

File: 6-6-1-556-50

Date: 90-03-08

**BRACKMAN ISLAND
ECOLOGICAL RESERVE #121 MANAGEMENT STATEMENT**

(This statement is intended for use in conjunction with the descriptive text and map pages supplied in the "Guide to Ecological Reserves in British Columbia".)

Features Requiring Special Management Consideration:

Though representative of nearshore forest environments in the dry Gulf Islands area, this site is outstanding in that it has not been adversely affected by livestock grazing, logging or settlement.

Management Issues:

1. The lush spring flower communities in the openings are vulnerable to trampling during April and May. If casual visitation by boaters increases, educational and/or restrictive measures would be indicated.
2. Boaters are cutting up driftlogs for firewood. There is also evidence that on occasion visitors have taken parts of the Rocky Mountain junipers that occur along the shoreline.
3. Browning branches were observed on Douglas-firs raising concerns about disease or insect attack.
4. There is no biological inventory and description for the inter- and sub tidal part of the reserve.

Management actions required and their Priority:

1. Maintain frequent volunteer warden presence.
2. Consider educational information sign(s) on preferred boat landing sites (additional to regular to ER signs).
3. Examine damage to Douglas fir (HQ or R staff), call in Canadian Forestry Service if warranted.
4. Obtain biological description of reserve's portions below mean high tide line.

Fire, Insect and Disease Contingency:

Note, that fire has played a significant role in the natural history of the forest on the island. If fire could be a feasible management tool today is doubtful however. It should not be used if there is any risk to

the old-growth trees and the Rocky Mountain junipers.

1. Avoid fires; if firefighting becomes necessary, avoid using chemicals and bulldozers in the reserve.
2. No insect and disease control desired.

Warden Name/Address: Mr. Paul Linton
Box 1347,
Ganges, B.C.,
V0S 1E0
(653-9204) or (653-4720)

Zone Manager: MALAHAT SOUTH ZONE
BILL SHAW

Approval:

Date

District Manager

Robin Soule

LJN/MGMT.121/90-02-192

Rich kelp beds are present, especially off the southwest side of Brackman Island. Intertidal and shallow subtidal habitats are dominated by rocky shore invertebrates like barnacles, starfishes, sea urchins, anemones, chitons and mussels. Many additional invertebrates should occur, as well as a variety of rockfishes.

OUTSTANDING FEATURES: Though representative of nearshore forest environments in the dry Gulf Islands area, this site is outstanding in that it has not been adversely affected by livestock grazing, logging or settlement.

OTHER INFORMATION: Order-in-Council no. 662, 28 April 1989. Application no. 375. Map no. 92 B/11. Marine Chart no. 3476. Accessible by boat; can easily be seen from nearby Portland Island.

Plant communities here, especially the wildflower stands, are vulnerable to trampling damage. Increasing visitation by boaters/kayakers from the Saanich Peninsula and Portland Island Marine Park may require control.

A preliminary plant community description and species list is available. Description of the marine environment is needed.

The island was purchased jointly by the B.C. Government, the Nature Conservancy of Canada and the Nature Trust of British Columbia. The reserve is under a 99-year lease from Nature Trust of British Columbia.

BRACKMAN ISLAND

E.R. #121

PURPOSE: To protect forest and wildflower stands on a pristine island in the Gulf Islands area and adjacent marine habitats

LOCATION: North side of Shute Passage, adjacent to Portland Island Marine Park, 3.5 km NNW of Schwartz Bay

SIZE: 35 ha **LAT:** 48°43'N **LONG:** 123°23'W **ELEVATION:** -20 - 50 m

BIOGEOCLIMATIC ZONE: Coastal Douglas-Fir

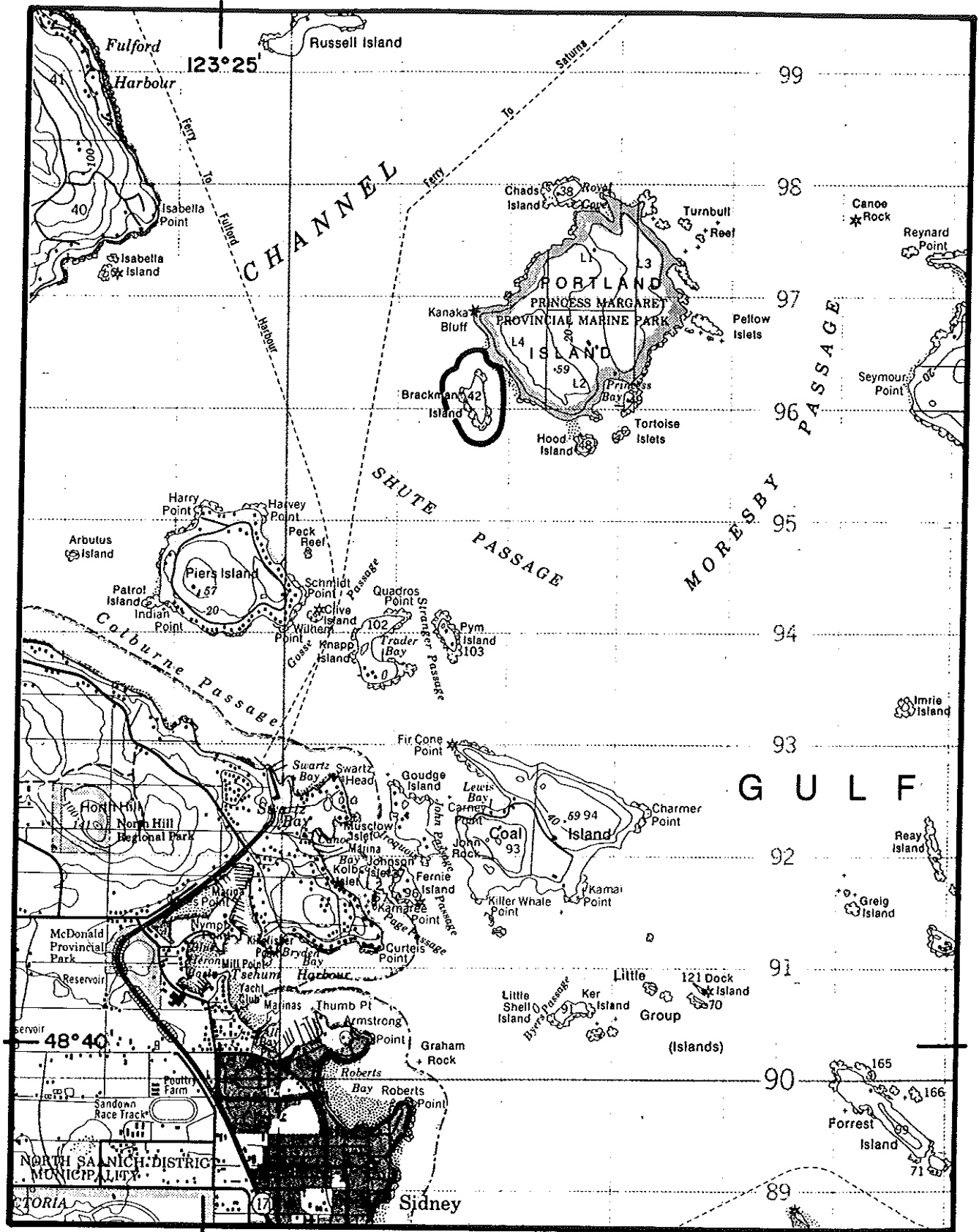
PHYSICAL FEATURES: The reserve comprises a five hectare island and surrounding marine habitats within 200 m of the high tide line. The island has thin soil cover over Cretaceous sandstones of the Nanaimo formation. Bedrock is exposed around most of the shoreline, and forms cliffs up to 15 m high along the northeast edge of the island. Substrates in the intertidal zone are primarily rock; this probably applies to much of the subtidal portion as well. This area has the mildest climate in British Columbia and a pronounced summer drought. The island has no streams or standing water.

BIOTIC FEATURES: Brackman Island is predominantly forested, except for small herbaceous openings in the southern and central parts where soil cover is extremely thin or absent. Douglas-fir dominates the tree cover and three age classes are present as a result of past fires, including fine old-growth specimens estimated to be over 250 years old. Arbutus trees are common, especially along the cliff tops. A few Rocky Mountain junipers occur near the shoreline, while Garry oaks are mostly restricted to rocky sites in and around the open meadows.

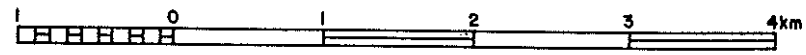
Three forest communities have been recognized and are largely distinguished by the dominant plant species in their herbaceous layer. These are the Douglas-fir/arbutus - ocean-spray - licorice fern; Douglas fir/arbutus - ocean-spray - Purple peavine; and Douglas-fir/arbutus - ocean-spray -moss communities. The latter type is most extensive and contains showy stands of white fawn lily, a species now severely reduced over much of its coastal range. The small open glade fringed by Garry oaks support a profusion of colorful spring flowers, notably common camas, chocolate lily, sea blush, small-flowered blue-eyed Mary, western buttercup and white fawn lily.

Eighty species of land plants have been recorded to date, of which 13 are rare in British Columbia. Most rare plants are in categories of least concern.

River otters and mink are frequently sighted around the shoreline and harbour seals in adjacent kelp beds. Common birds include bald eagles, black oystercatchers, great-blue herons, northwestern crows, cormorants and several kinds of gulls. A variety of songbirds utilize forest habitats on the island.



SCALE 1:50 000



N.T.S. No. 92 B/II

**ECOLOGICAL RESERVE No. 121
BRACKMAN ISLAND**