

ORIGINAL PURPOSE To protect a complete watershed containing an elevational sequence of three biogeoclimatic zones in a wet interior environment

CURRENT PURPOSE To protect a unique old growth ecosystem containing a diverse elevational sequence of three biogeoclimatic zones

OVERVIEW

Date established:	8 March 1972	Location:	SW side of Trout Lake 35 km E of Upper Arrow Lake
ORC #:	3031	Latitude:	50°32'N
Map number:	82 K/11	Longitude:	117°27'W

Total Area:	896 ha	Elevation:	790-2,500 m
Land:	887 ha		
Lake:	9 ha		

Access: Access by boat on Trout Lake.

Biogeoclimatic Zones: Interior Cedar-Hemlock (ICH); Engelmann Spruce-Subalpine Fir (ESSF); Interior Mountain-heather Alpine (IMA)

Variants: IMAun Undifferentiated; ESSFwc1 Columbia Wet Cold; ESSFwc4 Selkirk Wet Cold; ESSFwcp Wet Cold Parkland; ESSFwcv Wet Cold Woodland; ICHwk1 Wells Gray Wet Cool

Ecosection(s): Central Columbia Mountains

Region: Kootenay

Management Area: Arrow Slocan

COMPOSITION

Physical: Mount Hadow and adjacent serrate peaks of the Slocan Ranges mark the upper-elevational southwest boundary of the reserve and provide a spectacular backdrop. Below the vertical headwalls of this peak is a prominent cirque basin containing an alpine glacier which feeds directly into a subalpine lake, the source of Lew Creek. Reserve boundaries enclose the entire rather narrow valley of Lew Creek, a turbulent mountain stream which flows northeast into Trout Lake. Rock and talus are widespread in the alpine zone, as are avalanche chutes in the subalpine forest.

Biological: The reserve spans three biogeoclimatic zones. At the lowest elevations, below about the 1450 m elevation, western hemlock-western redcedar-western yew forest is quite continuous, and characterized by one-leaved foamflower and oak fern in the understory. Smaller, richer lowland sites support cedar stands in which devil's club, false-Solomon's seal and lady fern are typical. Subalpine forests are extensive but broken into ribbons by many avalanche paths, particularly in the upper part of the valley. In the lower, more continuous Engelmann spruce-subalpine fir stands, either white rhododendron and queen's cup or white rhododendron and black huckleberry are dominant species in the understory. Toward timberline, subalpine fir is more abundant than spruce, tree growth is more patchy and stunted, and whitebark pine, white rhododendron

and blue-leaved huckleberry are frequent associated species.

Although a sizeable area is within the Interior Mountain-heather Alpine zone, much of this consists of cliffs, talus, ice and snow.

Habitat capability for ungulates is generally low due to deep snow, however, a few mountain goats and caribou inhabit the area.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Caribou (southern population)	Red listed	Threatened (2000)	2
Grizzly Bear	Blue listed	Special Concern (2002)	2
Wolverine, ssp. <i>luscus</i>	Blue listed	Special Concern (2003)	2

THREATS

Climate Change: As the climate continues to change, a multitude of reactions may occur in this diverse reserve. The alpine glacier that feeds the subalpine lake and Lew Creek may continue to melt at an accelerated rate, flooding the creek and resulting in habitat loss for species currently present. It could also result in increased erosion and sedimentary deposit, and eventually lower water flow during summer months due to the lack of frozen reserves. The changing conditions may result in the reorganization of the specie assemblages, altering the present ecosystem representations within this reserve.

Forestry: There is logging adjacent to the reserve.

Transportation corridor: Access may increase due to planned road construction; connectivity will be disrupted.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE LEW CREEK ER ACCOUNT

Flora

devil's club (*Oplonanax horridus*)
 fern, lady (*Athyrium filix-fernina*)
 fern, oak (*Gymnocarpium dryopteris*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 foamflower, one-leaved (*Tiarella unifoliata*)
 hemlock, western (*Tsuga heterophylla*)
 huckleberry, black (*Vaccinium membranaceum*)
 huckleberry, blue-leaved (*Vaccinium deliciosum*)
 pine, whitebark (*Pinus albicaulis*)
 queen's cup (*Clintonia uniflora*)
 redcedar, western (*Thuja plicata*)
 rhododendron, white-flowered (*Rhododendron albiflorum*)
 Solomon's-seal, false (*Maianthemum racemosum* ssp. *amplexicaule*)

spruce, Engelmann (*Picea engelmannii*)
yew, western (*Taxus brevifolia*)

Fauna

Bear, Grizzly (*Ursus arctos*)
Caribou (southern population) (*Rangifer tarandus* pop.1)
Goat, Mountain (*Oreamnos americanus*)
Wolverine, ssp. *luscus* (*Gulo gulo luscus*)
