

The Royal Canadian Geographical Society

Coppermine River Expedition 2012

Expedition Report Written by Stefan Superina and Max Flomen

“A journey by canoe along ancient waterways is a good way to rediscover our lost relationship with the natural world and the Creator who put it together so long ago.”

- Bill Mason, Path of the Paddle



Expedition Team (left to right)

Max Flomen, Jesse Coleman, Seth Wotten, Stefan Superina, Andrew Stachiw, Jonathan Metcalfe

Introduction

In the summer of 2012, six intrepid explorers set out on a 50-day journey by canoe to the Arctic Ocean. Our inspiration: a novel (Keith Ross Leckie's "Coppermine") and a passion for paddling in the Canadian wilderness. We started in Yellowknife, the capital of the Northwest Territories, and finished in Kugluktuk, a Nunavut hamlet on the shores of Coronation Gulf. The expedition had a singular purpose. We wanted Canadians to know more about the lands and waterways we would be travelling through by promoting an experiential, outdoor model of education.

We travelled about 2,000 kilometres, crossing Great Slave Lake and arriving in the Barren Lands through a series of rigorous portages. We continued northward on the Lockhart River watershed through a large expanse of lakes. Travelling upstream on the Snake River to Courageous Lake, we crossed into Lake Providence to reach the Coppermine River watershed. From there we paddled downstream to reach the Arctic Ocean.

This report will detail the geographical features of the area we covered, and the natural and human histories they carry.

Great Slave Lake

Great Slave Lake is the ninth-largest lake in the world. At 480 kilometres long and 109 kilometres at its widest point, the lake covers an area of about 27,000 square kilometres – about half the size of Nova Scotia. It is what remains of the once massive glacial Lake McConnell that existed here about 10,000 years ago. Several large rivers flow into the lake, including the Slave, Peace, Hay and Athabasca. It's drained by the Mackenzie River in the west.



Image: Andrew Stachiw and Max Flomen paddling on Great Slave Lake

The Dene People have lived in and around the Great Slave region for thousands of years, long before European fur traders, explorers and settlers arrived. Ancestors of the Dene are thought to have come to North America nearly 15,000 years ago.

The name “Dene” comes from two words. “De” means flow, and “Ne” means Mother Earth. Before the influence of Europeans, the Dene lived and travelled in the great boreal forest and tundra regions of northern Canada, living in skin-covered tents, log huts, or sod/log cabins. There are five subsets of Dene groups in what is now known as the Northwest Territories. The Dene of the Mackenzie Delta Region come from the Gwich’in language group, the Sahtu Region from the North Slavey, the Decho Region from the South Slavey, the South Slavey Region from the Chipewyan, and the the North Slave Region from the Dogrib. Put together, these regions are known as the “Denendeh,” meaning “the Creator's Spirit flows through this Land.”

The lake’s toponymy reveals some of the region’s human history. The Cree First Nation, a rival tribe of the Dene for control in the fur trade, referred to the Dene as awonak, a derogative term meaning slaves. Peter Pond, an American fur trader who came to the region in the late 18th

century, explored the waterways around Lake Athabasca to the south. He determined the approximate location of Great Slave and Great Bear lakes, devising a series of maps. The name Slave Lake appears on his 1790 map of the region. The name became more commonly used over time. It is known as “Great” to distinguish it from the smaller Lesser Slave Lake in what is now central Alberta.

The arrival of Europeans to the region, and who was the first to lay eyes on the lake, will forever be the subject of debate. It could have very well been an unknown fur trader in the early 18th century who found his way down the Slave River and by chance came upon its shores. If we use recorded history as a guideline, Samuel Hearne, an employee of the Hudson Bay Company, may have been the first European to traverse over the Barren Lands from the Hudson Bay region and come upon the great lake. In the winter of 1771, Hearne, on his third journey in search of the Coppermine River and the copper deposits that were said to have existed in abundance in this region, trudged on foot across the frozen waters of Great Slave Lake upon returning from his voyage, accompanied by Chipewyan guide Matonabee.

In 1789, Alexander Mackenzie, in his bid to find a route to the orient, searched endlessly through the bays and inlets of Great Slave Lake’s western shores in search of the river that would ultimately bear his name, and alas, lead not to the orient, but to the Arctic Ocean.

Perhaps the most well known explorer to arrive on the shores of Great Slave Lake was Sir John Franklin, best known for his fateful 1845 Northwest Passage expedition in which both ships that he commanded, the HMS Erebus and HMS Terror, became trapped in the ice off King William Island in September 1846. The ships never sailed again, and Franklin and his crew would eventually perish from cold and starvation. The mystery of their death remains the subject of intense debate.

It was before this fateful expedition, in the 1820s, that Franklin, in the company of George Back, Robert Hood, and John Richardson, all of whom have rivers now bearing their names, used Fort Providence on the lake’s north shore as their base for an expedition to the Arctic coast with the goal being to reach the mouth of the Mackenzie River. In reaching the mouth, he became the second European to do so after Alexander Mackenzie.

So how does one cross a lake that large? The average canoeist dips their paddle into the water at approximately 25 strokes per minute. That’s about 1,500 strokes per hour. Now imagine paddling at that rate for 10 days to cross it – and that’s only if mother nature cooperates. But our expedition group was lucky; the conditions were pristine, and the water was relatively calm.

As our expedition party arose to greet each morning, routine began to settle in, muscles became used to the rigours of expedition life, and duties that needed to be performed on a regular basis to ensure the wellness of all became an expectation. We were responsible to each other, and in order to reach our destination, still hundreds of kilometres away, we were undoubtedly going to challenge each other’s patience and boundaries. As we paddled further into the wilderness, we

left civilization in our wake, and began to experience what it must have been like for those who arrived on the shores of this magnificent lake many years before us.



Image: Jonathan Metcalfe prepares to unload canoe on Great Slave Lake

After nine days of paddling on average between 40-50 kilometres a day, the canoe party took its first scheduled day of rest as we reached the eastern shores of Great Slave Lake, where the Lockhart River flows in after making its final descent from Artillery Lake in the Barren Lands. Traversing Great Slave Lake was our first big accomplishment, and as we set sail for the sandy beaches of Old Fort Reliance in front of us, we could not help but be overcome by joy at the realization that we had arrived at the end of the lake.

Great Slave Lake - East Arm

As we readied for a day of rest and recuperation, we were fortunate enough to have met a group of community members from Lutsel K'e, a Dene people of the Chipewyan language group located on the southeastern end of the lake.

Responsible for protecting the integrity of the land, this group from Lutsel K'e, referred to as Nihat'ni Dene, or "Watchers of the Land," is working on establishing a protected area called Thaidene Nene, or "Land of the Ancestors." They are stewards and play host to explorers travelling through their land. As they are responsible for maintaining the integrity of cultural sites and natural beauty, we were given the opportunity to explore the old site of Kache, which means "the place at the end of the lake where the river comes in."

All that remains of the old village of Kache are the remnants of log cabins and wood stoves, but it was home for many years to ancestors of Lutsel K'e Dene in the early and mid-20th century. Many families would settle in Kache as they left their permanent residences in Artillery Lake and migrated into the tree-line. The village acted as a base from which to travel to the Barren Lands to harvest the plentiful game that existed, including caribou, white-fox and muskox. The furs could then be traded at nearby posts. At the mouth of the Lockhart River nearby, plentiful fish could be found to feed dog-teams, and wood to fuel fires for warmth in the wintertime. As we toured the old site of Kache, the log buildings that remained represented symbols of a past dependent on the land, ancestral log homes of families mixed with evidence of how life was lived – old meat caches, dog pens and bone pits.



Image: Andrew Stachiw at the old village of Kache

Our day of rest was also accompanied by another visit to a site of historical prominence, that of the remains of Old Fort Reliance, British Navy Commander George Back's outpost that was built in the winter of 1833. Back was involved in both of Sir John Franklin's overland expeditions to the Arctic Ocean. He is remembered for leading three rescue missions during his time in the Great Slave region. In 1833, Back was sent on a mission to rescue Captain John Ross, who had disappeared in his attempt to traverse the northwest passage in 1829. Back and the rescue party built Fort Reliance to wait out the winter near the East Arm of Great Slave Lake. Surviving the extreme cold temperatures, with little food, Back's party received word the following spring that Ross and his crew had been found safe. Having built the fort, and intending to stay, Back went on to commit his journey to scientific exploration, documenting much of the flora and fauna in the region. Chimneys and the remains of old log buildings are all that remain of Back's fort, yet it is one of the best-preserved forts in the western subarctic.

Pike's Portage

Typically, a day of rest on an expedition is followed by one that is both mentally and physically challenging. The journey's next step after the crossing of Great Slave Lake would be to venture into a land that none of us had been before: the Barren Lands. To do so, we had to portage through a network of ancient trails known as Pike's Portage. Named after eccentric British explorer and entrepreneur Warburton Pike, and also referred to as Kache Haketh by the Lutsel K'e Dene, this route had been the primary path across the tree-line for many generations, whether via canoe or dog sled. In the summer, Dene ancestors would travel the portage in teams, many trips required back and forth to carry a season's worth of food and supplies out into the Barren Lands, often using the services of dogs to haul, carrying packs on their backs in caribou-hide sacks. In the wintertime, mushers and their dog-teams would make the trek over well-worn trails and frozen swamps.

Portaging is the practice of transporting one's gear between bodies of water, or to avoid stretches of river deemed too dangerous to navigate. The word portage is derived from the French verb, porter, meaning to carry. French voyageurs and trappers that would explore much of the Canadian interior in their pursuit of highly sought after beaver pelts used this word when referring to networks of trails connecting bodies of water.



Image: The expedition party travels across the first leg of Pike's Portage

Before the inception of the bush plane, Pike's Portage was the only safe means of navigating around the precipitous drops in elevation that characterize the Lockhart River as it

flows into Great Slave Lake. The Barren Lands, so named because of the lack of trees and sparse vegetation, give way to inhospitable conditions in storms and high winds. There is little shelter from the sun in the summertime, which can beat down on one mercilessly.

The portage route is estimated to be around 38 kilometres, characterized by many small lakes connected by seven portage trails in total. The first portage climbs out of Great Slave Lake for five kilometres, and has an elevation gain of about 200 metres. The trail is now primarily used by snowmobilers in the wintertime, and used very infrequently by canoeists venturing into the barrens. For us six, our loads were heavy, and after 10 straight days of paddling, our muscles were in no way ready for the rigours of portaging, an exercise which uses an entirely different set of muscles.

In keeping with traditional tripping, we wanted to continue the practice of portaging like those voyageurs who preceded us, preferring wannigans to transport much of the gear, using leather tump lines on our heads to carry the heavy loads on our backs. Wannigans are like wooden chests – the term itself is derived from the Ojibwa word, waanikaan, meaning “storage pit.” We had six wannigans in total, five carrying our cooking provisions, and one acting as our travelling kitchen, containing all items necessary to dine in luxury while in the bush.

As the expedition slugged its loads up and out of Great Slave Lake, beads of sweat poured off our brows, our mental and physical fortitudes pushed to the limit. Working our way between small lakes, there was plenty of creek-work through shallow waters, adeptly maneuvering the canoe around sharp-edged rocks, and removing obstacles impeding our path towards the barrens. As we pushed forward in our goal of reaching Artillery Lake, the tree-line began to vanish in front of us. We made camp on rocky outcrops and carried our loads over boulder strewn terrain. Not to mention the bugs became progressively worse, making the task of portaging that much more tedious, let alone any task that required the use of our hands – like swatting away the pesky little critters.

The Barren Lands

It wasn't until our second night on Artillery Lake that we truly felt we had crossed into the Barren Lands. Without a tree in sight, only small dwarf birches and shrubs, our orange tents stood out in stark contrast to the grey boulders demarcating the land around us. One point of land melted into the next, as there were no defining features, and navigation was, at times, difficult. As the weather turned colder, we donned hats, and cooked with what little wood was to be scavenged to bake our bannock and enjoy the warmth of the fire.



Image: Campsite on Artillery Lake

As we journeyed upstream on the Lockhart River, often battling strong currents in shallow waters, we were privileged to breathtaking vistas of the barrens, as the sun clung on to the horizon late into the evening.

Day 25 of the expedition was celebrated with a re-provisioning of food at the northern end of Clinton-Colden Lake, one of several large lakes that comprise the Lockhart River watershed system. These supplies were to last us the remainder of the expedition. As quickly as outfitter Dave Olesen from Hoarfrost River Huskies dropped off the food, he was gone. As the plane slowly vanished from the horizon, the expedition was left alone again, seemingly in the remotest place in the Canadian wilderness. Carefully packing our food, we celebrated with a day of rest and enjoyed another beautiful sunset before carrying onwards the following morning.

On Aylmer Lake, we spotted our first muskoxen. Typically travelling in herds numbering between 12-24, the muskox is among the Arctic's largest mammals, said to have migrated to

North America between 200,000 and 90,000 years ago. An adult muskox typically weighs 270 kilograms on average, and lives between 12-20 years. Their coat is characterized by long hair, referred to as guard hairs, that hang off their bodies, almost reaching the ground. These thick coats protect them from the severe winter weather conditions. Muskoxen eat grasses, arctic willows, woody plants, lichens and mosses. When muskoxen feel threatened, they assume a defensive posture whereby the adult bulls and cows face outward and form a ring around the calves. Usually, the bulls are at the front of the line while cows and young juveniles will be situated to the inner circle. As we made camp, the herd made off for distant land, the ground reverberating beneath our feet.



Image: Muskoxen on Aylmer Lake

As our upstream ascent continued on the Lockhart River, rapids gave way to small waterfalls where fishing was plentiful, and bannock was enjoyed while absorbing the warm rays of the high afternoon sun.

Pushing westward, and then north again, the expedition made the final push to the Coppermine River watershed, where the caribou we had longed to see started to appear en masse. We watched as they delicately balanced their way across small streams and foraged in nearby grasses, seemingly undaunted by our presence.

The Coppermine River watershed

After more than a month travelling across large lakes, and paddling up rivers, the expedition party had made it to Lake Providence, officially arriving at the Coppermine River watershed, where Samuel Hearne and Sir John Franklin had been many years before. With the wind at our back, we hoisted sail and set northwards across the lake.

As we climbed up hills that offered breathtaking vistas of the surrounding area, we often wondered what it would have been like for explorers to be coming across this land with no maps and no prior knowledge, especially that of Hearne, who walked with a party across this terrain in the dead of winter. Yet the maps that Hearne made by hand proved to be remarkably accurate – they were even used by Sir John Franklin in subsequent expeditions – as was his documentation of aboriginal customs and flora and fauna. Hearne’s journeys overland also speak to the remarkable first-hand knowledge his native guides had of the land, possessing no maps, yet having the capability to take Hearne to the mouth of the Coppermine River, often being burdened with the heaviest loads.



Image: Overlooking Lake Providence

The rapid leaving Lake Providence, flowing into Point Lake, is strewn with boulders and is dangerous to descend in a canoe. Called Obstruction Rapids, it was named so by Sir John Franklin. On Franklin’s overland expedition to the Arctic that took place in the fall and winter of 1821, he and his men encountered these rapids. It was on this journey that eight of 17 hired expedition members perished from exhaustion and starvation. Accounts tell of frigid temperatures, fall quickly transitioning to winter with snow on the ground and the water

beginning to freeze over up and downstream of the rapid. The hired voyageurs remarkably built a canoe from canvas remains and willows and made their way across the river. Expedition member John Richardson apparently would try to swim across the river with a rope secured to his waist. Such are the dangerous accounts that are all too commonly revealed from Sir John Franklin's expeditions.

It was here that we encountered our own obstruction, that of the subarctic's largest carnivore, the Barren Land grizzly. Before they shed every year, these grizzlies have long, shaggy coats. Their fur is made from coarse guard hairs and a thick coat of under fur. Caribou are a very important food source for them, hunted in the spring, and from mid-summer to autumn. In the summer months, grizzlies also nourish themselves on horsetail, sedge, arctic cotton grass and a wide variety of berries. Grizzlies are solitary animals, have good eyesight and excellent hearing and sense of smell. Unique in colour, the grizzly we encountered had a blond coat, and was well camouflaged against the rocks as we portaged our gear around the rapid. To avoid any unwanted disturbance, the expedition party crossed to the other side of the river to gain access to Point Lake, our last big lake crossing before the Coppermine River narrows and flows out to the Arctic Ocean.

The Coppermine River stretches 845 kilometres from its headwaters in Lac De Gras, initially flowing through a large series of lakes before narrowing out and following a generally northern direction to Coronation Gulf on the Arctic Ocean.

The Copper Inuit, descendants of the Thule Culture, have lived and travelled in the land and waterways of the Coppermine River region for close to 3,000 years. They had a nomadic, hunter-gatherer lifestyle which was sustained by a vibrant culture completely independent of European civilization. From the land, the people made a variety of tools, including copper arrows, ulu blades, spear heads, harpoons and knives. These tools were initially used for personal use, and later as trade for the purposes of acquisition of other material goods from Europeans.

In the wintertime, the Copper Inuit hunted seals, living in snow-house communities on the sea ice. When spring arrived, the communities broke up and moved to other areas on the coasts, from where they travelled inland in search of caribou, muskoxen and fish.

As the expedition group paddled downstream on the Coppermine River, we were struck by the beauty of the river and its surrounding landscape. On its upper reaches, the river is fed by arteries and streams flowing down from hills marked by small spruce and dwarf birch trees. Early mornings on the river were often defined by heavy fogs, lifting with the howling of tundra wolves, often revealing their presence nearby on the sandy banks.

Further downstream the lush vegetation in the hills gives way to tundra and the boreal forest is confined to the river valley, at times flowing through arctic tundra wetlands. At Rocky Defile Rapids, towering red sandstone cliffs emerge, intense whitewater funneling through its narrow passage, peregrine falcons nesting along the upper edges.

As the team enjoyed a dinner of fresh lake trout and grayling upstream of Rocky Defile, a large male grizzly bear, suspecting our presence long before we had spotted him, made the decision to cross the river, unknowingly, or perhaps fully aware, of what lay around the bend. What proceeded to take place next was a demonstration of the sheer raw power possessed by these animals, a moment whereby one is humbled in witnessing a species physically superior to ours, anatomically built to withstand such circumstances. As we watched on in sheer amazement, this powerful animal stared at us as he floated downstream, with a seeming look of disappointment on his face that we had forced him into this predicament, and ferried upstream against the powerful current with relative ease, escaping up the bank on the other side to forage on the abundant blueberries before disappearing over the horizon.



Image: Barren Land Grizzly Bear at Rocky Defile Rapids

Beyond Rocky Defile, the expedition began to enter into the arctic landscape, passing the September and Coppermine Mountains, towering above the land for several kilometres. With a strong current, and knowing the arduous lake paddling lay far behind us, we sat back, relaxed, and enjoyed each other's company.

The final stretch of the Coppermine River was perhaps the most dangerous. As late August approached, temperatures dropped, and frost routinely gathered on the tents in the morning. With several long stretches of whitewater approaching, an overturned canoe could very well lead to hypothermia, and in worse case scenarios, death from exposure to cold. Already mentally exhausted, and bodies ailing physically, we knew extreme caution was needed to proceed in a safe manner.

Navigating our way through the large standing waves of MuskoX Rapids, and then onto the frothing water pushing around the red cliffs of Sandstone Rapids, at one point we were faced with stretches of continuous whitewater between five and 10 kilometres in length.

The last rapid, so aptly named Escape Rapids by Sir John Franklin, is one that must be paddled down with extreme caution, for there is no alternative. Portaging over and around the high cliffs that surround it would be more dangerous. But scouting it is imperative, and the expedition party enjoyed the spectacular views that the cliffs afforded above the river canyon.

Bloody Falls is where the Coppermine River takes its final plunge toward the Arctic Ocean, whereafter white sandstone and rolling white marine sediments become apparent as the river approaches the coast. At Bloody Falls, the river violently cuts through steeped walled canyons, making its passage unnavigable in a canoe.



Image: Bloody Falls on the Coppermine River

Records indicate the Copper Inuit were believed to first come into contact with Europeans when they encountered Samuel Hearne on his remarkable overland expedition. With no well defined canoe routes known into the region, Hearne and his party embarked on foot, joined by a group of Cree and Chipewyan guides who are attributed with the survival of Hearne and his men. Hearne's party arrived at the Coppermine River by summer and succeeded in reaching the Arctic Ocean.

It was here, at Bloody Falls, that the most dramatic, and tragic, event of Hearne's expedition occurred. Accounts from Hearne's journal detail that as the expedition party arrived at the falls, it became apparent that Matonabee and the Yellowknife Dene party that had accompanied him, were arch enemies of the Copper Inuit, and intended to present themselves as a war party intent on inflicting great loss on the Inuit harvesting the Coppermine's rich bounty of fish at the falls. On July 17, the "Massacre at Bloody Falls," the Dene guides ambushed the sleeping Copper Inuit and killed approximately 20 men, women and children.

Kugluktuk, Nunavut

As we ate our final trip meal as a group alongside the falls, we could not help but appreciate the historical significance of the area. Claimed as a territorial park because of its unique heritage and importance, Kugluk Territorial Park is situated 13 kilometres southwest of Kugluktuk. This place shares its history with both Dene and Inuit cultures and ancestors dating back thousands of years.

Day 50 marked the final day for the expedition party. We arrived in Kugluktuk, an Inuit hamlet meaning “the place of moving water” in Inuktitut. Recognizing the potential for economic gain in the region through trade with the Copper Inuit, the Canadian government moved towards establishing permanent trading posts to facilitate the exchange of goods, resulting in the establishment of the Inuit hamlet of Coppermine, which underwent its name change to Kugluktuk in 1996.



Image: Kugluktuk, Nunavut

Over the following days, we conducted canoe lessons for school children, shared evening meals by the fireplace, and toured the hamlet gaining insight into the challenges that continue to face such remote northern communities; educational, economic, environmental and health. The community members were gracious and hospitable hosts, and we thoroughly enjoyed our stay in Kugluktuk.

As part of our expedition initiative, we wanted to make a contribution to Kugluktuk’s outdoor education program to encourage youth to be active and explore their land and

waterways. To assist in this, we donated much of our expedition gear to the hamlet, including tents, canoes, wannigans and other equipment.

The Coppermine River basin and the surrounding Barren Lands remain among the least visited and appreciated areas of Canada, despite their indelible influence on our past and their potential contribution to our collective future. The history of the Coppermine and its people, one of endurance and endeavour; triumph and tragedy; missed chances and new opportunities, remains only too relevant at present. In few other places is the delicate balance between the natural environment and human civilization on such breathtaking display.

The Coppermine River Expedition Team is grateful for the support of The Royal Canadian Geographical Society. The Society's mandate in making Canada better known to Canadians and to the world was an integral component of our expedition. Having the support of The Royal Canadian Geographical Society allowed our expedition team the opportunity to embark on a journey that we will all treasure for many years to come.