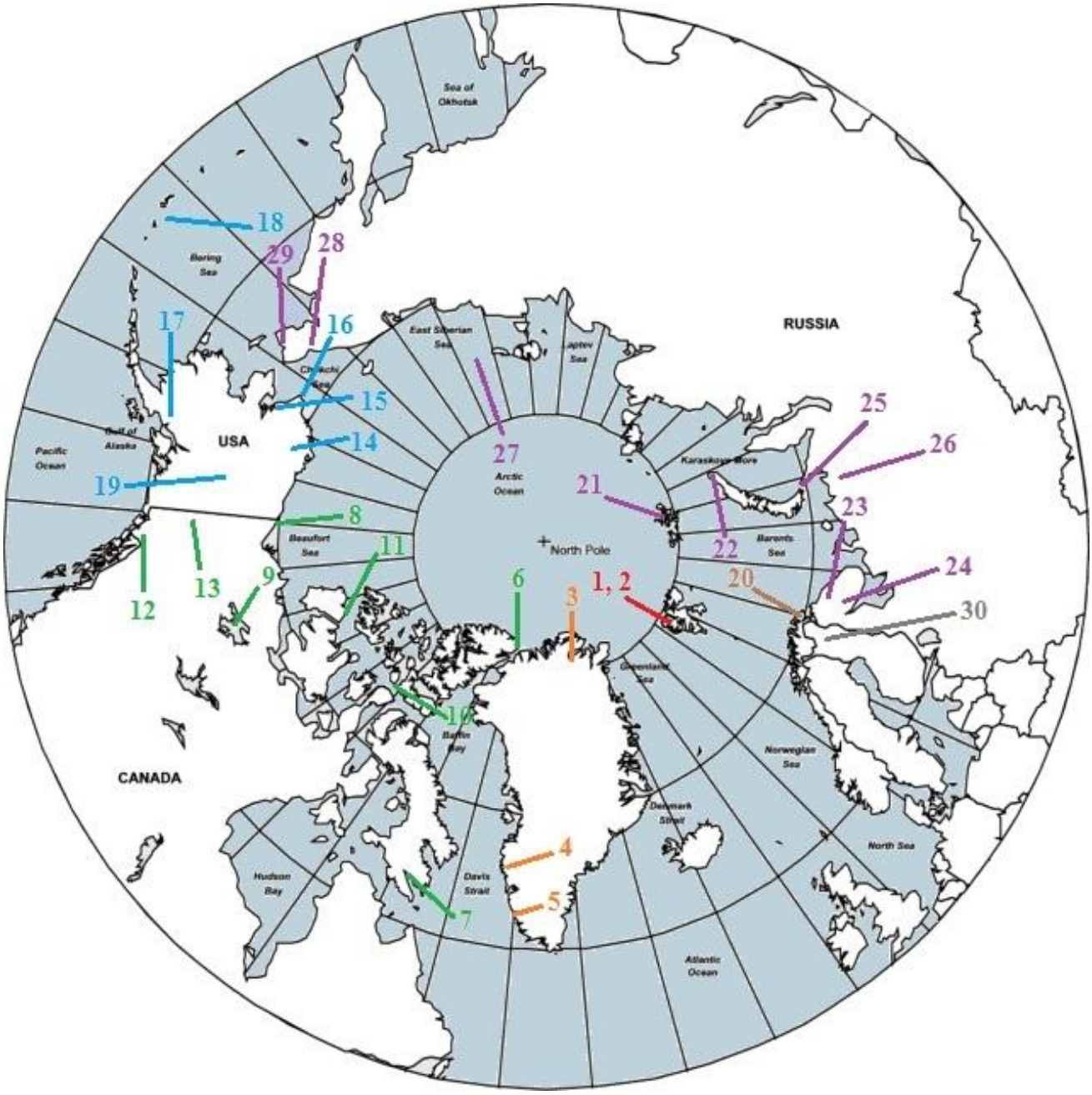
20. Ceavccageađgi / Noidiidčearru: rich Sámi heritage environment covering 1000s of years.

Russia

21. Fridtjof Nansen's and Hjalmar Johansen's wintering site 1895-96 on Zemlya Frantsa Iosifa.
22. Willem Barentsz' wintering site on Novaya Zemlya.
23. Ancient sailors' autographs on stone on ostrov Anikeev, Kola Peninsula,
24. Kanozero petroglyphs, Kola Peninsula.
25. Sacred sites of ostrov Vaigach.
26. Mangazea Town, West Siberia. 1st Russian 17th century town behind the Arctic Circle.
27. Zhokhov archaeological site, Novosibirskiye ostrova.
28. Pegtymel archaeological complex, Chukotka.
29. Kitovaya (Whale) Alley, Chukotka. Ancient Inuit construction of stones and whalebones.

Finland

30. The combined gold-prospecting related sites on the River Ivalojoki: Kultala Crown Station, Ritakoski, Pahaoja and stone banks of Sotajoki.


Sea of Okhotsk
Bering Sea
East Siberian Sea
Laptev Sea
RUSSIA
Pacific Ocean
Gulf of Alaska
USA
Arctic Ocean
North Pole
Karaskoye More
Barents Sea
Beaufort Sea
Greenland Sea
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Norway - Svalbard

Map of Svalbard showing the area of Smeerenburg and Virgohamna.

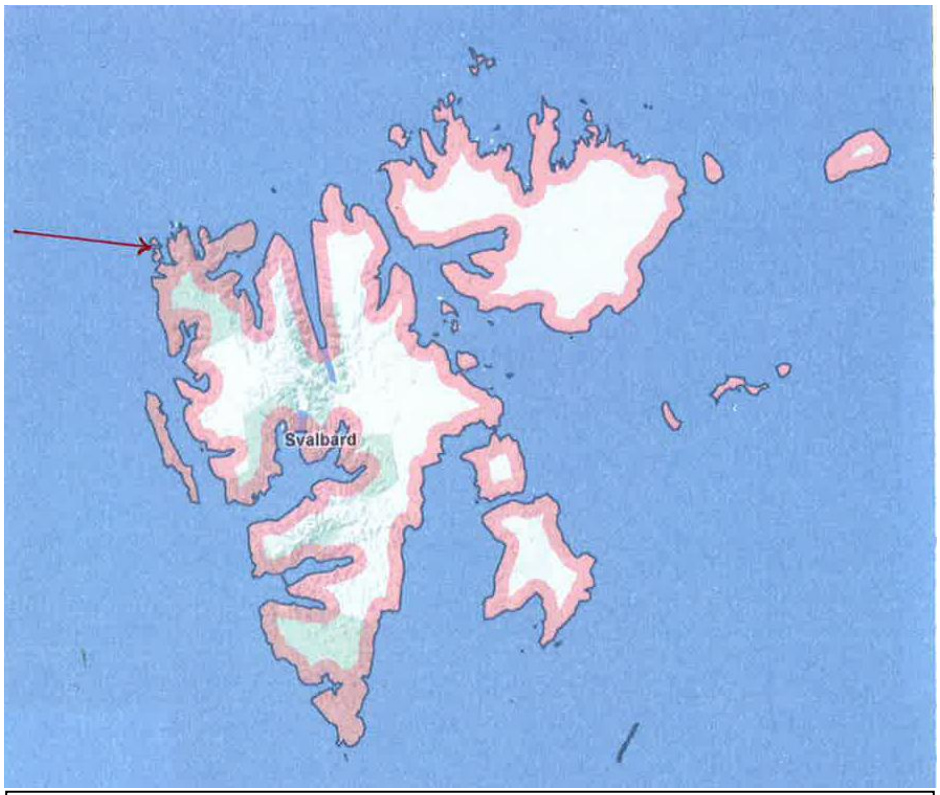


Figure 1.0 Basis from Google Maps

Site 1: Smeerenburg land station for Dutch 17th century whaling

Site description:
During the 17th century Dutch whalers established a land station – known as Smeerenburg (Blubber Town) – on the low, sandy shore of Amsterdam Island in the far northwest of the archipelago of Svalbard. The station was in use c. 1620-1660 and was comprised at its largest extent of at least seven double boiling pits (fire pits) and one single for boiling the oil out of the whale blubber. In addition there were 16-17 buildings of wood and bricks to house the workers during the summer and to serve as workshops and storage rooms. The paths between the buildings were paved and drained and the buildings had wooden floors. The station was ideally placed to catch the whales that came into the off-shore area, to provide shelter for the ships and ways of escape from approaching ice, and for winching the whales up on to the beach. The station also served as a base for exploration of the wider area around. Behind the shore station are a number of graves from the period, while hundreds of graves are collected in larger or smaller numbers on the surrounding islands and shores.

An extensive archaeological excavation and survey of the station and some of the graves revealed well-preserved skeletons and clothing from this period in Europe where workers' clothes are no longer preserved. The results of this project 1979-82 revolutionised existing knowledge of the whaling period and the environmental conditions for whales and whaling in 17th century Svalbard. The artifacts recovered from the excavations have been conserved and are now either exhibited in the Svalbard Museum in Longyearbyen or are placed in the climate-controlled modern archaeological storage facility there.

Physical condition:
The station has been visited by tourists for more than 100 years, but in far larger numbers now than ever before. It is one of the highlights of the expedition cruise trips each summer. The natural conditions together with visitation have broken down much of the structure of the boiling pits which are now recognisable as rings of solidified oil mixed with sand and gravel. The outermost of the eight ovens has been eroded into the sea and the second one is threatened. The archaeologically-excavated areas have been covered over and are now indistinguishable from the untouched sites.

Existing legal status:
The site has been protected by law since 1974 under various editions of what is now the Environmental Law for Svalbard. According to this it is not allowed to damage or disturb the site in any permanent way and no further excavations are envisaged in the near future. Tour operators have to follow strict guidelines for visitation to the site and an information board placed near to the landing site explains what the site is. There is in addition both a printed brochure, information on the web and information at the Svalbard Information Centre (Svalbardporten) in Longyearbyen.

Which criteria it meets:
The site is proposed under the Criteria 1 and 4.

Figure 1.1 One of the blubber ovens today. Photo: Susan Barr

Figure 1.2 Representation of a Dutch whaling station that could have been Smeerenburg. Painting by Cornelis de Man ca. 1639, now in Rijksmuseum, Amsterdam.

Primary references:

See: http://oldweb.sysselmannen.no/hovedEnkel.aspx?m=45282 > Smeerenburg pdf

Hacquebord, L. and Vroom, W. 1988: Walvisvaart in de Gouden Eeuw. De Bataafsche Leeuw, Amsterdam

Site 2: Virgohamna, site of the first attempts to explore the Arctic and reach the North Pole by air.

Site description:
Virgohamna is a bay on the north coast of Danskøya (Danish Island) in northwest Svalbard. In 1896 and 1897 the Swedish engineer Salomon August Andrée established a base there for attempts to fly to the North Pole with a hydrogen balloon. The first year ended without any attempt due to inclement weather conditions, while the actual attempt was made in 1897. Andrée and his two companions disappeared northwards and nothing more was known about their fate until remains of their bodies and equipment were found on the remote island Kvitøya in the northeast of Svalbard in 1930. The find of diaries and photographic film that could be developed has given rise to international books and films about the expedition and the fate of the men.

In 1906, 07 and 09 American Walter Wellman also established a base in Virgohamna, including a large hangar to house the airship he was to use to fly to the North Pole. The attempts ended in fiasco, but the remains of the hangar and the equipment to produce the gas for the airship are the most prominent heritage remains in the bay.

Before these technological pioneering attempts Virgohamna had already been used for industry; in the early 17th century Dutch whalers had established a small land station for processing whale oil, and had left behind some whalers' graves. Also within the cultural environment is the base of a small timber house, used by Englishman Arnold Pike and six companions to "experience the exotic area through the seasons" 1888-89.

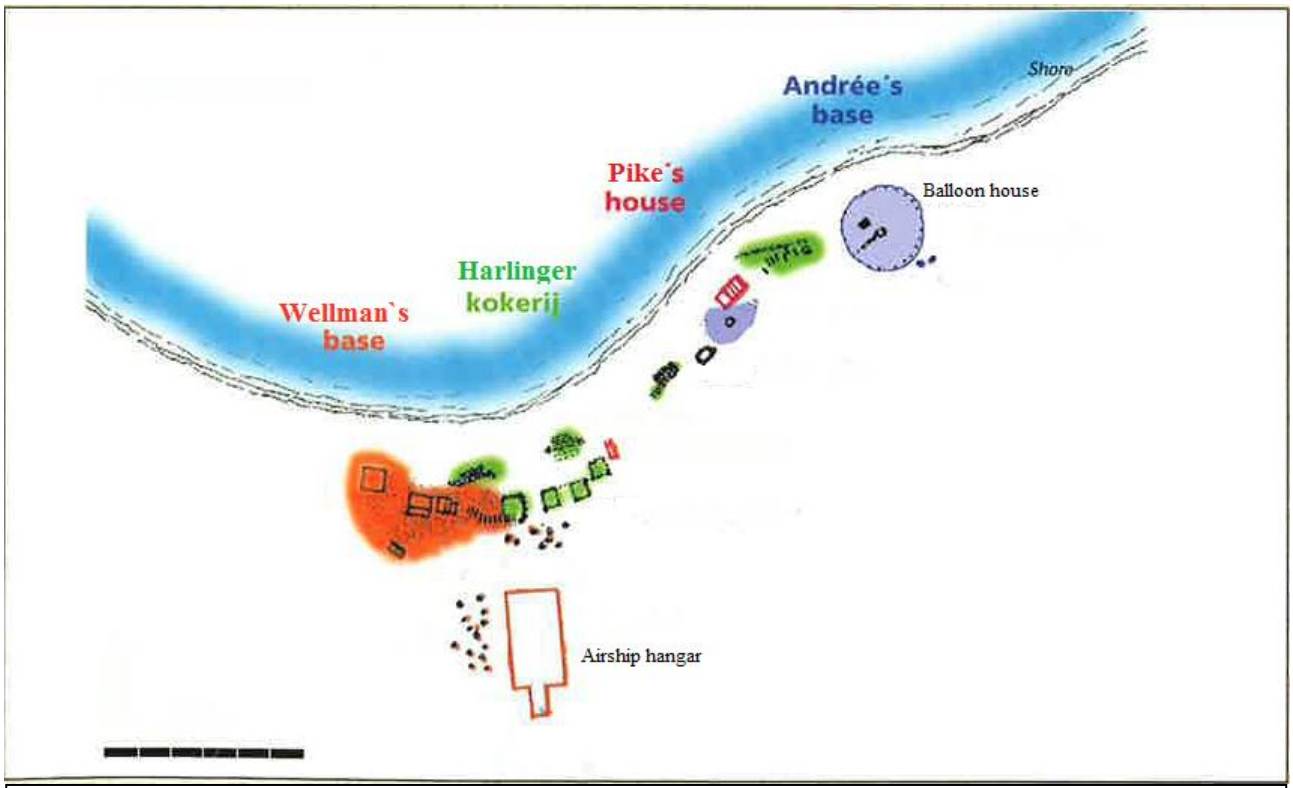


Figure 2.1. Sketch of the various cultural elements at Virgohamna.
From the Governor of Svalbard's information brochure.

Physical condition:
The station has been visited by tourists since Andrée's first base was established in 1886, but now in far larger numbers now than ever before. It is one of the highlights of the expedition cruise trips each summer. The site has previously been trampled over and many materials and artifacts have been removed. A survey of the cultural remains in the 1990s established the origin and purpose of many of the remains and provided a basis for better management.

Figure 2.2. Wellman's hangar and Pike's house being inspected by tourists in 1906. Remains from Andrée's balloon house in right foreground.
Photo: Norwegian Polar Institute from the Governor of Svalbard's information brochure.

Existing legal status:
The site has been protected by law since 1974 under various editions of what is now the Environmental Law for Svalbard. According to this it is not allowed to damage or disturb the site in any permanent way and no further excavations are envisaged in the near future. All visits to the site have to receive permission from the Governor of Svalbard beforehand and tour operators have to follow strict guidelines for movement around the site. An information sign placed near to the landing area explains what the site is. There is in addition both a printed brochure, information on the web and information at the Svalbard Information Centre (Svalbardporten) in Longyearbyen.

Which criteria it meets:
The site is proposed under the Criteria 2, 4 and 6.

Figure 2.3. Aerial view of the remains of Wellman's hanger and other sites in Virgohamna. Photo: Susan Barr

Primary references:

http://oldweb.sysselmannen.no/hovedEnkel.aspx?m=45282 Virgohamna pdf

Capelotti, P.J.1999: By Airship to the North Pole. An archaeology of human exploration. Rutgers University Press, New Jersey.

Greenland

Site 3: Eastern part of Midsommersø and Jørgen Brønlund fjord.

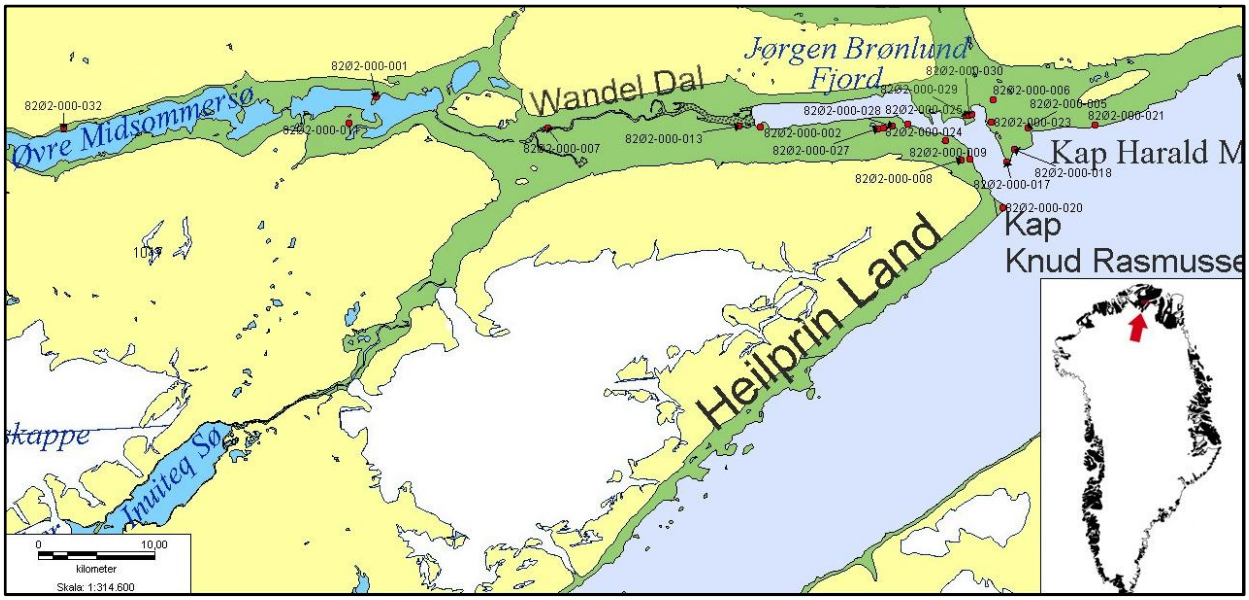


Figure 3.1: Overview of the area with sites comprising year-round seasonal hunting sites and settlements. Most sites are from the Independence Culture.

Site description:

The area comprises approximately 25 sites from the globe's northern- most settlement complexes from the very first inhabitants of North East Greenland, and some few camps from later occupations. Together the Independence sites represent the annual hunting cycle of the Independence Culture.

On the basis of the Out of Africa theory the people of the Independence culture completed the spreading of Homo Sapiens around the globe at this eastern most part of the Western Hemisphere. The Independence sites have dates between 2500 BC and 1700 BC.

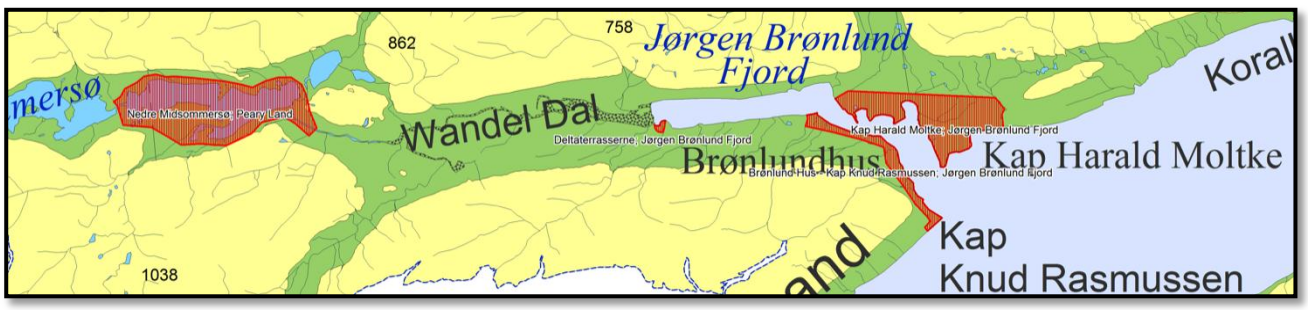


Figure 3.2: Map showing the outlines of areas with Independence sites nominated as international Arctic heritage sites.

Figure 3.3: Dwelling structure with central hearth from an Independence site in Jørgen Brønlund Fjord.

Physical condition:
The cultural heritage sites are vulnerable to traffic of any kind as they are lying exposed on the land surface. But the segregated location far from the beaten track makes disturbance from traffic unlikely.

Existing legal status:
All sites dated earlier than 1900 AD are protected by the Greenlandic Conservation Act. These sites are therefore legally protected by this Act, and also by the executive order, on North East Greenland National Park. According to the executive order heritage monuments must not be disturbed within a radius of 500 meter. Map B shows the areas to be especially protected. The areas on the map have been suggested to the Greenlandic Self-Government to be listed as heritage areas.

Which criteria it meets:
This nomination meets criteria 1, 2 and 5.

Primary references:
Knuth, E. 1967: The Ruins of the Musk-ox Way. *Folk 8-9*, 1966/67: 192-209.

Bjarne Grønnow and Jens Fog Jensen 2003: The Northernmost Ruins of the Globe. Eigil Knuth's Archaeological Investigations in Peary Land and Adjacent Areas of High Arctic Greenland – with contributions on faunal analyses by Christyann M. Darwent. *Meddelelser om Grønland · Man & Society 29.*

Site 4: Cultural landscape in Lake Tasersiaq and its immediate shores

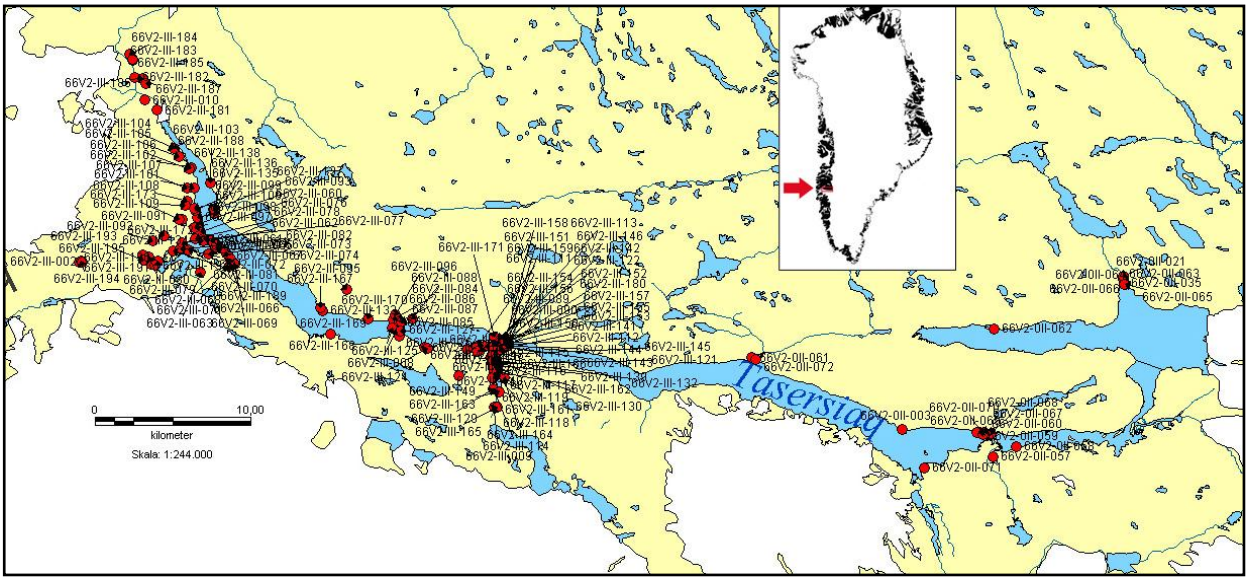


Figure 4.1: Lake Tasersiaq and its shores: The reds dots linked to a cultural heritage number are mapped sites which can include more than forty structures.

Site description:
The shores along the biggest lake in Greenland make a cultural landscape with more than 300 structures that for the most part can be related to Inuit (People of the Thule Culture and their descendants) caribou hunting. The coherent undisturbed cultural landscapes with complexes of settlements and hunting areas make unparalleled evidence of prehistoric and historic use of landscapes. The hunting areas contain such structures as shooting hides, lookouts, hunters' beds (structures for sleeping on hunting trips), shelters, graves, hunting drives, cairns, caches and trails. These cultural landscapes give unique opportunities for the study of prehistoric Inuit activities in the interior. In addition sources from traditional use are available and myths and legends related to certain localities by Tasersiaq have been recorded. The landscapes also provide a source for the study of the known historical dichotomy existing between hunting in the interior and the coast deriving from the cosmology of the Inuit, and for a more complete study of the utilization of the fluctuating hunting species. The remote high land area several days` walk from the coast of Kangerlussuaq ceased being used around 1950. The earliest structures dated to around 2000 BC are from the Saqqaq Culture, but the majority of the sites can be related to the use by the Inuit from the 14th century up to 1950.

Existing legal status:
All sites dated earlier than 1900 AD are protected by the Greenlandic Conservation Act.

Physical condition:
The undisturbed, contiguous areas with preserved cultural remains make up a fossilized imprint on the landscape.

Figure 4.2: Left: Tent houses and hunter's bed built along a cliff.
Right: Look-out structure with an excellent view.

Which criteria it meets:
The landscape meets criteria 1, 3, 4 and 5

Primary references:
Knudsen, Pauline 2009: Culture historical significance on areas Tasersiaq and Tarsartuup Tasersua in West Greenland & Suggestions for Salvage Archaeology and Documentation in Case of Damming Lakes. Report prepared for ALCOA, May 2009. Greenland National Museum & Archives.

Knudsen, Pauline 2009a: An Archaeological Survey in the West Greenland Inland, summer 2008, in Advance of Proposed Development of Hydroelectric Power. Report prepared for ALCOA. Greenland National Museum & Archives.

Knudsen, Pauline 2009b: Archaeological Surveys in the West Greenland Inland, summer 2009, in Advance of Proposed Development of Hydroelectric Power. - Report prepared for ALCOA. Greenland National Museum and Archives

Ulla Odgaard 2008: An Archaeological Survey in the West Greenland Inland, summer 2007, in Advance of Proposed Development of Hydroelectric Power. Report prepared for ALCOA. Greenland National Museum & Archives.

Site 5: Kangeq - Illuerunnerit. Historical sites situated in Southwest Greenland

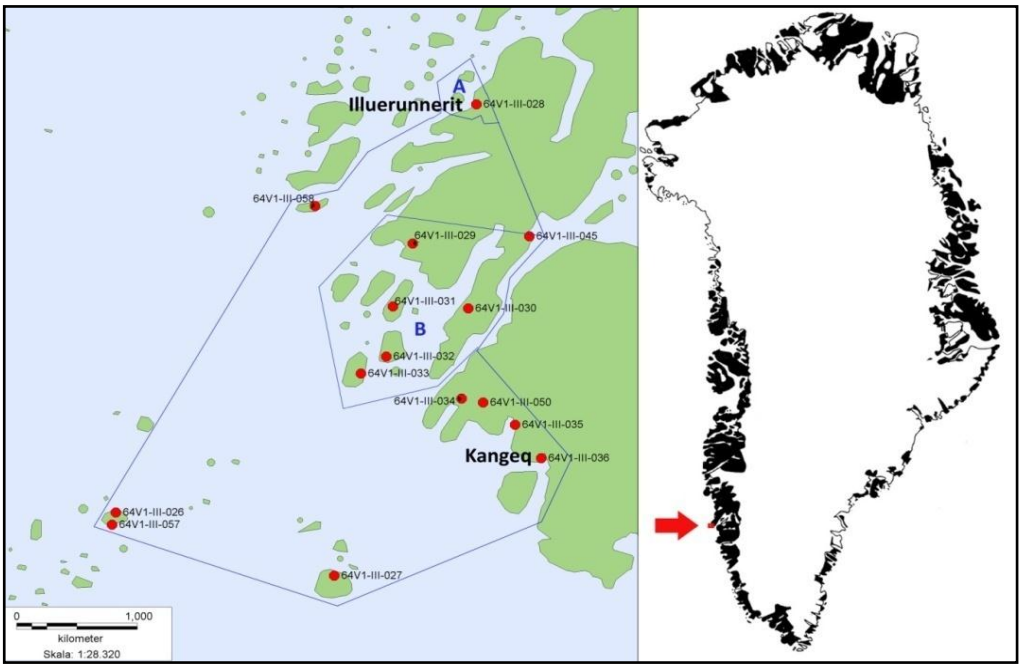


Figure 5.1: Kangeq, Illuerunnerit and the archipelago. The area marked with blue comprises the listed area. Area A and B are legally protected heritage areas.

Site description:
The many historical remains of the area include sites from all cultural periods except from the Norse. Two sites consist of remains from the Saqqaq Culture, one of which also includes Greenlandic Dorset (ref. 64V1-III-33 and 36). The Inuit settled the area in the 15th century. For 200 years Inuit travelling north from South Greenland are known have gathered by Kangeq to trade and take part in the fishing for lumpsucker in the spring. The first European explorers and whalers came to the Kangeq area in the late 16th century, but have not left any traces. The missionary Hans Egede, who was the first Westerner to settle in Greenland, first stayed at Illuerunnerit (ref. 64V1-III-28) from 1721 to 1728. The settlement of Kangeq (ref. 64V1-III-36) was established as a colonial settlement in 1854. The rich and varied tradition of legends were told and written by indigenous persons from Kangeq in the 19th century. Some of the ruins can be related to legends and even persons in the legends.

Physical condition:
The three preserved ruins from the Illuerunnerit (ref. 64V1-III-28) and many of the more than 40 ruins from the Inuit are well preserved even though some have been excavated. In the settlement of Kangeq many houses from the colonial settlement have decayed since the settlements were abandoned in 1974.

Existing legal status:
Areas A and B are proteced as cultural heritage areas by a law from 1971. The rest of the sites from before 1900 AD are protected by the Greenlandic Conservation Act.

Figure 5.2: The photo to the left shows part of the midden in Kangeq and to the right the ruin of a Thule Culture winter house also from Kangeq.

Which criteria it meets:
The area meets criteria 1, 2, 4 and 5.

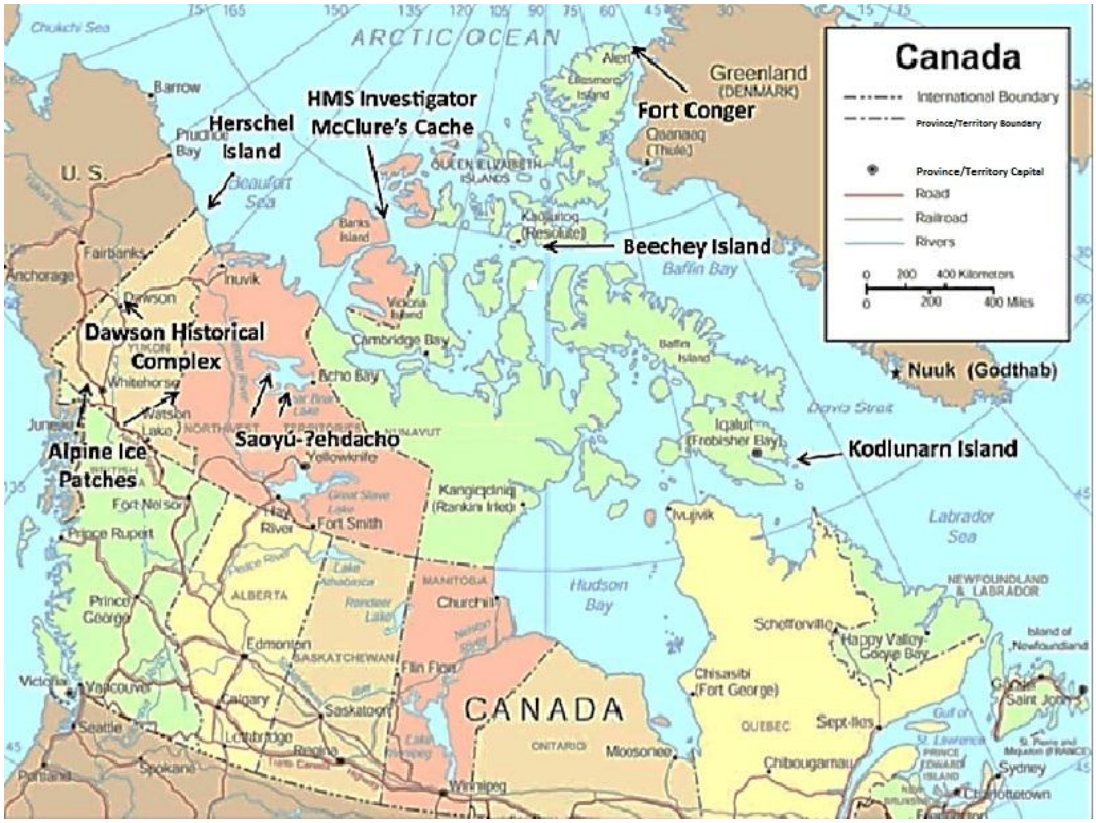
Primary references:
Hans Christian Gulløv and Hans Kapel 1979: Haabetz Colonie 1721 - 1788. A historical - archaeological investigation of the Danish-Norwegian colonization of Greenland. *Publications of the National Museum. Ethnographical Series 16*. Copenhagen.

Hans Christian Gulløv, 1997: From Middle Ages to Colonial Times. Archaeological and ethnohistorical studies of the Thule culture in South West Greenland 1300-1800 AD. *Meddelelser om Grønland, Man & Society 23*. Copenhagen

Canada

As a major point of reference, for the purposes of this committee, Canada has defined its Arctic region as the three territories of Nunavut, Northwest Territories and Yukon.

The proposed sites are:



- Fort Conger Nunavut
- Kodlunarn Island Nunavut
- Herschel Island Yukon
- Saoyú-?ehdacho Northwest Territories
- Beechey Island Nunavut
- HMS Investigator and McClure's Cache Northwest Territories
- Alpine Ice Patches Yukon and Northwest Territories
- Dawson Historical Complex Yukon

The list was compiled through discussion with experts from each of the three territories of Nunavut, Northwest Territories, and Yukon, and with input from subject matter experts from Parks Canada. In addition, consultations occurred across the territories through a mail query delivered to 133 communities.

Site 6: Fort Conger, Discovery Harbour

Figure 6.1 Fort Conger, Discovery Harbour

Site description:
Fort Conger is located in Quttinirpaaq National Park, northeastern Ellesmere Island, and features three small buildings and a debris field related to British and American exploration in the Arctic dating to the late 19th century as well as 20th-century Canadian, British and Danish expeditions. It is the site of the commemoration of the First International Polar Year of 1882-83 and its buildings are classified under the federal heritage buildings policy. Fort Conger's archaeological and historic remains are a landmark in an isolated land.

In 1875-76, Discovery Harbour served as the winter quarters for the H.M.S. Discovery of the British expedition commanded by George Strong Nares who was successful in achieving the Farthest North of 83º 20'. Led by Lieutenant Adolphus Greely, the United States Army established a scientific research station at Discovery Harbour for the first International Polar Year of 1881-82. Named for an expedition supporter, Fort Conger included a large winter shelter that soon proved difficult to heat. The expedition's scientific work was successful but the failure of two ships to resupply the 25-man party resulted in a horrific tale of starvation from which only six men survived. In 1899, American explorer Robert Peary arrived at the abandoned Fort Conger, planning to use it as a base station from which to reach the North Pole. The Peary expedition was accompanied by Inughuit guides from north-western Greenland, used traditional knowledge, wore fur and ate local food and was thus much better able to cope with the harsh conditions. Using a combination of European technology and Aboriginal traditional knowledge, the base camp structures were modified in ways that allowed them to function well within the cold arctic environment. Peary dismantled the house and reconfigured it into three small huts. The huts were connected by a series of canvas that became covered by hardened snow. Peary erected a tent for his own living quarter that was covered by mattresses from Fort Conger. Today, Peary`s tent cannot be found but the wooden structures remain at the site.

Fort Conger was the base for Peary's expeditions in 1900-01, and again in 1905-06 and 1908-09. After the Peary era, the site provided shelter to American, Norwegian, Danish, and British/Canadian expeditions in 1915, 19920, 1921, and 1935.

Physical condition:
The dismantling of Fort Conger by Peary and his crew left little of the original wooden structures at the site. Most of the outer walls are missing, and windows and doors are open, while the roof has blown of one of the small huts. A photograph taken of the hut in 1935 suggests that the roof had been off the hut since that time. The huts and the wooden artifacts are in various states of deterioration. Wind erosion, salt defibration, soft rot fungi and accumulation of moisture affect the wood structures and the wooden artifacts. Warming trends in the Arctic will have a continued detrimental effect on the structures and artifacts of woods by providing more, but since moisture is essential for decay to take place, reducing moisture in the wood would help to limit decay.

Existing legal status:
Today, the Fort Conger shelters have been designated as Classified Federal Heritage Buildings and are protected by Quttinirpaaq National Park as important cultural resources and a tangible reminder of the role of both Aboriginal people and Europeans in the history of this region.

Which criteria it meets:
The heritage value of Fort Conger is derived from its association with exploration and scientific research in the Arctic during the late nineteenth and early twentieth centuries.
The site meets criteria 1, 2, 4, 5 and 6.

Primary references:
Blanchette , Robert A., Benjamin W. Held and Joel A. Jurgens. 2008: Northumberland house, Fort Conger and the Peary huts in the Canadian high Arctic: current condition and assessment of wood deterioration taking place. In: Historical Polar Bases - preservation and management. Edited by S.Barr and P. Chaplin. ICOMOS Monuments and Sites Number XVII.

Site 7: Kodlunarn Island, Frobisher Bay

Site description:
Located on Frobisher Bay, Kodlunarn Island is the site of the English explorer Martin Frobisher's sixteenth-century mining activities and the surrounding area contains many precontact and contact sites that tell the story of early cultural contact in the Canadian Arctic. Kodlunarn Island was the base of Frobisher's operations during the latter two of three expeditions he undertook in the years 1576-78. Frobisher called the island "Countess of Warwick." Inuit, whose oral histories preserve memories of strangers who arrived there in ships in distant times, use their word for "white man" for the island. Charles Francis Hall, who in 1861 identified remains of the Frobisher expeditions on the island, recorded the Inuktitut term as "Kodlunarn", a spelling that was adopted as the official name of the island by the Geographic Board of Canada in 1910. Contemporary Inuit living in the Frobisher Bay area use the term "Qallunaat", which has the same meaning.

Figure 7.1 Aerial view of Kodlunarn Island

Frobisher first sailed to southern Baffin Island in 1576 in search of a route to Asia, the elusive "Northwest Passage." He returned to the area in 1577 and 1578 to mine ore that was mistakenly thought to contain gold. Although this was a short-lived, and ill-fated, venture it represents the first English attempt to establish a colony in North America. The third of the Frobisher voyages was the largest expedition to the Canadian Arctic until the mid-twentieth century, and still ranks as one of the largest ever. The undertaking had profound effects back in England, and may have altered the course of history for the local Inuit.

Physical condition:

Figure 7.2 The remains of the house built by the English are still clearly visible on the summit of Kodlunarn Island. (Robert McGhee)

Figure 7.3 Reservoir Trench, Kodlunarn Island Photograph

Existing legal status:
In October 1964 the Historic Sites and Monuments Board of Canada declared Kodlunarn Island to be of national historic significance.

Which criteria it meets:
The site meets criteria 1, 2, 4 and 5.

Primary references:
Fitzhugh, W.W and Olin, J.S. (Eds.).1993: Archeology of the Frobisher voyages. Smithsonian Institution, Washington

Site 8: Herschel Island

Herschel Island is located off the north Yukon coast and is recognized by the Historic Sites and Monuments Board of Canada as representing the whaling industry, the establishment of Canadian sovereignty in the western Arctic and the meeting of cultures.

Site description:
Sir John Franklin visited the island in the summer of 1866, met Inuviaaluit and named the island "to honour the name Herschel, borne most prominently by Sir William Herschel, who discovered the planet Uranus, Sir William's sister Caroline Herschel, who discovered eight comets, and Sir William's son Sir John Herschel, the brilliant polymath."

The earliest archaeological remains relate to the Thule culture. Inuvialuit used the island as a seasonal base for traditional hunting and fishing. In 1899, American whalers followed diminishing stocks off Pacific bowhead whales over the north coast of Alaska into the Beaufort Sea. The fleet established a settlement at the deep and sheltered harbour of Pauline Cove on Herschel Island. Twelve historic structures stand on the spit at Pauline Cove, the first of which was built in 1890. They relate to the whaling period, the Anglican missionaries, the Royal Canadian Mounted Police and trading companies. Also located at the Pauline Cove settlement are semi-subterranean an ice houses, various cemeteries, the archaeological remains of historic and prehistoric cultures, along with over 1000 graves, and significant ice age land and marine mammal vertebrate fossils, including woolly mammoth, Yukon horse, muskox, bison, and walrus.

Figure 8.1: Herschel Island, Pauline Cove 2007. Photo: Yukon Government

Figure 8.2: Excavation at Herschel Island

Physical condition:
Herschel Island is subjected to increasing wave erosion and is a prime example of how climate change is threatening built and cultural heritage. It was accepted on the 2008 World Monuments Watch List of 100 Most Endangered Sites.

Existing legal status:
Herschel Island is a National Historic Site of Canada and is on Canada's Tentative List for World Heritage status. It lies within the Herschel Island-Qikiqtaruk Territorial Park.

Which criteria it meets:
The site meets criteria 1, 2, 3 and 5.

Primary references:
http://www.env.gov.yk.ca/parksconservation/HerschelIslandQikiqtaruk.php

Site 9: Saoyú-ʔehdacho (pronounced saw-you-eh-da-cho)

Also known as Grizzly Bear Mountain and Scented Grass Hills of Great Bear Lake, the site is made up of two peninsulas, located south of the tree line in the Northwest Territories. The two peninsulas, Sahoyue and Edacho, are approximately 4000 and 5400 square kilometers (2500 and 3400 square miles) respectively, and reach into Great Bear Lake from the west and south.

Site description:
This large site encompasses cultural landscapes through which the strong ties of the Sahtugotine to the land are celebrated and embodied in the transmission and maintenance of their cultural and spiritual values. Saoyú-ʔehdacho is the largest National Historic Site in Canada.
Both landscapes rise gradually over a number of kilometers to broad, relatively flat summits covered with open boreal forest. Official recognition refers to the two peninsulas and their associated features and buildings.

Saoyú-ʔehdacho was designated a National Historic Site of Canada in 1996 because its cultural values, expressed through the interrelationship between the landscape, oral histories, graves and cultural resources, such as trails and cabins, help to explain and contribute to an understanding of the origin, spiritual values, lifestyle and land-use of the Sahtu Dene. Its heritage value lies in the cultural landscape as a whole, its environmental quality, which allows traditional lifestyle and land use activities, and the cultural values of the Sahtu Dene expressed through the inter-relationship between landscape, oral history, graves and cultural resources. These are outstanding landscapes that blend the natural and spiritual worlds of the Sahtu Dene and help define them as a people. The extensive oral tradition brings the history of the Sahtu Dene alive and signifies the importance of these sacred lands to them and to the heritage of Canada.

Figure 9.1: Cultural features from Saoyú-ʔehdacho

Physical condition:
The landscape is relatively undisturbed.

Figure 9.2 Aerial view of Saoyú-ʔehdacho

Existing legal status:
Saoyú-ʔehdacho is designated at a National Historic Site of Canada.

Which criteria it meets:
The site meets criteria 1, 3, 5 and 6

Primary references:
http://www.pc.gc.ca/agen/wwf/conservation/saoyu-ehdacho.aspx

Site 10: Beechey Island, located in the Canadian Arctic Archipelago

Site description:
Beechey Island has been an important landmark for vessels entering the High Arctic over the last two centuries. It bears meaning for the seafarers of every nation and especially for the British Royal Navy, because of its association with the final expedition of Sir John Franklin of 1845-48 and the numerous search vessels sent in its wake. The mystery surrounding the fate of Franklin and his men has been partially dispelled by the evidence acquired on some twenty-five search voyages. Inuit stories, artifacts, human remains and one grim note left in a cairn on King William Island reconstruct the tragedy. Interest in the Franklin story remains high to the present day.
During the winter of 1845-46, Sir John Franklin and his 128 men stayed on the island as part of their ill-fated quest to find the Northwest Passage. Search parties were sent out by the British Admiralty and beside several small buildings and a cairn, the gravesites of three expedition crew members were found there.

Beechey Island soon became an important starting point for subsequent investigations into the disappearance of the Franklin Expedition. Eventually, these resulted in the exploration and mapping of a large part of the Canadian Arctic Archipelago. The remains of Northumberland House, a supply depot and emergency shelter built by the Belcher Expedition in 1852, can still be seen on the island today. Archaeological resources include a shipwreck, cairns, caches, evidence of shore-based activities, evidence of pre-contact Aboriginal and Inuit occupation, and the location of the graves of three crew members from the Franklin Expedition.

Physical condition:
The remains of Northumberland House and the graves have been in the arctic environment for more than 160 years. The huts, the wooden artifacts and the monuments are in varied condition and they are deteriorated by biological and non-biological processes. Wind erosion, salt defibration and soft rot fungi have slowly caused degradation to the wood structures. Increasing temperatures in the arctic areas will undoubtedly speed up the decay of the fungi that are still active and destructive. The Northumberland House was intact in 1875, when it was visited by members of the first *Pandora* Expedition, led by Captain Allen Young, but today only ruins remain of the building and contents. Only a partial wall of the house is still standing, while wall boards and other contents lie on the ground within and around the house. Newer monuments that have been erected in the vicinity of the Franklin Monument disturb the site and there is impact pressure from increasing numbers of cruise tourists and other visitors.

Existing legal status:
Beechey Island is a National Historic Site of Canada, administered by Parks Canada.

Which criteria it meets:
The heritage value of Beechey Island is derived from its association with the search for the Northwest Passage, the loss of the Franklin Expedition and subsequent investigations into the disappearance of Sir John Franklin and his men. The site meet criteria 2, 5 and 6.

Figure 10.1: Graves and memorials at Beechey Island

Figure 10.2: The remains of Northumberland House, Beechey Island

Primary references:

Blanchette , Robert A., Benjamin W. Held and Joel A. Jurgens.2008: *Northumberland house, Fort Conger and the Peary huts in the Canadian high Arctic: current condition and assessment of wood deterioration taking place*. In Historical Polar Bases - preservation and management. Edited by S.Barr and P. Chaplin. ICOMOS Monuments and Sites Number XVII.

Site 11: HMS Investigator and McClure's Cache

Site description:
In January 1850, HMS *Investigator* was sent with HMS *Enterprise* to search for the lost Franklin Expedition. Unlike other Franklin rescue missions, Captain Richard Collinson of the *Enterprise* and Commander Robert LeMeseurier McClure of *Investigator* were to begin their search from the Pacific, but shortly after leaving England the two ships became separated and *Investigator* entered the western Arctic alone. While *Investigator* lay trapped in the floes of Prince of Wales Strait, McClure was able to sledge to Melville Island and reach the harbour where Sir Edward Parry had wintered in 1819 (Parry's Rock National Historic Site of Canada). By so doing McClure realized he had completed the final link of the northern Northwest Passage. When *Investigator* was released from the ice in the summer of 1851, McClure decided to attempt the Passage by circumnavigating Banks Island. Only narrow leads opened along the coast and under cover of darkness on 23 September 1851 McClure inadvertently sailed into a large bay on the island's north coast. As it was late in the year and the bay offered protection from being crushed in open pack, McClure anchored for the winter, calling the inlet 'Mercy Bay.' Unfortunately for the men of *Investigator*, ice failed to clear from Mercy Bay in the spring of 1852 and by early 1853 the men were facing starvation. Just as their survival appeared doubtful, Lieutenant Bedford Pim arrived by sledge from HMS *Resolute*, then anchored with HMS *Intrepid* at Dealy Island, off Melville Island. A portion of supplies was put ashore and graves dug for three of the men before the ship was abandoned and the crew evacuated by sledge to *Resolute* and *Intrepid*.

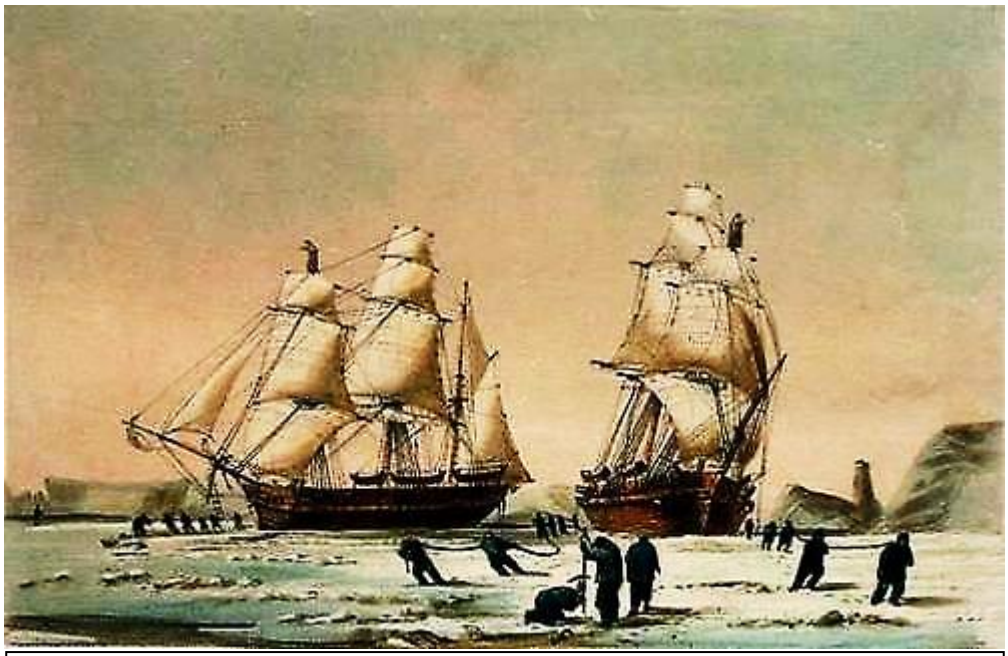


Figure 11.1: HMS Enterprise (left) and HMS Investigator (right).

In May 1854, Lieutenant Frederick Krabbé of *Intrepid* reached *Investigator* to assess her condition but found her filling with water. Doubtful she would survive another winter, Krabbé had more supplies unloaded to the shore depot. On 11 May 1854, Krabbé left *Investigator*, the last documented sighting of the ship afloat. McClure and his crew could not return home until they were picked up from Beechey Island in August 1854.

In the decades following *Investigator's* abandonment, the shore depot became a wealth of raw material for Copper Inuit (Innunnait) travelling on Banks Island. Precisely when Innunnait stoppedsalvaging material from the land site is unknown, but no Inuit were met by a sledge team of Captain Joseph Elzear Bernier's (NHP 1961) 1909 Arctic Patrol, and Inuit informants told Vilhjalmur Stefansson (NHP 1964) of the 1913-18 Canadian Arctic Expedition that the site was no longer visited and that the ship itself had long since disappeared.

In 2010, Parks Canada launched a combined underwater and terrestrial archaeological investigation to learn more about the McClure expedition. This resulted in finding the wreck in 11 m of water a short distance from the depot remains, and identifying the gravesites of three of *Investigator's* crew by archaeological magnetometer. The remains of the depot were also comprehensively mapped and a number of artefacts collected for future study. The following year a combined Parks Canada team returned to Mercy Bay to record the wreck and carry out limited excavations at the land site.

Figure 11.2: The underwater wreck of HMS *Investigator* in Mercy Bay.

The underwater wreck of HMS *Investigator* and associated on-shore remains of McClure's Cache are located in Mercy Bay, a large inlet on the north coast of Banks Island, Northwest Territories. Today Mercy Bay looks as it did in 1854, as there is no modern construction in the surrounding landscape, and several prehistoric and historic period aboriginal sites have been found in the surrounding area, one dating to c. 25000 years BP. There is also a coal pile and the unexcavated burials of three members of *Investigator's* crew.

Like many other historic sites in the Canadian Arctic archipelago, HMS *Investigator* and McClure's Cache is valued for its association with the search for the Northwest Passage and the lost Franklin Expedition.

McClure and his crew were credited by the Admiralty for discovering the Northwest Passage and with their return passage to England via the eastern Arctic they became the first to completely circumnavigate the Americas. The supplies left in Mercy Bay became a significant source of trading

goods for the Innunnait and may have substantially increased their economic status among their Inuit neighbours.

Physical condition:
The wreck – one of the best preserved of any Royal Navy arctic-service vessel of its time – is sitting upright on the sea floor with its hull intact and surrounded by artefacts, many in good condition. The land site is less well-preserved but is an extensive surface scatter of barrel staves, ship's boat fragments, tin cans, and other materials.

Existing legal status:
The land site remains covering about a hectare are within the boundaries of Aulavik National Park, the 118-feeet (36 m) long wreck lies in waters under the jurisdiction of the Government of the Northwest Territories.

Which criteria it meets:
The site meets criteria 2, 5 and 6.

Primary references:
http://www.pc.gc.ca/eng/culture/expeditions2011/nav-ves.aspx

Site 12: Alpine Ice Patches in Yukon and Northwest Territories

Site description:
Located between elevations of 1500 to 2100 meters asl, 24 ice patch archaeological sites have been recorded in the Southern Yukon (60.5° to 61.5° N, and 133.5° to 138° W), and nine in the Selwyn Mountains of the Northwest Territories (62.5° to 64° N, and 128° to 130° W).

The discovery and characterization of ice patch archaeological sites in Yukon Territory, starting in 1997, combined with more recent work in the Northwest Territories, demonstrates that hunters took advantage of predictable behaviour to intercept and harvest caribou and perhaps sheep on specialized kill sites in alpine environments. Caribou seek relief from warm summer temperatures and insect harassment on alpine ice patches which, in turn, preserve a long-term record of this relationship, mostly in the form of layers of fecal matter in the ice, as annual net accumulations of winter snow and surface depositions of dung were gradually compressed into permanent ice lenses. Hunting weapons lost or discarded by precontact hunters were preserved within the ice and, due to global climate change over the last few decades, these well-preserved artifacts are now being released from the ice on an annual basis. Preserved genetic materials in biological remains have provided insight into caribou population structure and health. With radiocarbon dating on artifacts and faunal material extending back more than 9,000 years, these remains help archaeologists reconstruct human use of alpine cultural landscape over much of the Holocene.

Alpine ice patch features preserve even the most fragile organic components of artifacts, providing important and unprecedented insights into replacement of technologies over time, the spatial and temporal distribution of some technological components, and into the range of activities taking place at the ice edge. Fragile organic elements such as wood, feathers, sinew and decorative colorations have seldom, if ever, been seen by Boreal archaeologists in other contexts, allowing researchers to move beyond the analysis of stone tools to achieve new understanding of technological intricacies and the accomplishments of northern Native peoples. These organic implements can also be directly radiocarbon dated allowing significant refinements and insights into changing hunting tool kits in the archaeological past.

Figure 12.1: Overviews of the landscape.

Physical condition:

Figure 12.2: Yukon Government Senior Projects Archaeologist, Greg Hare, displaying artifacts recovered from Yukon ice patches

Existing legal status:

Which criteria it meets:
The site meets criteria 1, 4, 5 and 6

Primary references:
Hare, P. Gregory, Sheila Greer, Ruth Gotthardt, Richard Farnell, Vandy Bowyer, Charles Schweger and Diane Strand. 2004 Ethnographic and Archaeological Investigations of Alpine Ice Patches in Southwest Yukon, Canada ARCTIC Vol. 57, NO. 3: 260– 272

Andrews, T. D. and G. MacKay Editors 2012. The Archaeology and Paleoecology of Alpine Ice Patches ARCTIC 65 (5)

Site 13: Dawson Historical Complex

Site description:
Few episodes in Canadian history have so captured imaginations as the fabulous Klondike Gold Rush, 1897-8. Thousands of adventurers and fortune seekers faced the rigors of the trail to dig for gold along creeks feeding the Klondike River. Dawson, a trading post on a mud flat at the confluence of the Klondike and Yukon Rivers, mushroomed in a single season to a sprawling boom town, made up of log and frame buildings, and tents. Some 50,000 people from the four corners of the earth arrived at Dawson. At the height of the gold rush, 1898-9, the itinerant population of Dawson was estimated between 20,000 and 30,000, making it the largest Canadian community west of Winnipeg. The excitement quickly petered out after the turn of the century, with the formation of large corporations which bought up individual claims. The Klondike continued to produce gold in abundance for a number of years. Parks Canada has been active in the restoration and preservation of what remains of the once lusty mining camp. The Complex as presented here comprises three elements: Discovery Claim, Dawson City, and Dredge No. 4.

Dawson City
Dawson City was named for Dr. George Mercer Dawson, a Canadian government geologist. By the 1940s Dawson was a village with a permanent population of under 1,000. In 1953 the territorial capital was transferred to Whitehorse. But the picturesque ghost-town beneath the scarred and rounded hill known as the Moosehide Slide, less than 200 miles (322 km) below the Arctic Circle, is still very much a part of our historical heritage. The gold rush provided a significant chapter in a Canadian history.

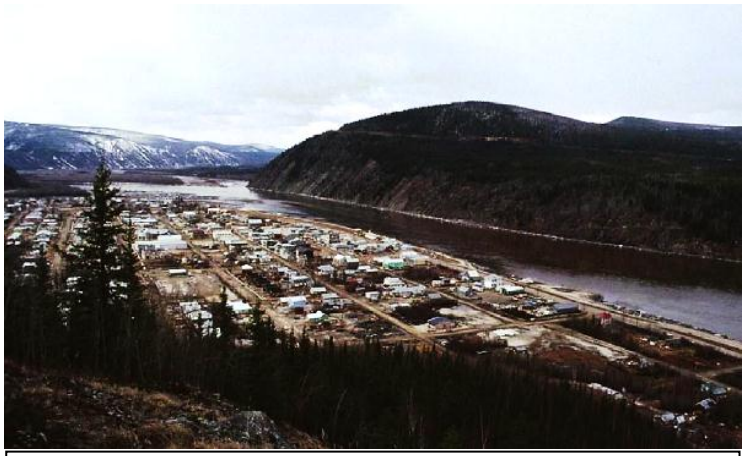


Figure 13.1 Aerial view of Dawson City and the Yukon river

Figure 13.2: Houses from Dawson City

Discovery Claim

At the Discovery Claim National Historic Site of Canada on Bonanza Creek, gold was found in 1896, and set off the Klondike Stampede of 1898. The event captured the imagination of the western world. More than $500 million dollars' worth of gold was ultimately taken from the frozen ground. Tipped off by veteran prospector Bob Henderson, George Carmack and his fishing partners, Skookum Jim and Tagish Charlie, searched the creek gravels of this area. On August 17, 1896 they found gold and staked the first four claims.

Word reached the outside world in 1897 when the ships carrying the wealthy Klondikers docked at San Francisco and Seattle. May 1898 saw 4,735 boats of one kind or another carrying 28,000 people past a North West Mounted Police check point at Tagish Post, headed for Dawson and the Klondike.

Not long after gold was discovered in large quantities in the Klondike, dredges were brought into the Yukon, the first dredge being built in the fall of 1899. One of the two dozen dredges that worked this area, Dredge No. 4 rests on Claim No. 117 Below Discovery on Bonanza Creek near the spot where it ceased operations in 1960. The largest wooden hull, bucket-line dredge in North America, it was designed by the Marion Steam Shovel Company.

Figure 13.3: Site of the Discovery claim that started the Gold Rush.

Dredge No. 4

Dredge No. 4 was built during the summer and winter of 1912 for the Canadian Klondike Mining Company on Claim 112 Below Discovery on Bonanza Creek. It commenced operations in May of 1913, and dug its way upstream in the Klondike Valley into what was known as the "Boyle Concession," sinking there in 1924. In 1927, it was refloated and continued to operate from the Klondike Valley to Hunker Creek. The ground at the mouth of Hunker Creek was so rich the dredge produced as much as 800 ounces of gold in a single day on Claim 67 Below. It operated until 1940. The dredge was rebuilt on Bonanza Creek by the Yukon Consolidated Gold Corporation and from 1941 to 1959 worked the Bonanza Creek valley.

Dredge No. 4 is 2/3 the size of a football field and 8 stories high. It has a displacement weight of over 3,000 tons (2,722 t), with a 16 cubic foot (.45 cubic meter) bucket capacity. The dredge could dig 48 feet (17 meters) below water level, and 17 feet (5 meters) above water level using hydraulic monitors and washing the gravel banks down. The dredge moved along on a pond of its own making, digging gold- bearing gravel in front, recovering the gold through the revolving screen washing plant, and then depositing the gravel out the stacker at the rear. It was electrically powered from the Company's hydro plant on the Klondike River about 30 miles (48 kilometers) away, requiring 920 continuous horsepower during the digging operation. Extra horsepower was needed occasionally for such things as hoisting the "spud" (pivot) and the gangplank.

Figure 13.4: Dredge No. 4

Physical condition:

Existing legal status:
Dawson Historical Complex is designated at a National Historic Site of Canada.

Which criteria it meets:
The site meets criteria 1, 4, 5 and 6

Primary references:
http://www.pc.gc.ca/eng/lhn-nhs/yt/klondike/natcul/dawson.aspx

Adherence to Best Practice
In proposing to Arctic Council that these sites are of international heritage significance, Canada agrees to respect the Statement of Best Practice for Site Management that has been put forth by the Sustainable Development Working Group.

All of the nominated sites fall under either Canadian Federal or Territorial legislative and regulatory protective frameworks and are actively communicated to Canadians and visitors.

Summary of Canada's Proposals
In relation to the criteria proposed for significance, each of the eight sites proposed by Canada exhibits several outstanding attributes. In large measure this is indicative of how cultural adaptations to the Arctic have required perseverance, enormous cooperation and effort, and how significantly cultural locations figure in today's society. For all of these reasons, recognition and responsible management of arctic heritage will continue to be supported as a priority for the future. The following table charts the principle criteria by which each of the eight sites meets the criteria for international significance that the committee established.

Site	Criteria					
	Human Adaptation	History of Exploration	Cosmology & Social Values	Materials, Design, Construction	Cultural History	Commemorative / Symbolic Value
Fort Conger	•	•		•	•	•
Kodlunarn Island	•	•		•	•	
Herschel Island	•	•	•		•	
Saoyú-?ehdacho	•		•		•	•
Beechey Island		•			•	•
HMS Investigator & McClure's Cache		•			•	•
Alpine Ice Patches	•			•	•	•
Dawson Historical Complex	•			•	•	•

Collaborators for Canada's input
Team Lead: Martin Magne, Parks Canada

Sustainable Development Working Group Liaison for Canada: John Pinkerton, Rebecca Kennedy, Parks Canada

Territorial Experts: Doug Stenton, Nunavut; Tom Andrews, Northwest Territories; Jeff Hunston,

Yukon
Subject Experts: Margaret Bertulli, Henry Carey, Lyle Dick, Parks Canada

USA - Alaska

Site 14: Agiak Lake Archeological District

Site description:
Agiak Lake is in the central Brooks Range, just over a mile south of the continental divide and about 30 air miles west-southwest of Anaktuvuk Pass, Alaska. Lying within Gates of the Arctic National Park and Preserve, the district encompasses all known archeological sites and features associated with caribou hunting regardless of cultural association or age within an area of 4500 acres. The polygon which describes the boundary of the district begins at Point A, located at UTM Zone 5: 2013414N/ 42157 E (see map).

Agiak Lake lies within the range of Western Arctic Caribou herd in northwest Alaska's Brooks Range, where people have been hunting caribou for millennia. At least as early as the late prehistoric period and possibly earlier, there is evidence for the use of caribou drivelines in the region for strategically funneling the migrating animals into lakes, creeks, or corrals where they could be easily killed. At Agiak Lake, there are over 600 rock cairns or inuksuk, constructed as features of these drivelines. In addition to the inuksuit, there are hundreds of other archeological features, including many tent rings, some radiocarbon dated to over 4,000 years ago. These early dates and the placement of the tent ring complexes in proximity to the drivelines suggest that the inuksuit may have been constructed in ancient times, but also used by later people as a hunting facility.

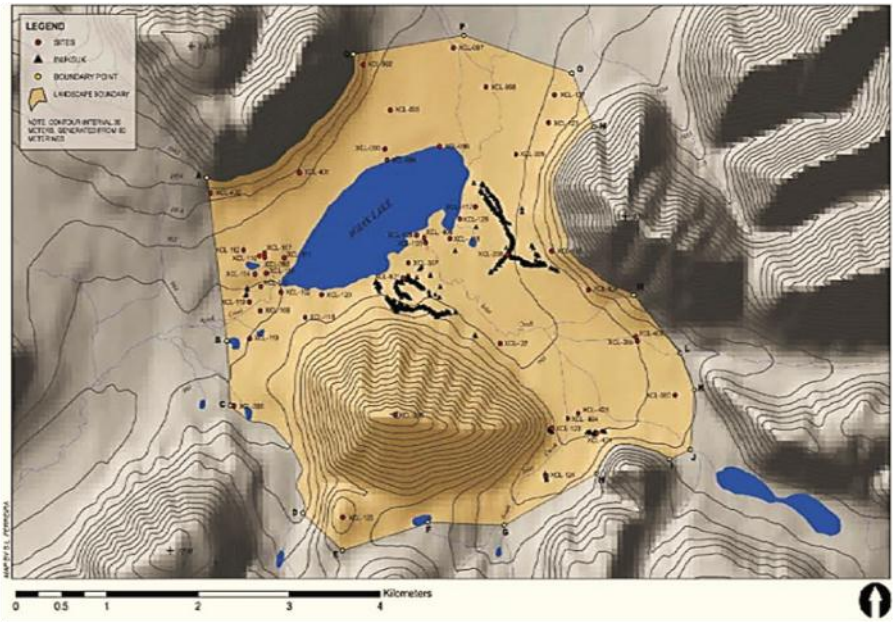


Figure 14.1 The map depicts individual cairns that comprise the drivelines which are shown in black. Archeological sites are denoted by red dots.

Caribou (Rangifer tarandus) has long been an important species for the survival of humans in the Arctic. Arctic and sub-arctic cultures that have inhabited the Brooks Range of Alaska for thousands of years have until very recently been substantially dependent on the caribou herds for their

survival. Their material culture reflected the importance of the caribou through their tools, housing, clothing, diet and mythology. All aspects of these prehistoric and historic aboriginal cultures incorporated caribou in one way or another, and it is difficult to overstate the animal's importance to them. It is therefore not surprising that scattered across the Brooks Range in northern Alaska are archeological sites and features that reveal the sophisticated methods these ancient cultures developed for hunting caribou. The Agiak Lake District exemplifies the caribou-hunting landscape in northern Alaska.

The district has international significance because it is an outstanding illustration of human adaptation to and interaction with nature.

Physical Condition:
The archeological district retains a high degree of archeological integrity and is considered to be in good condition.

Figure 14.2 Rock cairn (inuksuk) feature at Agiak Lake.

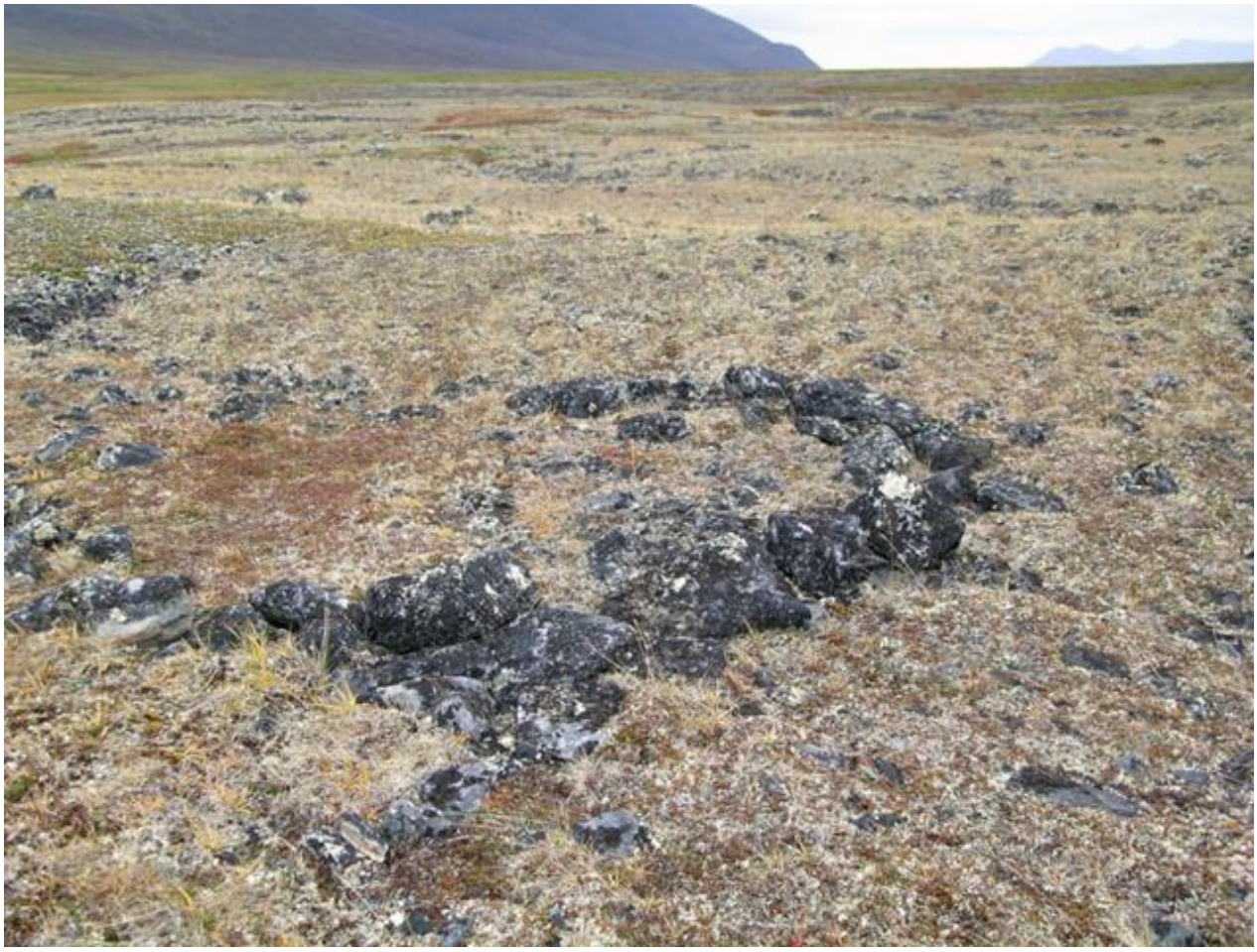


Figure 14.3. Tent ring feature at Agiak Lake.

Existing legal status:
The archeological district lies entirely within a designated wilderness area in Gates of the Arctic National Park and Preserve. It is monitored by National Park Service staff on a regular basis.

Which criteria it meets:
The site meets criteria 1, 3, 4 and 5

Primary References:
Wilson, A. K. and J. T. Rasic.2008: Northern Archaic Settlement and Subsistence Patterns at Agiak Lake, Brooks Range, Alaska. *Arctic Anthropology* 45 (2): 128-145.

Wilson, A.K. and S. L. Ferreira .2007: Agiak Lake Caribou Hunting Landscape. National Park Service, Alaska Region, Cultural Landscape Inventory. Manuscript on file Cultural Resources, National Park Service, Anchorage.

Site 15: Cape Krusenstern Archeological District

Site description:
Cape Krusenstern National Monument, designated by President Jimmy Carter in 1978, consists of 540,000 acres of land in northwest Alaska, bordering the Chukchi Sea and Kotzebue Sound. The boundaries of the archeological district, which extend beyond those of the national monument, correspond to the original boundaries established for Cape Krusenstern National Historic Landmark in 1973. According to Google Earth, the Monument is located at 67o 24' 15.89" N latitude and 163o 29' 14.16" W longitude.

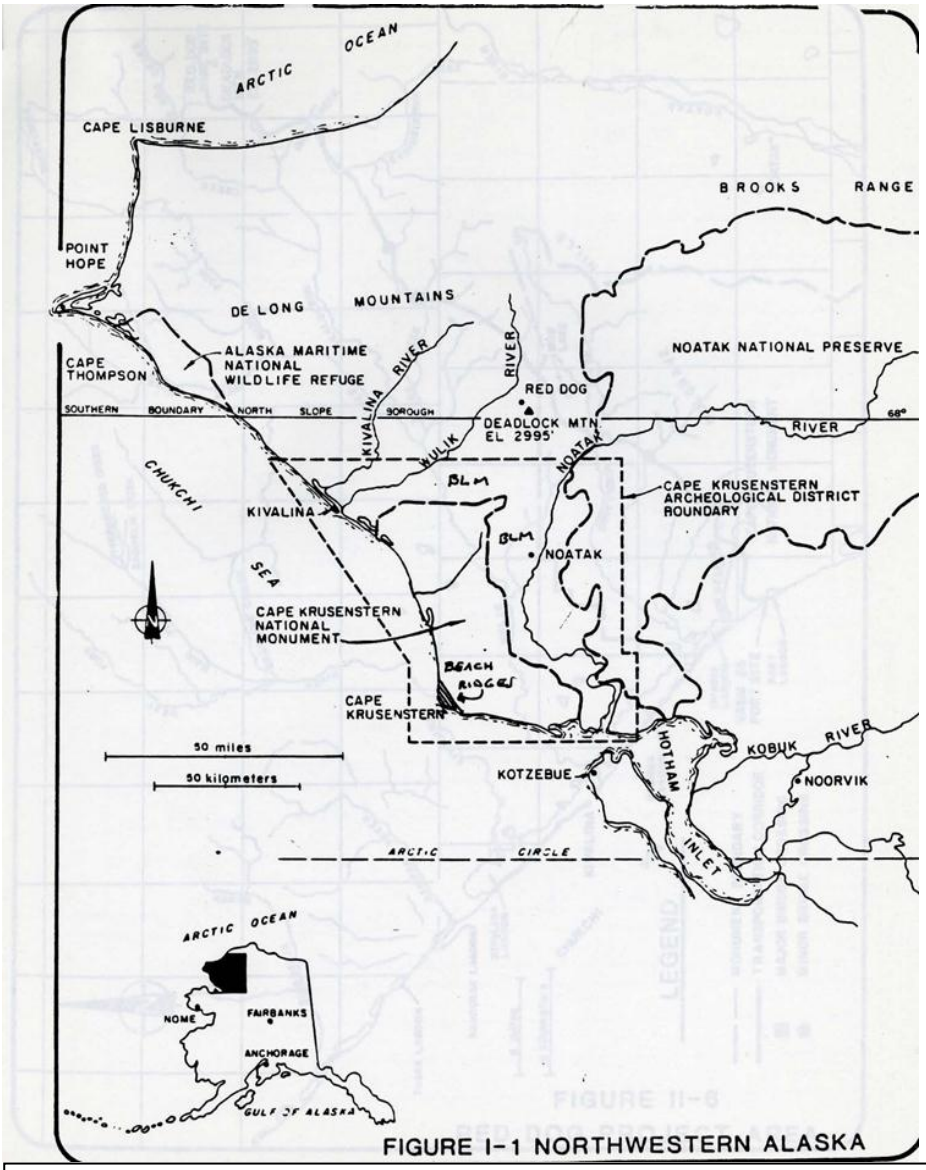


Figure 15.1. Map Northwestern Alaska

This vast archeological district encompasses a series of 114 marine beach ridges, formed since the time of the highest post-glacial sea level. The youngest beach ridges are located along the sea shore and linearly extend over 4 km, while progressively older beach ridges are located farther and farther inland toward Cape Krusenstern lagoon. The oldest of the beach-ridge sites contains chert

microblades and other artifacts dating to about 3500 B.C. Preserved on the adjacent ridges is evidence of the sweep of Arctic prehistory dating from over 5,000 years ago up through historic times. On the Iguchuk Hills bluffs behind the beach ridges are older sites, possibly dating to 9,000 years ago. The beach ridges and uplands of Cape Krusenstern provide a broad, horizontal stratigraphy, which includes virtually all phases of cultural history known in northwest Alaska.

In the mid-1950s, pioneer Alaska archeologist J. Louis Giddings, with the assistance of his Iñupiaq boatman, Almond Downey, discovered a long sequence of ancient beach ridges at Cape Krusenstern, which is known as "Sealing Point" to the Iñupiaq elders. Residents of Kotzebue still hunt seals and beluga whales at spring camp located at Sheshalik Spit, on the southern tip of Cape Krusenstern National Monument. In 2006, the National Park Service began a project to survey the entire 10 mile-long and 2.5-mile wide Cape Krusenstern beach ridge complex. The goal of the project was to integrate the cultural resource and environmental data into a comprehensive management plan in order to address coastal erosion, and to continue the documentation of archeological sites.

The archeological district site has exceptional international significance because of the greattime depth of history represented in its beach ridge and upland sites, associated with prehistoric cultures on both the North American and Russian sides of the Bering Sea.

Figure 15.2 A view of the beach ridges from the hills above.

Figure 15.3. National Park Service archeologists record a previously excavated housepit at Cape Krusenstern.

Physical condition:
Coastal erosion is the major threat, although ATV traffic is also taking its toll on sites in the archeological district. A road to the Red Dog mine crosses the northern boundary and trucks use it to haul zinc from inland open pit mines to a tidewater port. This traffic is highly regulated and has not appeared to impact archeological sites in the district.

Existing legal status:
In 1980, with the passage of ANILCA (Alaska National Interest Lands Conservation Act), much of the traditional homeland of the Iñupiat of Northwest Alaska became national parks, preserves, monuments, and wildlife refuges, including Cape Krusenstern. The National Park Service, Western Arctic National Parklands, headquartered in Kotzebue, manages the national monument. There are numerous private inholdings within the boundary of the Monument. The Red Dog Mine, the largest zinc mine in the world, is located northeast of Cape Krusenstern National Monument. The mine

transports its ore on a haul road, traversing the northern boundary of Cape Krusenstern and ending at a port site on the Chukchi Sea. Cominco Alaska operates the mine, along with the NANA Regional Corp., a Native corporation based in Kotzebue.

Which criteria it meets:
The site meets criteria 1, 3, 4 and 5

Primary references:
Giddings, J. L..1967: *Ancient Men of the Arctic.* University of Washington Press, Seattle.

Giddings, J. L. and D.D. Anderson.1986: *Beach Ridge Archeology of Cape Krusenstern. Eskimo and Pre-Eskimo Settlements around Kotzebue Sound, Alaska.* Publications in Archeology 20, National Park Service, Washington D.C.

McClenahan, P.L. and D. E. Gibson.1990: *Cape Krusenstern National Monument: An Archeological Survey.* Volume 1.National Park Service Research/Resources Management AR-17. National Park Service, Anchorage

Site 16: Ipiutak site, Point Hope

Site description:
The Ipiutak site is located at Point Hope, lying on a narrow spit of land between the Arctic Ocean and Ipiutak Lagoon. It lies at 68.356944 N latitude, and 166.775 W longitude.

Discovered in 1939, the site is the type site for the Ipiutak culture, which flourished in northwestern Alaska from around the beginning of the Christian era until about 1,400 years ago. The site covers 200 acres of tundra and reveals a prehistoric culture considered to be a forerunner of later Eskimo societies. It was designated as a National Historic Landmark on January 20, 1961.

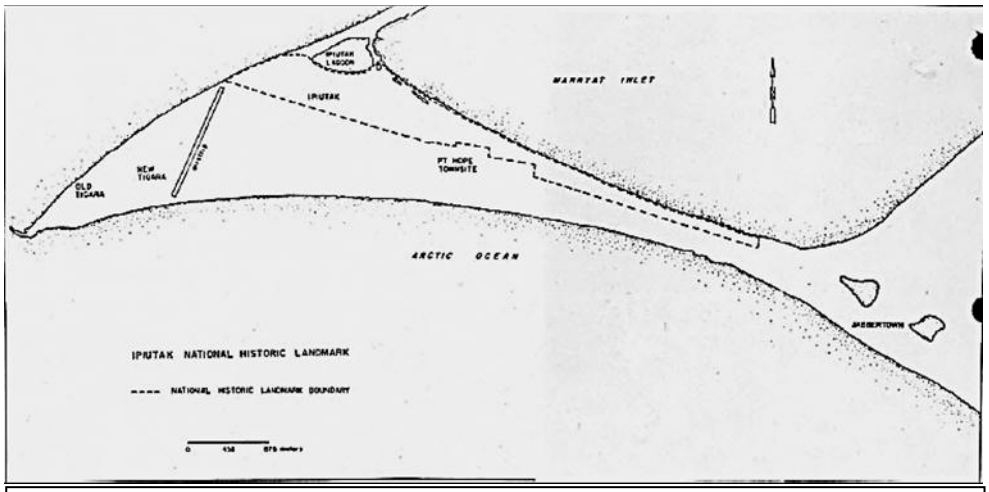


Figure 16.1: Ipiutak National Historic landmark.

The site was first discovered by Helge Larsen, Froelich Rainey, and J. L. Giddings, who were working at the nearby sites of Old Tigara and Jabbertown on the Pt. Hope spit. It appeared to them as a series of shallow, rectangular house depressions on low beach ridges south of a small salt water lake, named Ipiutak Lagoon. Some 575 house depressions were eventually mapped at the site, thus making it one of the largest known prehistoric settlements in the Alaskan Arctic. The Ipiutak culture is significant for its elaborate burial goods and for its early evidence for the use of iron. The Ipiutak site, along with the three other nearby sites (Old Tigara, New Tigara, and Jabbertown) represents 2,000 years of continuous occupation of Pt. Hope. Larsen and Rainey published their classic monograph on the site, Ipiutak and the Arctic Whale Hunting Culture, in 1948.

Archeologist Edward Hosley and crew revisited the Pt. Hope archeological sites in 1967, primarily to evaluate the impacts of erosion on the spit and the sites. Pt. Hope was again visited by archaeologists in the 1970s, including Anne Shinkwin of the University of Alaska, Fairbanks. A few short-term archeological compliance projects were done in Pt. Hope between 1979 and 1984, the most notable of them being a brief field reconnaissance conducted by Albert Dekin of the State University of New York, Binghamton. National Park Service archeologists made visits to Pt. Hope to check the condition of the National Historic Landmark in the 1980s and 1990s. One visit resulted in a revision of the National Historic Landmark to include only the Ipiutak site and not the adjacent sites of Old Tigara and Jabbertown, since Ipiutak was the site for which the Landmark was originally created. In more recent years, the Ipiutak site has been visited by archeologists for compliance-related activities, such as North Slope Borough erosion control projects. Since

discovery of the Ipiutak site at Point Hope, another spectacular Ipiutak site was discovered and excavated in the northwest Alaska community of Deering on the southern shore of Kotzebue Sound. Archeological research along both the North American and Asian shores of the Bering and Chukchi Seas has revealed sites with evidence of elaborate Eskimo ivory carving that flourished between about 2,600 and 700 years ago. Iron was traded to Alaska from Asia by about 1,400 years ago, and it was used to tip engraving tools and knives that enabled Ipiutak craftsmen to execute the delicate incised art so characteristic of many of their tools and weapons.

Physical condition:
Vandalism and looting have been problems at the Ipiutak site in the past, but in recent years the Native Village of Pt. Hope has issued a proclamation against such activity and residents have abided by the ban on illegal digging. A more recurring problem is that of severe fall storms and the resulting floods which pose a threat to the site.

Figure 16.2 Excavation at the Ipiutak site, date unknown.

Figure 16.3 landscape showing house depression and the Ipituak Lagoon.

Existing legal status:
Tikigaq Corporation of Point Hope, Alaska, an Alaska Native Village Corporation established in 1971 under the Alaska Native Claims Settlement Act (ANCSA), owns and manages the land on which the Ipiutak site is situated.

Which criteria it meets:
The Ipiutak site has international significance because it provides exceptional insight into the artistic and technical achievements of Eskimo cultures that flourished on both sides of the Bering and Chukchi Seas around the beginning of the Christian era.
The site meets criteria 1, 3, 4 and 5

Primary references:
Larsen, H. and F. Rainey.1948: *Ipiutak and the Arctic Whale Hunting Culture.* Anthropological Papers of the American Museum of Natural History, Vol. 42. New York.

Mason, Owen K.2006: "Ipiutak Remains Mysterious: A Focal Place Still Out of Focus." In: Dynamics of Northern Societies. Proceedings of a Symposium, edited by Bjarne Grønnow, pp. 106- 120, Danish National Museum, Danish Polar Center, Copenhagen.

Site 17: Kijik archeological district, Lake Clark

Site description:
The district encompasses an irregular area of 1920 acres, extending between the base of Kijik Mountain and Lake Clark within Lake Clark National Park and Preserve in southwest Alaska. It is situated on the north side of the easternmost tributary of the Kijik River as it enters into Lake Clark. The UTM coordinates are N 6687340 and E 430350.

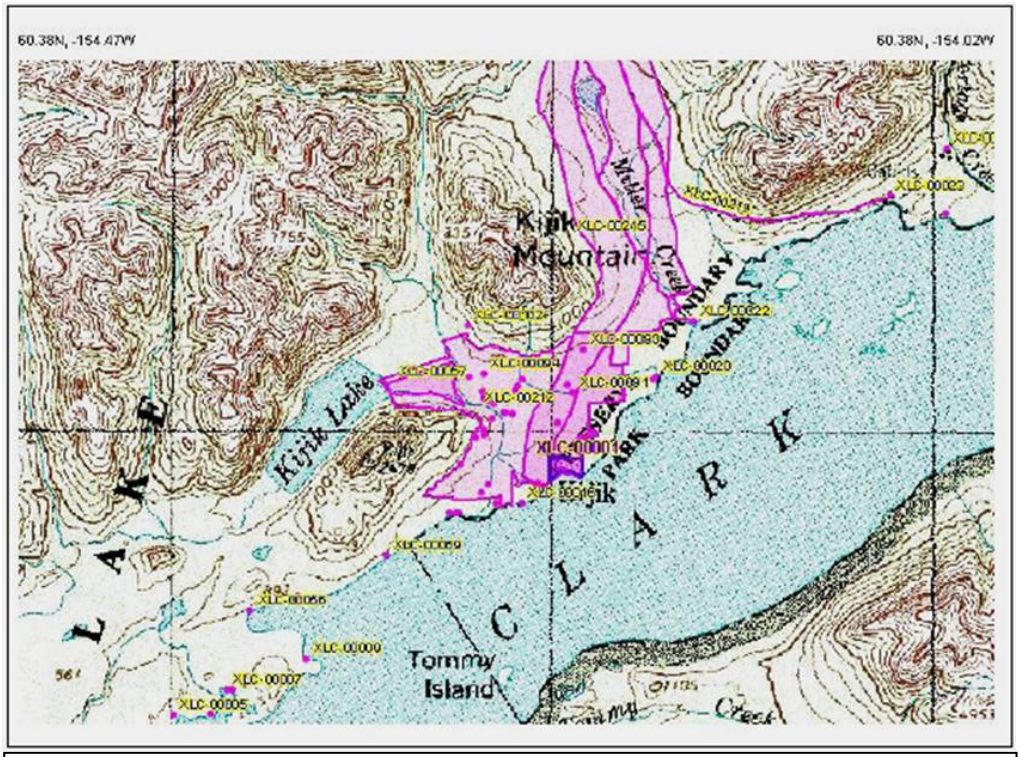


Figure 17.1 Kijik map.

Qizhjeh or Kijik was a Dena'ina Athabascan community, comprised of at least 10 settlements and 200 dwellings ranging in age from the proto-historic period (1600s) until 1910 when it was abandoned. The residents dismantled their homes, and carried the logs, piece by piece, to the village of Old Nondalton. Only the Russian Orthodox church, graves, and two houses were left behind. Most of the Nondalton's residents can claim that their ancestors lived at Kijik, so its history has been passed from generation to generation in numerous stories. The inland Dena'ina had semi-permanent winter villages, and had seasonal camps for hunting, gathering, fishing, and trapping. First documented in the journals of explorers and missionaries in the 1800s, Kijik was later excavated by archeologists James VanStone and Joan Townsend in 1966.

The artifacts they recovered constitute one of the largest collections of trade goods to be excavated in Alaska. Since 1966, several parties of anthropologists have re-visited the area for mapping and research purposes. Notable among the investigators has been John Branson of Lake Clark National Park and Preserve. In the early 1980s Branson found several new Dena'ina sites and assisted National Park Service archeologist Alice J. Lynch in mapping them. Designated as a National Historic Landmark in 1994, Kijik exemplifies the Athabascan migration and colonization of Interior Alaska during late prehistoric times.

The archeological district includes the surface remains of several semi-subterranean depressions, which represent large multi-family houses with secondary rooms and a sweat-bath attached to the center of the main room's rear wall. One of the sites (Fish Pond site) appears to be the single largest Athabascan settlement in Alaska. Over 1000 cache pits have been identified at the Kijik sites. These pits, once used for the storage of sockeye salmon and other food items, are visible examples of the continuity of the Dena'ina subsistence way of life in the Lake Clark region. Kijik Lake and its tributaries make up the spawning area for 10 to 15% of all the red salmon of the Kvichak River watershed from Bristol Bay, forming the most important red salmon watershed in the world.

Figure 17.2 **Left: Kijik lake**
Right: Examples of ceramics found at Kijik sites.

Physical condition:
A large part of the credit for the documentation at Kijik goes to John Branson, ranger-historian at Lake Clark National Park and Preserve. He played a pivotal role in site stewardship over the years, not only by relocating some of the historic settlements and discovering new sites, but in his continued efforts to protect the area from site vandalism. Through his interest in Kijik and historic research Branson has brought together the interests of National Park Service archeologists and local Dena'ina Athapaskan people whose ancestors once lived at Kijik.

Existing legal status:
Although Kijik lies within the boundaries of Lake Clark National Park and Preserver, the land status within the archeological district is a complex patchwork of private and public ownership and management.

Which criteria it meets:
The archeological district has international significance because it is an outstanding illustration of human adaptation to and interaction with nature in the Subarctic.
The site meets criteria 1, 3, 4 and 5.

Primary references:

Ellana, L.J. and A. Balluta.1992: *Nuvendaltun Quht'ana: The People of Nondalton.* Smithsonian Institution - National Park Service publication.

Lynch, A.J.1982: Qizhjeh: The Historic Tanaina Village of Kijik and the Kijik Archaeological District. *Anthropology and Historic Preservation, Cooperative Park Studies Unit Occasional Paper* No. 32. University of Alaska, Fairbanks.

VanStone J. and J. Townsend.1970: Kijik: An Historic Tanaina Indian Settlement. *Fieldiana: Anthropology*, 59. Field Museum of Natural History, Chicago.

Site 18: Attu and Kiska, Aleutian Islands

Site description:
The Aleutian Islands are located between the frigid Bering Sea and the warm Japanese Current of the North Pacific Ocean. While the islands' waters remain free of ice, the area is subject to year-round, vicious wind storms known as williwaws, and dense, impenetrable fogs. It rains or snows an average of 200 days a year. Glaciers and snow drifts mark the higher elevations, and lower levels support only spongy tundra and low-growing plants.

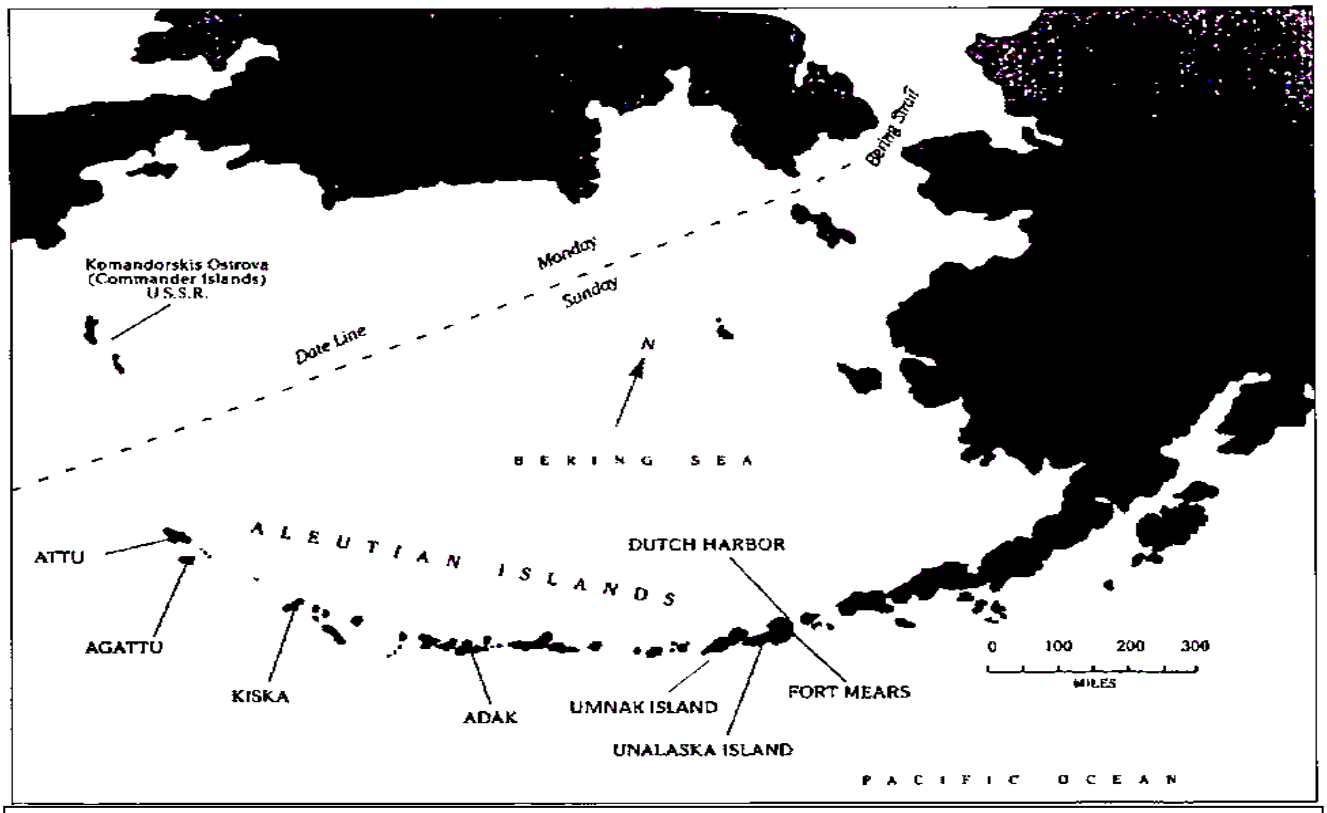


Figure 18.1 Aleutian Islands map that includes locations where significant WWII historic activities took place. Photocopied from "Attu:North American Battleground of World War II," NPS Teaching with Historic Places. Alterations done here - addition of Umnak Island (Fort Glenn) and deletion of Unimak Island.

Attu = 52.995833 lat/-173.24166
Attu Island is part of the Near Islands group of the Western Aleutian Islands, Alaska

Kiska = 52.066666 lat/-177.634722 long
Kiska Island is part of the Rat Island group of the Western Aleutian Islands, Alaska

The site has exceptional international significance because it has outstanding international commemorative or symbolic value.

The invasion and occupation by Japanese troops of the Aleutian Islands of Attu and Kiska marked the peak of Japan's military expansion in the North Pacific during World War II. Shortly after the Japanese bombed the U.S. military facility at Dutch Harbor in early June 1942, they invaded and occupied Kiska and Attu islands. While this invasion might have seemed alarmingly close to

America's backdoor, it was not the "first enemy occupation of U.S. soil since the war of 1812," as is typically mis-stated. Prior to the Aleutian invasion, Japan had occupied Guam (U.S. Territory), Wake Island (U.S. Territory) and the Philippines (Commonwealth of the U.S.).

The Japanese Navy and Army forces established bases on both Attu and Kiska islands which are about 200 miles apart. Kiska became the more developed to serve as a base for seaplane and midget submarine patrols. The year-long concerted U.S. bombing slowed down the Japanese base developments and with modest success that limited Japan's transportation option to just submarines. American forces recaptured Attu in May 1943 following a land battle that was costly for both sides. It was considered the second most costly U.S. assault in the Pacific with 1.481 U.S. fatalities and 3,416 casualties. With the fall of Attu, the end of the Japanese occupation was in sight. In July of 1943, the Japanese evacuated Kiska under cover of fog and undetected. The American and Canadian allied force of 34,000 troops invaded the deserted island about two weeks later. This ended what is known as the Aleutian Campaign. The U.S. established bases on both islands that were occupied through the end of the war. Attu provided a base for bombing missions against Japanese territories.

Physical condition:
The WWII cultural landscapes of Kiska and Attu are of global significance with a high level of integrity. The Kiska aerial battlefield preserves all actions by both attackers and defenders including the wreckage of both Japanese and U.S. aircraft, the bombs they dropped and the guns that were used to shoot some of them down. The Attu land battlefield is preserved in its rugged setting with a significant number of landscape elements that tell the story of the fierce 3-week battle that took place.

Attu
The battlefield remains as a cultural landscape. The battlefield landscapes, structures, and objects that retain the scars of battle includes thousands of shell and bomb craters, Japanese trenches, foxholes, and gun emplacements, as well as American ammunition magazines, dumps, spent cartridges, shrapnel, and shells at the scenes of heavy fighting. The natural setting retains a high level of integrity with invasion beaches, passes, valleys, and ridges where the battle took place. Together these features contribute to the overall significance of the Attu battlefield landscape.

Figure 18.3
Craters on Buffalo Ridge from Village Site (June 1997)

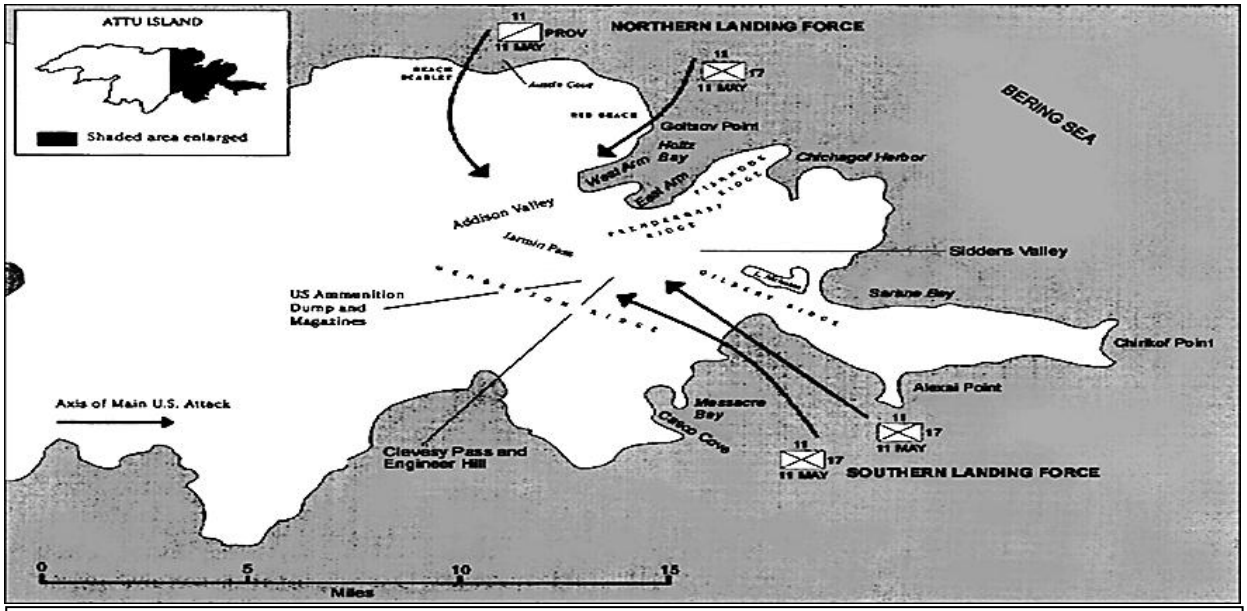


Figure 18.2: Photocopy showing the Recapture of Attu drawing from "Attu: North American Battleground of World War II," NPS Teaching with Historic Places - (Adapted from Stetson Conn, et al., Guarding the United States and Its Outposts).

Kiska

Recent scholarship relooked at Kiska as a battlefield, with boundaries that include the whole island and the nearby island of Little Kiska. The high level of integrity is the result of little development on the island since the WWII time period. There are hundreds of features that reflect the Japanese occupation as well as of the U.S. and Canadian occupation. This includes the World War II aerial battlefield landscapes, structures, objects, and numerous features from both the Japanese and U.S./Canadian base installations. These features show all aspects of military life, including Japanese coastal defense and anti-aircraft guns, a submarine base, Shinto shrines, personnel trenches, underground structures, invasion beaches, bomb craters, tent bases and revetments, collapsed Quonset huts, vehicles, aircraft crash sites, and shipwrecks. Together these features contribute to the overall significance of the Kiska battlefield landscape.

Figure 18.5:
75 mm anti-aircraft gun brought to Kiska by the Japanese.
Photographed by Kent Sundseth, USFWS, 2007.

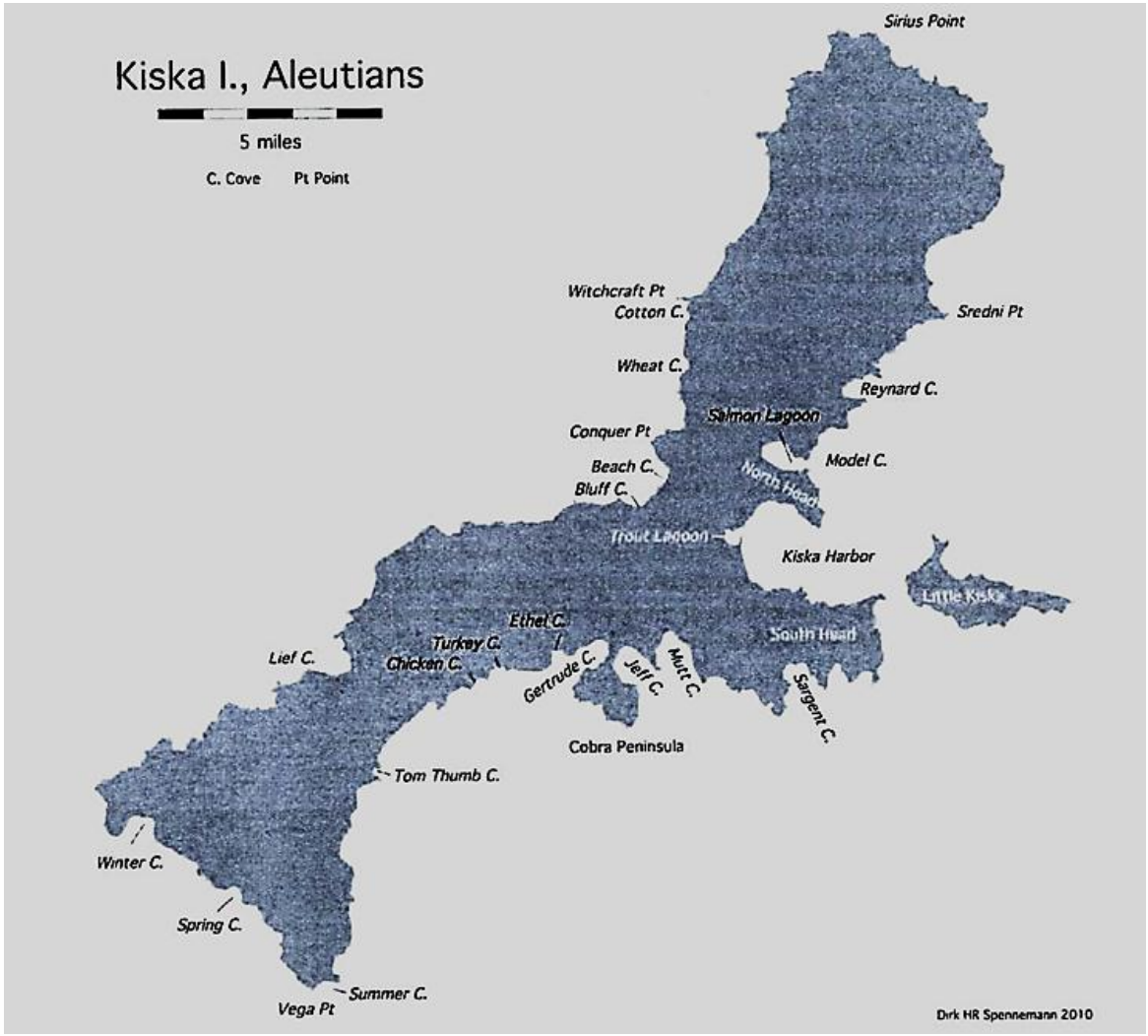


Figure 18.4: Photocopy of Kiska Island – the battlefield boundaries consist of both Kiska and Little Kiska islands. Image prepared by Dirk Spennemann for the Cultural Landscape of the World War II Battlefield of Kiska, Aleutian Islands, page 4.

Existing legal status:
The primary areas of WWII historic activity on both Kiska and Attu were designated as National Historic Landmarks in 1985.

Portions of Kiska and Attu are included in the World War II Valor in the Pacific National Monument as proclaimed in 2008. An initial planning document, "Foundation Statement – Alaska Unit World War II Valor in the Pacific," was completed in 2010.

Both Kiska and Attu islands are managed by the Alaska Maritime National Wildlife Refuge/USFWS.

Which criteria it meets:
The site meets criterion 4

Selected References:

The Thousand-Mile War: World War II in Alaska and the Aleutians, Brian Garfield (University of Alaska Press).

Aleutian Islands, U.S. Army Center for Military History (CMH Pub 72-6).

The Aleutian Warriors: A History of the 11th Air Force 7 Fleet Air Wing 4, John Haile Cloe (Anchorage Chapter, Air Force Association and Pictorial Histories Publishing company, Inc.)

The Cultural Landscape of the World War II Battlefield of Kiska, Aleutian Islands, Dirk Spennemann (National Park Service, 2011).

"Attu Battlefield and U.S. Army and Navy Airfields on Attu" National Historic Landmark nomination (designated 1985)

"Japanese Occupation Site" National Historic Landmark nomination (designated 1985)

Site 19: Shaw Creek flats archeological district

Site description:
Shaw Creek, which flows into the Tanana River about 12 miles (19.2 km) northwest of the community of Big Delta, is surrounded by a marshy area dotted with small lakes, known as Shaw Creek Flats. The confluence of Shaw Creek and the Tanana River lies adjacent to the Richardson Highway, linking Fairbanks and Delta Junction and then continuing south to the port of Valdez.

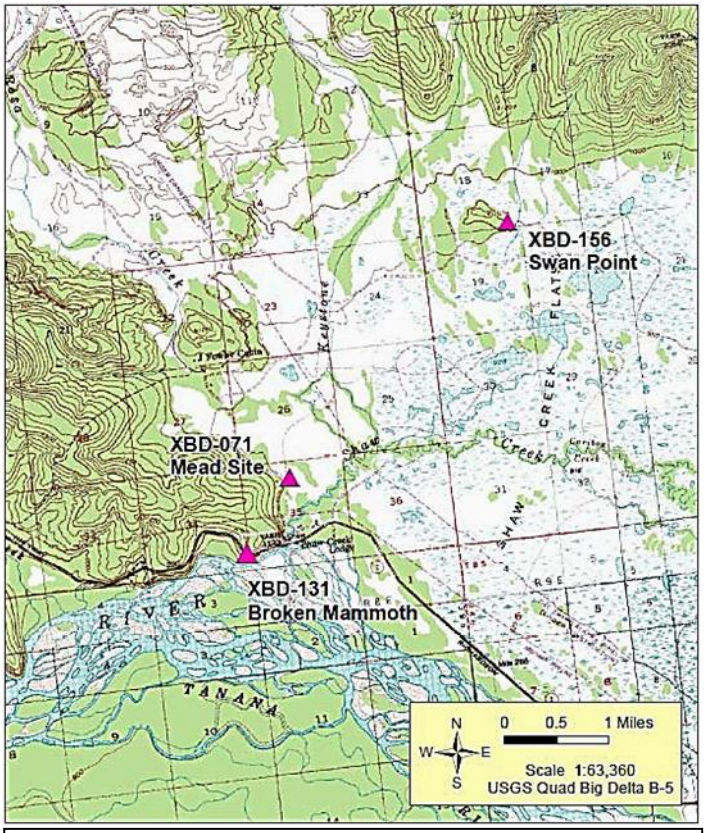


Figure 19.1: Shaw Creek Flats Archeological District

The three sites that comprise the district are all located within a radius of ca. 4 miles (6.4 km) on elevated landforms above Shaw Creek Flats. Broken Mammoth lies at 64.25972222 N and 146.121944444 W; Mead Site lies at 64.269444444 N and 146.105555556 W; and Swan Point lies at 64.301111111 N and 146.026388889 W.

The Shaw Creek Flats Archeological District comprises three of the oldest, well-dated sites in Alaska: Broken Mammoth, Mead, and Swan Point. These multi-component sites share many similarities: each has an earliest component dating before ca. 13,500 cal BP; each has produced artifacts fashioned from mammoth ivory along with a variety of stone tools; and each has good preservation of organic materials. The lowest cultural zone at Swan Point, dated at 14,400 years cal BP, is unique, however, as it establishes the earliest use of wedge-shaped core and burin technologies in Alaska. This technology, according to archeologist Charles Holmes, is more similar to the Dyuktai culture of the Lena River Basin in the Russian Far East than to the Denali complex of Alaska, and is thus thought to represent a transitional stage between the two cultures. While each site has upper components with dates spanning the last 7,000 years, it is their lower components that are highly significant. These cultural horizons, stratigraphically located near the base of

deposition and dating to the Pleistocene - Holocene boundary, represent a time period critical for research on the peopling of the Americas.

Figure 19.2: View of the Tanana River from the Broken Mammoth site.

Figure 19.3: Excavation at the lowest component of the Broken Mammoth site.

The Shaw Creek Flats sites have provided researchers with a glimpse back to the late Pleistocene, over 13,500 years ago, when small human groups set up camps at promising overlooks in search of game in eastern Beringia. In over 20 years of intermittent testing at Broken Mammoth, the Mead site, and Swan Point, archeologists have pieced together significant data which has furthered our understanding about the time depth of human occupation in North America, along with the diversity of subsistence resources and the technological traditions of these early Americans. The Shaw Creek Flats sites are significant because of their potential to address questions relating to the initial human occupation of North America during the terminal Pleistocene and the ensuring period of early Holocene cultural adaptation.

Physical condition:
Fortunately, even after many of years of investigations, intact deposits remain at the sites and have the promise to yield more information for future research.

Existing legal status:
The Broken Mammoth site and Swan Point are located on land owned and managed by the State of Alaska. The Mead site is owned and managed privately by Dr. Barbara Crass, an anthropologist who has co-sponsored archeological field schools at the site with the University of Alaska Fairbanks, Department of Anthropology.

Which criteria it meets:
This archeological district has exceptional international significance because it provides insights into the technological and cultural adaptations that appear to be transitional between the Dyuktai culture of the Russian Far East and the Denali complex of Alaska during the late Pleistocene - early Holocene time period.

The site meets criteria 1, 3, 4 and 5

Primary references:

Holmes, C. E. 1996: Broken Mammoth. *In American Beginnings: The Prehistory and Paleoecology of Beringia*, edited by F. H. West, pp. 312-318 University of Chicago Press, Chicago.

Holmes, C. E., R. VanderHoek, and T. Dilley.1996: Swan Point. *In American Beginnings: The Prehistory and Paleoecology of Beringia* edited by F. West, pp. 319-322. University of Chicago Press, Chicago.

Yesner, D. R.1996: Human Adaptation at the Pleistocene-Holocene Boundary (circa 13,000 to 8,000 BP). *Humans at the End of the Ice Age: Archaeology of the Pleistocene-Holocene Transition*. Edited by L. Straus, Eriksen, B., Erlansdson, J. and Yesner, D., pp. 255-276. Plenum Press, New York.

Sápmi

Site 20: The combined sites Ceavccageađgi and Noidiidčearru in Unjargga municipality in the county of Finnmark, Norway

Site description

Figure 20.1 Ceavccageađgi and Noidiidčearru in Unjargga municipality in the county of Finnmark, Norway.

The traditional territory of the Varanger Saami, the Varanger Peninsula in northernmost Scandinavia, is very rich in prehistoric and early historic sites. The archaeological record shows that the Varanger area was a core area in the formation of Saami cultural traits. Two outstanding sites are Ceavccageađgi and Noidiidčearru. Together, they express the tradition of the last and most long-lived hunting culture of the European mainland and its connection to and communication with nature. They also document the transition to nomadic reindeer herding and the coastal Sami adaptation, including fishing, hunting and small scale farming, in the 16th and 17th century.

At Ceavccageađgi, a broad point by the northern shore of the Varanger fjord, a large number of tent rings and pit houses document a continuous habitation from around 11000 BC to recent time. Due to the shore line rise after the last Ice Age, the sites get younger the closer to the sea level of today they lie. At the site is also an exceptionally large burial ground, with hundreds of graves. It was used for about 2500 years, the oldest graves dating back to around 1000 BC. The dead were laid in chambers built into the scree, or into a closed crevice or a cave. Other religious elements at the site are two sacrificial stone rings, a sacred stone, a standing offering stone surrounded by 13 stone rings and a sacred mountain. In the Saami language the area is named after the standing stone. Ceavccageađgi literally means "fish oil stone". The Norwegian name for the place is Mortensnes, Morten´s point.

Figure 20.2 Ceavccageaɗgi, the sacred offering stone. Photo: Saami Parliament, Norway

Figure 20.3 Left: Pit houses from 4500 BC. Right: Burial chamber. Photo: Saami Parliament, Norway

In the interior of the Varanger Peninsula there are are several trapping corrals with fences built of stone. The fences are in some cases extending for kilometers to guide the reindeer to the corrals. Varanger is the only place where trapping fences for reindeer/caribou are seen in combination with circular corrals. They were a forerunner to and are technologically related to the wooden fences and corrals used within reindeer husbandry. Noiddiidčearru means the Shamans´ Block Field. The Norwegian name is Kjøpmannskjølen, The Merchant´s Ridge. It is a low, barren mountain ridge, up to about 430 m above sea level. Here, the most extensive and magnificent of the stone built wild reindeer trapping system is situated. It consists of two corrals, one with a diameter of 130 meter, connected by a drive line, and several other long drive lines. Along the drive lines are a large number of bow-hides and meat caches.

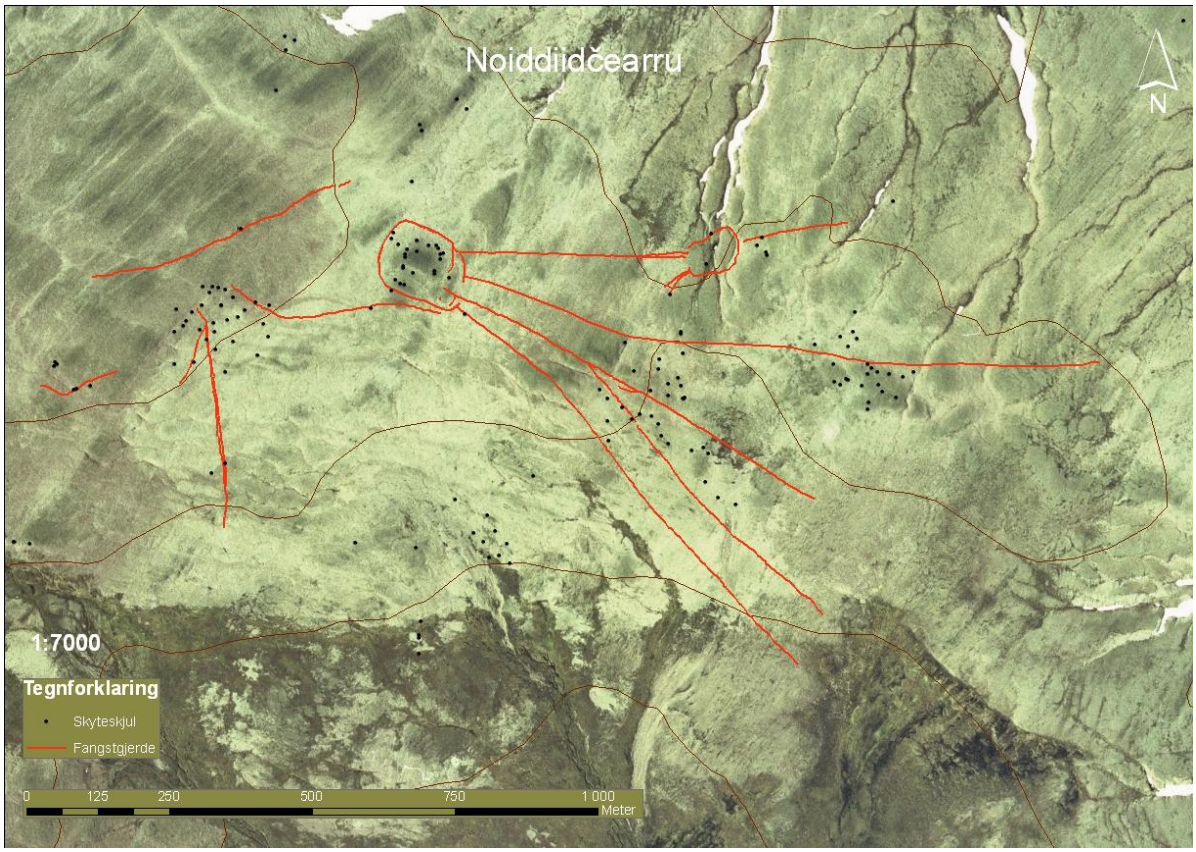


Figure 20.4 Corral with drive lines at Noiddiidčearru. The black dots are bow hides.

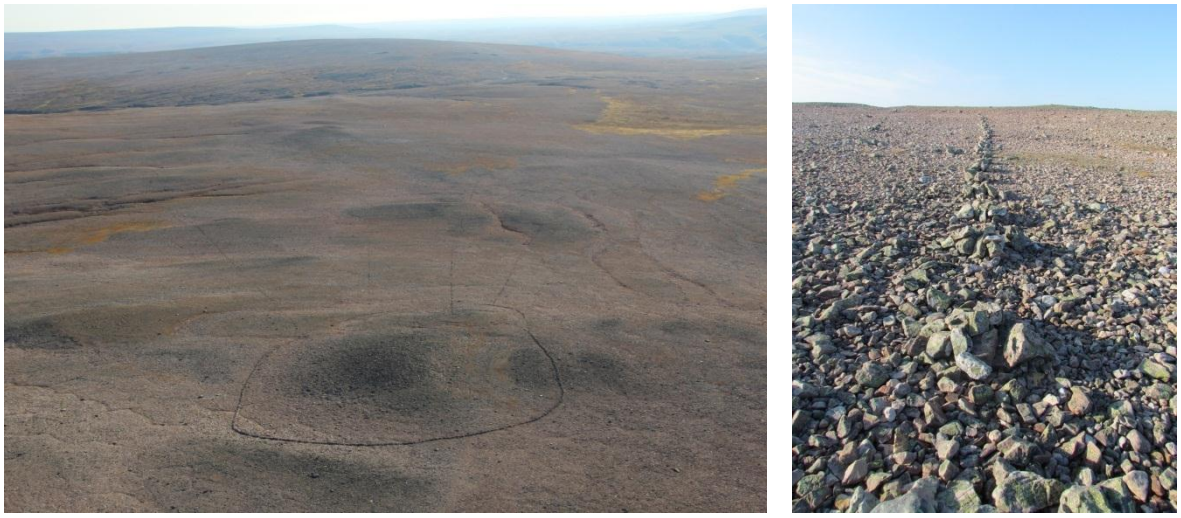


Figure 20.5 Left: Corral with drive lines. Right: Part of drive line. Photos: Saami Parliament, Norway

Physical condition:
Due to climate and lack of disturbances, the sites are very well preserved. A number of the burials were looted during the hunt for Sami skeletons and skulls from 1850 to 1920, and human remains from Mortensnes can be found in many European museums, as well as in USA. However, this is a testimony to a sad part of the recent history of the Saami people as well as of other indigenous peoples.

Existing legal status:
Ceavccageađgi is protected as a cultural monument area. Noiddiidčearru is protected through the Cultural Heritage Act and lies within the borders of the Varanger Peninsula National Park.

Which criteria it meets:
The combined sites meet criteria 1, 3, 4 and 5.

Figure 20.6 Turf house at Ceavccageađgi, lithography after Friis 1871. Sacred mountain in the background.

Primary references:
http://www.luondu.varjjat.org/

Vorren, Ørnulv, 1998: Villreinfangst i Varanger fram til 1600-1700 årene. Nordkalott-forlaget.

Russia

Site 21: Franz Josef Land

Fridtjof Nansen's and Hjalmar Johansen's wintering site from 1895-96. Located on Jackson Island, Zemlja Frantsa Iosifa, Russia.

Site description:
In 1893-96 the Norwegian scientist and polar hero Fridtjof Nansen led an expedition to drift across the Arctic Ocean with the polar ship FRAM. This aroused huge media attention in its time and the expedition became iconic in international polar history. Nansen and Johansen left the ship in spring 1895 in an attempt to reach the North Pole with dogsleds. On their return south they wintered in Zemlja Frantsa Iosifa (Franz Josef Land) and returned to Norway the following year. The story of the expedition and the wintering has been told and retold many times and in many languages, both in books, films, commemorative expeditions and theatre.

The wintering shelter was constructed with the few means available and was thus extremely primitive. A 1 m deep and 2 x 2 m hollow was scraped in the ground using a walrus shoulder blade and tooth, a ski stick and a cut-off sledge runner. Walls were built 1 m high round the hollow using stones from nearby slope and holes were plugged with moss. A drift log was placed over to support the roof of walrus hides. The inside height was roughly 2 m. The two men stayed in this shelter for eight months, living on walrus and polar bear meat and blubber. They slept and lay long hours in a double sleeping bag to keep warm. Light and heating was a primitive blubber lamp. Amazingly they emerged from the winter in good health and spirits and had each increased their body weight by up to 10 kg.

Figure 21.1: The ruin of the wintering hut of Norwegians Fridtjof Nansen and F. Hjalmar Johansen. Photo: Susan Barr

The shelter was rediscovered in 1990 and the site today shows the hollow, with the stones from the walls collapsed partly inside and partly outside. The log still lies across the hollow, but the roof skins are long gone. Bones and cartridge cases are scattered in and around the site.

Since 1990 the site has become one of the visitor goals for cruise ships to the archipelago, often in connection with cruises through the Northeast Passage or to the North Pole. With the fragile vegetation around, the site is very susceptible to visitor impact.

Physical condition:
The site is showing wear from visiting tourist groups and transport helicopters. Since 1996 bones have been collected into the hut remains from the surrounding area and then have disappeared again, possibly removed completely from the site.

Figure 21.2: Tourists from a cruise ship gathered around the site. Photo: P.J. Capelotti 2006

Existing legal status:
From 15 June 2009 the archipelago became part of the newly established Russkaya Arktika National Park.

Which criteria it meets:
The site meets criteria 2, 4, 5

Primary references:
Barr, Susan (Ed.) 1995: Franz Josef Land. Norsk Polarinstitutt, Oslo.

Site 22: Novaya Zemlya

The site of Willem Barentsz' wintering, Novaya Zemlya

Figure 22.1: Ice Bay, Novaya Zemlja, Russia

Site description:
The site of the famous Dutch sailor Willem Barentsz' wintering 1596-97, on the northern point of Novaya Zemlya.

Physical condition:
Since its discovery in 1871 the site has been visited many times, both by plunders and by archaeologists. Because of the lack of covering vegetation the site is still recognizable through the bits of small debris from the original building.

Existing legal status
From 15 June 2009 the archipelago became part of the newly established Russkaya Arktika National Park.

Which criteria it meets:
The area meets criteria 2, 4 and 5

Primary references:
Hacquebord, Louwrens.1995: In Search of *Het Behouden Huys*: A Survey of the Remains of the House of Willem Barentsz on Novaya Zemlya. In: Arctic, Vol.48, No.3 (September 1995), pp.248-256. University of Calgary, Canada.

Figure 22.2. Willem Barentsz' wintering site.

Site 23: The Kola Peninsula

Ancient autographs of sailors on a stone slab, located at the Anikeev Island, Pechengsky Raion, Murmansk oblast, Russia

Site description:

The islands Little and Big Anikeev are located opposite the mouth of the Tsyp-Navolok River. Names and monograms of Danish, Norwegian, Dutch and Russian sailors of the 16th – 19th century are carved on the slab at the Big Anikeev Island.

Physical condition:

Figure 23.1: Ancient autographs on Anikeev Island

Figure 23.2: Ancient autographs on Anikeev Island

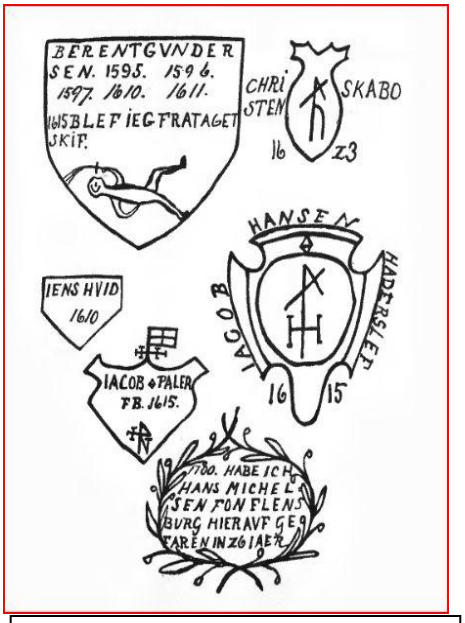


Figure 23.3: Ancient autographs on Anikeev Island.

Existing legal status:
The site is in the process of legalization.

Which criteria it meets:
The area meets criteria 2 and 5.

Primary references:
Gorter, Waling T. 2008: Inskripsjonene på Fiskerihalvøya og kongestokken i Vardøhus festning (in Norwegian). In: Forpost mot øst : fra Vardø og Finnmarks historie 1307-2007 : rapport fra det XXXII nordnorske historieseminar, Vardø 21.-23. september 2007, p.73-104.

Site 24: Kanozero Petroglyphs

A complex of more than 1000 petroglyphs, dated to up to 6000 years old. Located near the abandoned village of Kanozero, 40 km to the north-north-west from the Umba village, Tersky rayon, Murmanskaya oblast.

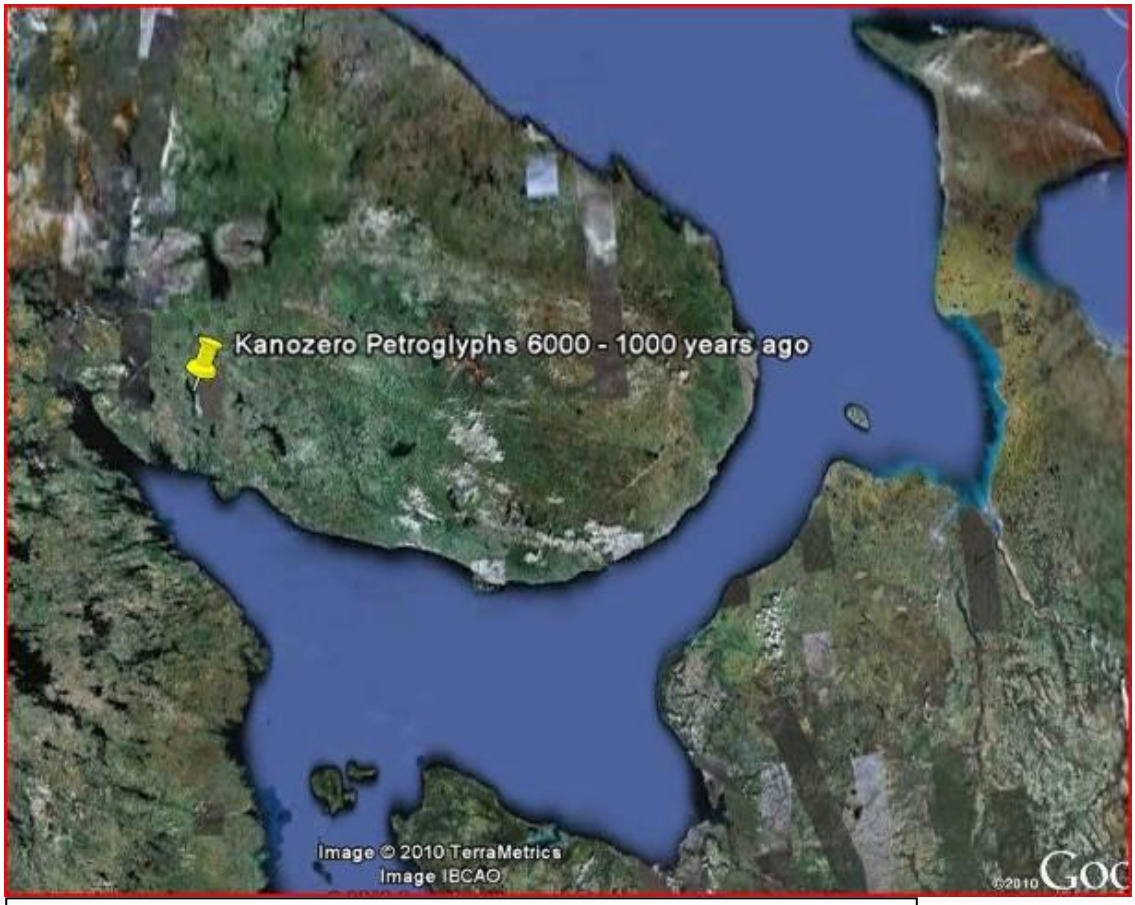


Figure 24.1: Murmansk oblast, Russia

Site description:
The Kanozero petroglyphs are the biggest complex of petroglyphs in the Russian area above the Arctic Circle. So far 1140 figures have been discovered, many of them are unique for Northern Eurasia. They are located near the abandoned village of Kanozero, 40 km to the north-north-west from the Umba village, Tersky rayon, Murmanskaya oblast.
Dated to the IV-II millennium before Christ.

Physical condition:

Figure 24.2: Kanozero petroglyphs

Existing legal status:
Heritage object of the Federal status, museum

Which criteria it meets:
The area meets criteria 3 and 4.

Primary references:
http://kae.rekvizit.ru/kan/kanintr.htm (in Russian)

Site 25: Vaigach Island

Sacred sites of Vaigach Island

Figure 25.1. Vaigach Island, Russia

Site description:
The Vaigach Island is a place of a unique concentration of natural, historic and cultural heritage. It has a status of special protection territory. Vaigach is a single sacred island in the Arctic where no one has lived from ancient times to the 20th century. It was the sacred place for several peoples who replaced one another in the Western Arctic in the course of thousands of years. Sensational findings were made here including coins from Middle Asia and Scythian arrows which date back to the 3rd – 2nd centuries B.C., i.e. before the Nenets arrived on the island.

Physical condition:

Existing legal status:
It has a status of special protection territory. The regional authorities are seeking to obtain UNESCO World Heritage status for it.

Which criteria it meets
The area meets criteria 1, 3, 4, and 5.

Primary references:
http://en.wikipedia.org/wiki/Vaygach_Island

Baryshev, I.B.2011: Iazycheskie Sviatilishcha Ostrova Vaigach [Pagan sanctuaries of Vaigach Island]. In Russian. Moscow: Institut naslediia. 320 p. (This monograph studies the sanctuaries of Vaigach Island in Arctic Ocean, their place in the religious life of medieval people from North-Eastern Europe and the Nenets from the Middle Ages to the present. The monograph is based on materials of the naval Arctic expedition in 1986-2010. Bibliography. Profusely illustrated.)

Site 26: West Siberia

Remains of the ancient Mangazea Town, located on the Taz River, Yamal-Nenets Autonomous Okrug, Russia

Site description:
Mangazea is the first Russian town of the 17th century in Siberia above the Arctic Circle. It was located on the Taz River which was a part of the Mangazea sea passage. The town was founded in 1601 and soon had a real boom because it became the main supplier of furs to the State. However, after a short time it was abolished and the population moved to Turukhan, on the left tributary of the Jenisey.

Unique findings were made during the excavations in Mangazea in the 1960-70s. In the frozen subsoil, many ship fragments were found which had been used in house building.

Figure 26.1. Yamal-Nenets Autonomous Okrug, Russia

Figure 26.2. Left: Permafrost excavations. Right: Permafrost excavations. Keel of a vessel (koch) as the foundation of the 17th century building.

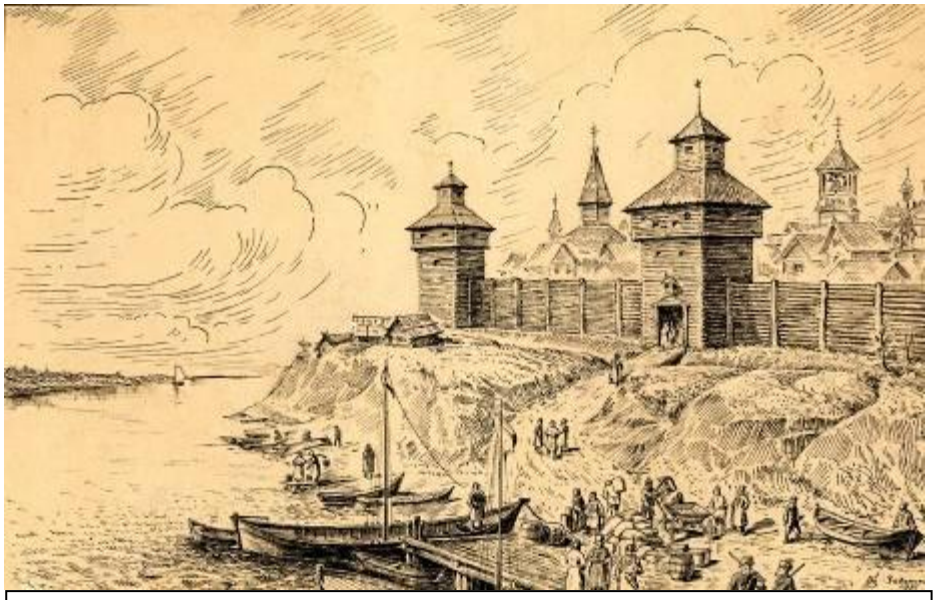


Figure 26.3. Pictorial reconstruction of Mangazea

Physical condition:

Existing legal status
Heritage object of the Federal status, museum

Which criteria it meets:
The area meets criteria 1, 2, 4 and 5.

Primary references:

http://en.wikipedia.org/wiki/Mangazeya

Site 27: The Novosibirsk Islands

The Zhokhov archaeological site. The island is situated in the East Siberian Sea and is part of the De Long archipelago.

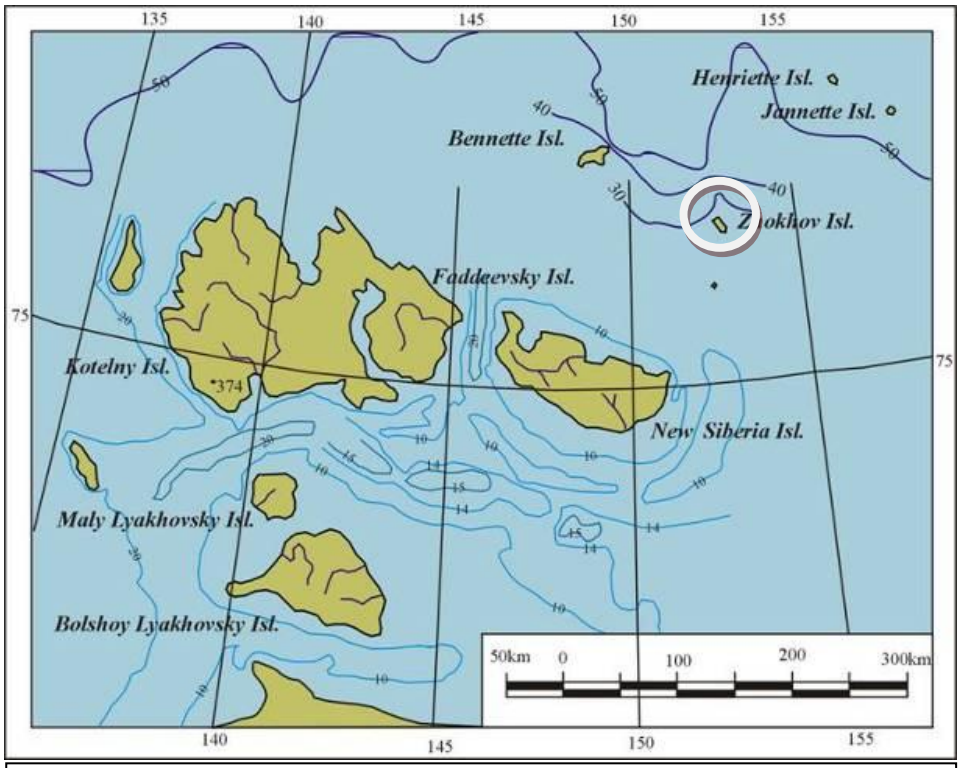


Figure 27.1: Zhokhov Island

Site description:
Zhokhov Island is situated beneath 76°N latitude and is one of the most remote territories in the eastern portion of the Siberian Arctic. It is one of the five small islands of the De Long archipelago in the Novosibirsk Islands group which constitutes the natural boundary between the Laptev and the East Siberian Seas. Zhokhov Island is 11 km north-south and 9 km west-east.

The Zhokhov archaeological site was excavated in two field seasons (1989-90), revealing many stone and bone objects. It was a hunting camp located a few days' run from the hunters' settlement. The site is 8000 years old. The archaeological findings show convincingly that the hunters reached their camp not by sea but on dry land and hunted not for sea animals but for deer and polar bear. Therefore, the islands must not have been separated from the continent at that time. There seems to be no doubt that the island was much larger 8000 years ago, or even was still a part of the mainland. In any case, the archaeological site was located not far from the shoreline. The occupants used driftwood in large amounts, and sometimes the cultural deposits of the site consist of wooden pieces and slivers mixed with bone/antler fragments.

The area of the site is abnormally large, and covers about 8000 sq.m., but the cultural layer probably has a discontinuous distribution. 148 m² were excavated and no difference between the surface and the sub-surface contexts was found, and the stratigraphy of the site can confirm the homogeneous origin of the assemblage. No evidence of redepositing of the cultural remains was

found; the cryoturbations (mixing of the soil due to frost actions) discovered in the horizon containing those remains was not strong enough to make important changes.
The results of the excavations were reported previously (Pitul'ko 1993, Pitul'ko and Giria 1994, Pitul'ko and Kasparov 1996). Abundant artifacts and faunal remains characterizing ancient aboriginal culture were discovered. The chronology of the site is based on results of the radiocarbon dating of charcoals, bone and wooden pieces done by different laboratories. More than 20 samples were tested. The mid-value for the samples taken from the cultural layer is 7800-8000 carbon years ago. The age of the site is controlled, to some extent, by the sample taken from the underlying stratum which is dated to 8790+/-90 BP (LU 2502).

Figure 27.2. Zokhov Island with sites marked.

Figure 27.3. Excavations on Zokhov Island

Figure 27.4. Pieces of fauna on the Zokhov site.

Figure 27.5. Artifacts from the Zokhov site

Physical condition:

Existing legal status:
Heritage object of the Federal status

Which criteria it meets:
The area meets criteria 1 and 4.

Primary references:
Pitul'ko 1993
Pitul'ko and Giria 1994
Pitul'ko and Kasparov 1996

Site 28: Chukotka

Pegtymel Archaeological Complex located in the Russian Far East.

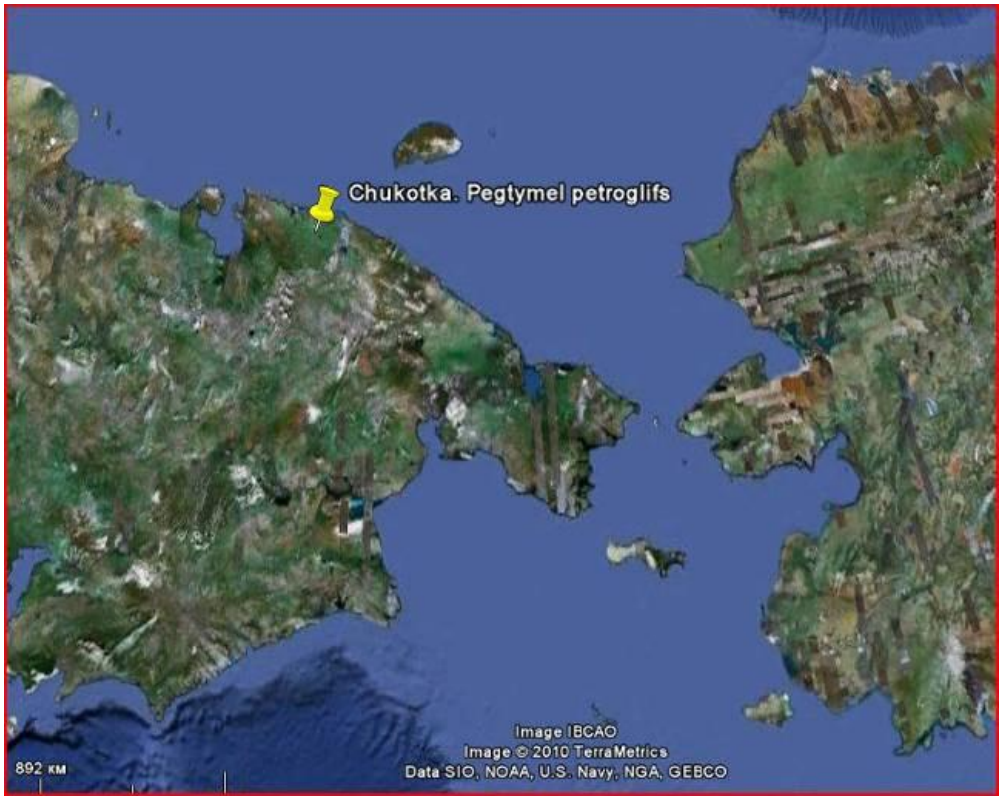


Figure 28.1. Chukotka Autonomous Okrug, Russia Billings, 65 km to the south-east from the village, the right bank of the Pegtymel River, lower mouth of the Kaykuul brook.

Site description:
Three Neolithic sites and 104 groups of petroglyphs 1000 B.C. – 1000 A.D.

Physical condition:

Existing legal status
Heritage object of the Federal status

Which criteria it meets:
The area meets criteria 3 and 4.

Primary references:
Richard L. Bland 2010: Another Look at the Pegtymel' Petroglyphs. From: Arctic Anthropology Volume 47, Number 2, 2010, pp. 22-31.
Rock Art of Chukotka, Pegtymel Petroglyphs at:
http://www.explorers.org/flag_reports/Flag_25_-_Stephanie_Zini_and_Alexander_Borodin.pdf

Site 29: Kitovaya (Whale) Alley

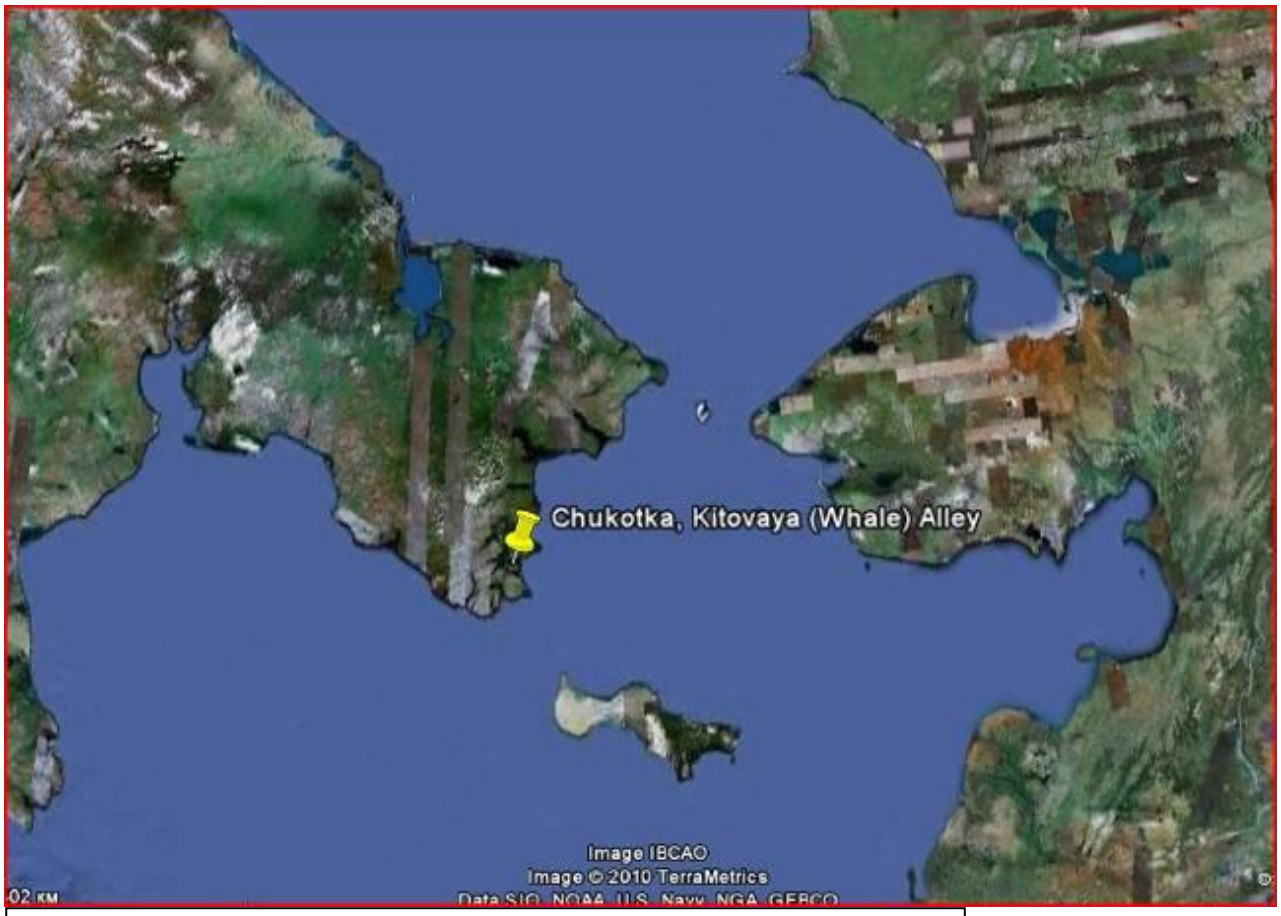


Figure 29.1. Chukotka Autonomous Okrug, Russia

Site description:
The site was discovered in 1976. It is located on the Ytygran Island in the Senyavin Straight in the Bering Sea, to the north from the Chukotsky Cape, near the south-eastern extremity of the Chukchi Peninsula, 1.5 km in from the coast and 3.8 km from the Arakamchechen Island. The Ytygran Island is 13.5 km long, maximum 5 km wide, in area 17 km². It is included into the Chukchi Autonomous Region. The island is famous for the Whale Alley, an ancient Eskimo construction where parallel rows of skulls and jaws of Greenlandic whales are dug into the earth. The Whale Alley is constructed of 50-60 skulls and 30 jaws and hundreds of specially arranged stones.
The first explorers of the Whale Alley dated it back to the 14-15th centuries A.D. Recently, laboratory analyses of three bones gave three dates - 297, 290 and 237 A.D. (Первые исследователи китовой аллеи датировали объект XIV-XVI вв. н.э.).

The Whale Alley is a unique utility structure and sacred place created by sea hunters of the Bering Strait which reflects the history of many centuries of adaptation to the stern life in the northern Pacific. About 1000 visitors yearly (mostly foreigners) go without specially equipped routes and without consideration of permissible load on the monument. The monument needs preservation. According the independent Internet-questionnaire, the Whale Alley is included into the list of 20 sights – wonders of Russia (www.ruschudo.ru). However, the name of the discoverer is omitted.

Physical condition:

Existing legal status
Heritage object of the Federal status

Which criteria it meets:
The area meets criteria 1, 3 and 4.

Primary references:
Первые исследователи китовой аллеи датировали объект XIV-XVI вв. н.э.

Sergeĭ Aleksandrovich Arutiunov, I. I. Krupnik, M. A. Chlenov, 1982: "Kitovaya Allyeya": Dryevnosti Ostrovov Proliva Syenyavina. Hayka. 174 pp.

List of consulted experts:

Boyarsky Petr Vladimirovich

Golovnev Andrey Vladimirovich

Gusev Sergey Valentinovich

Shumkin Vladimir Yakovlevich

Vizgalov Georgi Petrovich

Pitulko Vladimir Viktorovich

Gavrilo Maria Vladislavovna

Bogoslovskaya Ludmila Sergeevna

Filin Pavel Anatolyevich

Finland

Site 30: The combined sites on the River Ivalojoki: Kultala Crown Station, Ritakoski, Pahaoja and stone banks of Sotajoki

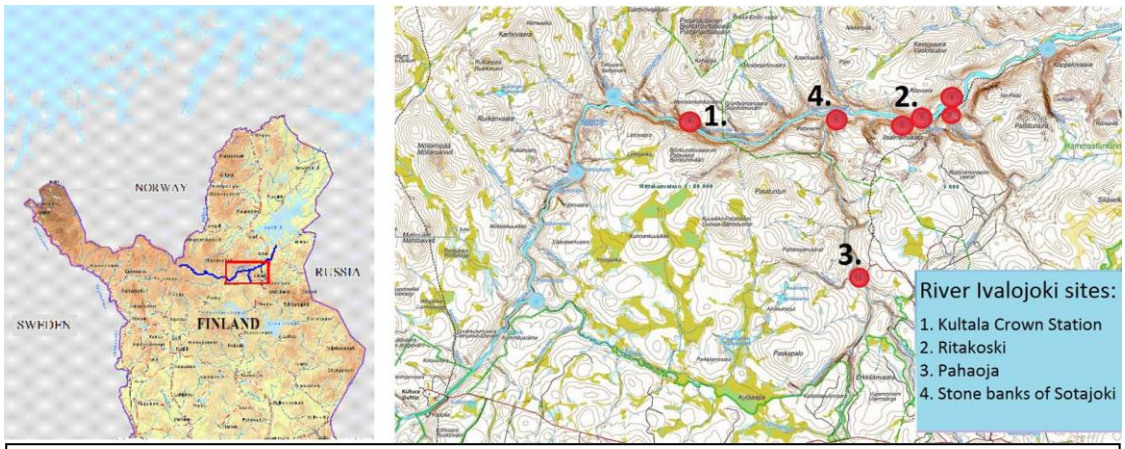


Figure 30.1: River Ivalojoki sites

Site description:
The gold nuggets found at Nulkkamukka by the River Ivalojoki in autumn 1868 started the first gold rush to the northern part of Europe. The River Ivalojoki area forms a significant gold prospecting related cultural heritage environment. There are several historically important sites where buildings from the gold rush era still remain. The most important sites related to the gold rush era are the Kultala Crown Station, Ritakoski gold cabins and its surroundings, Pahajoki base and Moberg stream, and large stone banks of Sotajoki (Sotajoen suupankki).

Figure 30.2: From left: remains of a shaft in Ritakoski surroundings in 2010, old claim sign near Kultala in 2011 and remains of road between Ritakoski sawmill and Kultala in 2007. Photos: Goldmuseum archives and Matti Kolho.

The material_cultural heritage of this unique site in a European scale can easily be seen: many original buildings, different machines and devices, roads or remains of them and remains of long passage ditches, man-made stone piles, boundary marks of claims, remains of long sluice boxes, mineshafts and test pits, and remains of mine rail. They bring out the human hope and desire for gold. Considering the latitude and its harsh conditions, roadless wilderness and very sparsely inhabited area the remains also tell about human being's megalomania but also unbelievable

adaptation to his environment. In addition to the gold prospecting traces there are also signs of prehistoric activity as well as Saami culture in the area.

For its immaterial cultural heritage the site is a special combination of western and eastern gold prospecting heritage in the European Arctic. Many gold prospectors or the representatives of gold companies visited and prospected in the gold fields of USA, Canada and Russia, bringing the techniques or methods they had adapted to the Ivalojoki area. For example: Wille Hall (aka Kaarlo Sjöblom) prospected in the Ural area and Canada, Heikki Kivekäs studied gold prospecting in USA and prospected in the Ural area, and Henry Kerkelä visited the gold fields of California and Australia. On the other hand, some of the prospectors during the early days of the Ivalojoki gold rush brought their knowledge with them to the other international gold fields. In addition, the River Ivalojoki and its tributaries have seen prospectors from other countries since the beginning of active prospecting.

The Kultala Crown Station

The area represents gold prospecting heritage during different decades. The most remarkable building is the Kultala Crown Station, which was built by the government in 1870, during the Russian reign, to administer gold searching and prospecting. At the station, the gold diggers' permits were inspected, the gold was weighed and tax was imposed on it. The building has remained original and is still in good condition. The signs, carvings and seals tell their own history about early days of arctic gold history. During the highest period there were 500 gold prospectors in the area and 38 men to hold office.

Figure 30.3: Kultala crown station and surroundings. Main building in the 1920s and 30s, and in summer 2005. Photos: Goldmuseum archives, GTK/Pentti Eskola and Matti Kolho.

The main building of Kultala, as well as some household buildings, has remained from these early days of gold fever. The main building and bakery were repaired in 1968, but the old residential building and saloon are now ruins. Around the Kultala environment there are many remains of cabins as well as traces of gold prospecting. By the River Ivalojoki and its tributaries one can see plenty of signs from 19th and early 20th century gold prospecting.

Kultala also functioned as a base for aurora borealis research during the 1st International Polar Year 1882-83. The aurora borealis research programme, which was set up by the Finnish Academy of Science, was carried out at Kultala over two winters during 1882-84.

Figure 30.4: From left: Seal of police chief in the wall is a reminder of the early gold rush era, signature carving from the end of 1880s in the wall of the smoke sauna, interior of Kultala Crown Station in 2005. Photos: Goldmuseum archives and Matti Kolho.

Ritakoski mansion cabin

Ritakoski mansion cabin with its environment served as a base for several gold companies between the 1910s and 1930s. In the surroundings of the yard there are tens of shafts and other structures related to gold prospecting. The heavy steam engine situated near the remains of a sawmill is part of European industrial history. The engine was made in the cradle of European industrialism, England. Upstream of Ritakoski there is another gold machine, a dredger planned and made by engineer Toivo Liljeqvist. The machine is a memory from efforts to dig the river bottom in the 1950s. The model for the dredger was taken from the goldfields of USA.

Figure 30.5: Above: Ritakoski and its yard in 2005. Left: Liljeqvist dredger in 2011, Kivekäs' steam engine in Ritakoski in 1935 and in summer 2009. The small picture is the sign of the manufacturer. Photos: Goldmuseum archives and Matti Kolho

Pahaoja base

Pahaoja base represents early mechanical gold prospecting. Its environment and buildings functioned as a base for the gold companies. Special for Pahaoja are the old machines and devices as well as the stone-supported road coming to the site. A small tributary of the River Sotajoki,

Moberg stream, was a research base for companies in the beginning of the 20th century. There are still several cabins and sauna by the Moberg stream. Nowadays there is the only mining concession of the River Ivalojoki.

Figure 30.6: Left: Pahaoja buildings and surroundings in the 1950s. Above middle and right: the device at the worksite of gold company Lapin Kulta(1925-27) in Pahaoja. The same part is seen under the recently renovated device shed in 2012 (right above), in front of the Pahaoja steam engine. Below middle is the Moberg smoke sauna in 2012, and right is the gold prospecting worksite of Törmänen by the Moberg stream in 1902. Photos: Goldmuseum archives and GTK.

Stone banks of Sotajoki

It is easy to believe the massive stone banks of the River Sotajoki mouth are traces of the Ice Age. However, they are caused by gold prospectors and they give an idea about the workload sacrificed for those huge piles. Large piles of stones relating to gold prospecting can also be found elsewhere by the river banks of Ivalojoki and its tributaries.

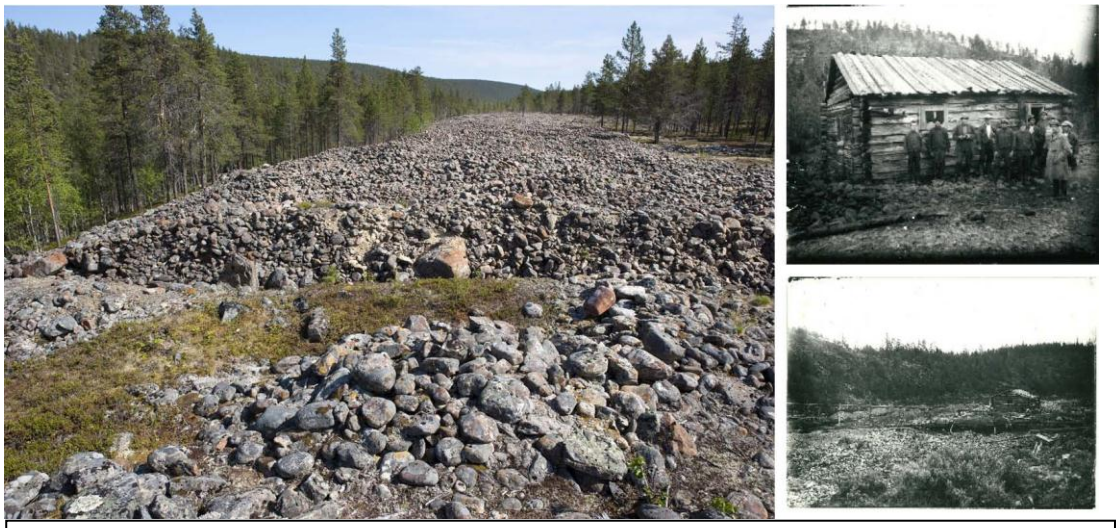


Figure 30.7: Left: Sotajoki stone banks in 2011. Right, above: workers of the Ivalojoki gold company in early 1924 in front of the building, near Sotajoki river mouth; below: Water sluices and a building at Villipankki of Sotajoki are probably part of the history of the Ivalojoki gold company. Photos: Matti Kolho and GTK.

Physical condition:
The River Ivalojoki gold area is the only of its kind in the European Arctic, representing an almost 150-year continuum of international gold prospecting. Still today, gold prospecting with its cultural heritage is very alive by the River Ivalojoki and its side rivers. Worth noticing is the arctic location of the area over 250 km above the Arctic Circle.

Existing legal status:
In Finland, the gold area of the River Ivalojoki belongs to the list of nationally significant built cultural environments. The list is maintained by National Board of Antiquities. Furthermore, the areas of Kultala, Ritakoski and Sotajoki banks are protected by the Antiquities Act.

Which criteria it meets:
The combined sites meet criteria 1, 2, 4, 5 and 6.