

ORIGINAL PURPOSE To protect representative trembling aspen stands and associated vegetation and fauna within the Sub-Boreal Spruce Zone

OVERVIEW

Date established:	10 Feb. 1978	Location:	23 km NNW of Mackenzie
ORC #:	3087	Latitude:	55°31'N
Map number:	93 O/11	Longitude:	123°15'W

Total Area:	284 ha	Elevation:	730-885 m
Land:	265 ha		
Lake:	19 ha		

Access: Access via Parsnip forest access road

Biogeoclimatic Zone:	Sub-Boreal Spruce (SBS)
Biogeoclimatic Variants:	SBSmk2 Williston Moist Cool; SBSwk2 Finlay-Peace Wet Cool
Ecosections:	Northern Hart Ranges; Parsnip Trench
Region:	Omineca
Management Area:	Omineca

COMPOSITION

Physical: The reserve encompasses an elongate, well-drained, northwest-southeast trending ridge with a low, rounded summit. The ridge lies at the eastern edge of the floor of the Rocky Mountain Trench, a structurally controlled valley with considerable glacial drift on its floor. Two small lance-shaped lakes separated by narrows, and their inflow stream, mark the east boundary. These drain via a creek around the north end of the ridge and westward to Williston Lake. These are virtually the only aquatic/wetland habitats in the reserve. Numerous lakes lie on the trench floor just west of the reserve; the Misinchinka Ranges of the Rockies rise to the east.

Biological: The feature of major interest is a fairly extensive, mature stand of trembling aspen with a dense, diverse understory of shrubs. This is a productive site for aspen growth compared to others in the region. White spruce also occurs, in some places as a dominant and in others as a sub-dominant, in the aspen woods. Juvenile spruces occur in much of the aspen forest and, in the absence of fire, this species will probably become dominant over much of the area.

Only two communities have been described here to date. Typical aspen woods have a shrub layer characterized by Douglas maple and birch-leaved spirea, and herbaceous cover characterized by prince's pine and rattlesnake-plantain. Other common shrubs are Sitka alder, highbush-cranberry, red-osier dogwood, and red elderberry. In white spruce stands, black huckleberry is the typical shrub while queen's cup, bunchberry, and red-stemmed feather moss characterize the ground cover. Forest cover maps indicate that lodgepole pine stands also occur. Other trees present include Subalpine fir, Engelmann spruce, paper birch and balsam poplar.

The fauna of the reserve has not been surveyed but this habitat type provides high quality winter range for moose. Aspen woodlands usually support a high diversity and abundance of small mammals and songbirds. Arctic grayling are reported to occur in the two lakes in the reserve.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES

None listed

THREATS

Climate Change:

The biodiversity of these aspen woodlands may change due to climate changes. Altered climatic conditions, such as warmer temperatures and drier soils, will favour some species, resulting in a shift in community composition.

RESEARCH OPPORTUNITIES

An excellent and accessible site to study the flora and fauna of aspen-dominated ecosystems.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE HEATHER LAKE ER ACCOUNT

Flora

alder, Sitka (*Alnus viridis* ssp. *sinuata*)
 aspen, trembling (*Populus tremuloides*)
 birch, paper (*Betula papyrifera*)
 bunchberry (*Cornus canadensis*)
 dogwood, red-osier (*Cornus stolonifera*)
 elderberry, red (*Sambucus racemosa*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 highbush-cranberry (*Viburnum edule*)
 huckleberry, black (*Vaccinium membranaceum*)
 maple, Douglas (*Acer glabrum* var. *glabrum*)
 moss, red-stemmed feather (*Pleurozium schreberi*)
 pine, lodgepole (*Pinus contorta* var. *latifolia*)
 poplar, balsam (*Populus balsamifera* ssp. *balsamifera*)
 prince's pine (*Chimaphila umbellata* ssp. *occidentalis*)
 queen's cup (*Clintonia uniflora*)
 rattlesnake-plantain (*Goodyera oblongifolia*)
 spirea, birch-leaved (*Spiraea betulifolia* ssp. *lucida*)
 spruce, Engelmann (*Picea engelmannii*)
 spruce, white (*Picea glauca*)

Fauna

Grayling, Arctic (*Thymallus arcticus*)
 Moose (*Alces americanus*)