

MACKENZIE RIVER TRIP

Length of trip: 21 to 28 days from Fort Providence to Inuvik.

Total Distance: 1480 km (925 miles) from Fort Providence to Inuvik.

Average Gradient: the average gradient from Mills Lake near Fort Providence to Inuvik is .5 feet per mil or .1 metres per kilometre.

Start: canoeists can start at Hay River, Fort Providence or Fort Simpson.

Finish: the most common finish point for this trip is Inuvik in the MacKenzie Delta.

Accessibility: charters and regularly scheduled air service extend to all of the MacKenzie River settlements as far north as Inuvik and Tuktoyaktuk. As well, there are connections to Winnipeg and Edmonton. The all-weather MacKenzie Highway reaches to Fort Simpson and Fort Providence, while the Dempster Highway from Dawson connects with Inuvik.

Maps Required:

1:250,000

Falaise Lake 85F
Norman Wells 96E
Mills Lake 85E
Sans Sault Rapids 106H
Fort Simpson 95H
Fort Good Hope 106I
Bulmer Lake 95I
Ontaratue Lake 106J
Camsell Bend 95J
Travaillant Lake 106O
Wrigley 950
Arctic Red River 106N
Dahadinni R 95N
Ft McPherson 106M
Fort Norman 96C
Aklavik 107B
Carcajou Canyon 96D

River Notes

Introduction

The MacKenzie River flows north from Great Slave Lake to the Arctic Ocean. Along the way, several lakes, rivers and streams empty into the MacKenzie, making it Canada's largest river. Some rivers, notably the Liard, carry great loads of suspended sediment, thus giving the MacKenzie its muddy and murky character. Fresh drinking water may be taken from any of the streams emptying into the MacKenzie.

One of the MacKenzie's main features is its accessibility. Those without time to travel the entire route may put in or take out at various communities along the way.

With the exception of two rapids, Sans Sault and the Ramparts, the MacKenzie offers a

flatwater trip for paddlers. The width of the MacKenzie (averaging about two km or 1.5 miles) presents the major hazard to canoeists as strong winds can quickly turn the wide expanse of water into whitecaps. In general, however, the MacKenzie trip can be undertaken by both beginner and experienced paddlers.

Some of the MacKenzie's other attractions include spectacular scenery, particularly in the mountains, and camping and exploration along its tributaries. Since most of the river flows through unspoiled wilderness, canoeists should have basic camping skills.

Climate

Spring breakup is usually in mid-May at the south end of the river and in early June at the north, while freeze up is in November. The canoeing season thus runs from June to late September, a somewhat longer period than is possible on most northern rivers.

The summer days are long, with many hours of sunlight. The further north canoeists travel, the more daylight hours they will experience. Near Fort Good Hope, above the Arctic Circle, paddlers can expect 24 hours of sunlight during July and part of August.

In the southern region of the MacKenzie, the average daily maximum temperature in July is about 21 degrees Celsius (69 degrees Fahrenheit). At night, the temperature drops to about 10 degrees Celsius (50 degrees Fahrenheit). Although rainfall is generally light, canoeists should carry adequate raingear.

Average temperatures in the northern region are cooler, by approximately 3 to 8 degrees Celsius. Rainfall is slightly lower near the Arctic Coast, averaging not more than 6 cm (2.5 inches).

Topography

The MacKenzie River begins around the low lying and wooded flat lands at the southeastern shore of Great Slave Lake. The 15 metre bluffs near Fort Providence disappear below the settlement.

Further down, past Camsell Bend, the MacKenzie Mountains provide a spectacular backdrop to the wide, wooded river valley. The abundance of sandbars and islands offer ideal campsites for canoeists. Many of these sandbars and gravel fans are formed where the tributaries empty into the MacKenzie. These river mouths are the best sources of clear water.

Most of the shoreline of the MacKenzie is made up of bare beaches, clay bluffs, and sand bars. Spring breakup leaves an abundant supply of driftwood, providing canoeists with fuel for cooking fires.

The Ramparts, upstream from Fort Good Hope, form an 11 km (7 miles) long cliff gorge carved through a limestone plateau. These cliffs provide some of the most spectacular scenery found along the MacKenzie.

As the river approaches Arctic Red River, the Lower Ramparts provide the last examples of dramatic relief. The cliffs fade to lowlands and the river increases in width as it enters the MacKenzie Delta. The delta region is dominated by a maze of channels oxbos and sandbars.

The Big Rock Hills, near Campbell River in the East Channel extend for 30 km (19 miles) and provide a striking contrast to the silty, alluvial soil of the Delta.

The town of Inuvik is situated on a flat wooded plateau, overlooking the MacKenzie Delta, backed by the Caribou Hills to the east.

Fauna

The MacKenzie Valley contains a wide range of wildlife. Approximately 39 species of mammals and 175 species of birds may be found along the course of the MacKenzie. Some of the more common mammals are moose, black bear, beaver, muskrat, lynx and marten. Almost all of the species of birds found in the MacKenzie Valley are migratory. The most common waterfowl species which can be observed during the migration are snow, white-fronted and Canada Geese, whistling swans and many species of ducks. Other birds such as loons, gulls, sandhill cranes may be encountered. Raptors including bald and golden eagles, ospreys and falcons may also be observed.

Of the fifty different species of fish recorded in the MacKenzie River drainage system, most are found in the rivers and streams which empty into the MacKenzie. Canoeists have good chances at catching arctic grayling, dolly varden, pike, whitefish, innconu and trout.

Flora

The MacKenzie River passes through two vegetation zones: the Boreal Forest along the southern half of the MacKenzie Valley, and the Taiga or Forest Tundra found mainly in the MacKenzie Delta Region.

The Boreal Forest is dominated by black and white spruce in the areas which have not been burned by forest fires in the last few decades. On the more recently burned sites, the most common tree species are paper birch, aspen, and poplar. Willow and alder thickets are found along the riverbank. Towards the north, these trees become shorter and less dense. Typical ground cover in this zone is white lichens, Labrador Tea and cranberry.

The Forest Tundra zone flanks the Boreal Forest and extends along the MacKenzie River as far as Inuvik. Black spruce trees predominate in the shelter of the river valley. The combination of warm summers, and deposition of soil nutrients and silt in the MacKenzie Delta has fostered the growth of Canada's northernmost forest. On some of the islands in the Delta near Inuvik, white spruce grow to heights of up to 15 metres (50 feet tall). In contrast, spruce trees 100 metres away grow to only 6 metres (20 feet) in height. Sedges and other aquatic plants grow in and around the numerous lakes and small channels of the Delta.

Human History

For thousands of years, the Dene (the Indian word meaning "people") travelled the MacKenzie River valley, living off the land's resources. They hunted and fished the river and its many tributaries. Only after the arrival of the Euro-Canadian fur traders, missionaries, and government workers did the Dene begin to assemble in permanent settlements.

There were four different Dene groups along the river; the Slavey in the upper MacKenzie, the Hare and the Mountain in the central and the Loucheux in the lower MacKenzie Valley. The Delta was also home of the Inuvialuit, or Eskimo.

The first intrusion into this way of life, occurred in 1789 with Alexander MacKenzie's trip down the river. In his search for a route to the Pacific Ocean. MacKenzie opened up a new area for the fur trading companies which were expanding north and west across Canada. Once he realized the MacKenzie did not lead to the Pacific, he named it the "River of Disappointment."

The Northwest Company traders followed MacKenzie. In 1804 they established posts at Fort of the Forks (Fort Simpson) and Fort Good Hope. Fort Norman was established in 1810. After the Northwest Company merged with the Hudson's Bay Company in 1821, more posts were added along the MacKenzie. Supplies, traps and guns were traded with the Dene for beaver,

muskrat, marten, lynx, fox, wolf and bear skins.

Following the fur traders, John Franklin and his crew travelled down the MacKenzie in the mid 1820's to survey the Arctic Coast. Tourists and explorers then used the river to reach the northern regions of Canada. In 1897, the Klondikers travelled the MacKenzie on their way to the Yukon Gold fields by way of the Liard, Peel, and Rat Rivers.

In 1919, Imperial Oil struck oil at Norman Wells. Two years later, Treaty 11 was signed between the MacKenzie Valley Dene and the Canadian Government. The Second World War marked the beginning of the construction of the Canol (Canadian Oil) pipeline from Norman Wells across the MacKenzie Mountains to Whitehorse. This project was abandoned within a year after it was started.

Increasing river traffic has resulted from the discovery of oil and gas in the MacKenzie Delta. In April 1985, the first oil began flowing south through the new pipeline from Norman Wells to the province of Alberta.

River Notes

This report describes a 1495 km (934 mile) boat trip down the MacKenzie River from Fort Providence, 72 km (45 miles) downstream from its mouth at Great Slave L Lake, to Inuvik in the MacKenzie Delta.

The put in point is at Fort Providence, a Dene settlement of 600 residents. It is situated on top of a high bluff overlooking the river. Two campground facilities are located in this community. As well, two craft shops sell locally made moose hair tuftings, beaded garments and other native art.

The MacKenzie is only about a half a mile wide in this first stretch and is surrounded by low and level countryside, covered with poplar and birch. About 19 km (12 miles) downstream, the river turns into Mills Lake, a long and wide body of water. Because of its size, shallowness and lack of island cover, this lake can become t acarus in even moderate winds. To lessen the distance travelled on the open lake, paddlers should cross to the MacKenzie's south shore soon after leaving Fort Providence.

At the bottom of Mills Lake, the river is several km wide. It starts to narrow past Small Axe Creek, as it flows through low, wet swampland. By the time it changes to a more northerly course at Jean Marie River, the river is only a half a mile wide. It continues in this direction for about fifteen miles, then starts to turn west again at the mouth of the Rabbitskin River.

Jean Marie River is a very traditional community of 69 Slavey speaking residents. This centre has become internationally recognized for the quality of moose hair tufting and porcupine quill art. There are no services for canoeists here.

About 19 km (12 miles) above Fort Simpson, the Green Island Rapids are encountered. While there is little surface turbulence, the current is swift. Approaching Fort Liard, paddlers should keep to the right hand shore to avoid the fast water at the mouth of the Liard River.

Fort Simpson, a town of 980 residents, is located on an island just downstream from the mouth of the Liard. This is a possible alternative starting point for a canoe trip on the MacKenzie. Not only is it the northern most point reached by the MacKenzie Highway, but it has regular air connections with Yellowknife. As well, it offers a variety of stores, services and accommodations.

Established by James Porter of the Northwest Company in 1804, Fort of the Forks (Fort Simpson) is the oldest continuously occupied trading post on the MacKenzie River. Because

of the rich resources here, Fort Simpson became a major fur trading and transportation centre. The rich alluvial soil allowed for a degree of self-sufficiency; missions grew their own vegetables and raised their own livestock.

Fort Simpson down to the mouth of the Nahanni, a distance of 118 km (74 miles), the river flows in a west-northwesterly direction. It is flanked in this stretch by rolling wooded plain, punctuated by areas of muskeg. Both the landscape and the course of the river change quite dramatically at Camsell Bend, five km (3 miles) below the mouth of the Nahanni. The MacKenzie encounters mountains for the first time, as a 917 metre (3000 feet) escarpment sharply deflects the river onto a northerly course. Below the Bend, the river slows and widens markedly, with banks 3-5 km (2-3 miles) apart. Several channels appear at this point, created by the numerous low lying islands (most notably McGern Island).

North of the mouth of the Willowlake River, the MacKenzie enters a very mountainous region. Rising out of the lowlands to the east of the river is the McConnell Range which parallels the river's right bank for nearly 320 km (200 miles). On the left bank, the river is flanked by the Camsell Range, a high wooded ridge, beyond which the land rises gradually to the MacKenzie Mountains. Just past the mouth of the River Between Two Mountains, the MacKenzie narrows and the current increases. Near Old Fort Island is the original site of Fort Wrigley. It was referred to as Little Rapids Post by the Hudson's Bay Company, and was moved several times before it became the permanent settlement of Wrigley.

Wrigley is a small community of log cabins situated high on a bluff on the right bank of the MacKenzie, with the Franklin Mountains providing a spectacular backdrop. It has accommodations, supplies and an air connection with Fort Simpson to the south. The main source of economy in this Slavey settlement is hunting, trapping and fishing.

The 350 metre high cliff face the Roche qui Trempe a l'Eau is located just downstream of Wrigley. Thermal springs are found around this dome shaped rock.

From here down to the mouth of the Blackwater River, a distance of about 80 km (50 miles), the river flows in a north-northwest direction at a fairly swift rate. The Ochre River empties into the MacKenzie from the east in this stretch. This river is notable for the bright red colour which it turns during early summer.

Three km (2 miles) below the Blackwater, it turns abruptly the west for 6.4 km (4 miles), then resumes its northerly course. The current becomes swifter, and the river winds through islands and sandbars as it descends towards Fort Norman.

Old Fort Norman was originally built near the confluence of the Redstone and the MacKenzie Rivers. Although there are cabins found at this site, the original buildings no longer exist.

Fort Norman is located high on the right bank of the MacKenzie, overlooking the entrance to the Great Bear Lake. Many services are available here including a Hudson's Bay store, nursing station, and the R.C.M.P. Nahanni Air serves the community with regular flights out of Norman Wells. The Hudson's Bay Company moved their post to this location in 1851, Father Grolier, O.M.I., then founded a mission here in 1859. Residents have begun restoration of the oldest standing church in the MacKenzie Valley, built from squared logs in the 1860's. The Dene of this settlement have a legend about nearby Great Bear Rock, which towers 450 metres above the river. A giant, after suffering a long cold winter killed three beaver, and then stretched their pelts on Bear Rock. According to the legend, these pelts are the red patches on the cliff face.

Below Fort Norman, the river flows in a north-westerly direction between clay sloping banks up to 12 metre (40 feet) in height. The 80 km (50 mile) stretch down to Norman Wells

contains many islands, with the river expanding to over five km (3 miles) in width at some points.

Located at a plain at the foot of the Norman Range, Norman Wells also offers several vital services: gas supplies, a campground, accommodations and air service to Inuvik, Yellowknife and the smaller settlements. During the Second World War, the American Army built the Canol Road and pipeline to transport oil from here to Alaska, via Whitehorse. Although this project was abandoned one year after it was begun, remains from its construction are still evident. Hikers use the Canol Road to gain access to the MacKenzie Mountains.

This is a relatively new community and is the site of the only oil refinery in the N.W.T. Tours of the oil field facilities may be arranged. Canoeists will see the six recently built artificial islands on the MacKenzie, used for production drilling. The oil taken from here is sent to Zama Lake, Alberta via the newly constructed pipeline. Canoeists are advised that drinking water may be contaminated downstream from the oil development in Norman Wells.

For about 112 km (70 miles) below Norman Wells, the MacKenzie continues in a west-north westerly direction, flowing between steep sloping clay and gravel banks interspersed with limestone cliffs. Below Perry Island, it turns sharply west for about 19 km (12 miles), flowing between sheer limestone cliffs. Behind them, the Carcajou Range rises sharply from the right shore, paralleling the river for about six km (4 miles). Another shift in direction occurs 5 km (3 miles) below Axel Island (at the mouth of the Carcajou River) where the MacKenzie turns sharply to the north. The river constricts to about 1 km (3/4 of a mile) at this point, and the San Sault Rapids on the MacKenzie are encountered.

The Sans Sault Rapids are formed by a rocky ledge that extends into midstream from the east bank. Although a portage is not necessary, they are best skirted by keeping to the west/left side of the river. There is a sign posted here to warn all boaters of this rapid.

Below the rapids, the MacKenzie flows in a northerly direction for about 56 km (33 miles). It remains at least 3 km (2 miles) wide throughout and contains many islands and sandbars.

The river narrows as it enters the Ramparts, a twelve km (7 mile) long vertically walled limestone canyon. The rapids here present the second major hazard to canoeists. The safest route for paddlers is within the channel markers. Towards the end of this spectacular gorge, the river begins to widen and then split around Manitou Island.

Fort Good Hope is found on the right shore opposite the Island. Many of the 463 residents here continue to hunt and trap in the surrounding areas. Accommodation and meal services are available to canoeists. Nahanni Air offers scheduled flights to Norman Wells and Inuvik. One of the main attractions here are the murals of Father Emile Petitot which decorate Our Lady of Good Hope Church built in 1878. Canoeists may want to explore Fossil Lake, located 16 km (12 miles) up Fossil Creek opposite the settlement. The Mackenzie once plunged over a falls here. All that remains today are the dried cliffs and the plunge pool.

For about 160 km (100 miles) below Fort Good Hope, the MacKenzie flows in a general northwesterly direction, around numerous islands and constantly shifting sandbars. The current is generally moderate, except for short constricted sections around islands or where the river narrows and flows between limestone cliffs.

Little Chicago was the wintering residence for prospectors travelling to the Klondike Gold rush in the 1890's. Prior to this, in 1815, the Hudson's Bay Company had established this site as a trading post. When the anticipated trading with the Loucheux did not develop, the post was moved to Fort Good Hope.

Below Thunder River, the MacKenzie turns sharply west, and continues on this course for

nearly 96 km (60 miles). At Travaillant River, it takes a more northwesterly course. In periods of low water, i.e., late summer and early fall, numerous islands, sandflats and shoals may present difficulties for paddlers.

After the mouth of Prairie Creek, the MacKenzie turns north, before entering a long horseshoe bend above the settlement of Arctic Red River. This section is known as the Lower Ramparts, an 13 km (8 mil) long canyon with shale walls of up to 90 metres (300 feet) in height. While the river narrows here to as little as half a mile, the current remains moderate and no difficult water is encountered.

The settlement of Arctic River is situated on the left bank of the MacKenzie at the mouth of the Arctic Red River. Located on the Dempster Highway, this community is linked with Inuvik, Fort McPherson and Dawson City, Yukon. Although Arctic Red River has been a traditional Dene fishing camp for generations, it became a permanent settlement when a mission was established in 1868.

24 km (15 miles) downstream, paddlers encounter Point Separation where the MacKenzie splits up into the many streams and channels of the Delta. Inuvik is reached by taking the East Channel, the entrance to which can be found about 16 km (10 miles) north of Point Separation. The name Inuvik means "place of man". Both the Inuvialuit and Dene traditionally hunted and fished this region. In 1955, Inuvik became the government and commercial centre of the Western Arctic. It contains a variety of stores and accommodations, campgrounds. As well, scheduled air service is available from Edmonton, Yellowknife, Norman Wells and Whitehorse.

MacKenzie River Cumulative Distances

Location	kilometres	miles
Fort Providence	0	0
Fort Simpson	255.5	159.5
Wrigley	495.0	309.0
Fort Norman	740.0	462.5
Norman Wells	818.0	631.5
Fort Good Hope	1010.5	844.0
Arctic Red River	1350.0	925.0