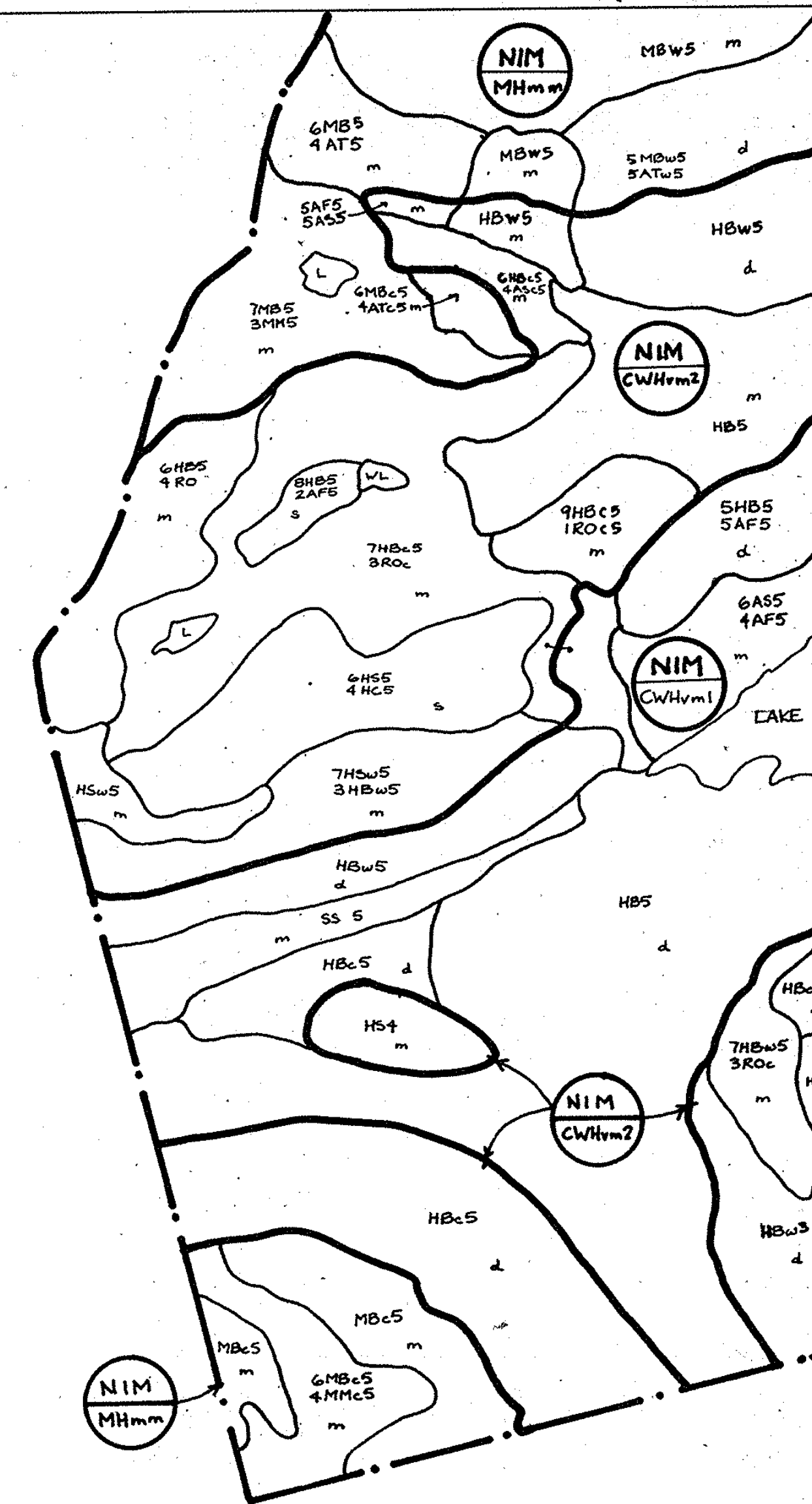


92 E.100

STRATHCONA PROVINCIAL PARK
BIOPHYSICAL HABITAT



1. Map Boundaries and symbols

Map Boundaries

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

Examples of Map Symbols

Biogeoclimatic Unit Labels

Percentile

Soil Stage (see box 3)

Aspect (see box 3)

Habitat Unit symbol (see box 4)

Stand Density (see box 5)

2. Ecosession

Ecosessions 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	Ecosession	Ecogion	Ecoprovince
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 Ecosession. This ecosession is a mountainous area of reduced rainfall leeward from the crest of Vancouver Island Ranges to the Nanaimo Lowlands.

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

WIM Windward Island Mountains Ecosession. This ecosession 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 (Ulzig, 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
m1: Submontane The submontane variant occurs on the leeward side of the Vancouver Island Ranges above the CWHm2 subzone and below 650m. Climatic conditions are intermediate between CWHm2 and CWHm1 subzones with moist, mild winters and cool but relatively dry summers.

m2: 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
v1: 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.

v2: Montane The montane variant occurs at higher elevations (600 - 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 maritime 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 1600m. 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

BIOPHYSICAL HABITAT UNITS

Map Symbol

Habitat Units of the CWHm2

DC Douglas-fir - cladsia, shallow soils
DS Douglas-fir - alii, dry
HK Western hemlock - krummholz, 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 - alii, shallow soils
HS Western hemlock - salix, dry
HP Hemlock - pipecleaner moss, mesic
AS Arbutus fr - salmonberry, moist
CC Western redcedar - slunk cabbage
SS Sitka spruce - salmonberry, high floodplain
BR Black cottonwood - red-osier dogwood, medium floodplain

Habitat Units of the CWHm1 and 2

HC Western hemlock - cladsia, shallow soils
HS Western hemlock - salix, dry
HB Western hemlock - blueberry, mesic
AF Arbutus fr - foamflower, rich mesic
AS Arbutus fr - salmonberry, moist
CG Western redcedar - goldthread, depression (vmt only)
CC Western redcedar - slunk cabbage
SS Sitka spruce - salmonberry, high floodplain
BR Black Cottonwood - red-osier dogwood, medium floodplain
ES Sedge/grass estuary (vmt only)

Habitat Units of the MHm

MM Mountain hemlock - mountain-heather, parkland
MB Mountain hemlock - blueberry, mesic
AT Arbutus fr - bifidolactia, deep soils
MD Mountain hemlock - deer cabbage, wet depression
YN Yellow cedar - halibone
MP Mountain-heathers - partridgefoot heath, mesic
SH Sedge - halibone meadow, fluvial

Habitat Units of the MHmp

MM Mountain hemlock - mountain-heather parkland
MB Mountain hemlock - blueberry forest
LM Lichen - mountain-heathers, rocky soil
MP Mountain-heathers - partridgefoot heath, mesic
RM Recent moraine
SH Sedge - halibone meadow, fluvial

Habitat Units of the AT

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

Additional Habitats
(occur in several subzones/variants)

AB Avalanche - bare
AV Sitka alder avalanche chute
CL cliff
GL glacier
LA lake
RG riparian gravel bar, low elevation
RO rock outcrop

RL rock outcrop, limestone
SA slump-red alder
SC side-complex vegetation
SB side - bare
SP snowpack - permanent
TB talus - bare
TV talus - vegetated, Sitka alder
WL wetland

Anthropogenic Units

CA Campsite
M Mine site

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

No. Stage

1 Shrub-Herb
2 Pole-Sapling
3 Young Forest
4 Mature Forest
5 Old Growth

ASPECT

w warm aspect slopes facing approximately 135° - 202°
c cool aspect slopes facing approximately 207° - 135°

STAND DENSITY

d dense canopy: greater than 65% cover
m moderate canopy: 25 - 65% cover
s sparse: less than 25% cover

6. Survey and Credits

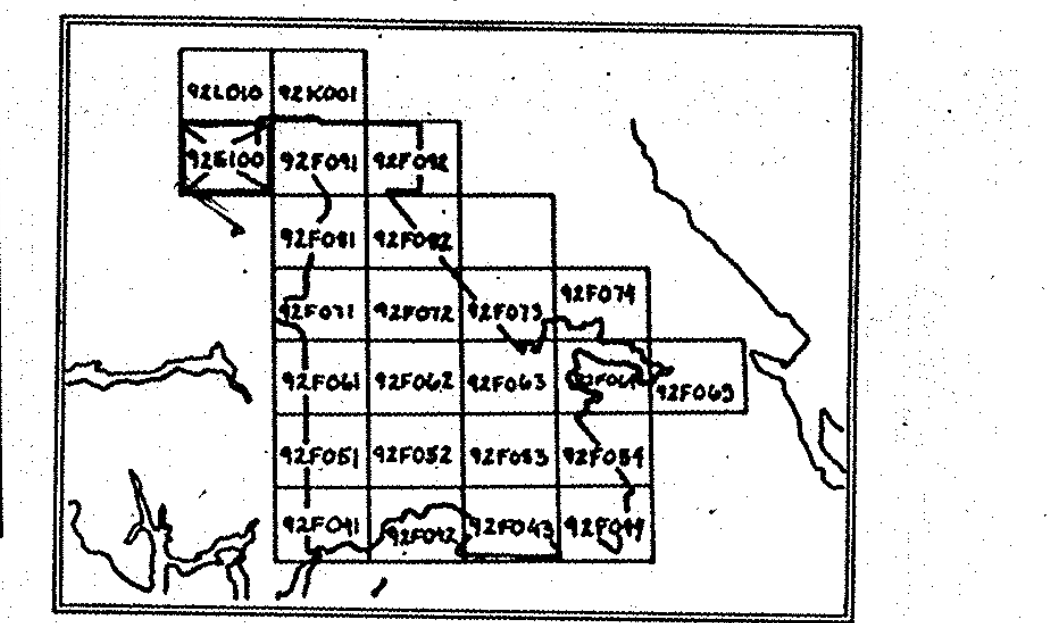
Air photo coverage for this project: BC78052: 116-125, 168-180; BC78076: 107, 237; BC80072: 4-50, 106-187, 226-260, 284-291, 296-297; BC80073: 10-36, 43-66, 71-96, 101-103, 261-262, 268-291; BC80093: 123-162; BC80095: 18-53, 59-66, 226-250, 257-277; BC80096: 143-155, 166-177; BC81010: 164, 165; BC81072: 168-172; BC84026: 107-115, 167-173; BC84026: 22-28, 209, 210, 213-216; 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 ecosystems, eight biogeoclimatic zones and 65 biophysical habitat units fall within the study area. Mapping is at a scale of 1:20,000 for BCOSS map sheets 92E.100, 92F.041, 042, 043, 044, 051, 052, 053, 054, 061, 062, 063, 064, 065, 071, 072, 073, 074, 081, 082, 091, 092, 92K.001, and 92L.010.



92E.100