

ORIGINAL PURPOSE To conserve forest ecosystems representative of the dry subzone of the Coastal Douglas-Fir Zone

OVERVIEW

Date established:	4 May 1971	Location:	Southeastern end of
Date amended:	19 March 1986		Saltspring Island, 4 km S of
	20 May 2004		Fulford Harbour
ORC #:	3016	Latitude:	48°44'N
Map number:	92 B/11	Longitude:	123°28'W
Total Area:	362 ha	Elevation:	0-420 m
Land:	362 ha		

Access: Road access available from Fulford Harbour.

Biogeoclimatic Zones: Coastal Douglas-Fir (CDF)
Coastal Western Hemlock (CWH)

Biogeoclimatic Variants: CDF mm, Moist Maritime
CWH xm1, very dry maritime, Eastern

Ecosection: Southern Gulf Islands

Region: Vancouver Island

Management Area: Saanich/ Southern Gulf Islands

COMPOSITION

Physical: The reserve is on the steep, rugged, southeast slope of Mount Tuam, facing Satellite Channel. These slopes consist of a series of rounded knolls separated by draws. Exposed bedrock is present on the tops of some knolls and along the shoreline, and soils are generally thin. About 1 km of rocky shoreline is included along Satellite Channel. Freshwater features include a small stream, a pond and minor swamps. The regionally dry summer climate is accentuated by the reserve's southern exposure and thin soils.

Biological: Second growth Douglas-fir forest, with inclusions of arbutus, red alder and bigleaf maple, covers most of the reserve, although some large veteran firs are present. Pure stands of arbutus, probably the best representation of this species in the ecological reserve system, are found on dry sites around upper elevation bedrock outcrops and near the shoreline. Mosses and grasses cover the rock outcrops. Alder and maple are generally restricted to a few moist draws.

About 160 species of higher plants have been identified to date in the reserve, of which 21 (13%) are rated as rare in the province. Most of these fall into the categories of least concern and while largely limited in distribution to dry sites within the dry subzone of the Coastal Douglas-fir Zone, they may be fairly

common in such habitats. Of note in this group are five species of native clovers. Species in the categories of greatest rarity include small vulpia, Howell's bluegrass, Howell's triteleia and bicolored flaxflower.

A large variety of birds has been recorded, including Turkey Vulture, Bald Eagle, Blue Grouse, California Quail, Brown Creeper, Woodpeckers and Bewick's Wren. Land mammals are limited to Black-ailed Deer, Red Squirrel, Wandering Shrew, Raccoon, Mink and Deermouse. One species of salamander, two of frogs and three of garter snakes are present. Insects belonging to 57 families have been collected and identified.

Cultural:

There are two small archaeological sites known to protect pre-historic shell middens; one is located at the head of the bay used for a B.C. Tel cable crossing to the Saanich Peninsula from the island. The second is also at the head of a bay in the eastern extent of the reserve.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Douglas-fir – arbutus association	Red listed		1
Douglas-fir – dull Oregon-grape association	Red listed		1
Douglas-fir – salal association	Blue listed		2
western redcedar – vanilla leaf association	Red listed		2
scalegod	Red listed		2
Zerene fritillary, ssp. <i>bremnerii</i>	Red listed		2
Howell's triteleia	Red listed	Endangered (2003)	1
yellow montane violet	Red listed	Endangered (2007)	1
Propertius Duskywing	Blue listed		2

THREATS

Climate Change:

As the climate continues to change, new conditions may favour particular forest systems over others, encouraging their proliferation and migration. Projections of forest migration suggest the expansion of the Coastal Douglas-Fir climatic envelope and the associated forest stands, providing this migration is not restricted due to habitat fragmentation and the elimination of ecological corridors.

Access:

Road allows easy access to the reserve.

Harvest:

Illegal collection of downed timber, removing important biomass from the ecosystem.

Harvest:	Hunting and ATV use within the reserve alters the protected habitat.
Non-native species:	Feral sheep graze in the reserve impacting the Garry oak and herbaceous terrestrial ecosystem. Extremely aggressive invasive plant species are present in the reserve.
Program constraint:	Lack of experienced and available staff inhibits necessary prevention of damage to reserve as well as inability to execute management strategies.
Recreation:	User-created trail tramples/effects vegetation, soils and wildlife
Urban and/or rural development:	Development between two reserve halves may challenge the viability of the entire ecosystem.

RESEARCH OPPORTUNITIES	University of Victoria students, under the direction of Dr. M. Bell, have prepared reports on the flora, fauna and insects.
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ER WARDEN ACTIVITIES	<p>Monitor visitation and trampling (report prohibited activities to Area Supervisor)</p> <p>Monitor and report sheep grazing activity in ER to Area Supervisor</p> <p>Continue to survey both flora and fauna present in ER</p> <p>Monitor for invasive plants and animals (control or eradicate where possible)</p> <p>Design and implement climate change monitoring program(s)</p>
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SCIENTIFIC NAMES FOR SPECIES MENTIONED IN THE MOUNT TUAM ER ACCOUNT

Flora

alder, red (*Alnus rubra*)
 arbutus (*Arbutus menziesii*)
 bluegrass, Howell's (*Poa howellii*)
 fescue, small (*Vulpia microstachys*) aka small vulpia
 Douglas-fir (*Pseudotsuga menziesii*)
 linanthus, bicoloured (*Linanthus bicolor*) (formerly bicolored flaxflower)
 maple, bigleaf (*Acer macrophyllum*)
 Oregon-grape, dull (*Mahonia nervosa*)
 redcedar, western (*Thuja plicata*)
 salal (*Gaultheria shallon*)
 scalepod (*Idahoia scapigera*)
 triteleia, Howell's (*Triteleia howellii*)
 vanilla-leaf (*Achlys triphylla*)
 violet, yellow montane (*Viola praemorsa* ssp. *praemorsa*)

Fauna

Creepers, Brown (*Certhia americana*)

Deer, Black-tailed (*Odocoileus hemionus columbianus*)

Deermouse (*Peromyscus* spp.)

Duskywing, Propertius (*Erynnis propertius*)

Eagle, Bald (*Haliaeetus leucocephalus*)

Fritillary, Zerene, bremnerii subspecies (*Speyeria zerene bremnerii*)

Grouse, Sooty (*Dendragapus fuliginosus*) aka Blue Grouse

Mink (*Neovison* spp.)

Quail, California (*Callipepla californica*)

Raccoon (*Procyon lotor*)

Shrew, Vagrant (*Sorex vagrans*) aka wandering shrew

Squirrel, Red (*Tamiasciurus hudsonicus*)

Vulture, Turkey (*Cathartes aura*)

Wren, Bewick's (*Thryomanes bewickii*)