



**1. Map Boundaries and symbols**

**Map Symbols**

- Ecoregion
- Biogeodimatic Units
- Biophysical Habitat Units
- Study Area Boundary

**Examples of Map Symbols**

(LIM) Ecoregion (see box 2)

(AT) Biogeodimatic Zone (see box 3)

**Biophysical Habitat Unit Labels**

Percentile

Slope Stage (see box 5)

Aspect (see box 5)

Habitat Unit symbol (see box 4)

m Stand Density (see box 5)

**2. Ecoregion**

Ecoregions are large, subregional sized areas, influenced by a particular macroclimatic process or interacting processes over a large geographic unit and are characterized by all plant communities and wildlife populations present (Demaree et al. 1989).

Map Symbol	Ecoregion	Ecoregion	Ecoregion
LIM	Leeward Island Mountains	Eastern Vancouver Is.	Georgia Depression
NIM	Northern Island Mountains	Western Vancouver Is.	Coast and Mountains
WIM	Windward Island Mountains	Western Vancouver Is.	Coast and Mountains

**DESCRIPTIONS**

LIM Leeward Island Mountains Ecoregion. This ecoregion is a mountainous area of reduced rainfall toward the crest of Vancouver Island Ranges to the Nanaimo Lowlands.

NIM Northern Island Mountains Ecoregion. This ecoregion is an area of low to rolling topography with high precipitation located at the north end of Vancouver Island.

WIM Windward Island Mountains Ecoregion. This ecoregion is the area of lowlands, islands and mountains on the western margin of Vancouver Island.

**3. Biogeodimatic Units**

A biogeodimatic unit is an area characterized by a distinct climatic climax or zonal ecosystem association. A subzone consists of unique sequences of geographically related ecosystems influenced by one type of regional climate (Udg. et al. 1983).

**CWHm2** COASTAL WESTERN HEMLOCK - western very dry maritime subzone occurs at lower elevations along the east side of Vancouver Island. Characterized by warm, dry summers and moist, mild winters with relatively little snowfall. Growing seasons are long and feature water deficits on zonal sites.

**CWHm1 & 2** COASTAL WESTERN HEMLOCK - moist maritime subzone. The submontane variant occurs on the leeward side of the Vancouver Island Ranges above the CWHm2 subzone and below 600m. Climatic conditions are intermediate between CWHm and CWHm2 subzones with moist, mild winters and cool but relatively dry summers.

**mm2 - Montane** The montane variant occurs at higher elevations on the leeward side of the Vancouver Island Ranges between 650 and 1000m. Compared to CWHm1 this subzone has cooler temperatures, shorter growing seasons and heavier snowfall, with snowpacks persisting throughout the winter.

**CWHm1 & 2** COASTAL WESTERN HEMLOCK - very wet maritime subzone

**vm1 - Submontane** The submontane variant occurs below 600m on the windward slopes of Strathcona Park. This subzone has a wet, humid climate with cool summers and mild winters featuring relatively little snow. Growing seasons are long. Precipitation is high but can vary considerably.

**vm2 - Montane** The montane variant occurs at higher elevations (1000 - 1000m) above the CWHm1. It grades into the MH zone above. Characterized by a wet, humid climate with cool, short summers and cool winters featuring substantial snowfall.

**MHm** MOUNTAIN HEMLOCK - moist maritime subzone occurs at high elevations (1000 - 1300m). It has long, moist, cool winters and short, cool moist summers. Frozen soils are rare due to insulating snowpack, but growing season frosts are common. Total snowfall is great, resulting in substantial snowpacks that can persist into July.

**MHmp** MOUNTAIN HEMLOCK PARKLAND - moist parkland subzone occurs above the MHm (1300m). The climate is harsher than in the MHm. If trees occur at all they are in isolated clumps and irregular small patches.

**AT** ALPINE TUNDRA zone occurs on high mountains throughout B.C. In Strathcona Park it occurs above 1650m. The harsh alpine climate is cold, windy, and snowy, and is characterized by low growing season temperatures and a very short frost-free period.

**4. Biophysical Habitat Units**

**Map Symbol**

**BIOPHYSICAL HABITAT UNITS**

**Habitat Units of the CWHm2**

DC Douglas fir - Cedrus, shallow soils

DS Douglas fir - salal, dry

HK Western hemlock - Kinnelburgia, mesic

CT Western redcedar - foamflower, deep soils

SS Sitka spruce - salmonberry, high floodplain

BR Black cottonwood - red-osier dogwood, medium floodplain

**Habitat Units of the CWHm1 and 2**

DS Douglas fir - salal, shallow soils

HS Western hemlock - salal, dry

HB Western hemlock - blueberry, mesic

AF Amabilis fir - foamflower, deep soils

AS Amabilis fir - salmonberry, moist

CC Western redcedar - slunk cabbage

SS Sitka spruce - salmonberry, high floodplain

BR Black cottonwood - red-osier dogwood, medium floodplain

ES Sedgework estuary (vmt only)

**Habitat Units of the MHm**

MM Mountain hemlock - mountain-heather, parkland

MB Mountain hemlock - blueberry, mesic

AT Amabilis fir - hellebore, deep soils

MD Mountain hemlock - deer cabbage, wet depression

MY Yellow cedar - hellebore

MP Mountain-heathers - partigedfoot heath, mesic

SH Sedge - hellebore meadow, fluvial

**Habitat Units of the AT**

LM Lichen - mountain-heathers, rocky soil, generally warm aspect

**Additional Habitats**

(occur in several subzones/variants)

AB Avianiche - lava RL rock outcrop, limestone

AV Sitka alder avalanche chute SA slump-red alder

CL cliff SC side-composite vegetation

GL glacier SB silt - bare

LA lake SP snowpack - permanent

RG riparian gravel bar, TB talus - bare

RO rock outcrop, TV talus - vegetated, Sitka alder

WL wetland

**Anthropogenic Units**

CA Campsite MI Mine/trace

**5. Successional Stage/Aspect/Stand Density**

**FOREST SUCCESSIONAL STAGES**

No.	Stage	ASPECT
1	Shrub-Herb	warm aspect slopes facing approximately 135° - 260°
2	Pole-Sapling	cool aspect slopes facing approximately 260° - 135°
3	Young Forest	
4	Mature Forest	
5	Old Growth	

**STAND DENSITY**

d dense canopy: greater than 85% cover

m moderate canopy: 25 - 85% cover

s sparse: less than 25% cover

**6. Survey and Credits**

Air photo coverage for this project: BC78052: 116-125, 168-180, BC78070: 102, 127; BC80072: 4-50, 106-187, 226-260, 264-291, 296-297; BC80073: 10-36, 43-66, 71-86, 101-103, 261-262, 288-291; BC80093: 123-162; BC80095: 16-53, 59-66, 220-229, 267-277; BC80096: 143-150, 166-177; BC81010: 164, 165; BC81072: 168-172; BC84026: 107-115, 107-117a; BC84028: 22-29, 209, 210, 212-216; BC84031: 28-37

Fieldwork: Minimal field checking was undertaken from July 19 to August 8, 1993. Less than 0.5% of the polygons were fieldchecked.

Mapped by: Madrone Consultants Ltd. 1994

**Explanatory notes**

In 1993 BC Parks (South Coast) initiated the Strathcona Provincial Park project to provide habitat mapping for effective vegetation and wildlife management.

The project area is over 230,000 hectares in size and is located in the central portion of Vancouver Island straddling the Vancouver Island Mountains. These ecoregions, eight biogeodimatic zones and 65 biophysical habitat units fall within the study area. Mapping is at a scale of 1:20,000 for BCOS map sheets 92E-102, 92E-041, 92E-042, 92E-043, 92E-044, 92E-045, 92E-046, 92E-047, 92E-048, 92E-049, 92E-050, 92E-051, 92E-052, 92E-053, 92E-054, 92E-055, 92E-056, 92E-057, 92E-058, 92E-059, 92E-060, 92E-061, 92E-062, 92E-063, 92E-064, 92E-065, 92E-066, 92E-067, 92E-068, 92E-069, 92E-070, 92E-071, 92E-072, 92E-073, 92E-074, 92E-075, 92E-076, 92E-077, 92E-078, 92E-079, 92E-080, 92E-081, 92E-082, 92E-083, 92E-084, 92E-085, 92E-086, 92E-087, 92E-088, 92E-089, 92E-090, 92E-091, 92E-092, 92E-093, 92E-094, 92E-095, 92E-096, 92E-097, 92E-098, 92E-099, 92E-100.

