

# OAK BAY ISLANDS ECOLOGICAL RESERVE

## PURPOSE STATEMENT

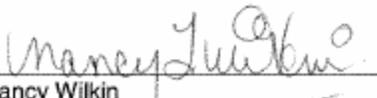
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Approved by:



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Date: Oct. 20, 2003



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Date: March 31, 04

## OAK BAY ISLANDS ECOLOGICAL RESERVE PURPOSE STATEMENT

Ecological reserves are areas selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. The key goal of ecological reserves is to contribute to the maintenance of biological diversity and the protection of genetic materials. All consumptive resource uses and the use of motorized vehicles are prohibited.

**Landing on the islands and islets of Oak Bay Islands Ecological Reserve is restricted to protect sensitive wildlife, plants and ecosystems. Permission to land is required.**

Research and educational activities may be carried out but only under permit.

### Primary Role

The **primary** role of Oak Bay Islands Ecological Reserve is to protect a wide variety of special natural features such as vulnerable nesting seabirds, uncommon meadow communities, showy and rare early spring wildflowers, and representative shallow-water marine habitats. The 211-hectare ecological reserve is located just off Victoria near Discovery Island and has three units: Great Chain Island and Chain Islets (the largest unit); Jemmy Jones Island (located in Baynes Channel); and Alpha Island and Griffin Islands (part of the Chatham-Discovery Group). The islets and islands comprise about nine hectares, the remainder being subtidal.

The ecological reserve protects natural meadow communities which are of very limited occurrence in British Columbia and are severely disturbed or eliminated in most other locations. Sixty-three species of vascular plants have been recorded on Alpha Island, an area of less than 1 hectare. Of those, at least 18 are in bloom by mid-April, among them showy stands of camas, buttercup, sea blush and chocolate lily. Provincially endangered wildflowers, including snake-root sanicle, Scouler's campion, California buttercup, fern-leaved desert parsley and golden paintbrush, grow on these islands that have been free of historical grazing pressures. Eight vegetation types have been described on the islands, their distribution being primarily determined by distance from shore, soil depth and moisture regime. Shrub stands occupy sheltered inland locations; meadows occur in deeper soils of sandy loam texture; stonecrop, prickly-pear cactus and other dry-site loving plants occupy soil pockets between rock outcrops; sea plantain, gumweed and thrift are found on rock outcrops receiving salt spray. Local sites enriched by river otter and seabird droppings and food remains have distinctive plant species. The ecological reserve has potential to serve as a seed bank for species re-introduction.

Chain Islets and Great Chain Island is a site of global significance and it supports one of the three largest seabird rookeries in the Gulf of Georgia and is important for gulls and cormorants. The site is home to the largest breeding population of glaucous-winged gulls in British Columbia, a significant breeding colony of double-crested cormorants (a vulnerable species that only nests in the Strait of Georgia) and a large migratory population of Brandt's cormorants (red-listed species). A few pigeon guillemots, pelagic cormorants, and black oystercatchers also nest here as well as on Jemmy Jones Island and Lewis Reef. Additionally, a variety of marine birds occur seasonally among the reefs and islands.

The ecological reserve also protects representative shallow-water marine habitats of the under-protected Strait of Georgia *Marine* Ecoregion. Shoreline features include steep faces, rocky outcrops, boulders, crevices, wave-cut chasms and small gravel beaches. The surrounding waters are rich with marine life such as canopy kelp beds, finfish, crabs, urchins, sea cucumbers, octopi, killer whales, harbour porpoises, harbour seals, and river otters.

## Management Issues

Known Management Issue	Response
Impacts on seabirds and marine wildlife from commercial wildlife viewing, casual small boaters and kayakers, and low flying aircraft	<ul style="list-style-type: none"> <li>➤ Provide tour operators with wildlife viewing guidelines.</li> <li>➤ Provide information to boaters and kayakers on the values of the ecological reserve and the reasons not to visit (i.e. not to disturb the wildlife). Use the ministry website, signs, marinas and marine charts as vehicles to deliver the message.</li> <li>➤ Work with local aircraft companies to increase the awareness of the ecological reserve, and to promote minimal impact activities (i.e. flying higher or around).</li> <li>➤ Work with the volunteer warden and other volunteers to increase compliance regarding access.</li> </ul>
Commercial harvest of marine benthic invertebrates	<ul style="list-style-type: none"> <li>➤ Work with Fisheries and Oceans Canada (DFO) to close the ecological reserve to commercial harvesting.</li> <li>➤ In the interim, work with DFO to minimize the impacts to the reserve including the disturbance of marine life and seabirds.</li> </ul>
Lack of knowledge of marine (subtidal) values	<ul style="list-style-type: none"> <li>➤ Conduct marine inventory surveys as funding/ opportunities become available.</li> </ul>
Lack of knowledge of cultural values and traditional use activities	<ul style="list-style-type: none"> <li>➤ Liaise with First Nations to acquire knowledge on traditional use and cultural values associated with the ecological reserve.</li> </ul>

## Conservation

Representation  
- ecosection

- Oak Bay Islands Ecological Reserve contributes minimally (0.34%) to the representation of the Southern Gulf Islands Ecosection which has only 5.62% protected provincially.

Oak Bay Islands Ecological Reserve also contributes 2.7% to the representation of the Strait of Georgia *Marine* Ecosection of which only 0.94% is protected provincially.

- biogeoclimatic subzone/variant

- Oak Bay Islands Ecological Reserve contributes minimally (0.14%) to the representation of the Coastal Douglas-fir (CDFmm) subzone which has only 2.43% protected provincially. However, any protected area that contributes to the protection of this ecosystem may be considered important given the fragmented nature of this ecosystem and the limited opportunities available for its protection.

Special Features

- Large population of nesting double-crested cormorants. Some oceanic influence that is not common in the Strait of Georgia, small reefs and diverse marine fauna, marine mammal habitat, rare natural meadow communities and wildflowers.

Rare/Endangered Values

- Red-listed species*: snake-root sanicle *Sanicula arctopoides* (listed as Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), golden Indian paintbrush (COSEWIC Endangered with very few populations, Alpha Islet is the second biggest population in BC with 1,000 plants), Scouler's catchfly (COSEWIC Endangered), fern-leaved desert parsley, California buttercup (2 populations), Brandt's cormorant, possible location of seaside bird's foot trefoil (listed as Endangered by COSEWIC). *Blue-listed species*: beach sand-spurry, double-crested cormorant (active). *Yellow-listed species of conservation concern (S3-S4)*: black oystercatcher and pelagic cormorants. The lichen *Haemotoma lapponicum* is very rare, but lichens have not been listed yet.

The colony of double-crested cormorants is the third largest in the Strait of Georgia but it is declining rapidly with only 95 nests observed in 2000 compared to 686 nests in 1991.

Scientific/Research Opportunities

Gull population dynamics and cormorant surveys have been studied on the Chain Islands, as well as vegetation surveys of Alpha Island. Potential research site given rarity of plants and potential use as a seed source for re-introduction of plant species to Vancouver Island. Great potential for marine research and education.

**Recreation**

Representation

- backcountry Not Applicable
- destination Not Applicable
- travel corridor Not Applicable
- local recreation Ecological reserves are not meant for outdoor recreation; however, some kayaking, boating and wildlife viewing occurs. Management will work with groups to address potential impacts.

Special Opportunities

None known at this time

Education/Interpretation Opportunities

Potential offsite education/interpretation opportunity

**Cultural Heritage**

Representation

Values unknown at this time, but may be an area of importance due to proximity to Chatham Island (where there are 20 archaeological sites). This area was a traditional bulb harvesting territory for Songhees First Nations.

Special Features

None known at this time

**Other Management Considerations**

Other Designations

The Chain Islets and Great Chain Island and the marine waters within a radius of 700 metres are an Important Bird Area (IBA) site. The IBA program is an international program that identifies and supports the protection of lands having special bird habitats.

Part of the Victoria Harbour Migratory Bird Sanctuary (MBS). MBS Regulations prohibit all disturbance, hunting, and collection of migratory birds and their eggs within a MBS.

Relationship to other PAs	<input checked="" type="checkbox"/>	One of 21 marine protected areas in the southern Vancouver Island region, adjacent to Discovery Island Marine Provincial Park. One of 152 ecological reserves in BC and part of a system of protected areas focused on bird breeding areas in coastal BC.
Co-operative Management Arrangements	<input type="checkbox"/>	Not Applicable
Partnerships	<input checked="" type="checkbox"/>	Friends of Ecological Reserves, Volunteer warden
Vulnerability	<input checked="" type="checkbox"/>	The terrestrial plant communities are sensitive to trampling damage and have a low carrying capacity for recreational use. The breeding seabirds are susceptible to disturbance. Invasive species such as broom, impacts such as trampling/compaction by recreational users, commercial wildlife viewing, commercial fishing within foreshore, low flying aircraft, dog walking and use, disturbance to nesting birds, seals, and whales from boaters who land to picnic and party on the island.
Relationship to other Strategies	<input checked="" type="checkbox"/>	Marine Protected Areas Strategy

**Area:** 211 hectares (202 ha foreshore, 9 ha upland)

**Date of establishment:** July 26, 1979