

## 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

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

<b>Total Area:</b>	2,173 ha	<b>Elevation:</b>	1,525-2,745 m
<b>Land:</b>	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-parsonip, 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	
<b>Climate Change:</b>	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.

<b>RESEARCH OPPORTUNITIES</b>	As the known northern end of the Englemann spruce range, this is a good place to monitor the range changes due to climate change.
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**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*)

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

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**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*)

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