

ALEZA LAKE

ER # 84

ORIGINAL PURPOSE To protect forests representative of a cool wet region within the Sub-Boreal Spruce Zone for research purposes

OVERVIEW

Date established:	10 Feb. 1978	Location:	50 km NE of Prince George; 4 km SW of Aleza Lake
ORC #:	3084	Latitude:	54°05'N
Map number:	93 J/1	Longitude:	122°06'W

Total Area:	269 ha	Elevation:	630-700 m
Land:	259 ha		
Lake:	10 ha		

Access: Access by road south from Old Highway 16, 3 km west of Aleza Lake village. A road follows the east and south reserve boundaries.

Biogeoclimatic Zone: Sub-Boreal Spruce
Biogeoclimatic Variant: SBS Willow Wet Cool (wk1)
Ecosection: McGregor Plateau
Region: Omineca
Management Area: Upper Fraser

COMPOSITION

Physical: The reserve lies on a gently dissected plain of low relief between the Fraser and Bowron rivers. This area was flooded by a glacial lake at the close of the ice age and is underlain by glacial lake clays. The reserve has a very gentle slope to the north, and small streams flowing northward in shallow valleys have their headwaters in the reserve. A shallow lake, about 12 ha in size, is located near the south boundary.

Biological: Except for the lake and a few small bogs the reserve is entirely forested. A variety of tree species is present but stands tend to be dominated by white spruce. Pure stands of white spruce have an understory characterized by black huckleberry, queen's cup, and mosses (knight's plume and red-stemmed feather moss). Dry sites support mixed stands of spruce, lodgepole pine, Douglas-fir and trembling aspen in which prince's pine, rattlesnake-plantain and mosses are typical associates. In more moist locations, subalpine fir is co-dominant with white spruce and the understory may be dominated by oak fern and knight's plume moss or by devil's club and oak fern.

A few small bog forests consist of a black spruce-scrub birch-sphagnum moss association. Wetlands heavily dominated by beaked sedge occur around the lake margin, as well as a few ponded areas in which water sedge and buckbean predominate. Waterlily and other aquatic plants occur in shallow parts of the lake.

The fauna has not been described. Lands in this area have a moderate capability for production of Moose. Snow depth limits the occurrence of deer.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES

None listed

THREATS

Climate Change:	<p>The Sub-Boreal Spruce zone has been predicted to reduce in size. The climate may change from cool and wet, conditions to which the ecosystems are adapted, to warm and dry as precipitation patterns change and temperatures rise.</p> <p>The composition of lake and associated communities may change due to eutrophication, higher water temperature, overall water quality and the resultant change in aquatic productivity.</p>
Harvest:	<p>Collection of firewood removes valuable biomass from ecosystem.</p>
Poaching:	<p>Moose and deer.</p>
Transportation corridor:	<p>Roads along two boundaries of reserve increase access.</p>

RESEARCH OPPORTUNITIES

Since 1993 two climate stations have been maintained in this area by the Aleza Lake Research Forest (UNBC and UBC). One is within the ecological reserve in an old-growth site, and the other is immediately outside the reserve in a clear cut.

A partial list of plants has been prepared.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE ALEZA LAKE ER ACCOUNT

Flora

aspen, trembling (*Populus tremuloides*)
birch, scrub (*Betula nana*)
buckbean (*Menyanthes trifoliata*)
devil's club (*Oplopanax horridus*)
Douglas-fir (*Pseudotsuga menziesii*)
fern, oak (*Gymnocarpium* spp.)
fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
huckleberry, black (*Vaccinium membranaceum*)
knight's plume (*Ptilium crista-castrensis*)
moss, peat (*Sphagnum* spp.)
moss, red-stemmed feather (*Pleurozium schreberi*)
pine, lodgepole (*Pinus contorta* var. *latifolia*)
prince's pine (*Chimaphila umbellata* ssp. *occidentalis*)
queen's cup (*Clintonia uniflora*)
rattlesnake-plantain (*Goodyera oblongifolia*)
sedge, beaked (*Carex utriculata*)
sedge, water (*Carex aquatilis*)

spruce, black (*Picea mariana*)
spruce, white (*Picea glauca*)
waterlily (*Nymphaea* sp.)

Fauna

Deer, Mule (*Odocoileus hemionus*)
Moose (*Alces americanus*)
