BAERIA ROCKS ER #24

ORIGINAL PURPOSE To protect nesting seabirds, and to preserve rich intertidal and subtidal communities for research and educational purposes

OVERVIEW				
Date established: Date amended: ORC #: Map number: Marine chart number:	4 May 1971 24 Oct. 1975 3024 92 C/14 3637	Location:  Latitude: Longitude:	At head of Imperial Eagle Channel, Barkley Sound, west coast of Vancouver Island 48°57'N 125°09'W	
Total Area: Land: Marine:	140 ha 2 ha 138 ha	Elevation:	-37-10 m	
Access:	Closed to the public by Order-in-Council no. 1920, 16 June 1977 to protect nesting birds which are very vulnerable to disturbance. A permit is required to land on the rocks and they are accessible by boat.			
Biogeoclimatic Zones: Biogeoclimatic Variant: Ecosection: Region: Management Area:	Coastal Western Hemlock (CWH) Upland area too small to be representative Upland area too small to be representative Vancouver Island Clayoquot			
COMPOSITION				

### COMPOSITION

**Physical:** 

The terrestrial part of the reserve consists of two low bedrock islands 500 m apart, the southern of which is made up of three closely associated rocks. The bulk of the reserve consists of the subtidal area between the rocks and the 20 fathom (36.5 m) depth. Intertidal and subtidal substrates are largely bedrock, although small areas of mud, sand, or shell occur at depth. Surf action is moderated due to distance from the outer coast.

**Biological:** 

Vascular plants are limited to a single species, hairy goldfields, found near the highest point of the north island. This species is rare in British Columbia. Several crustose lichens, adapted to salt spray, also occur. Nesting seabirds are the pelagic cormorant (30 pairs), glaucous-winged gull (210 pairs), black oystercatcher (15 pairs), and probably the pigeon guillemot. A few harbour seals haul out here.

Despite the predominantly bedrock substrates, a variety of intertidal habitats are present, including rock faces exposed to the surf, crevices, tide pools, and a protected lagoon in the north island. The intertidal shoreline is almost completely covered with marine invertebrates and algae, the most common of which are barnacles, goose barnacles, mussels, sea anemones, starfish and seaweeds of the genera *Endocladia*, *Fucus*, *Ulva*, *Egregia* and *Alaria*. Interesting examples of intertidal zonation are present. The surrounding

subtidal area supports a diverse invertebrate fauna that is particularly abundant in hydroids, ascidians, and anemones (particularly *Tealia lofotensis*), and several species of algae. Common fishes are the black, yellowtail, copper, quillback, and China rockfishes, and the kelp greenling.

# MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
hairy goldfields	Blue listed		3
Bald Eagle		Not At Risk (1984)	6
Black Oystercatcher			5
California Sea Lion		Not At Risk (1987)	6
Glaucous-winged Gull			5
Harbour Seal		Not At Risk (1999)	6
Pelagic Cormorant			5

## **THREATS**

Climate Change: Changes in marine species life cycles (phenology) due to

shifting sea surface temperatures, ocean levels and storm activity have been projected to result in new species assemblages and predator/prey relationships, effectively altering the composition of the intertidal and subtidal communities protected in this reserve. The low elevation of this reserve may also put the terrestrial communities at risk of habitat degradation and/or loss due to such conditions

mentioned above.

**Recreation:** A heavy volume of boat traffic disturbs wildlife.

RESEARCH OPPORTUNITIES This is an excellent teaching and research site for the Bamfield Marine Station, 13 km away. Reports are available on intertidal and subtidal flora and fauna, and harbour seal

behaviour.

# SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE BAERIA ROCKS ER ACCOUNT

## Flora

goldfields, hairy (Lasthenia maritima)

### Fauna

Anemone, Big Red (Tealia lofotensis)

Barnacle, Goose (Pollicipes polymerus mussels

Cormorant, Pelagic (Phalacrocorax pelagicus)

Eagle, Bald (Haliaeetus leucocephalus)

Greenling, Kelp (Hexagrammos decagrammus)

Guillemot, Pigeon (Cepphus columba)

Oystercatcher, Black (*Haematopus bachmani*)

Rockfish, Black (Sebastes melanops)

Rockfish, China (Sebastes nebulosus)

Rockfish, Copper (Sebastes caurinus)

Rockfish, Quillback (Sebastes maliger)

Rockfish, Yellowtail (Sebastes flavidus)

Sea Lion, California ( $Zalophus\ californianus$ ) Glaucous-winged Gull

Seal, Harbour (*Phoca vitulina*)