

CLELAND ISLAND

ER #1

ORIGINAL PURPOSE To protect breeding populations of many species of seabirds.

OVERVIEW

Date established:	4 May 1971	Location:	14 km W of Tofino, off west coast of Vancouver Island
ORC #:	3001		
Map number:	92 E/1	Latitude:	49°10'N
		Longitude:	126°05'W

Total Area:	7.7 ha	Elevation:	0-25 m
Land:	7.7 ha		

Access: Closed to public. A permit is required to land on island. Accessible by water.

Biogeoclimatic Zones: Coastal Western Hemlock (CWH)
Biogeoclimatic Variant: CWH vh1 CWH Southern Very Wet Hypermaritime
Ecosection: Vancouver Island Shelf
Region: Vancouver Island
Management Area: Clayoquot

COMPOSITION

Physical: The reserve comprises a single low-lying basalt island with a central vegetated area rimmed by bare rock. Soils, mainly sands, are strongly affected by ocean spray.

Biological: The vegetation consists of a central shrubby core and a surrounding belt of grasses. The exposed portions, especially on the outer edges of the island, have only scattered plant cover. The dense shrubs of the core are salmonberry, Nootka rose and coast black gooseberry, growing to two metres tall. The surrounding grassy belt is composed mostly of dune wildrye and broadleaved herbs. The rocky outcrops are characterized by Tracy's romanzoffia and villous cinquefoil. Three minor vegetation types are those of silverweed and seabeach sandwort on shell beaches, of slough sedge on a seepage site, and of salal on higher ground.

The grass belt provides nesting sites for Leach's Storm-petrel, Fork-tailed Storm-petrel, Tufted Puffin, Rhinoceros Auklet and Cassin's Auklet, which tunnel into the sandy soil. The bare rocks, beach logs and general surface of the island are home to Pigeon Guillemot, Glaucous-winged Gull, Black Oystercatcher, Pelagic Cormorant and a few Common Murres.

Oystercatchers feed on invertebrates found in great abundance in the intertidal zone. Beach logs provide habitat for the Wandering Salamander.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Common Murre	Red listed		2
Tufted Puffin	Blue listed		2
Cassin's Auklet	Blue listed		2
Rhinoceros Auklet			4

THREATS

Climate Change:	Being a relatively small low-lying island, the most direct effects of climate change are likely to be associated with the ocean. Higher sea level and increased storm activity are projected to flood and erode the shores of the reserve resulting in the loss of terrestrial habitat and the disturbance of valuable nesting sites. Continual warming of the sea surface temperature could change the composition of the marine and intertidal communities and, subsequently, the composition of the terrestrial community. Of particular concern with this reserve are the potential implications of changes to habitat and marine-based food sources for the seabird species for which the reserve was designated.
Recreation:	Disturbance of wildlife due to marine vessel transportation has been observed. The threat poses the most risk during sensitive time periods such as breeding and feeding.
Transportation:	There is a threat of an oil spill due to proximate marine traffic.

RESEARCH OPPORTUNITIES

Two Ph.D. dissertations on the Black Oystercatcher as well as publications and reports on oystercatchers, limpets and Rhinoceros Auklets are available through the Theses Canada Portal at <http://www.collectionscanada.gc.ca/thesescanada/index-e.html>. Seabird population surveys conducted yearly by the Canadian Wildlife Service are found at <http://www.cws-scf.ec.gc.ca/>.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE CLELAND ISLAND ER ACCOUNT

Flora

cinquefoil, villous (*Potentilla villosa*)
gooseberry, coast black (*Ribes lacustre*)
romanzoffia, Tracy's (*Romanzoffia tracyi*)
rose, Nootka (*Rosa nutkana*)
salal (*Gaultheria shallon*)
salmonberry (*Rubus spectabilis*)
sandwort, seabeach (*Honkenya peploides*)
sedge, slough (*Carex obnupta*)
silverweed (*Potentilla anserine*)
wildrye, dune (*Elymus mollis*)

Fauna

Auklet, Cassin's (*Ptychamphus aleuticus*)

Auklet, Rhinoceros (*Cerorhinca monocerata*)

Cormorant, Pelagic (*Phalacrocorax pelagicus*)

Guillemot, Pigeon (*Cepphus columba*)

Gull, Glaucous-winged (*Larus glaucescens*)

Murre, Common (*Uria aalge*)

Oystercatcher, Black (*Haematopus bachmani*)

Puffin, Tufted (*Fratercula cirrhata*)

Salamander, Wandering (*Aneides vagrans*)

Storm-petrel, Fork-tailed (*Oceanodroma furcata*)

Storm-petrel, Leach's (*Oceanodroma leucorhoa*)