

SIKANNI CHIEF RIVER

ER #46

ORIGINAL PURPOSE To conserve alpine-subalpine ecosystems representative of the northern Rocky Mountains

CURRENT PURPOSE To conserve the northern most occurrence of Engelmann spruce in the Rocky Mountains

OVERVIEW

Date established:	29 May 1973	Location:	Headwaters of Sikanni Chief River, 190 km NW of Hudson's Hope
ORC #:	3046		
Map number:	94 F (1:125,000) and 98 F/8 (1:50,000) 3809; 3853	Latitude:	57°17'N
		Longitude:	124°07'W

Total Area:	2,173 ha	Elevation:	1,525-2,745 m
Land:	2,173 ha		

Access: Access by float plane to Sikanni Chief Lake followed by 1 km uphill walk to reserve boundary

Biogeoclimatic Zones: Spruce-Willow-Birch (SWB); Boreal Altai Fescue Alpine (BAFA)
Biogeoclimatic Variant: BAFAun Undifferentiated; SWBmk Moist Cool; SWBmks Moist Cool Scrub
Ecosection: Easter Muskwa Ranges
Region: Peace
Management Area: Liard

COMPOSITION

Physical: Featuring spectacular alpine terrain in the heart of the northern Rockies, this triangular reserve encompasses the watersheds of two small streams that flow southwest into Sikanni Chief Lake at the extreme headwaters of the Sikanni Chief River. Reserve boundaries follow heights of land except the southwestern (lower) edge which follows the 1524 m (5000 ft.) contour. The varied terrain includes jagged peaks, cliffs, talus slopes, rock ledges, and vegetated alpine slopes. Alpine features such as cirque basins, moraines, small alpine glaciers, solifluction lobes and patterned ground are present. Due to the northern latitude, inland location, and high elevation, the climate is severe and the growing season short.

Biological: The reserve encompasses two biogeoclimatic zones. A fringe below about the 1650 m level has extensive shrub cover and scattered trees characteristic of the Spruce-Willow-Birch Zone. Typical associations here are the grey-leaved willow-subalpine fir, and scrub birch-Engelmann spruce types. This is the northernmost known occurrence of Engelmann spruce in the Rocky Mountains. Small water sedge fens occur in the Spruce-Willow-Birch Zone, as well as lush timberline meadows dominated by Indian hellebore, cow-parsnip, and willows.

In the Boreal Altai Fescue Alpine zone, communities dominated by alpine club-

moss (*Diphasiastrum alpinum*), four-angled mountain-heather (*Cassiope tetragona*), netted willow, arctic willow, Barratt's willow, fireweed, white mountain-avens, and black alpine sedge have been noted. Showy wildflowers include saxifrages, fleabanes, and butterweeds.

Caribou (*Rangifer terandus*), Moose (*Alces americanus*), Hoary Marmots (*Marmota caligata*), and chipmunks have been seen in the reserve. Excellent habitat is present for Stone's Sheep, Mountain Goat (*Oreamnos americanus*), Grizzly Bear (*Ursus arctos*), Golden Eagle (*Aquila chrysaetos*), ptarmigan and a variety of other arctic-alpine wildlife.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Caribou (northern mountain population)	Blue listed	Threatened / Special Concern (2002)	2
Grizzly Bear (<i>Ursus arctos</i>)	Blue listed	Special Concern (2002)	2
Wolverine, ssp. <i>luscus</i>	Blue listed	Special Concern (2003)	2

THREATS

Climate Change: It has been projected that alpine areas may be at high risk as a result of climate change due to their geographically restricted habitats. As the temperature warms and growing degree days increase, forest systems, as they expand and/or migrate, may encroach upon alpine ecosystems. This is highly dependent on a multitude of factors including sufficient moisture and nutrient availability for forest colonization.

RESEARCH OPPORTUNITIES

As the known northern end of the Englemann spruce range, this is a good place to monitor the range changes due to climate change.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE SIKANNI CHIEF RIVER ER ACCOUNT

Flora

birch, scrub (*Betula nana*)
 club-moss, alpine (*Diphasiastrum alpinum*)
 cow-parsnip (*Heracleum maximum*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 fireweed (*Epilobium angustifolium*)
 hellebore, Indian (*Veratrum viride*)
 mountain-avens, white (*Dryas octopetala*)
 mountain-heather, four-angled (*Cassiope tetragona*)
 sedge, black alpine (*Carex nigricans*)
 spruce, Engelmann (*Picea engelmannii*)
 willow, arctic (*Salix arctica*)

willow, Barratt's (*Salix barrattiana*)
willow, grey-leaved (*Salix glauca*)
willow, net-veined (*Salix reticulata*)

Fauna

Bear, Grizzly (*Ursus arctos*)
Caribou (northern mountain population) (*Rangifer tarandus pop. 15*)
Chipmunk (*Neotamias* spp.)
Eagle, Golden (*Aquila chrysaetos*)
Goat, Mountain (*Oreamnos americanus*)
Marmot, Hoary (*Marmota caligata*)
Moose (*Alces americanus*)
Ptarmigan (*Lagopus* spp.)
Sheep, Stone's (*Ovis dalli stonei*)
Wolverine, subspecies *luscus* (*Gulo gulo luscus*)
