

TERRESTRIAL ECOSYSTEM MAPPING OF MT. MAXWELL ECOLOGICAL RESERVE
Ministry of Water Land and Air Protection
Environmental Stewardship

Vancouver Island Region

Map sheets

092B.083, 092B.073

Scale 1:2 000

March 2003

INTRODUCTION

Terrestrial Ecosystem Mapping of the Mt. Maxwell Ecological Reserve was undertaken in 2002/2003 with the objective to classify, map at a scale of 1:2,000 and describe the natural ecosystems within the study area according to Resource Inventory Committee (RIC) standards of 1998. In addition to mapping using TEM standards, the TEM polygons were also classified by Garry oak ecosystem type, currently under development (Meidenger *et al.* 2001). The Garry Oak Ecosystem Classification is illustrated in additional interpretive maps in the accompanying project report (MESL 2003). The project received funding from the Ministry of Water Land and Air Protection, Environmental Stewardship, Vancouver Island Region. The maps and databases produced in this project are a fundamental first step in the management of sensitive ecosystems on Mt Maxwell and an important tool to support interpretation of these ecosystems for rare elements of biodiversity.

ECOSECTION

SOG: Straight of Georgia

BIOGEOCLIMATIC UNITS

CDFmm Coastal Douglas Fir, Moist Maritime

SITE MODIFIERS

Code	Criteria	Code	Criteria
a	active floodplain	n	fan or cone
c	coarse textured soil	p	peaty material on surface
d	deep soil	q	very steep cool aspect (285°-135°, slope >100%)
f	fine-textured soil	r	ridge
g	gullying occurring	s	shallow soils (20-100cm to bedrock)
h	hummocky terrain	t	terrace
j	gentle slope (slope <35%)	v	very shallow soil (<20cm to bedrock)
k	cool aspect (285°-135°, slope 35 – 100 %)	w	warm aspect (135°-285°, slope 35 – 100 %)
m	medium-textured soil	z	very steep warm aspect (135°-285°, >100% slope)

STRUCTURAL STAGE

Code	Structural Stage
1	Sparse/Bryoid
2	Herb
2a	Forb
2b	Graminoid
2c	Aquatic
2d	Dwarf Shrub
3	Shrub/Herb
3a	Low Shrub
3b	Tall Shrub
4	Pole/Sapling
5	Young Forest (generally 40-80 years but may begin as early as age 30, depending on tree species and ecological conditions)
6	Mature Forest (CWH and MH, 80-250 years)
7	Old Forest (CWH and MH, >250 years)

ECOSYSTEM UNITS						
CDFmm Coastal Douglas Fir Moist Maritime						
Map Code	Site Series #	Site Series Name	Assumed Modifiers	Typical Conditions	Typical Moisture Regime	Mapped Modifiers
DA	02	Douglas-fir – Lodgepole pine - Arbutus	d, j, m, r	upper slope to crest position; medium textured soils.	xeric	c, s, w
DS	01	Douglas-fir - Salal	d, j, m	mid to upper slope position; medium textured soils.	subxeric - mesic	c, w
DG	04	Douglas-fir – Grand-fir - Oregon grape	d, j, m	deep, medium textured soil; middle to upper slope position; richer nutrient regime	subxeric - mesic	w
FC	00	Fescue – Camas	j, m, s	very shallow, medium-textured soils; coastal bluffs and forest openings.	subxeric	w, z
GO	00	Garry oak – Ocean spray	j, m, r	upper slope to crest position; medium nutrient regime.	xeric - submesic	w
RO	-	Rock outcrop	-	-	-	-
SC	00	Cladina – Wallace’s selaginella	j, m, r, v	typically on ridge crests and upper slopes; very shallow, medium textured soils on rock outcrops in forest openings.	subxeric	w, z

DATA SOURCES

This mapping project is based on 1:10,000 black and white aerial photography from Geographic Data BC taken in 1985. Ernie Pacholuk created the base map from these air photos as the TRIM base did not adequately support 1:2,000 mapping. Full plots as well as ground inspection plots and visual checks were completed in the study area to achieve a survey intensity level 1. There was a total of 154 plots, 3 full, 26 ground inspections and 125 visual checks, completed between October 2002 and March 2003. Plot locations are shown on the map. Visual plots begin with V and ground inspection plots begin with G. All other plots are detailed.

CREDITS

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 Bioterrain Correlation: Bob Maxwell
 Funding provided by the Ministry of Water Land and Air Protection, Environmental Stewardship, Vancouver Island Region

REFERENCES

Ecosystems Working Group of the Terrestrial Ecosystems Task Force Resource Inventory Committee. 1998. *Standards for Terrestrial Ecosystem Mapping in British Columbia*. Victoria, British Columbia.

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