

Canadian Wildlife Service
Arctic Ecology Map Series
Critical Wildlife areas

Descriptive report

Great Bear River

GREAT BEAR RIVER
(Sheet #2079)

The Great Bear River map sheet encompasses an area of some 137,000 square miles, which may be divided into three major ecological regions. The north and northeastern third of the sheet is tundra which varies from fairly uniform plains bordering Coronation Gulf to rugged plateau areas to the south.

The central and western portions of the sheet which comprise almost two thirds of the total area is largely northern coniferous forest. This region is interspersed with several small alpine and sub-alpine areas.

The third major ecological unit consists of a small extension of the Mackenzie Mountains in the extreme southwest corner of the sheet.

Prominent waterways of the sheet include Great Bear Lake, and some one hundred and fifty miles of the Mackenzie River.

The larger settlements include Fort Norman, Fort Franklin, Coppermine and Norman Wells. Several big game hunting and sport fishing camps are scattered throughout the region.

Dall Sheep and Woodland Caribou are common throughout the mountainous regions of the sheet. Grizzly Bears are widely distributed.

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Two major Barren-Ground Caribou populations, the Bathurst Inlet herd and the Bluenose herd winter on the map sheet. The Bathurst herd wintering area is primarily east and south of Great Bear Lake and the smaller Bluenose herd winters to the north. However, almost all of the map sheet may be considered a wintering area for Caribou.

Furbearers such as Marten, Arctic Fox and Beaver are common or abundant over much of the inland region, while Seals are numerous in the marine area of Coronation Gulf.

Large numbers of varied waterfowl species are found within the map sheet.

Large populations of Arctic Char, Whitefish, Grayling and Lake Trout are found in the major lakes and streams. Inconnu and several species of Herring are common in the Mackenzie River.

The following is the descriptive text for units mapped on this sheet.

UNIT NUMBER	DESCRIPTION
1	Ringed Seals occur in Coronation Gulf. No further data available. (Mansfield)
2	The Tree River system is an extremely productive Arctic Char area. The annual productivity is fifteen pounds per acre of spawning area, far above the normal productivity of Arctic rivers. In total the Tree River produces approximately 15,000 pounds of Char per year. (Hunter)
3	Scattered herds of Muskoxen are found within this general area during the winter. (Kelsall)
4	The Coppermine River system is an important area

UNIT NUMBER	DESCRIPTION
4 (continued)	for Grizzly Bears. Grizzlies are scattered all along the major river systems on the map sheet. (Hall) With a few exceptions no Arctic Char are found in the lakes adjacent to the Coppermine River. Most of the fish are confined to the river itself. The many pools within the river provide excellent spawning areas for Char. Productivity is up to two pounds per acre which is very high for Arctic rivers. In general, lake production is at the rate of $\frac{1}{2}$ pound per acre. Char are produced up the Coppermine River as far as Red Rock Lake, and are utilized by natives and for sport fishing throughout the system. (Hunter)
5	Muskoxen were reported seen in the vicinity of Takijua Lake in 1970. (Kelsall)
6	This is a Gyrfalcon nesting area which includes the Peacock Hills on the Thelon River sheet. (Kuyt)
7	These are suspected migration routes for the Bathurst Inlet Caribou herd from Bathurst Inlet to the wintering areas of Unit 13 and 10. Caribou have been seen during August and September in the Snare Lake area. (Hall) Woodland Caribou are abundant in this unit throughout the year. No good information on numbers or distribution is available. (Hawley) This unit extends to the Anderson River sheet to the east.
8	A Gyrfalcon nesting area. (Kuyt)
9	Resident Arctic Char populations occur in lakes on the southern portion of the map sheet. Production is generally $\frac{1}{2}$ pound per acre annually. Production increases gradually in lakes towards Hudson Bay. (Hunter)
10	This is a critical caribou wintering range for segments of the Bathurst Inlet Herd which move into this area during the fall and winter. Wolverine and Wolves are also common in this unit. (Kuyt)

UNIT NUMBER	DESCRIPTION
11	This unit is a Barren-Ground Caribou wintering range which extends from the Slave River sheet to the south. (Kuyt) Segments of the Bathurst Inlet Herd winter in this region.
12	Landlocked Arctic Char populations occur in the small lakes in this general area. Production is from .8 to 1 pound per acre. (Hunter)
13	This unit encompasses a key wintering area for Caribou which migrate from the northeast and south-east. Wolverine and Wolves are also quite common here. Wolverine are most common in a strip parallel to tree line. (Kuyt) This is a wintering area during December through to March for Barren-Ground Caribou which may be part of the Bluenose or the Bathurst Herd. (Hall)
14	This area contains an important sport fishery for Lake Trout. A fishing camp is located at Sawmill Bay. (Fuller)
15	This is a broad migration route and staging area for Swans, Snow Geese and White-Fronted Geese. Numerous ducks nest and molt in this unit from May 1st to September 1st. Snow Geese utilize the area primarily during fall migration. It is a Whistling Swan staging area from September 1st to 30th, and is frequented by White-Fronted Geese during fall staging. (Barry) The unit extends to the Slave River map sheet to the south.
16	This is excellent Caribou winter habitat which contains good lichen range. (Stevens)
17	Large populations of Whitefish migrate from Great Bear Lake into the Johnny Hoe River watershed. (Novakowski)

UNIT NUMBER	DESCRIPTION
18	Woodland Caribou winter range. This general region is hunted by Indian people of Fort Norman. (Simmons)
19	This unit is a critical area for Yukon Grizzly Bear. No further data available. (Simmons)
20	Woodland Caribou winter range. No further data available. (Simmons)
21	This region of the Mackenzie River is a spring staging area for Snow Geese, Whistling Swans, White-Fronted Geese and numerous ducks. The populations make use of the sandy islands of the Mackenzie River from May 6th to 23rd.
22	The area is very good Beaver habitat with densities of approximately one colony per square mile reported. (Hawley)
23	This area is an important staging area primarily for ducks and geese. Populations number in the tens of thousands. (Stevens)
24	Important Lake Trout fishery for sport fishing. No further data available. (Stevens)
25	Woodland Caribou are abundant throughout the year in this unit. No detailed information on numbers or distribution is available. (Hawley)
26	The lakes in this general area are important to native peoples in the Colville Lake area. Included are Colville Lake and adjacent lakes such as Lac Belot and Lac des Bois. (Stevens)

UNIT NUMBER

DESCRIPTION

27 This is an important Marten area which follows the Anderson River and extends to tree line on adjacent sheets. (Williams, Hall)
The area delineated is considered to be the most important Marten area in the Northwest Territories. (Hall)

28 This unit encompasses a Barren-Ground Caribou range that incorporates areas described by several individuals. (Hall, Kelsall, Hawley, Williams)

Kelsall and Hawley (1966) estimate 25,300 Caribou on the eastern portion of this unit.

This unit is an eastward extension of the Caribou wintering area delineated on the Arctic Red River sheet. The region east of the Anderson River is the major wintering area for 30,000± Caribou which summer to the north and east. For the general unit that overlaps several map sheets, and includes this unit the following description applies:
Barren-Ground Caribou have utilized this unit for several years. Numbers vary from about 1,500 to 10,000 or (reportedly) 20,000 animals. They may be a segment of the Great Bear Herd which numbers near 50,000 animals. However, many animals are known to summer between Paulatuk and Horton River while reports by Kelsall and Thomas indicate the animals of the main herd summer further east. In at least two winters, Caribou were continuous from the western portion of the unit to Colville Lake and eastward to the Horton River. This unit may be utilized from October through March. However, after about January 1st, herds will be located in the timbered area south of 69°. In some years the animals may leave the entire area by mid-January on a continuing southward trek.

UNIT NUMBER	DESCRIPTION
29	This unit is considered to be an important Marten area. (Williams) No further data available.
30	Muskoxen use this area in groups of 2 to 50 animals. Recent reports from summer observations suggest they occur in this area year round. (Hawley) This unit is duplicated on the Anderson River sheet to the north.
31	This unit encompasses an important area for Muskoxen and Barren-Ground Caribou which extends north to the Horton River sheet. (Barry, Tener, Kelsall) Observations have been made in the spring and summer south of Paulatuk and Darnley Bay and near Bluenose Lake. (Tener 1958) A population estimate of between 425 and 625 Muskoxen has been made by Kelsall, <u>et al.</u> in the area south of Paulatuk and Darnley Bay. Spring populations and calving herds of Caribou probably occur above the 1000 foot contour. Mid-summer range probably includes low lying coastal areas as well as western areas of the unit.

REFERENCES

Personal Communication

T. W. Barry
V. D. Hawley
J. P. Kelsall
E. Kuyt (Canadian Wildlife Service)
N. S. Novakowski
N. M. Simmons
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R. B. Hall
R. Williams (Northwest Territories, Game Branch)

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Reports and Publications

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