



N
Scale 1:5,000

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

Mapsheets
 092B.083, 092B.073
 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 (Meidinger, 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: Strait of Georgia

BIOGEOCLIMATIC UNITS
 CDFmm Coastal Douglas Fir, Moist Maritime

ECOSYSTEM UNIT MAP LABEL FORMAT

Map Unit Labels: Polygon Number, Site Modifier 1, Structural Stage 1, Structural Stage 2, Site Modifier 2, Zone, Subzone

SITE MODIFIERS AND STRUCTURAL STAGES

| Site Modifiers Code | Criteria | Structural Stage Code | Criteria |
|---------------------|--|-----------------------|---------------|
| a | active floodplain | 1 | sparse/bryoid |
| c | coarse-textured soil | 2 | herb |
| d | deep soil | 2a | forb |
| f | fine-textured soil | 2b | graminoid |
| g | gully/occurring | 2c | aquatic |
| h | hummocky terrain | 2d | dwarf shrub |
| i | gentle slope (slope <35%) | 3 | shrub/herb |
| k | cool aspect (285 - 135, slope 35 - 100%) | 3a | low shrub |
| m | medium-textured soil | 3b | tall shrub |
| n | fan or cone | 4 | poleslipping |
| p | peaty material on surface | 5 | young forest |
| q | very steep cool aspect (285 - 135, slope > 100%) | 6 | mature forest |
| r | ridge | 7 | old forest |
| s | shallow soils (20 - 100 cm to bedrock) | | |
| t | terraces | | |
| v | very shallow soil (<20 cm to bedrock) | | |
| w | warm aspect (135 - 285, slope 35 - 100%) | | |
| z | very steep warm aspect (135 - 285, slope >100%) | | |

MAP BOUNDARIES

Ecosystem Unit, Study Area Boundary*, Plot Location Symbol, Cliffs, Contours (25m intervals)

* The study area boundary (red) is taken from the base map which was created at 1:2,000. The coast line (blue) is from TRIM which is intended for mapping at 1:20,000. Therefore the coast line from TRIM and the study area boundary do not match.

ECOSYSTEM UNITS*

| 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 soils; 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 |

* see MESL, 2003 for detailed ecosystem descriptions

DATA SOURCES
 This mapping project is based on 1:10,000 black and white aerial photography from Geographic Data B.C. taken in 1955. Ernie Pacholuk of West Coast Geomatics 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, 9 full, 28 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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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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 Meidinger, D., Hebble, R. and Roemer, H. November 2001 - in progress. *Higher-level Physiognomic Vegetation Categories for Garry Oak and Surrounding Ecosystems*. Victoria, British Columbia.