

VEGETATION

FOREST ZONATION AND LANDSCAPE UNITS  
for the East Kootenay Map area

**1. Explanatory Notes**

Vegetation maps show Forest Regions, Zones, Subzones, and Landscape Units. Zones, subzones and landscape units are the basic building blocks of this biophysical classification. A landscape unit is an area that is relatively homogeneous with respect to soils, surficial materials, disturbance history, climate and micro vegetation. Vegetation maps form a necessary input towards determining management alternatives, constraints, use and productivity.

This legend describes vegetation maps at a scale of 1:50 000 for mapsheets in 80's, J and O.

The map must be used in conjunction with the Explanatory Legend booklet. (See Box 10)

More detailed legends or reports may be available for this study area (See Box 10).

**2. Map Boundaries and Plot Symbols**

Biophysical Forest Region  
Biophysical Forest Zone  
Biophysical Forest Subzone  
Landscape Unit

Non-vegetated landscape unit (no zonal or subzonal connotations)

79-37253 Vegetation plot with a general soil description

79-37254 Vegetation plot with a detailed soil description and laboratory analysis

**3. Examples of Map Symbols**

(a) Biophysical Forest Regions, Zones and Subzones (See Box 5)

REGION  
ZONE  
SUBZONE

(b) Landscape Unit

Example 1: MCC-wH, wC, cfd  
ECOLOGICAL STATE (See Box 6) PLANT SPECIES (See Box 7) STAND APPEARANCE (See Box 8)

Example 2: MEC-m  
ECOLOGICAL STATE (See Box 6) STAND APPEARANCE (See Box 8)

Example 3: MEC-bCo, eS, mfd  
MS-1A, eS, mfd

\* For some landscape units both seral and climax conditions are shown. These units have the seral condition in the lower part of the symbol. They are separated from the climax condition shown in the upper part. The two parts are separated with a horizontal line.

**4. Composite Units**

Composite units are employed where two or three types of landscape units are so distributed that they cannot be designated as separate units at the scale of mapping.

Superscript numbers show the relative percentages in terms of each landscape unit.

MCC-eS, dIF, cfd<sup>5</sup> / MEC-m<sup>3</sup> / MEC-sAl, ps<sup>2</sup>

50% of unit    30% of unit    20% of unit

**5. Biophysical Forest Regions, Zones and Subzones**

Forest Region	Map Symbol	Forest Zone <sup>2</sup> and Subzone <sup>3</sup>	Forest Region	Map Symbol	Forest Zone <sup>2</sup> and Subzone <sup>3</sup>
WEST INTERIOR REGION (W)	DI ID a	INTERIOR ROCKY MOUNTAIN DOUGLAS-FIR ZONE (IO)	INTERIOR WESTERN HEMLOCK-WESTERN RED CEDAR ZONE (IwH-wC)	IWB IwH-wC a	a) Lodgepole pine subzone (Lacks ponderosa pine as a potential seral species)
		b) Ponderosa pine subzone (with ponderosa pine and lacks western larch as potential seral species)			a) Rocky Mountain Douglas-fir lodgepole pine-western larch subzone (lacks alpine fir and Engelmann spruce as potential seral species)
		c) Western larch - ponderosa pine subzone (with ponderosa pine and western larch as potential seral species)			b) Lodgepole pine-Engelmann spruce-alpine fir subzone (with alpine fir and Engelmann spruce as potential seral species)
WEST INTERIOR REGION (W)	SAeS-oIF DI ID a	SUBALPINE ENDEMANN SPRUCE-ALPINE FIR ZONE (SAeS-aIF)	INTERIOR WESTERN RED CEDAR ZONE (IwC)	IWB IwC b	a) Lodgepole pine-whitebark pine subzone (Lacks Rocky Mountain Douglas-fir as a potential seral species)
		b) Krummholz subzone (trees have stunted growth form and are layered in island patterns)			a) Lodgepole pine-Engelmann spruce-alpine fir subzone (lacks alpine fir and Engelmann spruce as potential seral species)
		c) Rocky Mountain Douglas-fir-lodgepole pine subzone (with Rocky Mountain Douglas-fir as a potential seral species)			b) Lodgepole pine-Engelmann spruce-alpine fir subzone (with alpine fir and Engelmann spruce as potential seral species)
WEST INTERIOR REGION (W)	DI Al	ALPINE TUNDRA ZONE (Al)	SUBALPINE ENDEMANN SPRUCE-ALPINE FIR ZONE (SAeS-aIF)	IWB SAeS-oIF c	a) Forested subzone
		subzones have not been determined			

1 A Biophysical Forest Region is an area in which the broad regional climate and physiography determine the definitive vegetation pattern of the region. Regions can be further divided into Forest Zones, Zones and Subzones.

2 A Biophysical Forest Zone is an area within a Forest Region of which the dominant vegetation of the climax stands on similar soils and terrain is ecologically similar. Soil, climate and topographic conditions determine the definitive vegetation pattern of zones.

3 A Biophysical Forest Subzone is an area within a Forest Zone defined on the basis of climate-related successional trends of dominant vegetation.

**6. Ecological State**

Ecological State is the successional stage to which vegetation has developed. The successional stages are determined by plant community structure and plant competition relationships in the community.

DC disclimax  
MCC maturing climatic climax (usually older than 60 years)  
MEC maturing edaphic climax (usually older than 60 years)  
MS maturing seral (usually between 60-140 years)  
OS overmature seral (usually older than 140 years)  
PS pioneer seral  
YCC young climatic climax (usually younger than 60 years)  
YEC young edaphic climax (usually younger than 60 years)  
YS young seral (usually younger than 60 years)

**7. Plant Species**

Tree species symbols are used to signify a vegetation type. Because of the natural variability of the vegetation, the indicated species may be infrequent or even absent from some sites, but none of the characteristics of the typical vegetation will occur.

al alpine larch    TA trembling aspen  
aIF alpine fir    W willow  
bCo black cottonwood    wB common paper birch  
D Rocky Mountain Douglas-fir    wC western red cedar  
eS Engelmann spruce    wH western hemlock  
IP lodgepole pine    wP whitebark pine  
pP ponderosa pine    wL western larch  
sAl Sitka mountain alder    wS white spruce

**8. Stand Appearance**

Stand Appearance is the structure and appearance of the vegetation, regardless of the species of which it is composed.

Forested units	Non-forested units
cfo coniferous forest - dense	al alpine tundra
cfo coniferous forest - open	cu cultivated undifferentiated
cfo coniferous forest - parkland	cu cultivated cover crop
gfd broadleaved forest - dense	cu cultivated fields
gfd broadleaved forest - open	cu cultivated hedgerow
gfd broadleaved forest - parkland	cu cultivated
mf mixed forest - dense	me meadow
mf mixed forest - open	mo monogated
mf mixed forest - parkland	ph pioneer herbs
	pI pioneer irrigated
	t tundra
	u undifferentiated
	wb wetland bog
	wf wetland fen
	wl wetland marsh
	ws wetland swamp

**9. Sources of Information**

a. B.C. Ministry of Forestry - Forest cover maps for Public Sustained Yield units and Parks:

- Kootenay National Park - 1954
- Crabbrook P.S.U. - 1964
- Upper Kootenay P.S.U. - 1965
- Windsore P.S.U. - 1968
- Craton P.S.U. - 1973
- Fernie P.S.U. - 1973
- Individual sample volume statements - 867 plots

b. Galloway Lumber Company Ltd.

- Tree Farm Licence 13 - forest cover maps
- Individual sample volume statements - 45 plots

c. Crownest Industries Ltd.

- Tree Farm Licence 27 - forest cover maps

d. B.C. Ministry of Environment, Resource Analysis Branch

- Terrain maps - 1977
- Soil survey (1969, 1974-1978)
- Climate maps (preliminary) - not available
- Vegetation survey (1968, 1974-1977) - 2100 plots

e. B.C. Ministry of Environment, Surveys and Mapping Branch

- 80 chain air photographs - 1972

**10. For Further Information**

A. References:

- Vegetation Mapping Methodology Manual, Terrestrial Studies Branch, Victoria, B.C. (in preparation).
- Explanatory Legend for Vegetation Maps of the East Kootenay Area, Terrestrial Studies Branch, Victoria, B.C., 1980.
- Biophysical Assessment of the East Kootenay Area, Vegetation, Terrestrial Studies Branch, Victoria, B.C. (in preparation).

B. Additional vegetation data and more detailed information (1968, 1974-78) available from:

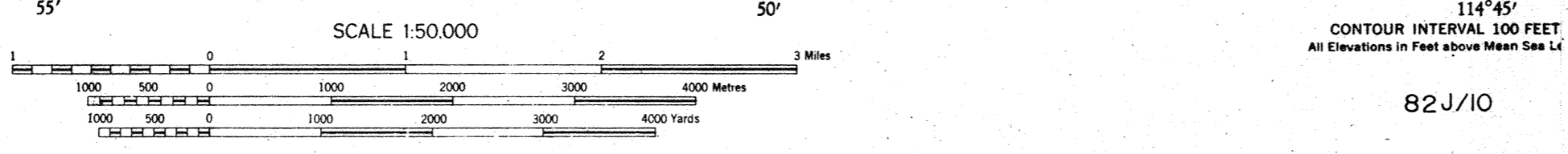
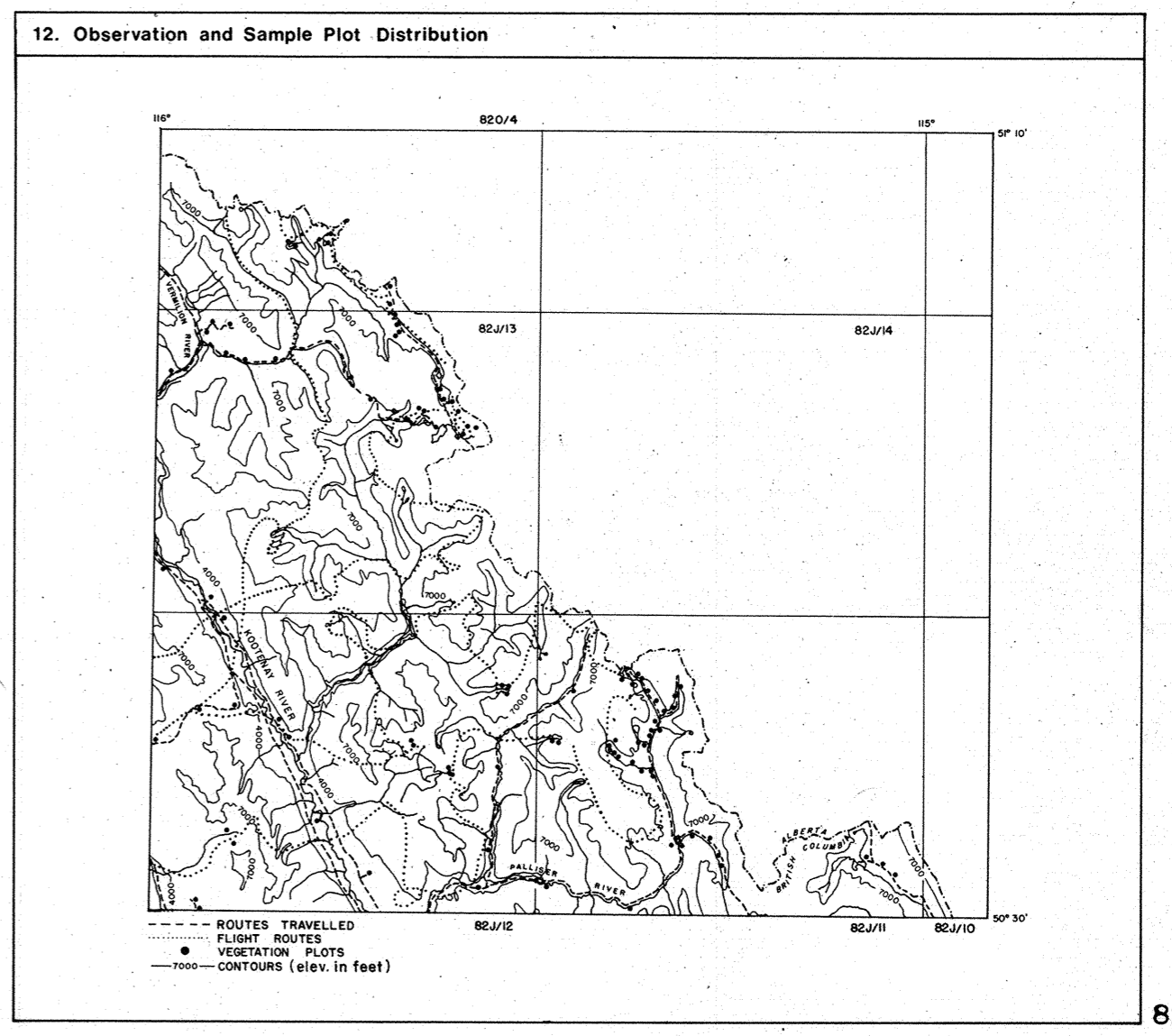
Operations Manager  
Terrestrial Studies Branch  
Ministry of Environment  
Parliament Buildings  
Victoria, B.C. V8B 1X6

C. Additional vegetation maps available from:

Map Library  
Assessment and Planning Division  
Ministry of Environment  
Parliament Buildings  
Victoria, B.C. V8B 1X6

**11. Credits**

Mapping supervised by **E.C. LEA**  
Mapping correlated by **E.C. LEA**  
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Produced by the Surveys and Mapping Branch, Department of Mines and Technical Surveys, 1952, from air photographs taken in 1947. Printed by the Army Survey Establishment, R.C.E., Department of National Defence, 1954. Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa, at 25 cents per copy.

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East Kootenay