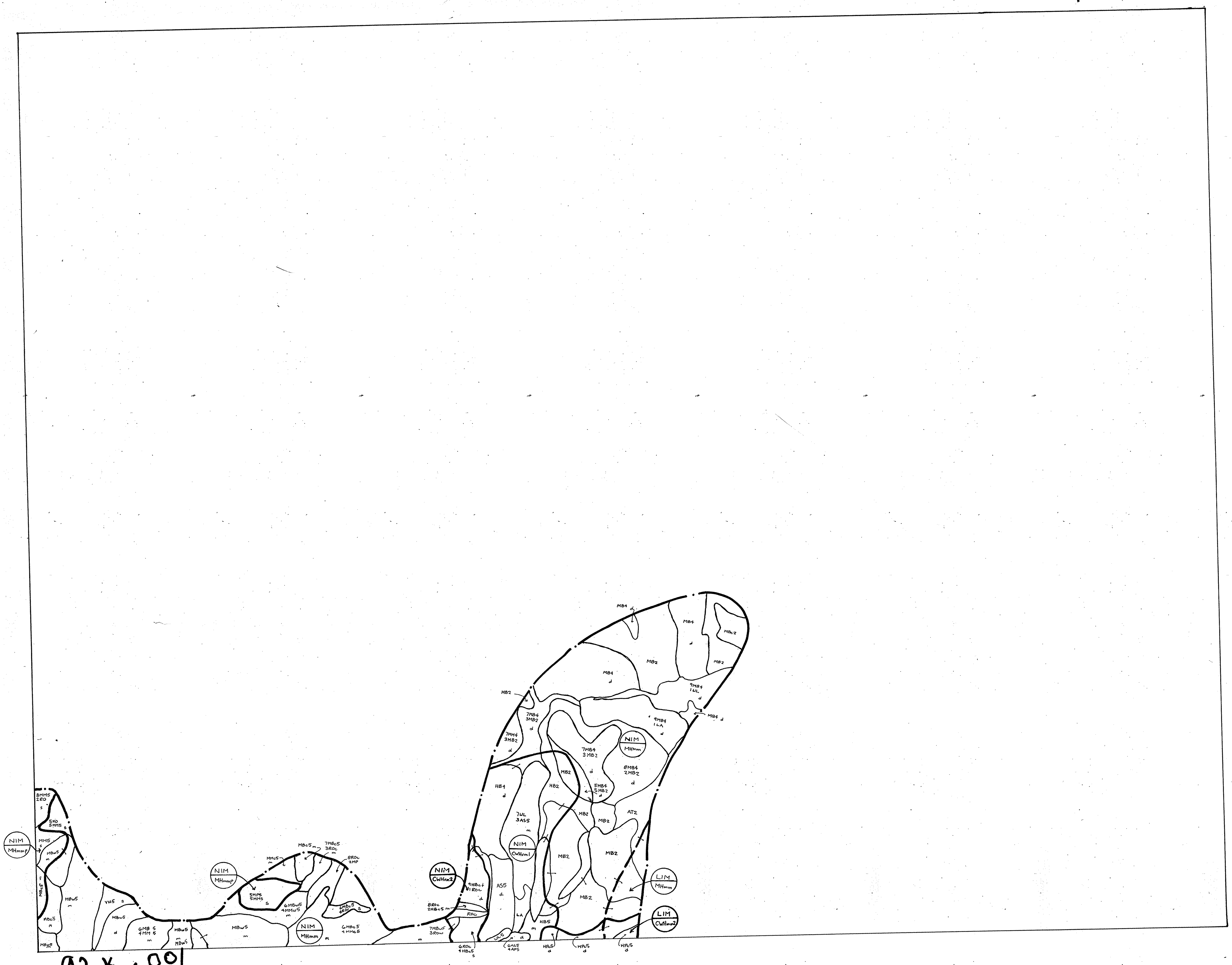
STRATHCONA
PROVINCIAL PARK
1993, 92K .001

92K.001



92K · 001

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

LIM / AT — Ecosection (see box 2); Biogeoclimatic Zone (see box 3)

Biophysical Habitat Unit Labels

6HPw5 - 4HSw5

- Percentile
- Seral Stage (see box 5)
- Aspect (see box 5)
- Habitat Unit symbol (see box 4)
- m — Stand Density (see box 5)

2. Ecosection

Ecosections 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 (Demarchi *et al.* 1989).

Map Symbol	Ecosection	Ecoregion	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 Ecosection. This ecosection is a mountainous area of reduced rainfall leeward from the crest of Vancouver Island Ranges to the Nanaimo Lowlands.

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

WIM — Windward Island Mountains Ecosection. This ecosection 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 (Utzig, *et al.* 1983).

CWHxm2 — 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.

CWHmm1 & 2 — COASTAL WESTERN HEMLOCK - moist maritime subzone
mm1: Submontane — The submontane variant occurs on the leeward side of the Vancouver Island Ranges above the CWHxm subzone and below 650m. Climatic conditions are intermediate between CWHxm and CWHvm 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 CWHmm1 this subzone has cooler temperatures, shorter growing seasons and heavier snowfall, with snowpacks persisting throughout the winter.

CWHvm1 & 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 (600 - 1000m), above the CWHvm1. It grades into the MH zone above. Characterized by a wet, humid climate with cool, short summers and cool winters featuring substantial snowfall.

MHmm — MOUNTAIN HEMLOCK - moist maritime subzone occurs at high elevations (1000 - 1300m). It has long, moist, cold 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.

MHmmp — MOUNTAIN HEMLOCK PARKLAND - moist maritime parkland subzone occurs above the MHmm (1300m). The climate is harsher than in the MHmm. 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 CWHxm2

- DC Douglas-fir - Cladina, shallow soils
- DS Douglas-fir - salal, dry
- HK Western hemlock - Kindbergia, 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 CWHmm1 and 2

- DS Douglas fir - salal, shallow soils
- HS Western hemlock - salal, dry
- HP Hemlock - pipecleaner moss, mesic
- 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 CWHvm1 and 2

- HC Western hemlock - cladina, shallow soils
- HS Western hemlock - salal, dry
- HB Western hemlock - blueberry, mesic
- AF Amabilis fir - foamflower, rich mesic
- AS Amabilis fir - salmonberry, moist
- CG Western redcedar - goldthread, depression (vm2 only)
- CC Western redcedar - skunk cabbage
- SS Sitka spruce - salmonberry, high floodplain
- BR Black Cottonwood - red-osier dogwood, medium floodplain
- ES Sedge/grass estuary (vm1 only)

Habitat Units of the MHmm

- MM Mountain hemlock - mountain-heather, parkland
- MB Mountain hemlock - blueberry, mesic
- AT Amabilis fir - twistedstalk, deep soils
- MD Mountain hemlock - deer cabbage, wet depression
- YH Yellow cedar - hellebore
- MP Mountain-heathers - partridgefoot heath, mesic
- SH Sedge - hellebore meadow, fluvial

Habitat Units of the MHmmp

- 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 morraine
- SH Sedge - hellebore 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	RL	rock outcrop, limestone
AV	Sitka alder avalanche chute	SA	slump-red alder
CL	cliff	SC	slide-composite vegetation
GL	glacier	SB	slide - bare
LA	lake	SP	snowpack - permanent
RG	riparian gravel bar, low elevation	TB	talus - bare
		TV	talus - vegetated, Sitka alder
RO	rock outcrop	WL	wetland

Anthropogenic Units

CA	Campsite	MI	Minesite

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° - 280°
- c — cool aspect slopes facing approximately 280° - 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

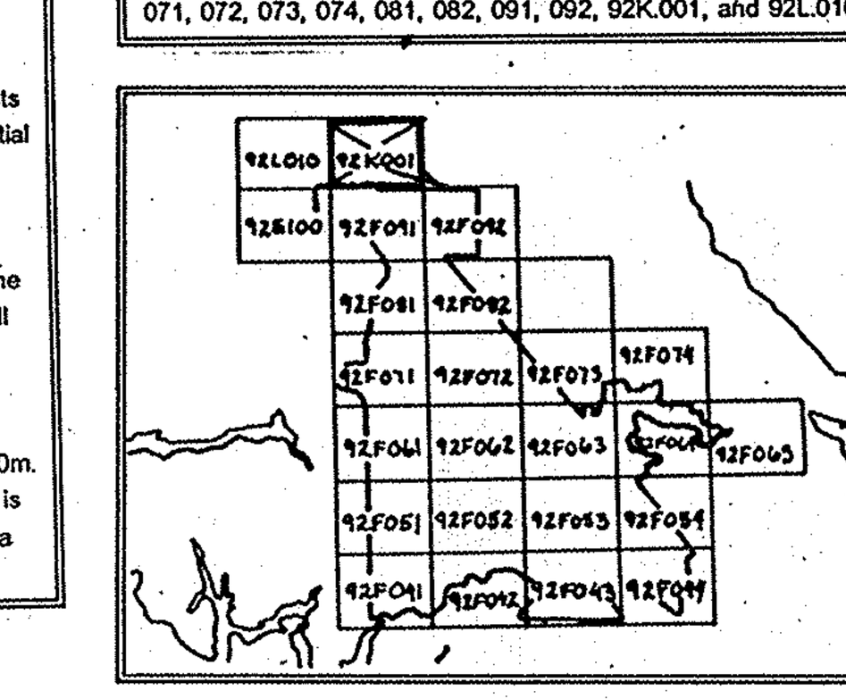
Air photo coverage for this project: BC78052: 116-125, 168-180; BC78076: 107, 237; BC80072: 4-50, 106-187, 226-260, 264-291, 296-297; BC80073: 10-36, 43-66, 71-86, 101-103, 261-262, 288-291; BC80093: 123-162; BC80095: 18-53, 59-86, 226-250, 257-277; BC80096: 143-159, 166-177; BC81010: 164, 165; BC81072: 168-172; BC84026: 107-115, 167-173; BC84028: 22-28, 209, 210, 213-218; 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. Three ecosections, eight biogeoclimatic zones and 65 biophysical habitat units fall within the study area. Mapping is at a scale of 1:20,000 for BCGS 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.



Strathcona