Arctic Cultural Heritage At Risk (Arctic CHAR):
Climate Change Impacts on the Inuvialuit Archaeological Record

Progress Report on the 2017 Field Season, Prepared by Max Friesen

A small ivory pendant in the shape of a beluga whale, found under a house floor.
**Background**

The Lower East Channel of the Mackenzie River, including eastern Richards Island and the north coast of the Tuktoyaktuk Peninsula, is home to many important Inuvialuit heritage sites – some date back as much as 700 years ago. This includes the major settlements of Kitigaaryuit (Kittigazuit), Kuukpak, and Nuvugaq (Atkinson Point), but also many other winter villages, smaller camps, and areas which saw specialized hunting and fishing.

However, these sites are now threatened by climate change, which is causing erosion of the coasts where Inuvialuit built their largest villages. For example, the site of Nuvugaq, which once held at least 17 large sod houses, is now completely destroyed by erosion. Warmer temperatures are also causing the permafrost to thaw, so delicate artifacts that have been frozen for centuries are now rotting and being destroyed.

The project “Arctic Cultural Heritage At Risk” (Arctic CHAR) is a collaboration between the University of Toronto and the Inuvialuit Cultural Resource Centre. The project is designed to reveal which heritage sites are most at risk, and then to excavate selected sites in order to save their contents before they are destroyed.

*Map: The Arctic Char Project Area. The dotted line shows the overall project area, and the five numbered rectangles show areas of intensive survey. Most work in 2017 occurred at the site of Kuukpak which is in Area 1, on Richards Island.*
Results of the 2017 Field Season

2017 was the final field season of the five-year Arctic CHAR project. Our main task was to finish excavation of a very large Inuvialuit house at Kuukpak, on Richards Island. Kuukpak is an extremely important Inuvialuit heritage site — it was the central village of the Kuukpangmiut, a large and powerful regional group who lived across Kugmallit Bay from Kitigaaryuit. Kuukpak is probably the largest site in the entire Inuvialuit region. It stretches for almost a kilometre along the bank of the Mackenzie River, and currently has the remains of at least 31 houses. However, much of the site has suffered serious erosion, and it probably once held over 40 very large houses. As described in the book *Nuna Aliannaittuq – Beautiful Land: Learning About Traditional Place Names from Tuktoyaktuk Elders* (ICRC 2011, page 24), not much is known about Kuukpak because it was abandoned during the 1800s. However, we do know that its inhabitants moved across Kugmallit Bay to join the Kitigaaryungmiut in the middle to late 1800s.

In 2017, a team of ten people worked at Kuukpak for six weeks. During that time, we spent most of our time excavating a very large Inuvialuit *igluryuaq* (ancient house) that had already started eroding into the water. This house is of the large three-alcove “cruciform” type that is well known in Inuvialuit traditional knowledge, and that has been reconstructed in Tuktoyaktuk. This house turned out to be particularly important because it contained a large number of historic trade goods — particularly glass trade beads and metal objects - indicating that it was occupied during the 1800s. This time period is not well understood in the region, so the house has added an important chapter to the area’s history linking the distant past with the modern world. At the end of the field season, the house was completely filled back in, to protect it from further damage.

Also in 2017, we performed one day of helicopter survey, visiting two sites. First, was McKinley Bay on the Tuktoyaktuk Peninsula, which is eroding quickly. Second, is the Satkualuk site, located just north of Kuukpak on Richards Island. Satkualuk belongs to the ancient Choris culture, and is over 2,000 years old.

Next Steps

The artifacts and animal bones from Kuukpak are currently being studied at the University of Toronto. They are on loan from the Prince of Wales Northern Heritage Centre in Yellowknife, where they will be returned once study is complete.

In the following pages, different aspects of the 2017 fieldwork will be described and illustrated.
Kuukpak Site Overview

Kuukpak is located on the east coast of Richards Island. The houses at the site are located on slopes leading down to the Mackenzie River, and many of these slopes are eroding rapidly. At low tide, great numbers of animal bones and artifacts can be seen below the houses. Important excavations have been conducted here in the past by Dr. Chuck Arnold, former Director of the Prince of Wales Northern Heritage Centre. However, additional archaeology is important to fill in gaps in our knowledge, and also to rescue parts of the site that are at risk of being destroyed.

Air photo of Kuukpak. The main site extends along most of the coastline seen on the right of this photo. At bottom right and centre right can be seen open erosion faces with house timbers sliding down the slopes. Below these houses, the beach is covered in stones and bones eroded from the ancient site.
The 2017 camp at Kuukpak. The yellow sleeping tents are surrounded by an electric bear alarm fence. The three white tents are the cook tent, storage tent, and artifact tent where all artifacts are carefully cleaned and packed. The main site of Kuukpak is on the slopes down to the water’s edge at upper right.
Kuukpak Area 5 House 1

Because Kuukpak is so large, it has been divided into six areas, most of which contain several houses. Almost all of our 2017 work was on House 1 in Area 5, which turned out to be the largest ancient Inuvialuit house ever excavated. Following are several photos showing different stages of the excavation.

After about two weeks, we could see the amazingly well-preserved collapsed walls of the house. Here, you can see the side and rear walls of the rear alcove, all collapsed down in a regular pattern.

One of the side alcoves was destroyed by fire and rebuilt at least once. Here is part of an earlier collapsed wall that is heavily burnt.
One of the challenges of working at Kuukpak is that the site is eroding rapidly. Here, Phylicia and Danii are working on the east alcove—half of it has already eroded down the bluff at the left side of this photo.
An air photo of the house nearing the end of excavation. The overall shape of the house can be clearly seen of a central square floor area with three alcoves – two on each side, and one at the back. The alcove on the right is eroding down the slope. The large dark pit at the bottom of the photo is the entrance area. It was badly slumped and eroded.
Near the end of the excavation, we came down to a spectacularly well-preserved floor in the main room. The remains of four posts that held up the roof can be seen at each corner.
Artifacts from Area 5 House 1

Part of a wooden artifact – possibly a bowl – with a very precisely-made double circle design.

A two-part knife handle made of caribou antler.
An antler arrowhead with an iron blade, indicating that Inuvialuit had begun to trade for useful European materials in the mid-1800s.

Our favourite artifact – an ulu with a wooden handle, two antler tangs, and an iron blade.
During our short 2017 helicopter survey, we stopped at Satkualuk. This is one of the earliest sites in the entire region, and was occupied by people of the mysterious Choris culture over 2,000 years ago. We collected a single small piece of caribou antler from the surface to allow us to radiocarbon date the site.
The McKinley Bay Site: Rapid Erosion

The McKinley Bay site near the northeast end of the Tuktoyaktuk Peninsula is eroding rapidly. Below, a comparison of 2013 and 2017 air photos shows that an entire house has eroded in the last four years.

McKinley Bay in 2013. Note the light green vegetation patch in centre of photo, and the complete house mound below it.

McKinley Bay in 2017. The light green vegetation patch is now at the edge of the eroding bluff, and the house mound is completely gone. In just four years, an entire house has been destroyed, and the bluff continues to erode back towards other houses.
For More Information...

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