WATERFOWL OBSERVATIONS WHILE CANOEING CANADA'S MACKENZIE RIVER

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Canada's Northwest Territories are a vast land mostly of unmolested primitive conditions. The area totals about one-half the size of our first 48 states. The population includes 36,000 people, of which one third are Indian, one third Eskimo, and one third broadly mixed Canadian caucasians. Settlements are sparce, generally small and widely scattered. Summer temperatures can be pleasant but are rather unpredictable. Weather may change rapidly so one must be prepared for severe climate.

There are over 100,000 lakes, most of them unnamed and unfished. The area has its share of rivers too, but the great one is the Mackenzie. This river is second in size to the Mississippi on the North American continent. It runs northwesterly from the Great Slave Lake, over 1,100 miles to the Arctic Ocean (Figure 1). It is a mile or more wide throughout most of it's length and has only one rapid of significance. The Mackenzie delta and adjacent areas are some of the most important waterfowl breeding grounds of the North American continent.

It was my good fortune last July and August (1972) to be with a party of 15 persons, mostly relatives, who canoed down this great primitive Mackenzie River from Fort Providence north to the Arctic Ocean (Figure 1). Our canoes were the cargo type, 20 ft. long, with 10 h.p. outboard motors. There were 3 persons to each canoe and each boat could carry up to 2,000 pounds. Gas, food, camping supplies and passengers were the main cargo.

The winter ice on the Mackenzie generally breaks up during May, but this may not occur until mid-June in the upper arctic reaches. Freeze-up recurs during late September or early October. The river, therefore, is navigable for only about 3 months each year. During the ice break-up period, ice dams of 50 feet or more in height may form which can cause flooding along the river.

The general purpose of the trip, for me, was to learn about the area's waterfowl nesting grounds, migration lanes and staging areas, in addition to the opportunity to explore and observe some ecologically primitive country.

Wildlife discussions were held with Northwest Territories Area Game Management Officers who had knowledge of the waterfowl and other wildlife found along the Mackenzie. This included meeting Don Boxer at Hay River on the Great Slave Lake, Max Trennert at Fort



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Simpson, Bob Johnson at Fort Good Hope, and Bill Carpenter at Inuvik, the town on the east side of the Mackenzie delta. Carpenter is the Assistant Supervisor of Trapline Management for the Northwest Territories normally stationed at Yellowknife, the new capitol of the Territories. These fellows were all competent and professionally trained men. I am most grateful for their assistance.

The Mackenzie River delta is over 100 miles long and extends to 50 miles wide. This size reflects the amount of silt and mud that is washed down into the Mackenzie from tributary streams flowing from the Nahanni and other ranges of the Mackenzie Mountains on the west. Out from the east side of the river are vast numbers of old glacier-created lakes and then the barren grounds which do not reach the river until the delta. Streams flowing from the east are clear and provide the best fishing as well as drinking water.

The economy and activities of the resident natives are centered around the wildlife resources of each settlement. The main occupations and methods of livelihood are trapping, hunting, and fishing for most residents of the river settlements.

At Inuvik, thanks to (the N.W.T. Trapline Supervisor) Bill Carpenter, I met Dr. Tom Barry, who is the Western Arctic Region Biologist for the Canadian Wildlife Service. Tom Barry has been carrying out waterfowl studies, including waterfowl banding, for over 12 years. He was the one person I had most wanted to see. His invitation to join him in a flight over the Mackenzie, the Kugaluk and Anderson River deltas along the Arctic coast was, for me, one of the highlights of the trip.

Lets discuss a few points about the trip down river. Our party met at Mile 40, near Fort Providence, where our canoes and other necessary supplies were delivered. After clearing with the Royal Mounted Police officer stationed at Fort Providence and finding a place to park our vehicles, we left Fort Providence in our five canoes on July 14, 1972.

I didn't go by canoe the first 35 miles because I had made arrangements to fly downriver and over the Mills Lake area. The Mills Lake area is roughly a ten mile wide marshland area along the river and one of the most important waterfowl migration staging and stopover points along the entire river. This is particularly so during the spring when early migrants pushing on further north wait for the ice to break up. Ted Malewski, the bush pilot at Fort Providence, flew me down river over and around the Mills Lake area so I could take photographs. With his pontoon Cessna 180 we met the canoes near the middle of the Mackenzie four hours later. Sandhill cranes as well as various waterfowl species next in the area. Pondweed, an important waterfowl food plant, grows proficiently here, consequently it was easy to understand why this shallow lake area is so important to waterfowl. During the past few years cooperative waterfowl banding work has been carried out at Mills Lake by the Canadian and United States wildlife services. Waterfowl from this location have been recorded on all four of our continental flyway wintering grounds.

There are over 50 rivers and streams that drain into the Mackenzie during its course to the delta. At Mile 205 the Liard River, one of the largest, joins up. It is a muddy river so it is here that the complexion of the Mackenzie starts to change. The village of Fort Simpson is at Mile 207. We camped here along the river, just up from the mudbank shore. Max Trennert, the Northwest Territories Area Game Officer stationed here, said that during early spring migration, mallards may arrive on nearby ponds and at the Mills Lake area in early May, only to stand around on the ice two to three weeks just waiting the thaw.

Progressing down river, we generally camped near shore by our canoes and supplies. Campsites nearly always were by junctions of tributary streams where best fishing and drinking water were found. Occasionally old Hudson Bay constructed trapper's cabins were found along the river but we often didn't use them because they had far more friendly mosquitoes than the open spaces along the river's edge.

At Mile 316, while visiting a small Indian settlement (the Boots' Brothers Settlement), a boating party with the Governor of the N.W.T., Stewart M. Hodgson, arrived. He was on a goodwill tour of the river settlements, giving information regarding the Canadian government's plans to construct a joint road and oil pipeline, mostly paralleling the Mackenzie River. Governor Hodgson presented to me an official flag of the N.W.T. to present to the Governor of California, with his warm greetings. (The governors had met on a previous occasion.) Governor Reagan recently accepted the flag in Sacramento at a brief but most cordial presentation ceremony in his office.

Also, while at this settlement one of the resident Indians gave me two snow goose bands from birds he had shot nearby during the month of May. Resident natives of the N.W.T. have few seasonal restrictions on the taking of wildlife. Wildlife is the present and historical method of subsistence for the people of this vast area. Snow geese do not nest here, consequently they are taken only while in migration along the river.

Progressing down the Mackenzie, at Mile 513, we visited Fort Norman, a village situated where the Great Bear Lake's river meets the Mackenzie. Water temperatures of Bear River were only a few degrees above freezing and chunks of ice were still seen floating in this river only two days before our arrival. We went up the Bear River and camped two days, where we had excellent fishing.

Not many waterfowl nest along the river. They utilize the ponds and lakes back in from the river's edge where more of the desirable aquatic plants flourish and the water levels are more stable.

Mile 683 on the Mackenzie brought us to the settlement of Fort Good Hope, an Indian village with a R.C.M.P. station, Hudson Bay Co. store and Catholic church. To arrive here we had gone through the Ramparts and San Sault Rapids. We lost some gear going through the rough San Sault but we were so happy to make it safely to Fort Good Hope that loss of gear seemed minor.

We didn't stop to visit the small Indian settlement at Tree River, Mile 854. However, while at Inuvik, we met two of its residents, Mr. and Mrs. Tony Andre, who could speak some English. We learned there are about 30 to 35 people, mostly all related, living at Tree River. These people, like those from most other settlements of the N.W.T. live off the wildlife of the land. There is no agricultural activity whatsoever. Hunting and trapping is the main economy, of course, but has been augmented in recent years with some social assistance from the Canadian government. Mr. Andre estimates that the take of wildlife each year by the people of this settlement is: 30 moose, 15 caribou (woodland), 500 ducks and geese, 2,000 muskrats, 150 marten, 35 beavers, 30 lynx, 25 fox, 25 mink, several wolverine, several wolves plus around 30 bales of fish. One bale equals 40 fish, I was told. The inconnu or "whitefish" is the most common. They may average 6 to 8 pounds and are caught primarily with nets in the Tree River. They are generally fileted, sun-dried, then smoked. The main summer activity of the settlements we visited all along the Mackenzie is the catching, drying and smoking of fish for their winter supply.

We arrived at the settlement of Arctic Red River at Mile 898. A few days before our arrival, a grizzly bear had wandered into the settlement and was killed. At our camping and rest stop locations along the river, we invariably saw large moose, bear and wolf tracks. We didn't see many of these animals but were constantly reminded that they were nearby.

Spotted sandpipers commonly nested along the river's edge, particularly where gravel bars existed. We saw osprey, bald eagle, peregrine falcon, kingfisher, and arctic tern nests along the river. Hundreds of ponds and lakes existed just back in from the river. It was on these ponds and water areas that most of the ducks, cranes, and other marshland birds existed. The arctic terns, however, nested in small colonies out on sandy islands in the Mackenzie or its delta. These birds are the champion migrants since they travel about 25,000 miles, from the Arctic to the Antarctic, annually.

The Mackenzie delta begins at a location called Point Separation. We found the East Channel of the delta and followed it, though not without some mistakes, all the way to the town of Inuvik, Mile 988. Inuvik is a relatively new, yet different, modern-type town. Buildings are on pilings, imbedded in the perma-frost-ice ground. All utility services are housed in enclosed, above ground, corridor lines. A modern airport provides some scheduled air flights.

Continuing down the East Channel, a stop was made at the abandoned Reindeer Depot, Mile 1020. It was here that our first contact was made with the Arctic's barren ground land along the river.

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The Arctic coastal Eskimo settlement of Tuktoyaktuk ("Tuk") was reached after approximately 1,100 miles from the Great Slave Lake. "Tuk" is where ocean ships can come in towards the delta during the summer and unload supplies, following access via a coastal deep water route.

Returning from "Tuk" to Inuvik, the canoes were sold and air flights to Yellowknife were arranged. From Yellowknife a bus trip provided transportation for the 200 miles back to Fort Providence and our vehicles.

The Mackenzie delta, particularly its west side, is rated as having one of the highest waterfowl nesting populations per square mile of any location on the North American continent. Consequently, flying the Mackenzie delta, the coastal arctic barren grounds and over the Kugaluk and Anderson River deltas with Tom Barry and Bill Carpenter was one of the highlights of the trip for me. Barry has supervised the bandings of over 20,000 geese during the past 12 years at Banks Island and the Anderson and Mackenzie River deltas. His bandings and studies were of particular interest to me.

In the Anderson River delta for example, Pacific brant, snow geese, white-fronted geese, honkers and whistling swan nest fairly close to one another. Their different migration routes, however, take them to widely separated wintering grounds. The swans go southeasterly as they take the Great Lakes route diagonally across the continent, from the Great Bear Lake to Lake Erie and Lake Ontario, on to the Atlantic coast of Virginia and the Carolinas. In the late spring, they are among the first to arrive on the tundra nesting grounds and the last to leave in the fall. The honkers fly southbound through the Mississippi Flyway where many end up in Louisiana and vicinity. The white-fronted geese from this same delta fly south by following the Mackenzie Valley, then across the Canadian parklands and great plains area of the United States. From here they continue south to where they winter on the gulf coast of Texas and Mexico. Snow geese nesting in the Anderson River delta move west about 200 miles to join other snows in the Mackenzie delta. The main snow goose nesting concentration of the central arctic is found along the Egg River of Banks Island, where an estimated 100,000 pairs nest. This nesting colony is approximately 350 miles northeast of the Mackenzie delta. These Banks Island snows fly southwest over the Arctic Ocean to the Mackenzie delta, joining the mainland snows for their flight south. Leaving the Mackenzie delta, snows may stop 300 miles to the south to feed on green plants they find on wide mud flats of the Mackenzie below Fort Good Hope. If they by-pass this short hop, most will fly south to stop at the Hay Lakes area of northwestern Alberts. Some will have found time to visit the Mills Lake area where they waited for the ice break-up during their spring flight north. From the Hay Lakes area snows move to southern Alberta and then to western Montana. Leaving Montana they change direction and fly southwesterly across the Rockies heading for Summer Lake, Oregon and/or Tule Lake in northern California. Most leave the Tule Lake Basin around mid-November to fly to their wintering grounds in the Sacramento and San Joaquin Valleys of California. Brant that nest in the Anderson River delta migrate westerly along the Arctic coast making numerous stops as they follow the coast around Alaska, down the Pacific coast south to winter along the coasts of California, Lower California and Mexico.

Therefore, the whistling swan and the four species of geese that use the Anderson River delta scatter widely from the Atlantic to the Pacific to go to their wintering grounds.

In conclusion, we found the native residents of the Northwest Territories as well as all Canadians most friendly, helpful and courteous. During winter months, oil and mineral explorations are presently being undertaken by various corporations under permit from the Canadian government. These resources are being discovered and the future developments for their extraction will gradually remove, in many areas, the primitive stature that the Northwest Territories presently possesses.