GALIANO ISLAND ER #128

ORIGINAL PURPOSE To preserve a unique bog in the Coastal Douglas-Fir Zone

OVERVIEW				
Date established: ORC #: Map number:	5 July 1990 3128 92 B/13	Location: Latitude: Longitude:	Two km SE of settlement of North Galiano in the Gulf Islands 48°58'N 123°33'W	
Total Area: Land: Lake:	25 ha 24 ha 1 ha	Elevation:	60-120 m	
Access:	A dirt access road passes the reserve.			
Biogeoclimatic Zone: Biogeoclimatic Variant: Ecosection: Region: Management Area:	Coastal Douglas-Fir (CDF) CDFmm Moist Maritime Southern Gulf Islands Vancouver Island Saanich/Southern Gulf Islands			
COMPOSITION				

# **Physical:**

The bog, about 900 m long and 125 m wide, lies in an elongate depression between NE-SE trending ridges of Cretaceous sedimentary rock. It has a centrally located open-water area about 0.5 ha in size, and drains southward to Trincomali Channel via an intermittent stream. Soils in the bog are primarily Fibrisols and Mesisols. The climate is characterized by a winter precipitation peak and summer drought.

# **Biological:**

The predominant bog vegetation consists of ericaceous shrubs and sphagnum moss, a wetland association that is rare in the Coastal Douglas-fir Zone. Three shrubby bog communities have been described: (1) Labrador tea/bog laurel-bog cranberry-sphagnum, (2) Labrador tea-beak rush-sphagnum, and (3) hardhack stands. Herbaceous wetland types include: (4) great bulrush-common reed, (5) slough sedge, and (6) yellow waterlily. Moist sites at the bog margin support red alder-salmonberry-sword fern, and red alder-hardhack-slough sedge/skunk cabbage communities. Two forested communities on rocky uplands surrounding the bog are the Douglas-fir-arbutus-dull Oregon grape and Douglas-fir (arbutus)salal types. A few rocky outcrops are characterized by tall Oregon grape and falsebox.

Ten species of rare plants have been identified in the reserve, nine of which are in the categories of least rarity. The other species, pointed rush, was previously known from only five locations in the province. Regionally uncommon bog plants found here include bog rosemary, bog cranberry, round-leaved sundew, Chamisso's cottongrass and arctic starflower.

Beaver are present and periodically dam the outlet stream, causing variations in water levels in the bog. Faunal surveys have not been done.

MANAGEMENT CONCERNS				
SIGNIFICANT SPECIES/COMMUNITIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY	
lodgepole pine – peat-moss association	Red listed		2	
bog cranberry Chamisso's cotton-grass			4 6	
Labrador tea			6	
pointed rush	Blue listed		3	
round-leaved sundew			6	
Beaver			5	

### **THREATS**

Climate Change:	Bogs have been assessed as vulnerable to climate change due to projected changes in hydrology and increasing temperatures, both of which may contribute to altered water levels and quality and subsequent shifts in community composition.
Non-native species:	Scotch broom may be in undisturbed sites upland of the bog.
Transportation corridor:	Old trail (skid road) passes through the corner of the reserve. Travel on the trail may pollute the bogland and be used increasingly by developers and industries, altering the hydrology.
Urban and/or rural development:	Clearing and land use activity within the watershed results in sedimentation and infilling of the bog.
RESEARCH OPPORTUNITIES	The reserve is an excellent site for potential studies of wetland wildlife and insects.

# SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE GALIANO ISLAND ER ACCOUNT

## Flora

alder, red (Alnus rubra)

arbutus (*Arbutus menziesii*)

beak-rush, white (Rhynchospora alba)

bog-laurel, western (Kalmia microphylla)

broom, Scotch (Cytisus scoparius)

bulrush, soft-stemmed (aka great bulrush) (Schoenoplectus tabernaemontani)

cabbage, skunk (Lysichiton americanus)

cotton-grass, Chamisso's (Eriophorum chamissonis)

cranberry, bog (Oxycoccos oxycoccos)

Douglas-fir, coast (Pseudotsuga menziesii var. menziesii)

falsebox (Paxistima myrsinites)

fern, sword (Polystichum munitum)

hardhack (Spiraea douglasii ssp. douglasii)

Labrador tea (*Ledum groenlandicum*)

moss, peat (Sphagnum spp.)

Oregon-grape, dull (Mahonia nervosa)

Oregon-grape, tall (Mahonia aquifolium)
pine, lodgepole (Pinus contorta var. latifolia)
reed, common (Phragmites australis ssp. australis)
rosemary, bog (Andromeda polifolia)
rush, pointed (Juncus oxymeris)
salal (Gaultheria shallon)
salmonberry (Rubus spectabilis)
sedge, slough (Carex obnupta)
starflower, arctic (Trientalis europaea ssp. arctica)
sundew, round-leaved (Drosera rotundifolia var. rotundifolia)
waterlily, yellow (Nymphaea mexicana)

# Fauna

Beaver, American (Castor canadensis)