

STUDIES OF PHYSICAL PARAMETERS OF INDIGENOUS ARTIFACTS

Collecting and preserving the relating oral stories



Prepared by Dr. Arzu Sardarli
Principal Investigator



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Pelican Narrows

Adam Highway	Gilbert Linklater
Annie Sewap	Madonna Ballentyne
Caroline Merasty	Mary Ann Custer
Clara Linklater	Mildred Ratt
David Custer	Sophie Anna Custer

Sturgeon Lake

Eric Bird	Norma Rabbitskin
Frank Ermine	Rose Daniels
Garry Turner	Terry Daniels
Joseph Naytowhow	Willie Ermine, Community Coordinator
Leonard Ermine	Yvonne Seesequasis
Mike Daniels	

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I also acknowledge the ongoing support of senior management, the Finance and Human Resources departments' staff and all colleagues from the First Nation University of Canada.

MEMBERS OF OUR TEAM

- Dr. Arzu Sardarli, Principal Investigator, Project Manager (First Nations University of Canada)
- Dr. Evelyn Siegfried, Investigator (Royal Saskatchewan Museum)
- Prof. Ida Swan, Investigator (First Nations University of Canada)
- Dr. Leta Kingfisher, Investigator (First Nations University of Canada)
- Dr. Bill Patterson, Investigator (University of Saskatchewan)
- Dr. Sandra Timsic, Investigator (University of Saskatchewan)
- Dr. Tim Panas, Archaeology Consultant (Program/Policy Officer III for Parks Canada)
- Dr. Lynn Wells, Investigator (First Nations University of Canada)
- Dr. Andrei Volodin, Investigator (University of Regina)
- Dr. Mauricio Barbi, Investigator (University of Regina)
- Allan Asapass, English-Cree interpreter
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- Khaysa Osmanli, Research Assistant
- Marah Mattison, Research Assistant
- Margo Jobb, Research Assistant
- Skylar Wall, Research Assistant

PROJECT OUTLINE

The Project, “Studies of physical parameters of Indigenous artifacts; collecting and preserving the relating oral stories,” was initiated by a group of scholars from First Nations University of Canada (FNUniv), University of Regina (U of R) and Royal Saskatchewan Museum (RSM). The Project was supported by the Department of Canadian Heritage within the Museum Assistance Program.

More than forty people, including Elders, Indigenous Knowledge Keepers, community members, students, participated in this Project. Within the Project, we studied the principles of a research Ethics protocol for collecting, studying and preserving Indigenous artifacts, collected oral stories and determined physical parameters of Indigenous artifacts borrowed from communities and the RSM.

The Project was carried out in collaboration with Sturgeon Lake and Pelican Narrows First Nations communities. The Project was conducted from June 1, 2018, to December 31, 2020, in five phases. Within the first phase, we initiated the research Ethics review by the University of Regina. We then consulted with Elders and Knowledge Keepers regarding the research Ethics protocols for collecting and preserving the Indigenous artifacts. The consultations were carried out during the individual meetings, workshops organized in Pelican Narrows and Sturgeon Lake, and ceremonies.

Within the second phase, we trained research assistants (Indigenous students) for working in First Nations communities and at the RSM. The training included Indigenous studies and the basics of Archaeology.

Within the third phase, we interviewed Elders and Knowledge Keepers from Pelican Narrows and Sturgeon Lake and recorded their oral stories. In parallel, we collected Indigenous artifacts in the Pelican Narrows and Sturgeon Lake communities and selected samples from RSM collections for physical measurements.

Within the fourth phase, we carried out laboratory measurements on the selected artifacts. The measurements were done at the Scanning Electron Microscope Laboratory of the University of Alberta, Saskatchewan Isotope Laboratory of the University of Saskatchewan and André E. Lalonde Accelerator Mass Spectrometry Laboratory of the University of Ottawa.

Within the fifth phase, we carried out the statistical analysis of data obtained from the chemical composition measurements on artifacts, determined preliminary results of our studies and prepared materials for first publications. The preliminary results of the Project were presented to Pelican Narrows and Sturgeon Lake community members.

INTRODUCTION

This Project started with my discussions with my guide to the Indigenous Word, Elder Willie Ermine. Willie once worked at the First Nations University of Canada. We were office neighbours at the Northern Campus (Prince Albert, Saskatchewan). I learned a lot from Willie about Indigenous Knowledge and the Indigenous way of living on the land. Indigenous artifacts were a regular topic of our discussions. Willie talked about the artifacts found in his community, Sturgeon Lake, and oral stories relating to artifacts.

I decided to learn more about Indigenous artifact studies around the World and found out that Indigenous artifacts have been objects of interest for museums and private collectors for many years in Saskatchewan. More recently, researchers found, dating artifacts can help to get information on Aboriginal trade routes and exchanges from hundreds and thousands of years ago. I then met Dr. Mauricio Barbi (University of Regina), who introduced me to his paleontology studies using synchrotron radiation-based techniques. I learned that modern laboratory technologies could be used to make precise non-destructive measurements of physical parameters of artifacts. Dr. Andrei Volodin (University of Regina), joined our discussions and shared statistical analysis of artifacts' physical

parameters. At this stage, we realized the need of a archaeologist on our team. I was recommended to contact Dr. Evelyn Siegfried, the Curator of Indigenous Studies of the Royal Saskatchewan Museum. Dr. Siegfried kindly agreed to join the team, and Evelyn recommended to apply for the Museums Assistance Program (MAP) funding.

As a team, we started working on the research proposal. I asked Dr. Lynn Wells (formerly, VP Academic of FNUniv) to help us develop our proposal. She recommended to collect Indigenous oral stories within the Project.

From the beginning, we intended to closely collaborate with Indigenous communities. I was inspired by Willie Ermine for starting this Project, it would be logical to collaborate with his community, Sturgeon Lake. By that time, Willie had become Professor Emeritus. However, he kindly promised his support. My other colleague Assistant Professor of FNUniv, Ida Swan, agreed to join the team and help us in collaborating with her community, Pelican Narrows.

We developed the research proposal and submitted it to the MAP funding competition. In March 2018, FNUniv received a letter from the Ministry of Canadian Heritage our funding application was approved.

ETHICS REVIEW AND COMMUNITY CONSULTATIONS

According to the agreement between the First Nations University of Canada and the University of Regina, our proposal had to be reviewed by the University of Regina Research Ethics Board. The proposal included detailed information about our Project and the Consent Forms for individual interviews. After reviewing the proposal, The Research Ethics Board recommended to develop the Consent Form for group meetings as well. We also were advised to have interviewees' signatures for premising voice recording and imaging (pictures and/or videos). After the second review, on July 17, 2018 the Research Ethics Board of the University of Regina approved and granted us the Research Ethics Board Certificate.

The community consultations were initiated before we submitted the proposal. We had contacted administrations of Pelican

Narrows and Sturgeon Lake in the process of proposal development. Chief Greg Ermine (Sturgeon Lake) and Chief Peter A. Beatty (Pelican Narrows) supported our application for MAP funding.

After consulting with community members, Community Consultants and Community Coordinator, we scheduled the community workshops on October 13, 2018 (Pelican Narrows) and on October 22, 2018 (Sturgeon Lake). Workshops were facilitated and organized by the Community Coordinator and Community Consultants. Both workshop discussions were voice-recorded. Project Manager, Community Coordinator, Community Consultants and the Consultant for Archaeology and Anthropology participated in both workshops. Research team members joined the workshops by phone.



Pelican Narrows Workshop

Four Elders/Knowledge Keepers, the Project Manager, the Community Coordinator, Community Consultants (Pelican Narrows and Sturgeon Lake), the Consultant for Archaeology and Anthropology and some community members participated in the Pelican Narrows workshop. Two research team members (from Regina, SK and Prince Albert, SK) joined the workshop by teleconferencing. The Project Manager completed a presentation about the MAP project objectives and plans; asked Elders/Knowledge Keepers for their permission and guidance, and invited community members to participate in the Project.

Research team members provided more specific information about the goals of the Project and answered questions of community members.

Elders/Knowledge Keepers spoke of their own views and some concerns regarding the community-based research on the territories of their communities, the process of Indigenous artifact collection, and their exhibition at museums. After the discussions, Pelican Narrows Elders/Knowledge Keepers addressed their willingness to participate in the MAP project.



Sturgeon Lake Workshop

Four Elders/Knowledge Keepers, the Project Manager, the Community Coordinator, Community Consultants (Pelican Narrows and Sturgeon Lake), the Consultant for Archaeology and Anthropology and some community members participated in the *Sturgeon Lake workshop*. Two research team members (from Regina, SK and Prince Albert, SK) joined the workshop by teleconferencing.

The Project Manager presented the MAP project objectives and plans; asked Elders/Knowledge Keepers for their permission and guidance, and invited community members to participate in the Project. Research team members provided information of the goals for the Project and answered the questions of community members. Elders/Knowledge Keepers shared their views and concerns regarding the community-based research on the territories of their communities, the process of Indigenous artifact collection, and their exhibition at museums. They emphasized the importance of building trust between the community and research team.

Elders/Knowledge Keepers requested another meeting to make a final decision regarding their participation in the Project. They invited research team members to participate in a Sweat Lodge ceremony at Sturgeon Lake on December 6, 2018. Participation of research team members in the Sweat Lodge ceremony would be considered as the beginning of the trust-building process and part of the research Ethics protocol for working in the Sturgeon Lake community.

The Project Manager and Consultant for Archaeology and Anthropology participated in the Sweat Lodge ceremony. Elders/Knowledge Keepers and many community members also participated in the ceremony. The Project Manager was asked to address his team's request about conducting the Project to community members. After the ceremony, Elders/Knowledge Keepers expressed the community's willingness to support the Project.

TRAINING

The Research Assistants were trained and supervised by Dr. Arzu Sardarli (Statistical Analysis, interview and transcribing techniques), Dr. Evelyn Siegfried (worked with artifacts), Dr. Leta Kingfisher (Indigenous research protocol), Dr. Tim Panas (Basics of Archaeology) and Dr. Andrei Volodin (Statistical Analysis).

Basics of Archaeology

prepared by Dr. Tim Panas

The training of the Research Assistants (students) included; how to conduct archaeological research in Northern Saskatchewan; took place in three separate stages. The first of these stages was a half-day lecture on archaeology at FNUniv (Northern Campus, Prince Albert, SK). Since the students did not have a previous background in archaeology, this training examined how field studies are conducted and provided a comprehensive look at the pre-European history of Saskatchewan. Major topics discussed in this lecture included:

- Basic background in the field of archaeology
- Methods used in obtaining calendar (or absolute) dates for archaeological artifacts
- The general types of artifacts found in Saskatchewan (lithic, bone, ceramics, etc.)
- The history of the landscape of Saskatchewan, from the last Ice Age to today
- The presently understood archaeological history of the province

- The different types of archaeological objects and site types found in Saskatchewan, including artifacts, tipi rings, medicine wheels, effigies, rock art, and cellar depressions
- Field survey methodologies, note-taking in the field, and the operation of hand-held global positioning systems (GPS)

In conjunction with the public archaeological excavations organized by the Saskatchewan Archaeological Society; the second stage of the training took place in Humboldt at the site of the Humboldt Telegraph station. During this stage, students acquired hands-on experience in identifying artifacts in the field, how to conduct successful field surveys of large areas of land, and how to record archaeological information in the field. During the half-day exercise, students were responsible for surveying a portion of the telegraph site to locate and record any artifacts or features (foundation remains, evidence of campfires, etc.) on the ground surface. Once located and identified, students took detailed field notes on their finds and recorded the location of each artifact using a GPS.



Training session at the site of the Humboldt Telegraph station

The third stage of the training for students included the principal investigator, archaeological advisor, and assigned student visiting each respective community. Areas mentioned by Elders during the interviews were examined. Examination of the lands were conducted with regard to the recommendations made including methodologies to survey and data record at these locations. Following this trip, students conducted their own surveys of these areas.

Indigenous Protocol Studies

Indigenous Protocol training was done at FNUniv (Northern Campus, Prince Albert, SK). During the week, the Indigenous Studies faculty member of FNUniv, Dr. Leta Kingfisher, taught the Community Research Assistants about the basics of the Indigenous Research Protocol.

ORAL STORIES

The names of five interviewees (Elders and Knowledge Keepers) from both Pelican Narrows and Sturgeon Lake First Nations were suggested by the Community Consultants. The interviewees were scheduled and organized by Community Consultants and the Community Coordinator. The interviews were held in the Opawikoscikan School Library of Pelican Narrows and at the Adult Education Centre of Sturgeon Lake.

One Pelican Narrows Elder was interviewed in her own house. Elders and Knowledge Keepers were interviewed by the Project Manager and Community Research Assistants and occasionally Community Consultants participated in interviews. All interviews were recorded by two voice recorders simultaneously. Some interviews were in Cree. The oral stories were transcribed by Research Assistants.



Research Assistant Margo Jobb is interviewing Elder Adam Highway



Interview with Elder Eric Bird



Research Assistant Margo Jobb is interviewing Elder Gilbert Linklater



Interview with Storyteller Joseph Naytowhow



Interview with Elders Rose and Mike Daniels



Interview with Elder Yvonne Seesequasis

Pelican Narrows, SK, Canada

Adam Highway – 98 years old

Adam recalls his childhood, the experiences he had with his father and within his Community.

I was raised in the Pelican Narrows area. From age six to fifteen, I attended the residential school in Sturgeon Landing.

When I came back from school, I started trapping with my dad. My dad taught me how to trap and hunt. I remember my father having meetings with the men; I was a teenager amongst them. We would have meetings in a house where my dad had built a stone stove; it was a stove

made from the land. We would cook on it. I remember feeling happy to be there. I listen while they spoke, laughed and shared stories.

Later the name changed to Dene Narrows. Dene people would access the water from there to gather medicines not far from Pelican Narrows. First Portage and Medicine Rapids were named because of the Dene reference to those areas. There are pictograph paintings near Medicine Rapids where Dene people drew the images of their dreams.

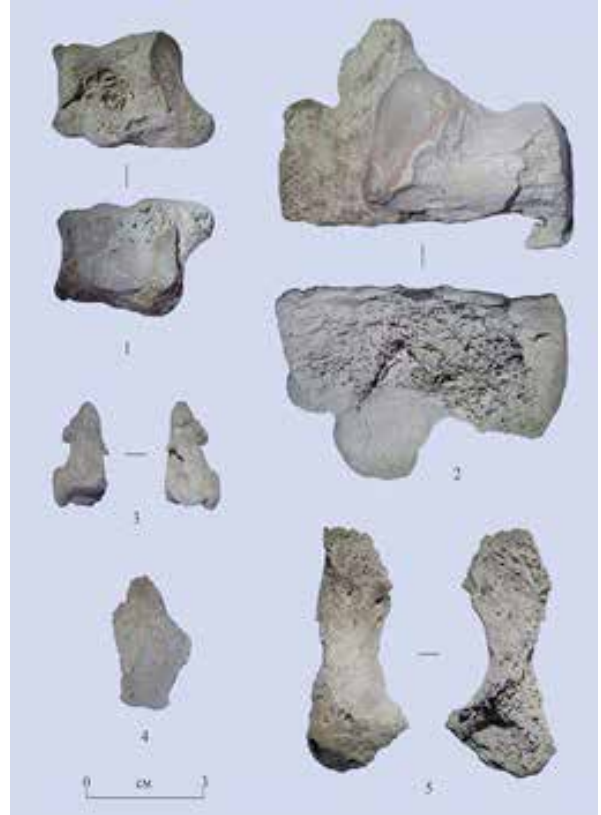
The lands were rich, and we ate traditional foods. We were healthy and fit, living off the land, living a clean lifestyle.



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When we were kids, we used to catch Suckerfish. In the springtime, I saw Woodland caribou, which is a rare sight today in Pelican Narrows.

I found human bones in various areas around my community. Bones were found near the former Government institutions; the old Nursing Station, the old Conservation House and later in gravel pits. The human bones were there for a while until a white man gathered and took them to Beaver Lake. I showed my father the bones I found. He explained they were from the times when the Dene battled against the Cree. Finding the human bones meant the war between Dene and Cree happened right in Pelican Narrows. Former Chief Ron Michel gathered the human remains, and held traditional ceremonies to lay the



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historical bones to rest and honored them with sacred grass.

I am almost a hundred years old; I was born after the Dene, Saulteaux, and the Cree disputes.



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Annie Sewap – 85 years old

Annie recalls stories of her mother's ancestor the Othakapachikew. It was my late grandfathers' grandfather who shared stories that were shared throughout generations. These stories were taught to me, and now they are mine to share.

I was born and raised in First Portage, also known as Medicine Rapids. I was a young woman when my family moved to Kaskew-Pelican Narrows. Moving to Pelican meant accessing the residential school. Two of my teenage siblings had to attend school for a year or two until they reached the age of sixteen. Once you turned sixteen, you were no longer qualified to attend school. I was already too old.



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There were not many people in the community of Pelican at that time. My mother cared for a few elderly women, in our home and in theirs. It gave us opportunity to visit.

We did have boats and motors for the men to fish.



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The Sioux

I remember my grandparent's story of the Cree hiding along the Narrows when other tribes –Sioux came to Pelican Narrows. Members in the community would run and hide in the forest; men would sometimes engage in war. An old man volunteered to take the women and the children to a safe place, later called Kimosom Pwatinahk, now called Deschambault Lake. The Sioux went found the hiding group. The few survivors there were, they took with them on their canoes, paddled off. The surviving women and children went back to their camp. Asort while later the hunters returned to the camp. It was snowing; a foot trail was visible in the snow that leads to the water. They followed the Sioux. As they paddled off, they saw a group of children who were left on a deep-water reef. Then they saw the Sioux going to shore, jumping off their canoes. They surrounded them coming from the woods. They chased the Sioux off.



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Whitigo

In the long cold winters, Whitigo would come to visit us, then in spring, he melted and would leave with the snow. Whitigo was mean. No one would dare to bother him. On one occasion, two-night watchmen were warned not to go near Whitigo, but their hunting skills bound them to the challenge. Sitting, hidden on spruce branches, they waited patiently. They shot towards Whitigo and saw Whitigo running away with fatal injuries. The two-night watchmen went home proud to share the news, they killed Whitigo, and they were alive to talk about it. They were reminded by the Elders; they were told not to leave, nor to confront Whitigo. That Whitigo was neither man nor animal and would not die

so easily. Confirming the Elders' words, it was not long after they heard Whitigo returning, making terrible noises. The watchmen were confounded. Whitigo was fatally injured; he should be dead. They ordered the others to stay put and rushed off to confront the approaching Whitigo. The children and adults did not attempt to go near Whitigo for fear they would be killed by the anger in Whitigo.

Annie's Ancestor was one of the Watchmen. He is the one who shot Whitigo in the head and used his axe to kill Whitigo as the others watched. They built a large fire and threw Whitigo's icy body on the fire, and watched it melt and turn to water.

Gilbert Linklater

Gilbert was raised along the Churchill River. Gilbert has many fond memories of how people used to live off the land. It is an area inhabited by Indigenous people for many years.

Nutrition

I remember Cree people lived off the land, and no one was ever sorts of food. This was before the government licensed and regulated trap lines and commercial fishing to monitor the animal population. The fish was so nice in Pelican Narrows. Beautiful lakes were abundantly full of Whitefish, Walleye, Sturgeon and Northern Pike. People used to live on a diet of just fish. Whitefish offers enough nutrients and proteins to sustain human diet requirements. During the summer, fish and meat were smoked and dried to preserve them. My grandmother used to make pemmican and lard out of moose fat.



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I remember our ancestors used to have a garden at Whitigo Lake; my dad had a big garden. In fall, the animals would be ready for winter and have an extra layer of fat on them. I still have a craving for my grandmother's preserved delicious moose fat. I remember my Kokum baked big fresh garden potatoes; she used to cut them in half top them with moose lard and shredded dry moose meat.

We were environmentalist without knowing it, and used everything we could from our hunting and gathering. We tried not to throw anything away, not even the bones.

I remember my grandmother used to make barley soup with boiled bones. Then she would add other garden vegetables, turnips, carrots, potatoes. The best soup I ever had, oh my goodness.



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The men also worked hard to ensure there was food for winter. They would dig cellars fifteen feet deep and reinforce the walls with moss and hand-cut hay. There they would store the garden vegetables and the preserved fish and meat for the winter.

Many of our people went hungry, but we were living like kings over there. We never went hungry. We knew how to survive, how to live. All these things are lost today; no one does this anymore.

I remember just after the war, airplanes would land, sometimes twice a day. The planes were loaded with fish and fly off. Taking our resources, taking from us what we used for survival.

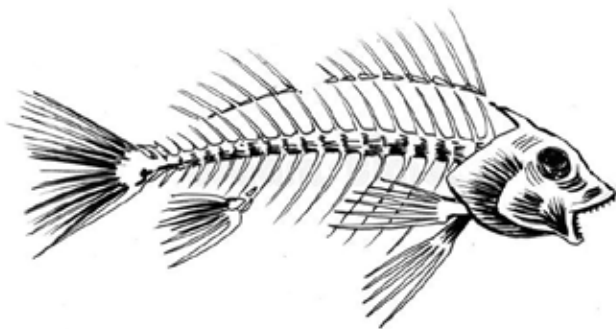
When I was three years old, we were living on the Churchill River, near a long bay, called Father Beau. The area was full of caribou, hundreds; you didn't need to travel far like you have to now. Today, you can fish and hunt there for two weeks and catch nothing.

The Sioux

I remember an old story, before colonization of the Woodland Cree people fighting the Sioux peoples. The warriors went out to hunt for food; two older men volunteered to stay behind and protect the women and children. A Sioux tribe attacked the camp while the warriors were away. The Sioux killed many of the Cree women and children. When the hunters got back, they were angry and immediately they set out to catch the Sioux attackers. The Cree warriors travelled quickly and caught up with the Sioux

at Ballantyne River. The Cree warriors captured the Sioux Chief and took him back to Deschambault Lake. The Cree warriors kept the Sioux Chief tortured him and made him suffer throughout the rest of his years. Deschambault Lake is called Kimosom Pwatinahk which translates to Grandfather Sioux.

I recall Deschambault Lake has some painted pictographs of the Little People. My great-great ancestors used to visit with the Little People, down the river in Sandy Bay. I recall a story of my ancestors communicating with a rock. The rock would somehow open up to a new dimension, and my ancestor would step into the rock. Talking to the rock, they would ask for medicines, and when the rock opened, there were bundles and bundles of medicines. The ancestor did not speak with the Little People; communication was silent, almost telepathic. One time, my ancestor walked into the rock where the Little People lived. The Little People were sitting eating fish. He, too, wanted to eat some fish, but he was told that he could not eat with them unless he wanted to stay with them for eternity.



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Whitigo

I remember hearing that my great-great grandfather was in fact the man who killed Whitigo near Whitigo Lake. My great-great grandfather had left the tribe for a short time, when he returned, the people were scared and crying. Whitigo had appeared to the people in the village every night trying to kill them. My ancestor left to go find Whitigo. He found Whitigo sitting on the moss under a large tree. Whitigo was frightful; he was not wearing any clothes; his lips were gone, as if he possibly had eaten his own lips off. Luckily, My grandfather found ashes from an old burned-out fire nearby to load his muzzleloader rifle. He then told a woman to chop wood for a fire. Once Whitigo heard the lady chopping wood, he went on all fours and started running towards the woman. My ancestor then shot Whitigo in the neck and blew his head right off. There was a loud scream coming from his decapitated head, Whitigo eventually died. The members of the tribe fell unconscious from the cry of Whitigo's death cry. My grandfather woke the people instructing them to gather firewood quickly. They built



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a large fire. It took three days for Whitigo's remains to burn completely. If there was even a single drop of blood left, Whitigo could have come back to life.

Doctrines

I remember people used to make medicines. Sometimes, even bad medicines like love potions. It reminds me now of stories of voodoo. Love potions were known to be the work of evil. I once had a toothache. A woman had medicines to take my swelling and pain away. It specifically had to be that lady to apply the medicines on me. There were all kinds of medicines that could treat a person's ailments. There were illnesses or symptoms that western doctors were unable to treat, but traditional medicines would.



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Environmental changes

Pollution and weather changes affect fish, birds, and animals over time.

I believe pollution is the major cause of animal population and environmental changes. I was taught to watch for changes in the weather by observing nature's signals. The sunset colour indicated the weather for the next day.

Now, there is so much pollution in the air you cannot read or even see the signals correctly.

My family had artifacts of carved stones, believed it was the Stone Age people. Unfortunately, the stones were stolen from the industrial room at the school.

My family was staying north of Woodlake, where I found an arrowhead but thought nothing of it and I lost it. I found another arrowhead when I was digging in the yard preparing the earth to plant potatoes. This arrow was covered in hard clay and it was difficult to take off.



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Language

Now in Pelican, we hear people speaking both in English and Cree, sometimes using both languages in the same sentence. The younger generation is not fluent in Cree; many of our youth do not know their traditional language. I think it's very sad. My wife and I, always speak Cree in our house. Our children had no choice but to learn. An Elder once said, our language is in the land, and we lose that, we are lost. I am an Elder, but the Elders I am talking about were very old men.



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Anonymous – 85 years old

I was born and raised around Deschambault Lake area; my dad had a trap line and did commercial fishing.

Nutrition and health

I remember being alone with my mother because my father was in Limestone trapping. Hunters used to walk far distances to hunt wild game. Returning with meat that would be preserved for the long winter. They would hunt big game and small animals too; muskrats, beavers, and ducks. White poplar trees were used to smoke meat and fish. People used to have large gardens, and in the fall, would store their potatoes, garden vegetables smoked and dried meat in cellars underground.



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I do not see anything like that anymore in our day and age. If people did not work hard doing commercial fishing or trapping, people would get welfare. Money purchased numerous essential items for survival. It helped that things were not expensive at that time. Now everything costs so much money.

I remember there were a lot of people in Opawasihk community. We lived further outside the community. The people were healthy and fit, even older people. There were no cars or motor vehicles, and even if there were, they cost more money than we had. We walked or even run from place to place without complaining. It kept us in shape and was not hard to do.

I think commercial fishing has been detrimental to Pelican Lake. Commercial fishermen now have to fish from Trade Lake and Wood Lake to help meet their quotas, as some of the lakes are overfished and cannot keep up to the demand. People used to catch a lot of trout, and now they are a rare catch.



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Medicines

I remember when there was a sickness in the community my parents would hang a skunk next to their camp. On occasions when we did get ill, my mother would make us drink skunk oil. Illness such as high fevers, lung infections and disease, would result in numerous deaths. We didn't have access to doctors or hospitals. We used our own traditional medicines to treat illness. My mom would put skunk oil on a 'sapothikan' and give it to us. My family stayed away from the main areas and by hanging a skunk and drinking skunk oil, we rarely got sick.



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Environmental changes

I find the weather to be colder than it was a long time ago. Despite the changes of seasons, the weather is colder now than it once was.

Elders

I remember we were raised as children, not only by our parents but by the community, with Elders guiding us. Even if we were not your child, and we were misbehaving, you would get disciplined.

Elders were often the ones who decided on who the children should marry. Elders had to know the person well if they were to allow a marriage.

When people passed away, it was not allowed to mention their names. You could only say what kind of relationship you had with the deceased person. Out of respect for the diseased spirit, no mention of the person's name was used for a year after they had passed.

Sophie Anna Custer – 83 years old

I am an Elder. I was born in Burned Wood Lake, that's Manawanstiwak, Pelican Lake area now. I attended a residential school in Sturgeon Lake shortly after the death of my mother. I was in a residential school for more than ten years, from the age of six to sixteen. They were not good years, but I survived the experience.



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I remember there were big gardens. My father had a big garden. He would dig cellars in the ground to keep vegetables, meat, and fish stored for the winter. The older women would work with the hides to make blankets and clothing from the wild game hides.

I was married at the age of seventeen, it was an arranged marriage by the Elders of my community. I felt lucky because my husband was a hunter and trapper; he would be able to provide for our family. I had a child a year later. We worked together on the trap line all winter and returned to our community to sell our furs for money in the spring. It was not an easy life. One spring, my husband, our three children and I travelled by dogsled to our trap line.



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On average, we would get thirty muskrats every few days. One exception week, we trapped eighty muskrats. Trapping and skinning was a lot of hard work. I used to set nets for commercial fishing; I remember my hands aching because of the cold. Sometimes we would use the dogs to pull the nets from the icy water. It felt like minus fifty with the wind and the openness on the lake. I could feel the cold to my bones.

I remember we could set up trap lines anywhere, but that changed when the conservation officers arrived and limited locations of traplines. A lot of changes occurred when the officers arrived. We were restricted to limited areas to trap and limited with quantities of fish. People from my community, argued that the water and the land were not owed by anyone.



Retrieved from open resources

A conservation officer approached my husband with a job offer. It was the first time; we would receive a real paycheck to support our family. My husband worked until retirement. He suffered from diabetes and eventually died of cancer, leaving me alone to raise our children.

Whitigo

I remember a story of my father and his brother in law going trapping near Two River. They were walking, checking their trap line when one of them came upon Whitigo sitting on a rock. Whitigo face looked half-eaten, his lips were missing, and he look frightening. As Whitigo stared, my father called to the second man to run quickly. Together they ran away from the Whitigo, frighten off the tales heard of his power and ability to kill others. They ran as fast as they could towards the river where their canoe lay waiting on the shore. As they paddled away, they could hear the sounds of Whitigo coming after them. Too far to reach their home, they made camp on an island for the night. In the darkness,

they could hear Whitigo' cries. Surviving the night in fear, they returned to their village to share their story. There are other stories of people seeing Whitigo. Including stories of Whitigo, who was seen at both Kettle Falls and Deschambault Lake.

Little People

I recall having books about the Little People and Wîsahkêcâhk, but I don't know what happened to them over the years. I shared the stories of the Little People with my grandchildren in my language, Woodland Cree.

I remember a couple of occasions when I was visited by the Little People. My first memory was when I was young; we lived in a small cabin, where I was visited by a Little Person. At night I could hear noises; it sounded like light footsteps. I would sit up and look around, not seeing anything, but the noises could still be heard.

It was years later, as an adult that I was revisited by the Little People. I was driving, and along the road, in the tall grass, I saw someone standing in the grass. I made the driver stop and back the vehicle up. There was nothing in the grass, but something had caught her eye.

I know there are still Little People around Pelican Narrows. Some people even say they can read your mind. Because they can read your mind, it's important to always think positively, of the Little People, to keep good luck in your life.

My son once had an experience with the Little People; someone had stepped on his blanket. I knew my son would be afraid, so I dismissed it as the wind.

The Sioux

I remember the story of the Sioux and the Woodland Cree people. The men were leaving to go hunting. Two old men were to look after the women and children while the hunters were away. One of the men felt a sense of trouble coming; he instructed the other man to take the women and children and hide them while he kept watching. Women and children left the community travelling with one of the men high into the hills where they would be protected and hidden. The Sioux warriors entered the empty camp and took all they could carry. The women and children hidden in the hills travelled to Deschambault Lake area. Two boys who were left near the community to keep watch quickly shared the events of the Sioux with the returning hunters. The Sioux found the hidden women and children. They kept some as slaves, stole others as wives and killed those who resisted.

The Woodland Cree people who were safe ended up coming back to Pelican Narrows. I believe there are a lot of unmarked graves in and around Pelican Narrows because of the killings.



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I worry about the future for my people, my children, my descendants. It has been foretold that there would be hardships, depression, and suffering. Technology is going to replace jobs for my people. I fear what the future will be for my family.

Sturgeon Lake, SK, Canada

Eric Bird

Eric recalls some life experiences in the community of Sturgeon Lake.

I was born in the Sturgeon Lake community area. There was not a school at that time, so I was sent to a boarding school in Duck Lake, the St. Michael's Indian Residential. As with many of my people who attended residential schools, I was not allowed to speak my language. Living standards were low, and nutrition was below standards for Indian students. I remember the drinking water we were given was not clear, not clean. The school and residence were heated with wood-burning stoves, and students had to help make firewood.



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I don't recall ever seeing people hunt with bow and arrows; we always had rifles or shot guns. We would hunt big game in our area; deer, moose, elk. Caribou was hunted too, but we had to travel far north to find them.

I remember being told that we are related to Chief Sitting Bull and the people in North Dakota. I don't recall the story or what the relations are.

Another interesting story I remember being told is a story of my grandfathers' pipe. A long time ago, English Royalty visited Sturgeon Lake reservation. My grandfather raised the pipe in the ceremony. King George smoked from the pipe while Queen Elizabeth visited different areas of our reservation. Queen Elizabeth was interested in our traditional ceremonies, especially asking to see our people's traditional dances.



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There were other stories I heard but don't recall them entirely. These stories include: the Skin Walkers, humans that could transform into animals, the little people that live near the lakes.

In my community I have heard stories of people needing to continue to move often to avoid a creature they called Cannibal. Cannibal was mean, and to avoid him, you had to continue to move, never staying in the same place too long. Sturgeon is connected to the land; the land must be respected in order for the Cannibal to leave you in peace.

Mike and Rose Daniels

Mike Daniels

I attended residential school at age seven. Once I turned sixteen, I left residential school and began working on the CN railroads. As a result of the treatment I experienced in residential school, I developed an addiction to alcohol very quickly when it became legally available in the 1960s. I have learnt through my healing journey to deal with my past and have been sober for a long time now.

I was fortunate to have Elders in my life that taught me how to respect the traditional ways and the ceremonies. I am a respected pipe carrier, and with that, I must uphold the honour of that pipe through my behaviour and my actions.



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The Indigenous ceremonies of our people are important and should be encouraged to practice. Indigenous ceremonies, like the pipe ceremony, the Sundance, the Healing Lodge Sweats and many others, are lost to our children and must be preserved for future generations. These need to be passed on to our children and their children.

It has taken me time to learn, but now I try to live a traditional life, limiting the use of western ways and technologies. I continue to use wood to heat my house and, whenever possible, to cook over.

Our traditional ways are passing by, and we need to grasp every opportunity we can to learn and practice our traditions.

Medicines that we collect and Mother Earth offers us are used to helping treat illness and are so powerful they can even treat cancer.



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Rose Daniels

I, too, attended residential school at a young age. While I was away at school, my mother passed away. The grief I was not able to express due to the restrictions

of the school continues to live within me. I continue to work through the journey of loss caused by the inflictions of residential schools.



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When I was allowed to return home after turning sixteen, it was important for me to learn, remember and pass on the Indigenous traditions of my Elders, and my people.

Now, I am the Grandmother in ceremonies, and it is my role to teach the women in my community how to be traditional women. I share the teachings I learnt from my Elders, beading, sewing, cooking, the sacredness and power of being a woman. I share the teachings of being able to work with their hands. Together we work with traditional bone and rock tools. It was my grandparents that taught me to use stones, bones and antlers. These teachings I share with my family and my community.



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Yvonne Seesequasis

I attended a residential school at a young age and remained there for eleven years. I was one of the fortunate students, I was able to return home for some holidays and summer breaks.

My father was one of the last blood Chief, and my family played an important role in the community. We were a colonized people, and adapted to a farming life style. My father built our family home, he work the land for farming. My mother had a large garden that would produce enough vegetables that she could preserve and store to feed us over the winter.

My parents were able to design and create tools need to achieve success in their production of food. We did not have a lot of money; we could not afford to purchase tools and nor mechanical machinery needed.



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My grandfather was a Scottish man who worked for the Hudson Bay Company. Together he and my Indigenous grandmother would share many stories of folklore, fairy tales and history.

ARCHAEOLOGICAL SURVEY

The areas chosen for archaeological survey (Pelican Narrows and Sturgeon Lake) were determined by Community Consultants. In the first days of surveys, the Community Research Assistants were

supervised by Dr. Timothy Panas. Surveys then continued with the Community Research Assistants and Principal Investigator. On occasion, the Community Consultants participated in the surveys.



Tim Panas and Research Assistant Margo Jobb in Pelican Narrows



Tim Panas and Research Assistant Alyse Custer in Sturgeon Lake

LABORATORY MEASUREMENTS

We obtained twelve bone, nineteen lithic and six metal artifacts from the Royal Saskatchewan Museum (selected by Dr. Evelyn Siegfried, Curator of

Indigenous Studies, RSM), Pelican Narrows (nine artifacts) and Sturgeon Lake (two artifacts) (Appendix).



Dr. Evelyn Siegfried at the Royal Saskatchewan Museum



Community Consultant Margaret Brass, Research Assistant Margo Jobb with artifacts from Pelican Narrows

The Radio-Carbon Dating of the bone samples was done at André E. Lalonde AMS Laboratory of the University of Ottawa. The ages of seven samples were determined.

The Isotopic measurements were carried out at the Saskatchewan Isotope Laboratory of the University of Saskatchewan (bone-made samples and one metal-made sample) by the Laboratory Research Assistant under the supervision of Dr. Bill Patterson and Dr. Sandra Timsic.

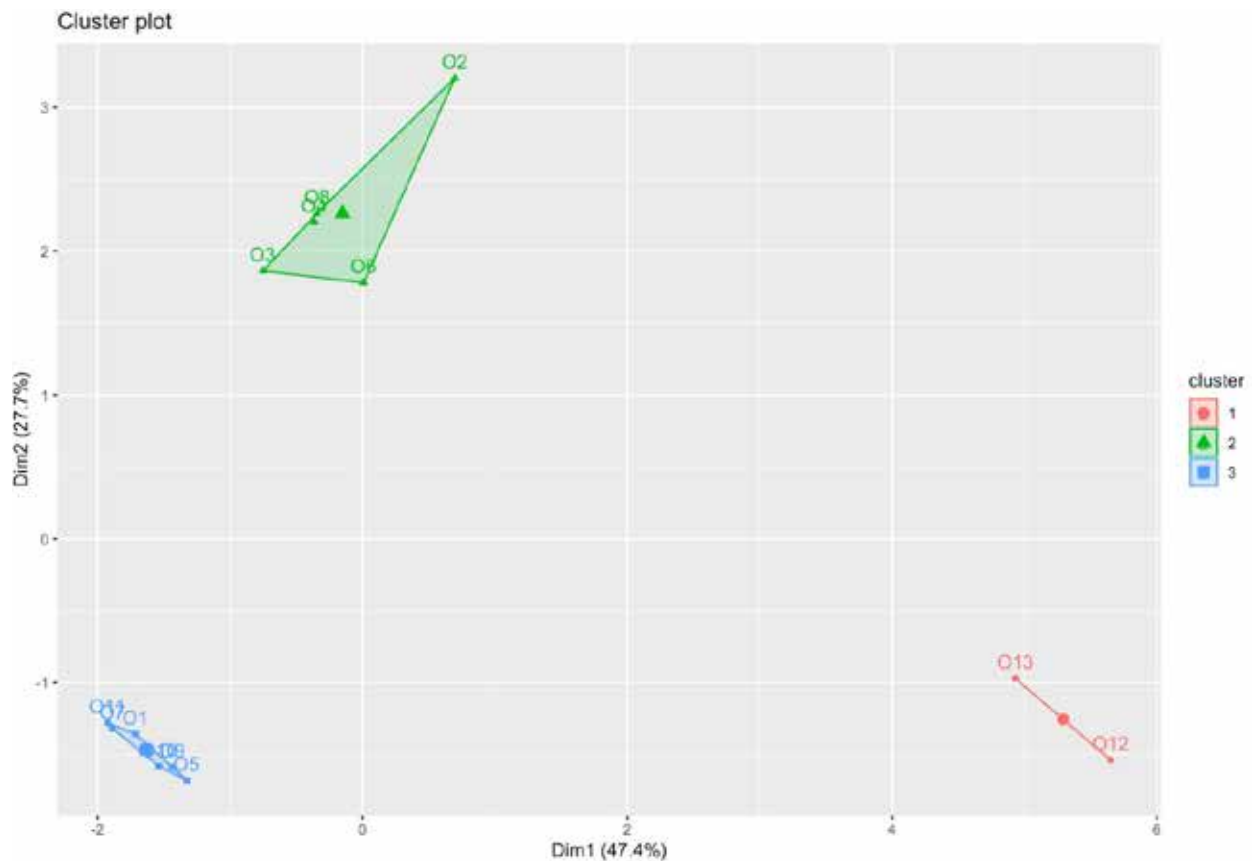


Bone Collagen Preparation for Isotope Analysis. Collagen samples (top) are weighted into 6x4 mm tin capsules (≈ 0.5 mg per sample) (bottom)

STATISTICAL ANALYSIS

The purpose of the statistical analysis was to determine the level of similarities of artifacts with regard to their chemical compositions. We analyzed the amount of fifteen different chemical components: carbon,

oxygen, fluorine, sodium, magnesium, aluminum, silicon, phosphorus, sulphur, chlorine, potassium, calcium, titanium, manganese, iron. Based on the analysis, we determined three clusters containing the most similar artifacts.



Cluster Plot

PRELIMINARY RESULTS

1. It is essential to start any research (including archaeological) Project in Indigenous communities with detailed, informal and formal discussions with Elders, local administration and informal leaders.
2. Each Indigenous community may have its own individual research protocol. However, all community experts address their concern if the proposed research project would benefit their community.
3. Although all Elders consider the positive role of museums in preserving the Indigenous artifacts, there exist different opinions regarding the laboratory measurements on artifacts.
4. All Elders are against any kind of laboratory measurements (destructive and non-destructive) on artifacts having spiritual significance.
5. Some Elders find acceptable laboratory measurements on artifacts, which do not have any spiritual significance (such as, animal bones, tools).
6. Elders and Knowledge Keepers are pleased to share the oral stories relating to their families and communities. However, we did not observe statistically significant evidence of the correlation between oral stories and artifacts.
7. Bone-based artifacts are the most useful for isotopic analysis. The ages of seven artifacts were determined using the radio-carbon dating analysis. The results of radio-carbon date analysis are in good agreement and confirm the results of earlier dating on bone artifacts that originated from the same archaeological site (the Broken Axle Site) that were dated in the 1980s. This earlier work was completed as part of the analysis and summary reporting for the site following excavation in the 1980s.
8. The bison bone femur found in Sturgeon Lake was investigated at the Saskatchewan Isotope Laboratory. Isotopic biogeochemistry of collagen found in the sample can be used in the construction of paleoecology and paleoenvironments, including climatic variables such as temperature and precipitation.
9. Within the Project, we used classical statistical analysis methods for determining the similarities of artifacts with respect to their chemical compositions. However, it is recommended to increase the number of samples and improve the accuracy of measurements for improving the reliability of statistical estimation in any future research.

CONCLUSION

Due to the COVID 19 Pandemic, we were not able to visit Pelican Narrows and Sturgeon Lake to make the final report. However, the preliminary results of the Project have been reported to community members via Zoom meetings and teleconferences. Elders, Knowledge Keepers and team members participated in online discussions on the preliminary results of the Project.

This Project can be considered as the first stage of future studies of Indigenous artifacts using the modern technologies in collaboration with communities.

It would be reasonable to consider developing a research proposal for a longer-term archaeological project within the extended geography surrounding the two communities that agreed to be part of this research project. Perhaps, other Indigenous communities may wish to become part of a larger project that explores the realms of oral history and connection to materials that are found in archaeological contexts.

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