

PATSUK CREEK

ER #85

ORIGINAL PURPOSE To protect excellent examples of paper birch forest and a rich assemblage of associated plants

OVERVIEW

Date established:	10 Feb. 1978	Location:	38 km NNW of Mackenzie
ORC #:	3085	Latitude:	55°38'N
Map number:	93 O/11	Longitude:	123°23'W

Total Area:	438 ha	Elevation:	715-1,555 m
Land:	437 ha		
Lake:	1 ha		

Access: Access via Parsnip forest access road.

Biogeoclimatic Zone: Sub-Boreal Spruce (SBS); Engelmann Spruce-Subalpine Fir (ESSF)
Biogeoclimatic Variants: ESSFwk2 Misinchinka Wet Cool; ESSFwc3 Cariboo Wet Cold; SBSmk2 Williston Moist Cool; SBSwk2 Finlay-Peace Wet Cool
Ecosection: Northern Hart Ranges; Parsnip Trench
Region: Omineca
Management Area: Omineca

COMPOSITION

Physical: The reserve is situated on moderate to steep mountain slopes bordering Patsuk Creek, which flows from the Misinchinka Range into Parsnip Reach of Williston Lake via Six Mile Creek. Most of the reserve is south of the creek, with slope exposure to the northwest and west. Small, flat, alluvial sites occur along the fast-flowing stream which drops at a rate of about 20 m per km in this area.

Biological: Stands of paper birch, not of widespread occurrence in the province, are an important feature here. These stands and smaller areas of aspen and lodgepole pine, in the Sub-Boreal Spruce Zone below about the 1075 m elevation, appear to have originated after a fire. Forest cover maps indicate the stands to be 85 - 105 years old in 2010.

Birch forest dominates on the cool, moist, northwesterly exposed slopes above Patsuk Creek. In places birch is mixed with aspen or white spruce, which also attain good growth here. In typical birch forest, trembling aspen is sub-dominant, Douglas maple characterizes the shrub layer, and mosses are abundant on the ground. A few shrubby openings support an association of Douglas maple, red elderberry, ostrich fern, stinging nettle and moss, while alluvial flats along Patsuk Creek have developed a balsam poplar-Drummond's willow-soopolallie-lichen community. Aspen and lodgepole pine woods tend to occur at middle elevations on steep, dry, west-facing slopes. Scattered white spruce stands occur at middle elevations and just inside the southwest corner of the reserve.

In the Engelmann Spruce-Subalpine Fir Zone, which occupies about half of the reserve area, an Engelmann spruce-Subalpine fir-black huckleberry-bunchberry association is present.

One rare plant, the mountain bladder fern (*Cystopteris montana*), is known to be associated with blue clay soils in the reserve.

The fauna has not been surveyed, but moose and bears are known to be common. Arctic grayling occur in Patsuk Creek.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
mountain bladder fern			4

THREATS

Climate Change:	Drier conditions (due to warmer temperatures and changed hydrology) may reduce the productivity of paper birch and associated vegetation.
Access:	Firewood collection, poaching and plant harvesting may occur due to ease of access

RESEARCH OPPORTUNITIES	Reserve protects a relatively unusual forest stand dominated by paper birch.
-------------------------------	--

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE PATSUK CREEK ER ACCOUNT

Flora

aspen, trembling (*Populus tremuloides*)
 birch, paper (*Betula papyrifera*)
 bunchberry (*Cornus canadensis*)
 elderberry, red (*Sambucus racemosa*)
 fern, mountain bladder (*Cystopteris montana*)
 fern, ostrich (*Matteuccia struthiopteris*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 huckleberry, black (*Vaccinium membranaceum*)
 maple, Douglas (*Acer glabrum* var. *glabrum*)
 nettle, stinging (*Urtica dioica*)
 pine, lodgepole (*Pinus contorta* var. *latifolia*)
 poplar, balsam (*Populus balsamifera* ssp. *balsamifera*)
 soopolallie (*Shepherdia canadensis*)
 spruce, Engelmann (*Picea engelmannii*)
 spruce, white (*Picea glauca*)
 willow, Drummond's (*Salix drummondiana*)

Fauna

Bear (*Ursus* spp.)
 Grayling, Arctic (*Thymallus arcticus*)
 Moose (*Alces americanus*)