

ORIGINAL PURPOSE To maintain undisturbed examples of subalpine parkland and alpine ecosystems in the Quesnel Highland.

OVERVIEW

Date established:	4 Dec. 1975	Location:	Palmer Range, 18 km ESE of Barkerville
ORC #:	3070	Latitude:	53°01'N
Map number:	93 H/3	Longitude:	121°16'W

Total Area:	418.85 ha	Elevation:	1,675-2,140 m
Land:	418.85 ha		

Access: Access to vicinity of reserve via logging road southeast from Barkerville. Full day hike needed to reach reserve from nearest road.

Biogeoclimatic Zones: Engelmann Spruce – Subalpine Fir (ESSF); Interior Mountain-Heather Alpine (IMA)

Biogeoclimatic Variant: ESSFwc3 Cariboo Wet Cold; IMAunp Undifferentiated Parkland

Ecosection: Bowron Valley

Region: Cariboo

Management Area: North Cariboo

COMPOSITION

Physical: The Palmer Range, an upland within the Shuswap Highland, trends from northwest to southeast and has summits about 2130 m in elevation. These were over-ridden by Pleistocene ice resulting in generally rounded profiles, and then subsequently dissected by local alpine glaciers and stream erosion. The reserve contains the centrally located Mount Tinsdale and summits to the northwest and southwest. From the northwest-southeast alpine backbone of the reserve the terrain falls away fairly gently to the southwest but more sharply to the northeast. Local alpine glaciers, long since melted, have formed a series of cirque basins along the northeast slopes of the reserve, giving a scalloped appearance in plain view.

Biological: Considerable gently sloping terrain with good soil cover, located from just below to just above timberline, results in a broad transition zone between subalpine forest and alpine tundra. This parkland and krummholz zone is a major feature of the reserve. At the lowest elevations a few fairly dense stands of spruce-fir forest are present, while extensive alplands occur above the parkland zone.

Eight communities have been described in the alpine zone. Two lichen-dominated types in which moss campion may be prominent occur on rocky outcrops. Soils with a high content of frost-shattered rock support associations characterized by one-flowered cinquefoil and alpine bluegrass, or by alpine fescue and common juniper. Communities dominated by three species of mountain-heather and by entire-leaved white mountain-avens are widespread on

well-drained slopes, while species like sibbaldia and snow willow characterize two communities in sites of late snow melt. Dominant species in the subalpine forest are subalpine fir and dwarf blueberry.

The fauna has not been surveyed, although excellent habitat for Grizzly Bears and Mountain Caribou is present in the reserve.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Caribou (northern mountain population)	Blue listed	Threatened / Special Concern (2002)	2

THREATS

Climate Change:	The reduction of alpine areas due to encroachment of migrating forest systems has been projected as a result of climate change. Due to their geographical restriction, alpine habitats may be unable to adapt to changing conditions while timberlines continue to rise.
Forestry:	Adjacent logging activity creates access to reserve.
Mining and exploration:	Adjacent mineral claims will lead to road construction and increased access to reserve.
Recreation:	Snowmobiling in adjacent area has expanded into the reserve.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE MOUNT TINSDALE ER ACCOUNT

Flora

blueberry, dwarf (*Vaccinium caespitosum*)
 bluegrass, alpine (*Poa alpina* ssp. *alpina*)
 cinquefoil, one-flowered (*Potentilla uniflora*)
 fescue, alpine (*Festuca brachyphylla*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 juniper, common (*Juniperus communis*)
 moss campion (*Silene acaulis* var. *acaulis*)
 mountain-avens, entire-leaved white (*Dryas integrifolia* ssp. *integrifolia*)
 sibbaldia (*Sibbaldia procumbens*)
 spruce, Engelmann (*Picea engelmannii*)
 willow, dwarf snow (*Salix nivalis*)

Fauna

Bear, Grizzly (*Ursus arctos*)
 Caribou (northern mountain population) (*Rangifer tarandus* pop. 15)