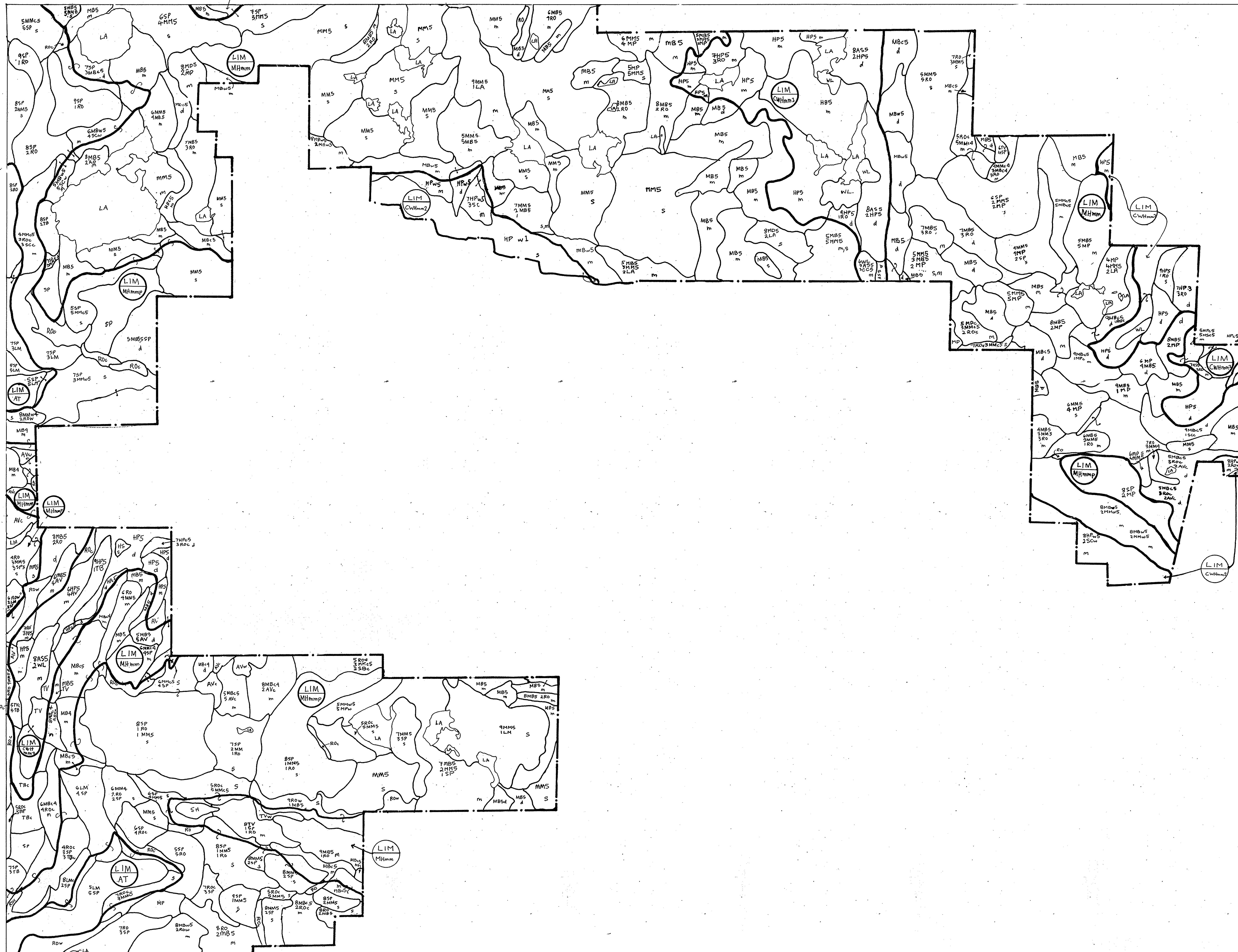


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STRATHCONA PROVINCIAL PARK
BIOPHYSICAL HABITAT



1. Map Boundaries and symbols

Map Boundaries

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

Examples of Map Symbols

- Ecoregion (see box 2)
- Biogeoclimatic Zone (see box 3)

Biophysical Habitat Unit Labels

- Percentile
- Stand Stage (see box 5)
- Aspect (see box 5)
- Habitat Unit symbol (see box 4)
- 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 physiographic 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 leeward from the crest of Vancouver Island Ranges to the Nanaimo Lowlands.

NIM Northern Island Mountains Ecoregion. This ecoregion is an area of low 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. Biogeoclimatic Units

A biogeoclimatic 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 (Uzig, et al. 1983).

CWtm2 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.

CWtm1 & 2 COASTAL WESTERN HEMLOCK - moist maritime subzone The submontane variant occurs on the leeward side of the Vancouver Island Ranges above the CWtm2 subzone and below 650m. Climatic conditions are intermediate between CWtm2 and CWtm1 subzones with moist, mild winters and cool but relatively dry summers.

mw2 - Montane The montane variant occurs at higher elevations on the leeward side of the Vancouver Island Ranges between 650 and 1000m. Compared to CWtm1 this subzone has cooler temperatures, shorter growing seasons and heavier snowfall, with snowpacks persisting throughout the winter.

CWtm1 & 2 COASTAL WESTERN HEMLOCK - very wet maritime subzone 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.

mw2 - Montane The montane variant occurs at higher elevations (800 - 1000m) above the CWtm1. It grades into the MIM zone above. Characterized by a wet, humid climate with cool, short summers and cool winters featuring substantial snowfall.

MIMm MOUNTAIN HEMLOCK - moist maritime subzone occurs at high elevations (1000 - 1300m). It has long, moist, cold winters and short, cool moist summers. Freeze frosts 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.

MIMhp MOUNTAIN HEMLOCK PARKLAND - moist maritime parkland subzone occurs above the MIMm (1300m). The climate is warmer than in the MIMm. 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 CWtm2

- DC Douglas fir - clifias, shallow soils
- DS Douglas fir - silt, dry
- HK Western hemlock - Kinsbergia, moist
- CT Western redcedar - foamflower, deep soils
- SS Sitka spruce - salmonberry, high floodplain
- BR Black cottonwood - red-osier dogwood, medium floodplain

Habitat Units of the CWtm1 and 2

- DS Douglas fir - silt, shallow soils
- HS Western hemlock - silt, dry
- HP Hemlock - riparian meadow, meadow
- AS Amabilis fir - salmonberry, moist
- CC Western redcedar - skunk cabbage
- SS Sitka spruce - salmonberry, high floodplain
- BR Black cottonwood - red-osier dogwood, medium floodplain

Habitat Units of the CWtm1 and 2

- HC Western hemlock - clifias, shallow soils
- HS Western hemlock - silt, dry
- HB Amabilis fir - foamflower, rich meadow
- AF Amabilis fir - salmonberry, moist
- CO Western redcedar - goldthread, depression (vmt only)
- CC Western redcedar - skunk cabbage
- SS Sitka spruce - salmonberry, high floodplain
- BR Black Cottonwood - red-osier dogwood, medium floodplain
- ES Sedgeland meadow (vmt only)

Habitat Units of the MIMm

- MM Mountain hemlock - mountain-heather, parkland
- MB Mountain hemlock - blueberry, meadow
- AT Amabilis fir - foamflower, deep soils
- MD Mountain hemlock - deer cabbage, wet depression
- YH Yellow cedar - hellebore
- MP Mountain-heather - partitiploet health, meadow
- SH Sedge - hellebore meadow, fluvial

Habitat Units of the MIMhp

- MM Mountain hemlock - mountain-heather parkland
- MB Mountain hemlock - blueberry forest
- LM Mountain-heather - partitiploet health, meadow
- MP Riparian meadow
- SH Sedge - hellebore meadow, fluvial

Habitat Units of the AT

- LM Lichen - mountain-heather, rocky soils, generally warm aspect

Additional Habitats (occur in several subzones/variants)

- AV Avalanche - bare
- CL glacial
- LA lake
- RG riparian gravel bar, low elevation
- RO rock outcrop
- CA Campfire
- RL rock outcrop, limestone
- EA slump-red alder
- SC silt-composite vegetation
- SS silt - bare
- SP snowpack - permanent
- TB talus - bare
- TV talus - vegetated, Sitka alder
- WL wetland

Anthropogenic Units

- MI Mine site

5. Successional Stage/Aspect/Stand Density FOREST SUCCESSIONAL STAGES

No.	Stage	ASPECT
1	Stump-field	w warm aspect slopes facing approximately 135° - 250°
2	Pole-Stapling	c cool aspect slopes facing approximately 250° - 135°
3	Young Forest	
4	Mature Forest	
5	Old Growth	

STAND DENSITY

- d dense canopy: greater than 85% cover
- m moderate canopy: 75 - 85% cover
- s sparse: less than 25% cover

6. Survey and Credits

Air photo coverage for this project: BC78052: 116-125, 168-180; BC78076: 107, 207; BC20072: 4-50, 106-187, 206-300, 364-391, 396-397; BC20073: 10-36, 43-66, 71-96, 101-103, 261-262, 268-291; BC20093: 123-162; BC20095: 16-53, 59-86, 228-250, 257-277; BC20096: 143-159, 166-177; BC21010: 164, 165; BC21072: 168-172; BC24026: 107-115, 167-173; BC24028: 22-28, 209, 210, 212-216; BC24031: 26-27

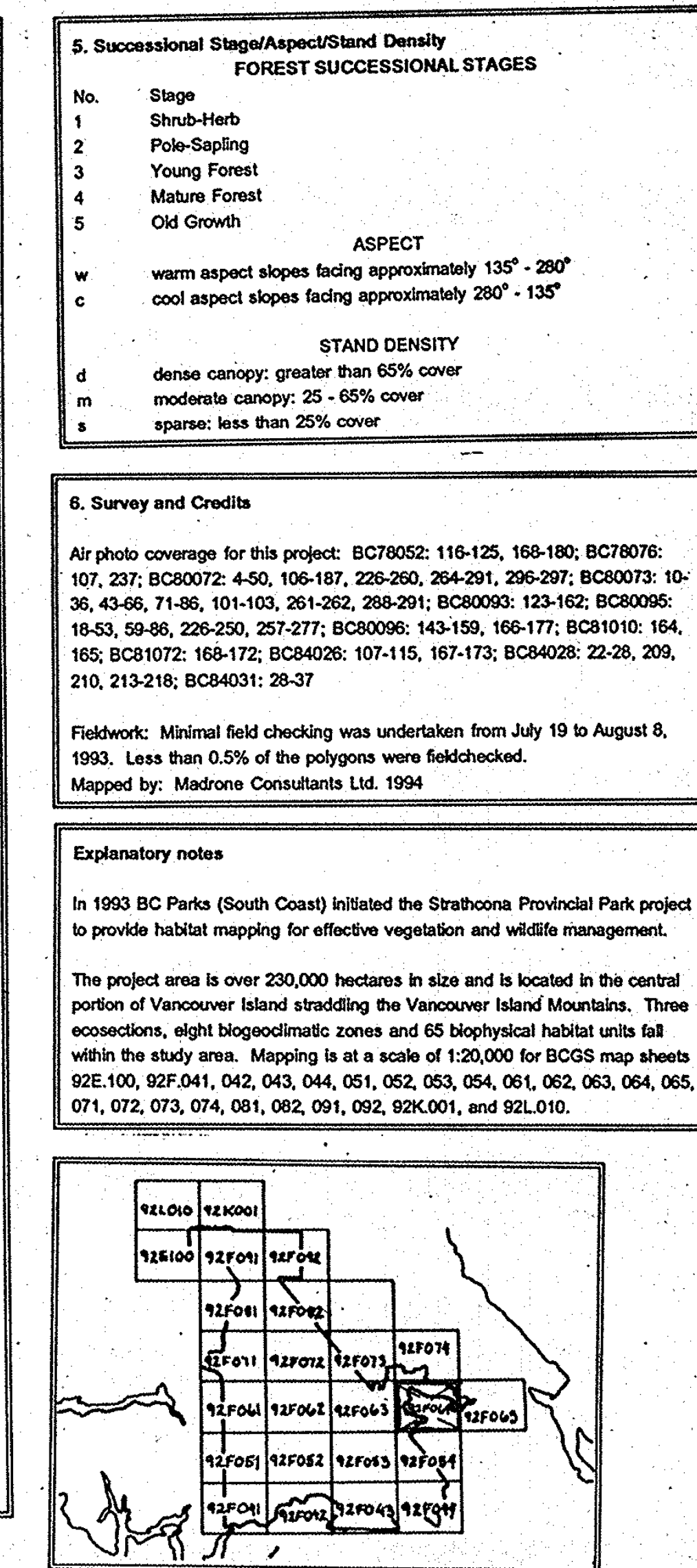
Fieldwork: Minimal field checking was undertaken from July 19 to August 6, 1993. Less than 0.5% of the polygons were fieldchecked.

Mapped by: Malvina Constantine 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. Three ecoregions, eight biogeoclimatic 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.100, 92F.041, 042, 043, 044, 051, 052, 053, 054, 051, 062, 063, 064, 065, 071, 072, 073, 074, 081, 082, 091, 092, 093, 094, and 92L.010.



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