

# CHILAKO RIVER

ER #79

**ORIGINAL PURPOSE** To protect the most southerly known stand of tamarack trees in British Columbia

## OVERVIEW

<b>Date established:</b>	15 Dec.	<b>Location:</b>	54 km S of Vanderhoof; 2 km N of Chilako River
<b>ORC #:</b>	1977		
<b>Map number:</b>	3079	<b>Latitude:</b>	53°32'N
	93 G/12	<b>Longitude:</b>	123°57'W

<b>Total Area:</b>	66 ha	<b>Elevation:</b>	900-915 m
<b>Land:</b>	66 ha		

**Access:** Access via logging roads south from Vanderhoof. A road follows the east boundary of the reserve.

**Biogeoclimatic Zone:** Sub-Boreal Spruce (SBS)  
**Biogeoclimatic Variants:** SBSdw2 Blackwater Dry Warm  
**Ecosection:** Nazko Upland  
**Region:** Omineca  
**Management Area:** Nechako

## COMPOSITION

**Physical:** The reserve lies on the gently rolling surface of the Nechako Plateau and has little variation in relief. A shallow east-west depression across the reserve is occupied by a minor water course which drains wetlands located on the east. This flows westward to join other creeks which enter the Chilako River. Drumlins and flutings indicate that Pleistocene ice moved northeastward in this area. The variable local soils are developed on glacial till. The climate is expected to be slightly cooler than Vanderhoof, which is 300 m lower in elevation.

**Biological:** In 2005, nearly the entire southern half of this reserve was burned by wildfire. Other areas within the reserve have been disturbed by the recent Mountain Pine Beetle infestation.

The major feature of this reserve is a stand of vigorous tamarack trees located well to the south of the usual range of this species in the Boreal White and Black Spruce Zone of the Peace River-Fort Nelson-Liard area. Black spruce is also near the southern limit of its range here. The reserve is largely forested, but contains small, scattered sedge meadows.

Three forest communities have been described here. Sites dominated by tamarack are swampy and the ground cover is characterized by sphagnum mosses and other moisture-loving bryophytes. Mixed black spruce -tamarack stands, in which shrubs such as Labrador tea and scrub birch are common, also occur. Many trees in these stands are festooned with black arboreal lichens. Drier locations in the reserve support spruce-lodgepole pine forest, with ground cover dominated by mosses and lichens. Other upland species include

trembling aspen, common juniper, prickly rose, Bebb's willow and soopolallie.

The fauna has not been surveyed.

#### MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
tamarack			4

#### THREATS

**Climate Change:** Since much of this reserve has burned and been disturbed by beetle infestation, the primary concern that is related to climate change may be changed community composition due to the proliferation of invasive species. Also, as the climate continues to warm and dry, this reserve's border may no longer encompass the most southerly limit of tamarack trees as the climatic envelope associated with tamarack habitat shifts northward.

**Access:** Harvest of mushrooms and potential hunting occurs in this reserve.

**Forest health:** Nearly half the reserve was burned in a forest fire in 2005.

#### RESEARCH OPPORTUNITIES

The recent wildfires offer the opportunity to study community succession and the role of fire disturbance in functioning ecosystems.

A unique opportunity to study the southern end of a species range when climate envelopes are shifting northward.

#### SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE CHILAKO RIVER ER ACCOUNT

##### Flora

aspen, trembling (*Populus tremuloides*)  
birch, scrub (*Betula nana*)  
juniper, common (*Juniperus communis*)  
Labrador tea (*Ledum groenlandicum*)  
moss, peat (*Sphagnum spp.*)  
pine, lodgepole (*Pinus contorta* var. *latifolia*)  
rose, prickly (*Rosa acicularis* spp. *sayi*)  
soopolallie (*Shepherdia canadensis*)  
spruce, black (*Picea mariana*)  
tamarack (*Latix laricina*)  
willow, Bebb's (*Salix bebbiana*)