

ORIGINAL PURPOSE To preserve Douglas-fir trees near their westernmost limit of distribution on southern Vancouver Island

OVERVIEW

Date established:	31 Jan. 1974	Location:	E shore of Nitinat Lake, 33 km NW of Port Renfrew, Vancouver Island
Date amended:	24 Feb. 1977		
ORC #:	3054		
Map number:	92 C/15	Latitude:	48°46'N
		Longitude:	124°43'W

Total Area:	77 ha	Elevation:	0-300 m
Land:	77 ha		

Access: Access by boat on Nitinat Lake or by logging roads

Biogeoclimatic Zones:	Coastal Western Hemlock (CWH)
Biogeoclimatic Variants:	CWHvm1 Submontane Very Wet Maritime
Ecosections:	Windward Island Mountains
Region:	Vancouver Island
Management Area:	Cowichan

COMPOSITION

Physical: The reserve extends for about 2.5 km along the eastern shoreline of Nitinat Lake and 300 m inland. It has steep slopes varying in exposure from west to northwest. Rocky outcrops, bluffs and talus are common, especially near lake level. The regional bedrock is primarily granitic; soils are mostly Podzols developed on glacial till and colluvium. Surrounding mountains of the Vancouver Island Ranges rise to about 1000 m. The climate is moderated by low elevation and proximity to the outer coast (12.5 km). Average annual precipitation is in the 250-350 cm range.

Nitinat Lake, although not part of the reserve, is of interest because it is slightly tidal, has a thin layer of fresh water on its surface with salt water beneath, and contains mostly marine or brackish organisms.

Biological: Douglas-fir and Sitka spruce trees occur here in scattered stands among broken rock and bluffs, where competition from other coniferous trees is reduced. Characteristic understory plants in areas where fir is most abundant are the moss *Stokesiella oregana* and the lichen *Cladonia gracilis*. Western hemlock is the dominant tree over most of the area on representative sites. Two hemlock communities have been noted, one with an understory of salal, oval-leaved blueberry and red huckleberry, the other characterized by Alaskan blueberry and the moss *Rhytidiadelphus loreus*. Other trees in the reserve include western redcedar, yellow cedar, amabilis fir, western mountain-ash and western yew. Some wildflowers noted here are the trillium, false lily-of-the-valley, Siberian miner's lettuce, clasping twistedstalk and Hooker's fairybells. At least six species of ferns and 22 bryophytes are present. The vertebrate fauna has not been surveyed.

Cultural: A traditional Dididaht fort site (P'up'ubak) is located on a small promontory on the east shore of Nitinat Lake. The surrounding area has a number of post-contact culturally modified trees.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Scouler's corydalis		Not At Risk (2006)	3
clasping Twistedstalk			6
false lily-of-the-valley			6
Hooker's fairybells			6
Siberian miner's-lettuce			6
western trillium			6

THREATS

Climate Change: The steep slopes of this reserve may be at risk of degradation due to increased runoff during wet seasons, and more extreme drying during the summer months. These changes in hydrology may or may not affect the stability of the forest root structure.

RESEARCH OPPORTUNITIES A faunal survey would make an important contribution to the baseline information for this reserve.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE NITINAT LAKE ER ACCOUNT

Flora

blueberry, Alaskan (*Vaccinium alaskaense*)
 blueberry, oval-leaved (*Vaccinium ovalifolium*)
 corydalis, Scouler's (*Corydalis scouleri*)
 Douglas-fir, coast (*Pseudotsuga menziesii* var. *menziesii*)
 fairybells, Hooker's (*Prosartes hookeri* var. *oregana*)
 fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa*)
 hemlock, western (*Tsuga heterophylla*)
 huckleberry, red (*Vaccinium parvifolium*)
 lichen, pixie (*Cladonia gracilis*)
 lily-of-the-valley, false (*Maianthemum dilatatum*)
 miner's-lettuce, Siberian (*Claytonia sibirica*)
 moss, loreus goose neck (*Rhytidiadelphus loreus*)
 moss, Oregon eurhynchium (*Eurhynchium oreganum*) (formerly *Stokesiella oregana*)
 mountain-ash, western (*Sorbus scopulina*)
 redcedar, western (*Thuja plicata*)
 salal (*Gaultheria shallon*)
 spruce, Sitka (*Picea sitchensis*)
 trillium, western (*Trillium ovatum* var. *ovatum*)
 twistedstalk, clasping (*Streptopus amplexifolius*)
 yellow-cedar (*Chamaecyparis nootkatensis*)
 yew, western (*Taxus brevifolia*)