

ORIGINAL PURPOSE To protect an altitudinal cross-section of vegetation from the mid-mountain to the alpine zone

OVERVIEW

Date established:	10 Aug. 1989	Location:	Tsitika drainage, south of Port McNeill, on northeastern Vancouver Island
ORC #:	3123	Latitude:	50°24'N
Map number:	92 L/7	Longitude:	126°28'W

Total Area:	557 ha	Elevation:	230-1,650 m
Land:	557 ha		

Access: Accessible by backcountry hike through Lower Tsitika River Park.

Biogeoclimatic Zones: Coastal Western Hemlock (CWH); Mountain Hemlock (MH); Coastal Mountain-heather Alpine (CMA)

Biogeoclimatic Variants: CWHvm1 Submontane Very Wet Maritime; CWHvm2 Montane Very Wet Maritime; MHmm1 Windward Moist Maritime; CMAunp Undifferentiated and Parkland

Ecosection: Northern Island Mountains

Region: Vancouver Island

Management Area: Cape Scott

COMPOSITION

Physical: The reserve comprises the very steep northwest to southwest-facing slopes of Mount Derby, which are dissected by numerous precipitous ravines. The latter give rise to small streams that meet the Tsitika River below the reserve boundaries. Surficial deposits are primarily colluvium at the lower elevation, but are mostly absent as the rocky peak is approached.

Biological: Major forest communities at low elevation are: (1) amabilis fir-western hemlock-Alaskan blueberry with bunchberry and deer fern and (2) western hemlock-western redcedar-salal-blueberry-false azalea. At mid-elevations, communities are: (3) amabilis fir-mountain hemlock-yellow cedar-oval-leaved blueberry and (4) mountain hemlock-yellow cedar-copperbush-blueberries. Higher elevations have: (5) very dense mountain hemlock krummholz, (6) mountain hemlock-blue-leaved huckleberry-mountain heather, "parkland" and (7) open alpine heath of pink and white mountain heathers. Discontinuous alpine herb communities are present where the substrate is favourable.

No faunal records are available, but black-tailed deer are presumed to be abundant and cougar and wolf may be present.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES

None listed

THREATS

Climate Change:

Due to their geographical restriction and adaptation to cold arid environments, alpine ecosystems have been assessed by researchers as very vulnerable to climate change. The projected warming temperatures and changes in precipitation may drive the timberline up to higher elevations where soil is available, displacing alpine areas.

Forest systems in the Mountain Hemlock zone are adapted to cool moist environments; they may be displaced by drier forest systems.

Forestry:

Insufficient buffer zone increases windthrow risk within reserve.

Harvesting adjacent to reserve boundaries increases risk of unauthorized harvesting within the reserve.

Program constraint:

Lack of funding for aerial inspections of park boundaries directly abutting tenured crown land and private land.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE MOUNT DERBY ER ACCOUNT

Flora

azalea, false (*Menziesia ferruginea* ssp. *ferruginea*)

blueberry, Alaskan (*Vaccinium alaskaense*)

blueberry, oval-leaved (*Vaccinium ovalifolium*)

bunchberry (*Cornus canadensis*)

copperbush (*Elliottia pyroliflorus*)

fern, deer (*Blechnum spicant*)

fir, amabilis (*Abies amabilis*)

hemlock, mountain (*Tsuga mertensiana*)

hemlock, western (*Tsuga heterophylla*)

huckleberry, blue-leaved (*Vaccinium deliciosum*)

mountain-heather, pink (*Phyllodoce empetriformis*)

mountain-heather, white (*Cassiope mertensiana* var. *mertensiana*)

salal (*Gaultheria shallon*)

western redcedar

yellow-cedar (*Chamaecyparis nootkatensis*)

Fauna

Cougar (*Puma concolor*)

Deer, Black-tailed (*Odocoileus hemionus* ssp. *hemionus*)

Wolf, Grey (*Canis lupus*)