

ORIGINAL PURPOSE To preserve a fragment of the rapidly disappearing Fraser Valley boglands

OVERVIEW

Date established:	17 April 1980	Location:	Near S end of Pitt Lake, 15 km NNE of Pitt Meadows
ORC #:	3099	Latitude:	49°19'N
Map number:	92 G/7	Longitude:	122°38'W

Total Area:	88 ha	Elevation:	2-60 m
Land:	88 ha		

Access: Access by Neaves Road which borders the west side of the reserve.

Biogeoclimatic Zone:	Coastal Western Hemlock (CWH)
Biogeoclimatic Variant:	CDFdm Dry Maritime
Ecosection:	Fraser Lowland
Region:	Lower Mainland
Management Area:	North Fraser

COMPOSITION

Physical: The reserve is situated near the northern edge of the Fraser Lowland on a large deltaic plain. Surficial materials originated from Pleistocene glaciation, subsequent marine invasion, and finally deposition of river-borne sediments. The Fraser River sediments, which originated as floodplain and overbank deposits of the Fraser and Pitt rivers, may be up to 15 m thick and overlie up to 300 m of marine silt, sand, and clay. Two bedrock knolls protrude through this material in the reserve.

Biological: The vegetation varies from open bogland, through treed bogland, to upland forest and sparse vegetation on rock outcrops. Seven plant communities have been described in this small area. Open boglands, mostly in the northern part of the reserve, are dominated by shrubs of the heath family (Labrador tea, bog-laurel, bog cranberry, and bog blueberry) and sphagnum mosses. A similar type, referred to as bog forest, supports the plants listed above plus lodgepole pine trees. The bogs contain interesting northern relict plants such as cloudberry. Paper birch stands in which hardhack is the dominant shrub and reed canarygrass the dominant grass also occur in boggy sites. On slightly higher ground are lodgepole pine-western hemlock stands with an understory of oval-leaved blueberry, salal, and moss. Two kinds of seral forest resulting from logging and/or fire occupy small areas. These are red alder stands containing juvenile hemlock, salmonberry, bracken, lady fern, and moss, and juvenile Douglas-fir woods containing hemlock, red huckleberry, salal, and bracken.

A variety of birds and mammals typical of boglands and seral forest types is present. A few rare greater sandhill cranes are believed to nest in surrounding bogs.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Sandhill Crane		Not At Risk (1979)	5

THREATS

Climate Change:	The wetland areas protected in this reserve are already rapidly disappearing. Current conditions confounded by climate change may accelerate the rate of drying.
Agriculture:	Adjacent landowners would like to take water from the main water source in the reserve. This would alter hydrological patterns and disturb many species.
Non-native species:	A Bass population was introduced to the lake by local anglers and are out-competing native species. Invasive Reed Canary grass is changing community structure and leading to native species loss.
Recreation:	Illegal camping impacts the sensitive wetland habitat. Public entry into the area causes vandalism and serious forest and grassland fire potential. High public use of dykes in the surrounding areas is impacting the bird population.

RESEARCH OPPORTUNITIES

The reserve is located within a large expanse of bogland, but much of this has been altered by cultivation, dyking, and drainage. Drainage ditches occur along the north and south boundaries and have lowered the water table in the reserve. This has encouraged the development of lodgepole pine bog forest and the pine-hemlock community. A report on Sandhill Cranes is available.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE PITT POLDER ER ACCOUNT

Flora

alder, red (*Alnus rubra*)
birch, paper (*Betula papyrifera*)
blueberry, bog (*Vaccinium uliginosum*)
blueberry, oval-leaved (*Vaccinium ovalifolium*)
bog-laurel, western (*Kalmia microphylla*)
cloudberry (*Rubus chamaemorus*)
cranberry, bog (*Oxycoccus oxycoccus*)
Douglas-fir (*Pseudotsuga menziesii*)
fern, bracken (*Pteridium aquilinum*)
fern, lady (*Athyrium filix-fernina*)
hardhack (*Spiraea douglasii* ssp. *douglasii*)

hemlock, western (*Tsuga heterophylla*)
huckleberry, red (*Vaccinium parvifolium*)
Labrador tea (*Ledum groenlandicum*)
moss, peat (*Sphagnum spp.*)
pine, lodgepole (*Pinus contorta* var. *latifolia*)
reed canarygrass (*Phalaris arundinacea*)
salal (*Gaultheria shallon*)
salmonberry (*Rubus spectabilis*)

Fauna

Crane, Sandhill (*Grus canadensis*)