YALE GARRY OAKS

ORIGINAL PU	RPOSE To protect the most easterly isolated stand of Garry oak and associated ecosystem in British Columbia							
OVERVIEW								
Date established: ORC #: Map number:		9 December 1998 9769 91/B/11	Location: Latitude: Longitude:	2 km NE of Yale 49°33'N 121°23'W				
Total Area: Land:		11.65 ha 11.65 ha	Elevation:	200 m				
Access:		Accessible by boat from the west side of the Fraser River.						
Biogeoclimatic Zone: Biogeoclimatic Variant: Ecosection: Region: Management Area:		Coastal Western Hemlock (CWH) CWHds1 Southern Dry Submaritime Eastern Pacific Ranges Lower Mainland North Fraser						
COMPOSITIO	N							
Physical: Biological:	 N The reserve consists of a series of rocky outcrops and bluffs that have been cut through by the Canadian National Railway line which separates the upper part of the stand from the more open lower portion. The lower portion is again divided into a northwestern and a southeastern part by an indentation in the river's shoreline (a sandy beach at low water) that extends to the base of a steep talus slope below the railway. Soils range from shallow on more open bluffs to deep and stony on sites between the outcrops and on some benched sites. The most significant feature is the disjunctive occurrence of Garry oaks, some 160 km from their main distribution along the coast. Set within a conifer forest, this is a heterogeneous, mixed Garry oak stand with younger Douglas-fir on all but the most shallow, rocky soils. Also significant are the associated vascular plants and bryophytes that are characteristic of both coastal Garry oak and, to a lesser degree, drier interior ecosystems. Many of these species also show wide disjunctions from their closest populations. Plants with coastal affinities include, among vascular plants, Hooker's onion, long-stoloned sedge, and licorice fern, and among bryophytes (<i>Dendroalsia abietina</i>), (<i>Zygodon viridissimus</i>), (<i>Anacolia menziesii</i>), (<i>Homalothecium nuttallii</i>), (<i>Antitrichia californica</i>) and (<i>Orthotrichum lyellii</i>). In contrast, vascular plants with interior affinities include such species as water birch, choke cherry, bluebunch wheatgrass, brown-eyed Susan, rough-stemmed fleabane and western polypody. 							
Cultural:	There is evidence of precontact First Nations' occupation within the reserve area; a cache pit, mound and unidentified cultural depression have been documented.							

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES Garry oak – bigleaf maple – cherries association		BC LIST STATUS Red listed	COSEWIC STATUS	CF PRIORITY Not Assessed			
White Sturgeon (lower Frase population)	Red listed	Endangered (2003)	1				
heterocodon		Blue listed		2			
THREATS							
Climate Change:	The distribution of Garry oak ecosystems may expand, if properly managed and unhindered, due to drying and warming climate and increases in disturbance such as fire. The encroachment of Douglas-fir on Garry oak communities may also continue due to natural forest succession.						
Geological processes:	eological processes: Fraser River flooding						
Loss of species-at-risk:	Encroachment of Douglas-fir into the rare Garry oak stands.						
		l garbage dumping occurs, changing water quality, Fying physical environment and changing the soil chemistry.					
TransportationCutting of Garry oaks for fire wecorridors:line.			or fire wood occurs; acces	s is through rail			
Transportation corridor:	orridor increases access to reserve and modifies nvironment. Transportation changes air quality and becies as well as introducing non-native species.						
RESEARCH Studies on Garry oak ecology and forest su conducted within the reserve.				on can be			

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE YALE GARRY OAKS ER ACCOUNT

Flora

birch, water (Betula occidentalis) brown-eyed Susan (Gaillardia aristata) cherry, choke (Prunus virginiana) Douglas-fir (Pseudotsuga menziesii) fern, licorice (Polypodium glycyrrhiza) fleabane, rough-stemmed (Erigeron strigosus var. strigosus) heterocodon (Heterocodon rariflorum) maple, bigleaf (Acer macrophyllum) moss (Anacolia menziesii) moss (Anacolia menziesii) moss (Antitrichia californica) moss (Dendroalsia abietina) moss (Orthotrichum lyellii) moss (Zygodon viridissimus) oak, Garry (*Quercus garryana*) onion, Hooker's (*Allium acuminatum*) polypody, western (*Polypodium hesperium*) sedge, long-stoloned (*Carex inops*) wheatgrass, bluebunch (*Pseudoroegneria spicata*)

Fauna

Sturgeon, White (Lower Fraser River population) (Acipenser transmontanus pop.4)