

## TORKELSEN LAKE

ER #73

**ORIGINAL PURPOSE** To retain an accessible northern bog-forest complex for research and educational uses

### OVERVIEW

<b>Date established:</b>	4 Dec. 1975	<b>Location:</b>	50 km NE of Smithers; 4 km W of the north arm of Babine Lake
<b>ORC #:</b>	3073	<b>Latitude:</b>	55°07'N
<b>Map number:</b>	93 M/2	<b>Longitude:</b>	126°40'W

<b>Total Area:</b>	182 ha	<b>Elevation:</b>	855-885 m
<b>Land:</b>	182 ha		

**Access:** Access is possible on the road between Smithers and Fort Babine, which passes along the east boundary of the reserve.

<b>Biogeoclimatic Zone:</b>	Sub-Boreal Spruce (SBS)
<b>Biogeoclimatic Variant:</b>	SBSmc2 Babine Moist Cold
<b>Ecosection:</b>	Babine Upland
<b>Region:</b>	Skeena
<b>Management Area:</b>	Babine

### COMPOSITION

**Physical:** This reserve is on the floor of a broad northeast-southwest trending valley flanked by mountains rising to 1200 m or higher. Except for a hill on its western side, most of the reserve is flat and boggy. It is located at a divide between streams draining into Babine Lake and into the Bulkley River. Aerial photos show prominent north-south glacial striations on the valley floor. Soils are predominantly Organic types in which plant materials are poorly decomposed.

**Biological:** A mosaic of open bog, sparsely treed bog woodland, and dense forest is present. Three wetland communities have been described. Open shrubby fens are dominated by grey-leaved and Barclay's willows, mountain alder, cloudberry, and sphagnum moss. Sedge-dominated marsh and fen occur along the creek and pond margins. Cloudberry is particularly abundant in these sites. Forested bog communities include white and black spruce stands with ground cover dominated by Labrador tea and four species of moss, and a white and black spruce type containing subalpine fir, sweet colt's-foot (*var. palmatus*), and mosses. On higher ground the tree cover is comprised of white and Engelmann spruce hybrids and subalpine fir, and the understory is characterized by dwarf blueberry, black huckleberry, and several mosses among which sphagnum is not included. This reserve appears to be rich in species of mosses. Other trees present are lodgepole pine, paper birch, and black cottonwood. A more extensive list of plants is available.

The fauna has not comprehensively been surveyed. Beaver dams are evident on air photos, and Moose are known to be common in the area. Tracks of Wolverine, American Marten, Short-tailed Weasel and Snowshoe Hare have been seen in the reserve. A brief list of birds and dragonflies is available.

**Cultural:** Reserve lies within Lake Babine First Nation's asserted territory.

#### MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
cloudberry			4
Lapland buttercup			6

#### THREATS

- Climate Change:** Warmer temperatures and changed hydrology may impact the wetlands for which this reserve was designated. A reduction in available moisture may dry up the bogs, resulting in habitat loss for associated species and the reorganization of community composition possibly endangering the rare/exceptional plant life present in this reserve.
- Forest health:** Fire suppression changes the community structure within the reserve.
- Forestry:** Adjacent logging eliminates buffer zone around reserve.  
Road construction for logging may alter hydrology within reserve. Adjacent logging roads also increase ease of access into reserve.
- Harvest:** Illegal hunting may occur within the reserve.

#### RESEARCH OPPORTUNITIES

At least two plants of extensive distribution in more northern regions, cloudberry and Lapland buttercup occur here, perhaps as relicts from a time when the climate was colder.

#### SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE TORKLESEN LAKE ER ACCOUNT

##### Flora

alder, mountain (*Alnus incana* ssp. *tenuifolia*)  
birch, paper (*Betula papyrifera*)  
blueberry, dwarf (*Vaccinium caespitosum*)  
cloudberry (*Rubus chamaemorus*)  
colt's-foot, sweet (*Petasites frigidus* var. *palmatus*)  
cottonwood, black (*Populus trichocarpa* ssp. *trichocarpa*)  
fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)  
huckleberry, black (*Vaccinium membranaceum*)  
mosses (Bryophytes)  
pine, lodgepole (*Pinus contorta* var. *latifolia*)  
spruce, black (*Picea mariana*)  
spruce, hybrid white (*Picea glauca* x *engelmannii*)  
spruce, white (*Picea glauca*)  
willow, Barclay's (*Salix barclayi*)  
willow, grey-leaved (*Salix glauca*)

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**Fauna**

Beaver, American (*Castor canadensis*)

Hare, Snowshoe (*Lepus americanus*)

Marten, American (*Martes americana*)

Moose (*Alces americanus*)

Weasel, Short-tailed (*Mustela erminea*)

Wolverine (*Gulo gulo*)