

# 8

## A Gwich'in Year on the Land

Until relatively recent times, Gwich'in people lived out on the land, moving between seasonal sites in a relatively regular seasonal round. A sequence of different subsistence activities, focused in different locations and at different types of sites, characterized the Gwich'in seasonal cycle. Prior to the past thirty to forty years, villages were occupied for relatively short times, especially at seasonal gatherings such as Christmas, Easter, and Assumption Day or a summer gathering, when visiting and trading were done.

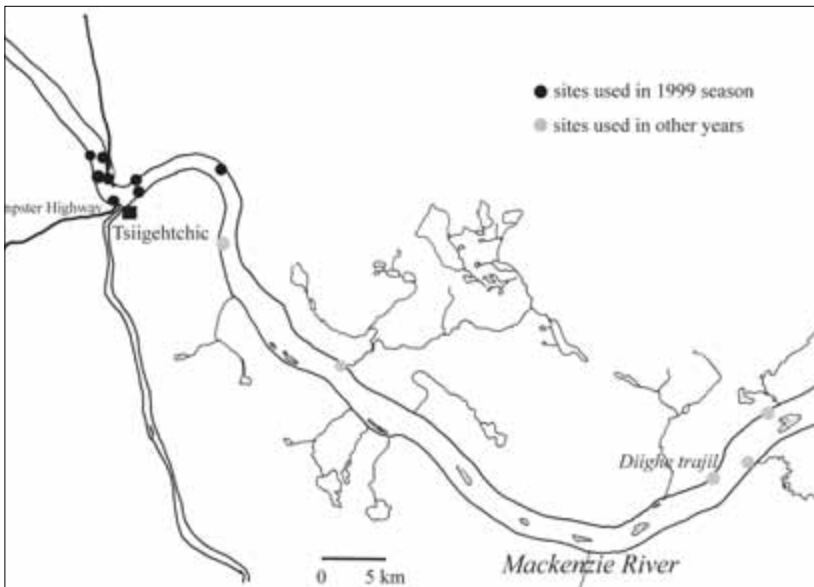
I will begin my description of the seasonal round with "spring," the season when the snow and ice covered landscape is in rapid transition to the summer ice-free state, and the days are rapidly becoming very long. This is a variable period in late May and early June. As travel becomes difficult at this time of year, Gwich'in families had to decide where they would "pass spring." This had to be a site where they could wait out the shift from winter sled (now snow machine) travel to summer boat travel, and high enough above the spring flood and ice jam levels to remain unflooded. Muskrat (*Ondatra zibethicus*) and beaver (*Castor canadensis*) hunting and trapping, and waterfowl hunting, are the principal subsistence activities in a spring camp.

In the summer, after break-up and while the weather is warm, Gwich'in disperse to various locations along the Peel and Mackenzie Rivers, and in the myriad channels of the Mackenzie Delta, to fish for river-running broad whitefish (*Coregonus nasus*), humpback whitefish (*C. clupeaformis*), and inconnu or coney (*Stenodus leucichthys*). Fishable sites are eddies, and locations of productive eddies are known to community members (Figure 8.1). Through an informal network of conversation within communities, people communicate who will be fishing in what areas, and where people will set up their fish camps. Campsites seem to be a form of property, and permission is required to use a site established and improved by someone else who is not a relative. A similar form of family fishing sites is reported for Greenlanders by Peterson (1963). When a family decides to fish an area where they previously had no camp, they are free to establish a new site. Where more than one net is set in an eddy, the nets are set so that they do not interfere with each other and both can catch fish. Areas immediately adjacent to the villages or ferry crossings such as 8 Miles at the Peel River Ferry, and the area below Tsiigehtchic on the Mackenzie River, are areas of common use. Just upstream and across from Tsiigehtchic at Chii t'iet, and the bay just downstream from the western end of the Mackenzie Ferry crossing, are also



Figure 8.1 William Teya pulling coney from net set at eddy below Shiltee Rock, summer 1999

shared areas of common use for people from the Tsiigehtchic community. Figure 8.2 below shows below eddies as solid-shaded areas, along the lower Mackenzie River near Tsiigehtchic, which were fished in the 1999 summer season. Eddies known as fishing and fish camp sites that were used in other years are shown as hollow circles. The Tree River site (Diighe 'tr'aajil) was not used in 1999, but was fished in 2000 (Figure 8.3) as I describe in Chapter 7. This site has been used by Alestine Andre's family for a long time, and has an ancient name commemorating a gambling contest that took place long ago.



**Figure 8.2** Summer fishing sites (eddies) on the Mackenzie River near Tsiigehtchic, Northwest Territories

In the fall, fishing at fish lakes and ice fishing on the Peel and Mackenzie Rivers is carried out. Travel to specific fish lakes was a former part of the Tsiigehtchic seasonal round. “Fish lakes” are lakes in which productive fall fish netting (usually from the ice) can be accomplished. There are also areas of open water such as Travailant Lake, which has a highly productive crooked back (humpback whitefish) fishery in November. As with rivers, only specific sites are productive (e.g. near inlet streams or off certain points), and



**Figure 8.3** Fish drying at the fishing site, Dighe 'ir'aajil, looking across the Mackenzie to Tree River where Hyacinthe Andre had his homestead

one must know both where and when to fish to be successful. People may decline to share the information necessary for successful fishing, especially if they feel would-be fishers may not be adequately respectful of the fish they take. Species taken in lakes include trout (*Salvelinus namaycush*), Arctic charr (*Salvelinus alpinus*), both species of whitefish, loche (*Lota lota*), and northern pike (*Esox lucius*). During the fall fishery on the Mackenzie, broad and humpback whitefish, coney, herring (*Coregonus autumnalis* and *C. sardinella*), loche and northern pike are caught. Fall-caught fish were usually frozen in pits, or made into "stick fish." The whitefish species and coney are the most abundant species. Loche eggs and liver are a delicacy much appreciated by Gwich'in people, as are whitefish eggs.

In the past, serious fall fishing activity was undertaken on rivers and on lakes to catch fish for winter dog feed. A family might cache several thousand fish to ensure an adequate supply (Hyacinthe Andre, Noel Andre, and William Teya, pers. comm.). There are numerous known fish lakes north of the Mackenzie River, north and east of Tsiigehtchic (in the area that will be traversed by the pipeline corridor). Different families accessed specific camping and fishing sites over the years, integrating this movement into their seasonal round (Andre and Kritsch 1992). At present, little concentrated fall fishing is done, because changes in lifestyle associated with concentration into villages and with adoption of gas powered snow machines has eliminated the need for a large dog feed fishery. Fish remain very important as human food, and form a significant part of the diet of contemporary Gwich'in people.

Fall is also a time of caribou hunting and ice fishing on the river. Both Gwich'ya Gwich'in and Teetl'it Gwich'in ice fish in the fall, while Fort McPherson (Teetl'it) people are more involved in fall caribou hunting because of their proximity to the Richardson Mountains where the Porcupine Caribou Herd migrates.

Moose hunting is and was a part of the fall and winter routine of both groups, especially along the rivers and around certain lakes. In addition to the value of the meat, moose hides are important as a source of durable leather. Moose hunting can be combined with trapping activity, also characteristic of late fall through late winter, with a break around Christmas.

Trapping furbearers has been an important economic activity since at least the early 1800s (Krech 1983). Species utilized on traplines include the furbearers that are the focus of the cash economy, and game species for subsistence, and the lake fish formerly procured in the fall for dog feed. Traplines are areas of extensive use in the winter season, and include areas away

from the banks of the major rivers. Upland areas are trapped for marten, while Mackenzie Delta areas may be productive of lynx and, in late winter and spring, of muskrat. Beavers have been found throughout the Delta and along the Peel and Arctic Red Rivers. Their numbers have been variable and subject to population crashes. They were trapped in late winter and early spring when sufficiently numerous (Gwich'in Elders 1997:89-95).

People tend to trap in areas familiar to them, or that have been used in the past by family members. According to elders, people had their own trap lines, and they respected the lines of others. Elders stated that you can't cross another trapper's trail, nor use his or her trail in your own trapping activities. Traps may be set, however, in the same general area provided these rules are followed and each trapper elaborates his own trail system (Tony Andre, pers. comm.). These considerations of trapline ownership are similar to those reported for Alaska Gwich'in (=Kutchin) by Richard Nelson (1986). Trapping camps, with requirements for other resources such as dry fuelwood, are also associated with traplines. Trappers can change their areas; the same kind of informal networking among community members that orders the fishing effort also regulates where the trapping effort is focused. As Margaret Donovan of Tsiigehtchic put it, the trappers decide where they are going and who will be concentrating in what area by a kind of "gentleman's agreement." People may decide to try a new area, to give a previously used area a rest, or they may choose to return to an area in which they have worked previously. When Tsiigehtchic had a group trapline, individual trappers decided where to trap within that area. Trappers from Fort McPherson seem to have family traplines, and related people may have lines in nearby areas, such as the Charlie-Tetlichic family and spouses in the Road River area. Some flexibility for people to choose or change a fishing area is allowed, depending on how many people are currently trapping, and choices among several family controlled lines. One can also arrange to trap in someone else's area by talking with them.

Jigging for loche (also known as burbot) through the ice is another winter subsistence activity, and can be done at specific productive sites along the main river systems and Mackenzie Delta channels, and on the lakes.

Caribou are the most important species to Gwich'in identity. A bull caribou, with white neck and antlers held high, adorns the Gwich'in flag. Caribou are the most important animal in the Gwich'in economy, so they are highly valued.

Caribou hunting is another winter activity. Families, especially from Fort McPherson, in the past would follow various routes into the mountains with their dogsleds, and would camp wherever they encountered caribou, to process the meat. There is also a spring caribou hunt, when the caribou are moving north to their calving grounds. People from Tsiigehtchic regularly went up the Arctic Red River to hunt caribou during the fall and winter, where they could access woodland caribou, and in the headwaters, the Porcupine Caribou Herd in the mountains.

Caribou, being vagrant and highly bunched, require different arrangements for their harvest than other large ungulates such as moose. Although the broad outlines of their seasonal cycle and geographic movements are well known, the exact timing and route of movement are notoriously variable. Gwich'in use caribou from the Porcupine Caribou Herd, and the Bluenose Herd of barren ground caribou (*Rangifer tarandus groenlandicus*). Larger and more solitary boreal woodland caribou (*Rangifer tarandus caribou*) are also likely used along the Mackenzie and Peel Rivers (Shaw and Benn 2001; Nagy et al. 2003). The Porcupine Caribou Herd ranges in the northwest extremity of the Northwest Territories, in adjacent areas of the northern Yukon, and on the Arctic Coastal Plane of eastern Alaska, and were more often hunted by the Teet'it Gwich'in and the Vuntut Gwitchin of the northern Yukon (Gwich'in Elders 1997; Sherry and Vuntut Gwitchin First Nation 1999), than by the Gwich'ya Gwich'in of Tsiigehtchic. Gwich'ya Gwich'in made use of the Bluenose Caribou Herd of the northern Northwest Territories (Gwich'in Elders 1997). People hunted Bluenose caribou where groups were encountered amongst the lakes north of the Mackenzie River in the general vicinity of Travaillant Lake. Bluenose caribou follow different patterns, and they change their route about every 10 to 20 years. As Dan Andre of Tsiigehtchic put it, it is almost like they are aware of how much food they have; they leave a certain area and then return to it later (Johnson and Andre 2001). Another factor influencing their movement to new wintering areas is the occurrence of forest fires, which burn all of the lichens, which are an important food source for caribou. In 1986, the area around Travaillant Lake burned, and the Bluenose caribou are now found in an area to the north of there, where they are relatively remote from Tsiigehtchic.<sup>1</sup> Owing to greater accessibility via the highway, Tsiigehtchic hunters now make more extensive use of the Porcupine caribou instead.

In the past, hunting of the Porcupine caribou involved travel up various trails into the Richardson Mountains, especially trails up the Rat River to

Fish Creek and the Bell River, up Stony Creek to Brass House, up Vittrekwa Creek and Road River across to Rock River, and up Caribou River to the Caribou Lake area (Gwich'in Elders 1997; Bertha Frances, Mary and William Teya, and Neil Colin, pers. comm.) (Figure 8.4). When caribou were encountered, people camped there and processed the meat by making dry meat and caching frozen meat for later use. Some of this dry meat and frozen meat might later be taken to Fort McPherson by dogsled. Communal hunting was often practiced, and information about where caribou were encountered was shared. When caribou are available nearby, people from Fort McPherson preferentially hunt caribou. Gwich'in people required large amounts of meat traditionally; meat is still culturally and nutritionally very important. There is a high degree of sharing of meat, especially of caribou and of moose. When there are no caribou around, Gwich'in people shift to other resources such as moose and rabbits (*Lepus americanus*), and make extensive use of fish. Rabbit and fish are also shared.

At present, Gwich'in from all of the Canadian communities access the Porcupine Caribou Herd from the Dempster Highway. The presence of the highway does ensure that caribou will cross the highway or feed in the highway area at some point during the winter. The relative lack of predictability



**Figure 8.4** Rolling slopes of Richardson Mountains in late August, 2000, just as the first of the Porcupine Caribou Herd began moving into the area from their calving grounds to the north

in their movements means that the exact timing and location of encountering huntable caribou varies significantly year to year. This maximizes the value of sharing information about the occurrence of caribou, as well as distribution of the catch. The nature of caribou movement also maximizes the value of dispersing people in predictable areas to make sure that someone encounters caribou, and can communicate to others where the animals are. Communal hunting and a highly developed sharing ethic allow distribution of meat to as many people as possible in the community. This is underscored by the strong Gwich'in belief that generosity in sharing meat is necessary to ensure continuation of good hunting success. Gwich'in consider caribou to be active agents who choose to give themselves to human hunters to enable their survival. Respectful acceptance of the gift, by shooting caribou when possible and sharing the meat if it is more than the hunter's immediate needs, is necessary for that relationship to continue.

### **Gwich'in livelihood and relations to the land in the early twenty-first century**

Contemporary Gwich'in in the Mackenzie Delta region live in the villages of Fort McPherson, Tsiigehtchic, and Aklavik, and in the town of Inuvik. Many people have part-time or full-time wage employment, or live on transfer payments. Oil and gas development dominate the present economy. Few people presently engage in serious trapping, though hunting and fishing for subsistence continue to be important and highly valued activities. Most people spend the majority of their time residing in permanent houses or apartments in town; few spend substantial amounts of time out on the land living in camps in cabins or wall-tents. Those that do, tend to alternate periods of time in town with time on the land. Present subsistence activities are more likely to be within a day's travel of the village, and people may return immediately to town by motorized transportation (truck, boat with outboard engine, or snow machine) with the meat or fish they have obtained.

In the contemporary Canadian context, there are various formal institutions that influence Gwich'in use of land and resources. Since the settlement of the Gwich'in Comprehensive Claim in 1992 these institutions include co-management boards: the Gwich'in Renewable Resource Board (GRRB), the Gwich'in Land and Water Board, and the Gwich'in Land Use Planning Board; the Gwich'in Tribal Council and the Gwich'in Lands Office; community Renewable Resource Councils; local governments; the Porcupine Caribou Management Board; the Northwest Territories Department of

Resources, Wildlife and Economic Development (DRWED) and the Federal Department of Fisheries and Oceans. Comparable Yukon Departments regulate caribou hunting in the Yukon.

A variety of mandates and epistemologies guide the approaches to land and resource management promoted by these diverse organizations. Contemporary Gwich'in ordering of access to land and resources necessarily encompasses the intersection of Euro-Canadian and indigenous perspectives and goals, with these new formal institutions being laid over the highly informal and fluid traditional system. Contemporary Gwich'in find themselves dealing with a global cash economy, the intrusion of other resource values, such as natural gas, tourism, transportation corridors, and other actors, including tourists, resource industries and their employees, non-indigenous government biologists, and other government employees. The Department of Fisheries and Oceans, in consultation with the GRRB and the Renewable Resource Councils, regulates fishing gear, and attempts to collect a series of statistics on all fish caught or released by fishers with commercial licenses.

The conditions and constraints of the comprehensive claim define a bounded Gwich'in Settlement Area, which encompasses much, but not all, of the area traditionally used by Gwich'in of the Mackenzie and Peel Rivers. Within this Settlement Area, some parcels are designated as Gwich'in Private Lands, and other lands are co-managed by the government of the Northwest Territories, through their various agencies, and by the Gwich'in. Which kinds of activities can take place is influenced by the differences between the legal statuses of these types of land. Renewable Resource Councils, the Gwich'in Land Office, the Designated Gwich'in Organizations, and the Co-management boards, DRWED. Furthermore, the Gwich'in Tribal Council review and monitor activities, hold meetings to discuss what courses of action should be permitted, and negotiate the shape of activities on the land, by Gwich'in and other interested parties. Underneath all of this, informal institutions continue to operate as people choose where and when they will fish, hunt or trap. The resilience of all of these institutions, formal and informal, is challenged by the magnitude of proposed and likely changes as pipeline construction proceeds and oil and gas fields are developed in the Mackenzie Delta and perhaps on the Peel Plateau.

### **Seasonality, flexibility and changing contexts**

In an Arctic environment, everything is highly seasonal. Configurations of people and place can change dramatically depending on time of year, and

may be renegotiated for each season. Although fishing sites do not change dramatically, people may change the areas they choose to fish. Areas for hunting moose and caribou do change quite a bit from year to year, making it difficult to adequately render habitat on fixed maps. A measure of stability is provided by associations of particular families with specific areas, over periods of at least two to three generations, despite dramatic changes in Gwich'in life.

The changeability of Arctic environment is a major factor in needing flexible organization and the ability to shift spatially in response to shifts in animal populations, unusual weather, and the spatial distribution of stochastic events such as wild fire, which influence furbearer and fish habitats, ease of travel, and plant resources such as berries and firewood. The strong Gwich'in ethic of sharing meat and fish helps to ensure that the variations in harvest are evened out among members of the community, despite variations in the productivity of different areas at different times.

In the contemporary Canadian and global contexts, there are other factors that influence Gwich'in relationships to land. The Mackenzie Delta is part of Canada and the Northwest Territories. The 1992 comprehensive claim settlement dictated various institutional arrangements to accommodate Canadian, territorial, and Gwich'in rights and responsibilities vis-à-vis the land. The global economy continues to influence pressures on the land base by industries such as the oil and gas industry, and the viability of trapping, through the market for fine furs. The renewal of the Mackenzie Pipeline Project in the early years of the twenty-first century, and the frenzied boom in oil and gas exploration, has obvious effects on Gwich'in relationships to land and on participation in the land based economy. The accelerating changes in global climate also influence the Gwich'in homeland, as the Western Arctic is one of the areas which is experiencing significant rise in temperature, with associated permafrost melting and change of ice patterns and seasonal weather (e.g. Maxwell 1997, Nelson et al. 2002, Berkes and Jolly 2001). Indeed, Elders already comment that their ability to predict weather, so important for safe travel on the land, is diminished as weather and winds display novel patterns.

The local subsistence economy continues to be significant, though substantial investments in equipment and fuel are often now required to be able to harvest country foods. The dollar value of country foods, especially fish and wild meats, is very high<sup>2</sup> (cf. Wein and Freeman 1992; Wein 1994) though many people fail to realize their worth. Within this changed context, the local, informal institutions continue to operate, and newer institutions

such as the Renewable Resource Councils, the Band Councils, the Designated Gwich'in Organizations, the Gwich'in Tribal Council, the Porcupine Caribou Management Board, and the Gwich'in Co-management Boards monitor land and resource use and debate competing uses for land. Serious questions about the nature of the future landscape in the Mackenzie Delta are hotly debated as of this writing, when Imperial Oil and the other pipeline proponents are waiting for the conclusion of the environmental impact assessment and the decision of the National Energy Board. Concerns regarding the impacts of oil and gas development and of the gas pipeline, and their impacts on key places on the land, temper optimism about badly needed economic development and choices about the Gwich'in future. Concerns about the accelerating impact of global climatic change are also present, and no one is sure how the land, the seasons, or the animals will respond. Though the knowledge of the land may change, and the land and animals themselves may change, relationship to the land remains and will remain a foundation of Gwich'in life, health and identity.