

Canadian Wildlife Service
Arctic Ecology Map Series
Critical Wildlife areas

Descriptive report

Peel River

PEEL RIVER*
(Sheet #2078)

This map sheet encompasses some 82,000 square miles of north-central Yukon Territories and a small portion of the Northwest Territories located west of the Mackenzie River.

The region is almost entirely alpine and sub-alpine with altitudes ranging from about 2,000 feet in the valleys to approximately 7,700 foot range. The principal mountain ranges in the south are the Mackenzie Mountains, the Wernecke Mountains and the Ogilvie Mountains. The northern region includes the south end of the Richardson Mountain range and the critical wildlife area encompassed by the Old Crow Flats.

Several major river systems such as the Porcupine, Peel and Arctic Red Rivers originate on this sheet and drain north or northwest. The only major settlement is located at Old Crow on the Porcupine River.

The chief wildlife species of the mountainous regions are resident Dall Sheep, Woodland Caribou, and Grizzly Bear. Grizzly Bear and Wolverine are generally distributed throughout

* That portion of the Peel River map sheet covered by the larger scale (1:500,000) Arctic Red River sheet has been deleted from this description and described in a separate report to accompany the Arctic Red River sheet.

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the map area as well as migrant and wintering populations of Barren-Ground Caribou from the Porcupine Herd. Beaver, muskrat and marten are also common and locally abundant along several of the lower river systems where the more productive habitat occurs. Major nesting and migrant waterfowl populations are at Old Crow Flats and along some of the downstream portions of the major rivers.

Moose are common residents of the Old Crow Flats and important wintering concentrations occur in the protected willow bottoms of the Driftwood, Porcupine, Bell, Eagle and Rock River systems.

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

UNIT NUMBER	DESCRIPTION
1	Woodland Caribou wintering area. (Simmons)
2	An important beaver area surrounding the critical Ramparts River beaver area. (Stevens, Bryant) (Bryant 1957), (Hawley 1966). This unit extends into the Arctic Red River map sheet.
3	Two Peregrine Falcons observed and one nest. These birds were nesting in August 1969. (Yorath)
4	Important Grizzly Bear area. (Simmons)
5	This is a duplication of a swan migration unit delineated on the Great Bear River sheet. (Barry)
6	Snow Geese, Whistling Swans, White-Fronted Geese are numerous. Ducks use this region of the Mackenzie River as a spring staging area, generally from May 6th to May 23rd. (Barry) This unit is a duplication of a unit delineated on the Great Bear River sheet.
7	A critical area for Grizzly Bear. No further data available. (Simmons)
8	Woodland Caribou wintering area, this is critical winter range. (Simmons)
9	An important Grizzly Bear area which extends south on the MacMillan River sheet. (Simmons)
10	Dall Sheep are plentiful in the Ogilvie and Wernecke Mountains. These animals are resident and are quite numerous throughout these mountain ranges. (Pearson)

UNIT NUMBER	DESCRIPTION
11	This unit encompasses Woodland Caribou range for the Steel Creek Herd. (Innes-Taylor) Caribou have been seen crossing the Whitehorse-Alaska road in this area in October. These animals are hunted here by residents of Whitehorse. (Fuller)
12	Caribou winter concentrations generally occur throughout the area. (Innes-Taylor) Caribou are found wintering and possibly calving through these regions as shown. Caribou are found all through the region and no specific information is available. (Pearson) This is the major wintering area for the Porcupine Herd. This unit contains good lichen range. (Belous) The unit boundary incorporates corroborative data provided by Stevens and Boxer.
13	Porcupine and Bell Rivers are known as nesting areas for Peregrine Falcons. (Pearson)
14	Salmon runs occur up the Salmon Fork of the Back River. No further data available. (Hawley)
15	Salmon runs occur up the Porcupine River. No data on extent of their range or numbers is available. (Hawley)
16	The area delineated appears to be the main wintering area for the "Porcupine Herd". Caribou winter fairly consistently along the northern part of this unit. Reports by Munro and Fuller indicate that the caribou winter well up toward the crest of the Ogilvie Mountains. Reports of caribou wintering up the Wind and Bonnet Plume Rivers have been received. The main wintering areas appear to be the Road, Trail and Caribou Rivers east of the Richardson Mountains, Eagle Plains, and Porcupine Plateau (head of Lord Creek to the west). Several thousand (general hunter

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estimate is about 10,000 but sometimes higher) winter in that eastern area from November through March. The caribou when moving northward either follow along the east side of the Richardson Mountains or cross the mountains into the headwaters of the Rock and Eagle Rivers.

Those caribou reach the Arctic Slope across the Rat River to Big Fish River, up the Bell River to Rapid Creek or via the Driftwood River to Blow River. Migration routes are continually variable. (Hawley)

The Old Crow Flats are a secondary wintering area for the Porcupine Caribou Herd. (Belous) This unit is the southern portion of the Old Crow Flats which extends northward on the Herschel sheet.

The Old Crow Flats is a critical area and represents important habitat for several species. The following information is a duplicate of the major description given for this area on the Herschel sheet.

The Old Crow Flats are the principal muskrat area of the Yukon Territory and are vital to the economy of the local inhabitants. Muskrats provide almost all of the cash income for the Old Crow Indians, and food for dogs and people in the spring. Populations are variable as with all known muskrat populations. Population densities are low, since the bulk of the habitat consists of shallow, relatively unproductive lakes. Productive marshes are lacking. As a result the habitat is probably more sensitive to disturbance by man or by muskrats alone and coupled with low primary productivity, results in drastic and rapid population fluctuations.

This unit supports a relatively dense population of moose year round. Few census or density figures are available, however the wintering population is probably larger than the summer population as a result of migration into the area. During the winter, flights over the area showed densities of about one-half to two moose per mile of flight line.

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DESCRIPTION

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(continued)

The Old Crow Flats and vicinity frequently winter several thousand caribou of the Porcupine Herd. The occurrence is erratic and numbers are variable. Reports from Old Crow are not very useful since the people need not travel long distances for caribou during the winter and reports do not necessarily reflect the numbers of animals over the entire range.

The Old Crow Flats constitutes the main migration route for caribou of the Porcupine Herd. Generally, in spring, the animals tend to funnel into a relatively narrow migration corridor from a much more extensive wintering area to the south. The animals wintering to the west move generally eastward and pass east of Old Crow River while those as far as the east side of the Richardson Mountains may veer just as far to the west. Generally the eastern segment migrates up the Bell River but may cross directly to the vicinity of Big and Little Fish Rivers or swing over to the Driftwood River to reach the Arctic Slope at the Blow River. Caribou have been reported regularly migrating through all parts of this unit. The fall migration appears to be influenced by the coastal barrier so that the migration is more uniform and contained. However, it is still quite variable. The main routes off the Arctic Slope are at the Blow River Pass and the headwaters of Fish River. In the Big and Little Fish Rivers, concentrations of 10-20,000+ animals have been reported frequently in recent years. That area is often occupied for a month or more (August to October) before migration continues down the Bell River or across the Rat River on the east side of the Richardson Mountains. (Hawley)

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Peregrine Falcons have been seen frequently along the Old Crow River and Johnson Creek drainages encompassed by this unit. Numerous birds were seen in 1964. (Youngman)

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18 This area is one of the migration corridors for the Porcupine Caribou Herd. It is used during both spring and autumn migration. (Boxer, Belous, et al.)

19 This is an important Dall Sheep area which extends to the Herschel and Arctic Red River map sheets. (Stevens)

The Dall Sheep in the area north of the Rat Pass in the Richardson Mountains seem to be increasing in population despite increased non-selective hunting by residents of the area. In 1964, the population was considered to be 58 animals from records kept by geologists who flew helicopters extensively throughout the summer. In 1969, over 100 animals were estimated by hunters in one day although they were unable to get exact counts of all groups observed from the ground. No objective comprehensive surveys or studies have been made of sheep in the area so range and numbers have not been documented in detail. However, superficial information indicates this population is discrete and separate from the sheep in the British Mountains and the sheep south of Rat Pass although no physical barrier excludes their mingling. Harvests from the area are not well documented but kills of from 6 to 50 per year have been recorded.

Grizzly Bear are commonly encountered in this area and appear to be quite numerous. Geologists working the area extensively remarked that they saw more bear (80+) than sheep (58 known to be different). (Hawley)

REFERENCES

Personal Communications

T. W. Barry
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N. M. Simmons
W. E. Stevens

A. Innes-Taylor Government of the Yukon Territory

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Petroleum Geology

P. M. Youngman National Museum of Canada

R. Belous

D. Boxer Northwest Territories, Game Branch

W. A. Fuller University of Alberta

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