

## SUNBEAM CREEK

ER #39

### ORIGINAL PURPOSE

To protect a variety of alpine communities representative of the western edge of the Rocky Mountains

### OVERVIEW

<b>Date established:</b>	2 June 1972	<b>Location:</b>	McBride Peak, 5.5 km NE of the town of McBride
<b>ORC #:</b>	3039	<b>Latitude:</b>	53°21'N
<b>Map number:</b>	93 H/8	<b>Longitude:</b>	120°06'W

<b>Total Area:</b>	511 ha	<b>Elevation:</b>	1,830-2,270 m
<b>Land:</b>	511 ha		

**Access:** Access to vicinity of reserve is available by foot or four-wheel drive vehicle up fire lookout road, east of McBride.

**Biogeoclimatic Zones:** Interior Mountain-heather Alpine (IMA)  
Engelmann Spruce – Subalpine Fir (ESSF).

**Biogeoclimatic Variants:** IMA un IMA Undifferentiated;  
ESSF mm1 ESSF Raush Moist Mild;  
ESSF mmp ESSF Moist Mild Parkland.

**Ecosection:** Northern Park Ranges

**Region:** Omineca

**Management Area:** Robson Area

### COMPOSITION

**Physical:** The reserve encompasses McBride Peak and adjacent summits to the northeast and northwest. These mountains form the western-most flank of the Park Range, immediately adjacent to the Rocky Mountain trench. Mountains in the reserve have generally rounded summits, having been overtopped by a dome of Pleistocene ice which reached the 2450 m elevation. They therefore lack the matterhorn-like peaks of higher mountains further east in the Park Ranges which protruded above the regional ice sheet, e.g. Mount Robson. Local alpine glaciers and stream erosion during the past ten thousand (10, 000) years have dissected the rounded summits to some extent, producing U-shaped valleys separated by relatively sharp crests. Surficial materials are largely morainal and colluvial. Freeze-thaw action has resulted in characteristic alpine features like solifluction lobes and frost-shattered rock. The climate is cold and windy. Glaciers do not presently exist, but snow patches are present on north-facing slopes for most of the summer. Drainage is via Sunbeam Creek and McKale River into the Fraser.

**Biological:** Slopes in the reserve face all directions and terrain varies from moist stream-bottoms to alpine crests, therefore, a variety of alpine plant communities are present. To date, however, these have been only superficially described. A few scattered whitebark pine and subalpine fir trees, largely in a krummholz form, occur on slopes along stream valleys in the lowest parts of the reserve (1830-1950 m). These areas may have affinities with the Engelmann Spruce-Subalpine Fir Zone, but are extremely limited in extent. The bulk of the reserve is in the

Interior Mountain-heather Alpine zone.

Extensive well-drained slopes above the treeline are dominated by pink, yellow and white mountain-heather and white mountain-avens. White rhododendron, oval-leaved blueberry, Sitka valerian and Indian hellebore are common at lower elevations. Moss campion, glaucous gentian, and a variety of grasses, sedges and lichens are present.

**MANAGEMENT CONCERNS**

<b>SIGNIFICANT SPECIES</b>	<b>BC LIST STATUS</b>	<b>COSEWIC STATUS</b>	<b>CF PRIORITY</b>
Grizzly Bear	Blue listed	Special Concern (2002)	2
Mountain Caribou (northern mountain pop.)	Blue listed	Threatened / Special Concern (2003)	2
Wolverine		Special Concern (2003)	2
Hoary Marmots			5
Ptarmigan			

**THREATS**

**Climate Change:**

The IPCC projects an eventual reduction of alpine tundra ecosystems due to the upward movement of the treeline to higher elevations. The warmer temperatures, increased growing degree days, and decrease of snow patches may encourage this upward migration of forest systems.

**Recreation:**

The alpine area is used for recreation because of easy access and the location of the ER in the middle of a well known hiking route.

**Utilities and utility corridors:**

There is a communications tower on site, which was there before the reserve was designated.

**ER WARDEN ACTIVITIES**

- Monitor/report illegal recreation activity where observed
- Continue to survey both flora and fauna present in ER
- Monitor for invasive plants (control or eradicate where possible)

## SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE SUNBEAM CREEK ER ACCOUNT

### Flora

blueberry, oval-leaved (*Vaccinium ovalifolium*)  
fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)  
gentian, glaucous (*Gentiana glauca*)  
hellebore, Indian (*Veratrum viride*)  
moss campion (*Siene acaulis* var. *acaulis*)  
mountain-avens, white (*Dryas octopetala*)  
mountain-heather, pink (*Phyllodoce empetriiformis*)  
mountain-heather, white (*Cassiope mertensiana* var. *mertensiana*)  
mountain-heather, yellow (*Phyllodoce glanduliflora*)  
pine, whitebark (*Pinus albicaulis*)  
rhododendron, white-flowered (*Rhododendron albiflorum*)  
valerian, Sitka (*Valeriana sitchensis*)

### Fauna

Bear, Grizzly (*Ursus arctos*)  
Caribou, Mountain (*Rangifer tarandus*)  
Marmot, Hoary (*Marmota caligata*)  
Ptarmigan (*Lagopus* spp.)  
Wolverine (*Gulo gulo*)

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