

TOW HILL

ER #9

ORIGINAL PURPOSE To protect a sand beach, dune ecosystems and inland moor bogs on Haida Gwaii

OVERVIEW

Date established:	4 May 1971	Location:	22 km E of Massett, northeastern Graham Island, SW of Tow Hill
ORC #:	3009	Latitude:	54°03'N
Map number:	103 J/4	Longitude:	131°50'W

Total Area:	519 ha	Elevation:	0-30 m
Land:	446 ha		
Lake:	4 ha		
Marine:	69 ha		

Access: Access is available by dirt road from Massett. This road passes completely across the reserve. The reserve is bounded on the west, east and south by Naikoon Provincial Park.

Biogeoclimatic Zones:	Coastal Western Hemlock (CWH)
Biogeoclimatic Variant:	CWH Submontane Wet Hypermaritime (wh1)
Ecosection:	Queen Charlotte Lowland
Marine Ecosystem:	Dixon Entrance
Region:	Skeena
Management Area:	Queen Charlotte Island

COMPOSITION

Physical: A broad beach of hard sand is present, partly the result of the presence of Yakan Point which acts as a natural groin and traps sand being moved north eastward by littoral drift. This is a segment of the longest, most spectacular beach in the province. Its 200 m wide foreshore slopes gently into Dixon Entrance, while the backshore is characterized by a series of dunes and ancient beach landforms to 10 m above present sea level. Low-lying wetlands occupy most of the inland part of the reserve, and contain several ponds and a meandering stream.

Biological: Plant communities associated with dunes, coniferous forest and bogs characterize the reserve. Sand-binding grasses and herbs grow in patches on the dunes, including several species that are rare in the province. These are the large-headed sedge, American glehnia and sea mertensia. In British Columbia, the sea mertensia is known to occur only in the Queen Charlotte Islands. In the lee of the beach and sand dunes, Sitka spruce and to a lesser extent western hemlock and western redcedar grow as closed coniferous forest. Further inland, level terrain with impeded drainage has created large open bogs containing much peat moss and many bonsai-like shore (lodgepole) pine. Ten species of peat moss and 12 of reindeer moss (lichens of the *Cladonia* group) have been recognized on one brief visit to the bogs.

No data are available on wildlife but species observed in the nearby Rose Spit

Ecological Reserve (#10), i.e. Marten, Red Squirrel, Deer Mouse, Black-tailed Deer and Raccoon, are probably also found here. Harbour Seals and Steller Sea Lions are likely visitors along the coast. A variety of shorebirds is expected during migration periods.

Cultural: The site of an historic Haida plank house is in the reserve.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
bog adder's-mouth orchid	Blue listed		3
Kamchatka spike rush	Blue listed		2
sea bluebells	Blue listed		2
American glehnia	Blue listed		2

THREATS

Climate Change: The northern location of this reserve, as well as its coastline composition may make it vulnerable to substantial change. Possible increased sea levels and storm activity could erode the sand beach and degrade the fragile dune ecosystems for which this reserve was designated. Higher sea levels and changed hydrology could also alter the inland moor bogs by increasing their salinity and/or changing their seasonal water levels. All changes would be reflected in shifts in the biotic components of the associated aquatic, terrestrial and marine communities.

Transportation corridors: Widening of Tow Hill Road leading to encroachment on ER boundaries. This and other current road access and associated recreational use such as ATVs threaten rare plant species.

RESEARCH OPPORTUNITIES

This unique area could use a more thorough assessment and subsequent monitoring of ecological changes due to climate changes.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE TOW HILL ER ACCOUNT

Flora

bluebells, sea (*Mertensia maritima*)
 glehnia, American (*Glehnia littoralis* ssp. *leiocarpa*)
 hemlock, western (*Tsuga heterophylla*)
 moss, peat (*Sphagnum* spp.)
 moss, reindeer (*Cladonia* sp.)
 pine, shore (*Pinus contorta* var. *contorta*)
 redcedar, western (*Thuja plicata*)
 sedge, large-headed (*Carex macrocephala*)
 spruce, Sitka (*Picea sitchensis*)

Fauna

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

Marten (*Martes americana*)

Mouse, Deer (*Peromyscus maniculatus*)

Raccoon (*Procyon lotor*)

Sea Lion, Steller (*Eumetopias jubatus*)

Seal, Harbour (*Phoca vitulina*)

Squirrel, Red (*Tamiasciurus hudsonicus*)