

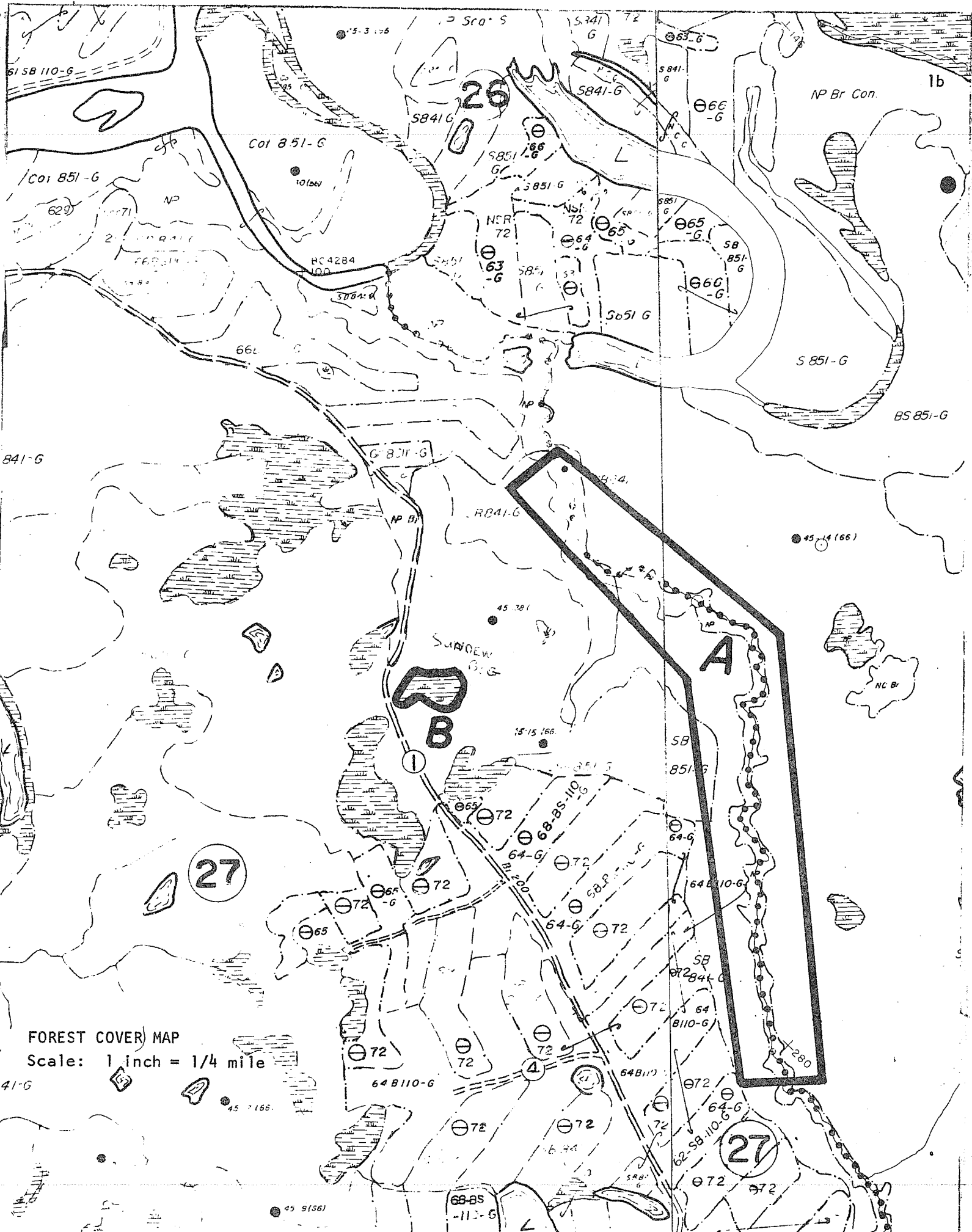
INTERNATIONAL BIOLOGICAL PROGRAMME

SECTION CT : CONSERVATION OF TERRESTRIAL BIOLOGICAL COMMUNITIES

CHECK SHEET (Mark VII) FOR SURVEY OF IBP AREAS*

To be completed with reference to the GUIDE TO THE CHECK SHEET

		Serial Number						
1.	<p>1. Name of surveyor Jim Pojar, Calvin Parsons, V.J. Krajina</p> <p>2. Address of surveyor Dept. of Botany</p> <p>..... Univ. of British Columbia</p> <p>..... Vancouver, B.C., Canada</p> <p>3. Check Sheet completed (a) on site X (b) from records X</p> <p>4. Date Check Sheet completed Oct. 12, 1974</p>							For Data Centre Use only
2.	<p>1. Name of IBP Area Hubble Creek, 9-10 mi. NNW of McGregor near Aleza Lake</p> <p>2. Name of IBP Subdivision (or serial letter) SBS</p> <p>3. Map of IBP Area* showing boundaries attached? Yes X No</p> <p>4. Sketch map of IBP Area*. Please mark direction of north, the scale and grid numbers where applicable.</p> <div style="border: 1px solid black; width: 60%; margin: 10px auto; height: 250px;"></div>							
<p>* For "IBP Area", read IBP Area and/or IBP Subdivision.</p>								



FOREST COVER MAP
 Scale: 1 inch = 1/4 mile

341-G

45 7166

45 9166

68-BS-110-G

27

27

1b

NP Br Con.

S 851-G

BS 851-G

SUNDEW B-G

NC Br

27

A

B

1

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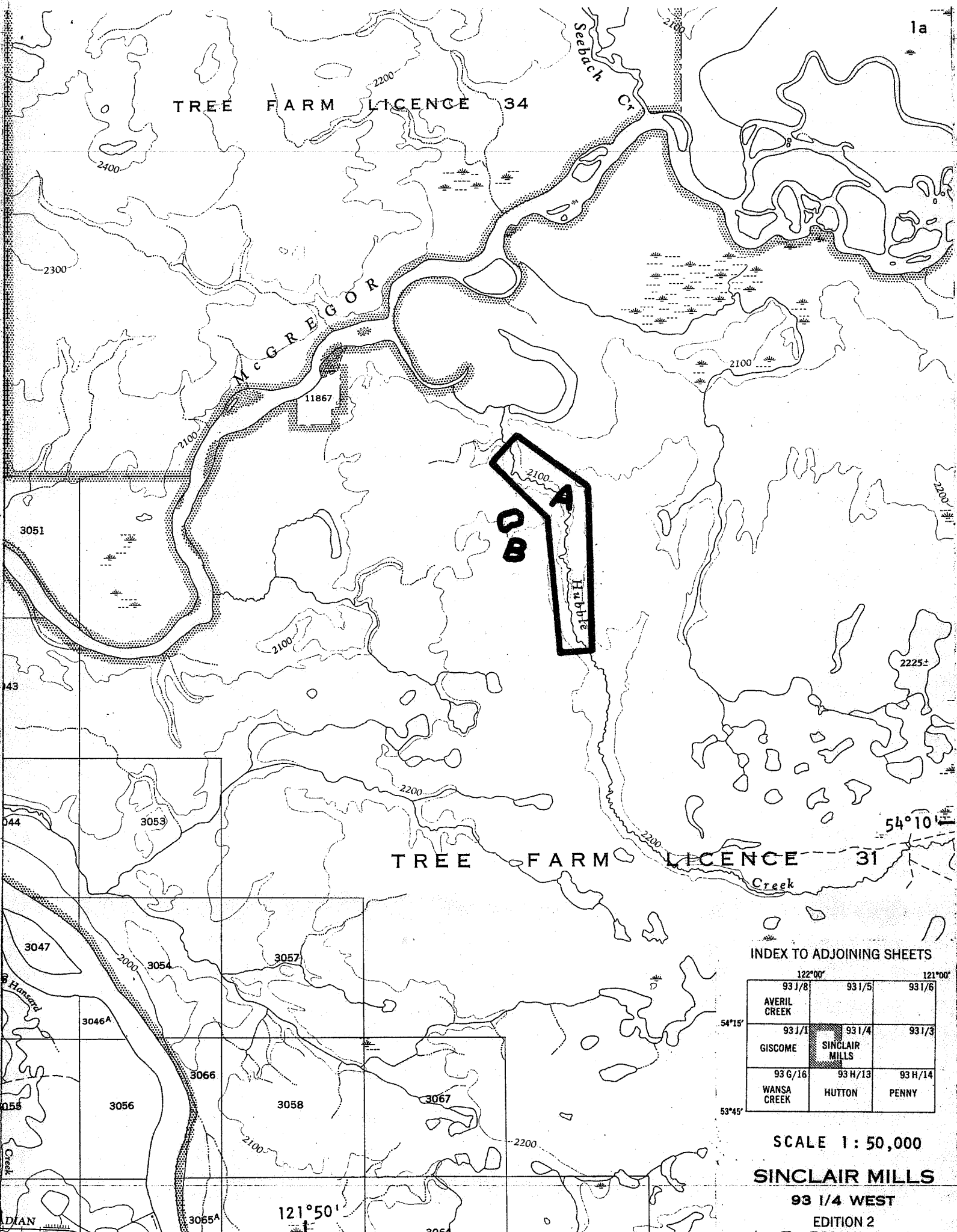
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1a

TREE FARM LICENCE 34

MCGREGOR

Sebach Cr

11867

A
B
Hubble

3051

2100

54°10'

TREE FARM LICENCE 31

Creek

43

44

3053

3047

3054

3057

55

3056

3058

3067

Honsard Cr

3046A

3066

DIAN

3065A

121°50'

3064

INDEX TO ADJOINING SHEETS

122°00'		121°00'
93 J/8	93 I/5	93 I/6
AVERIL CREEK		
93 J/1	93 I/4	93 I/3
GISCOME	SINCLAIR MILLS	
93 G/16	93 H/13	93 H/14
WANSA CREEK	HUTTON	PENNY
54°15'		
53°45'		

SCALE 1 : 50,000

SINCLAIR MILLS

93 I/4 WEST

EDITION 2

3.

Location of IBP Area*

1. Latitude 54 ° 11.2 - 12.5' N Longitude 121 ° 51.8 - 52.8' W
2. Country Canada
- State or Province British Columbia County Prince George
- (State or Province County)

4.

Administration

- National 1. Official category Crown Land (TFL 31)
2. Address of administration B.C. Dept. of Lands, Forests, and Water Resources
Parliament Buildings
Victoria, B.C., Canada

International Class

3.

Included in U.N. List	Rejected from U.N. List	Area with formal conservation status	No formal cons. status
(A)	(B)	(C)	(D) X

5.

Characteristics of IBP Area*

1. Surface area (state units of measurement)
2. Altitude (state units of measurement) Maximum 2250 ft. (690 m)
Minimum 2000 ft. (610 m)

6.

Climate

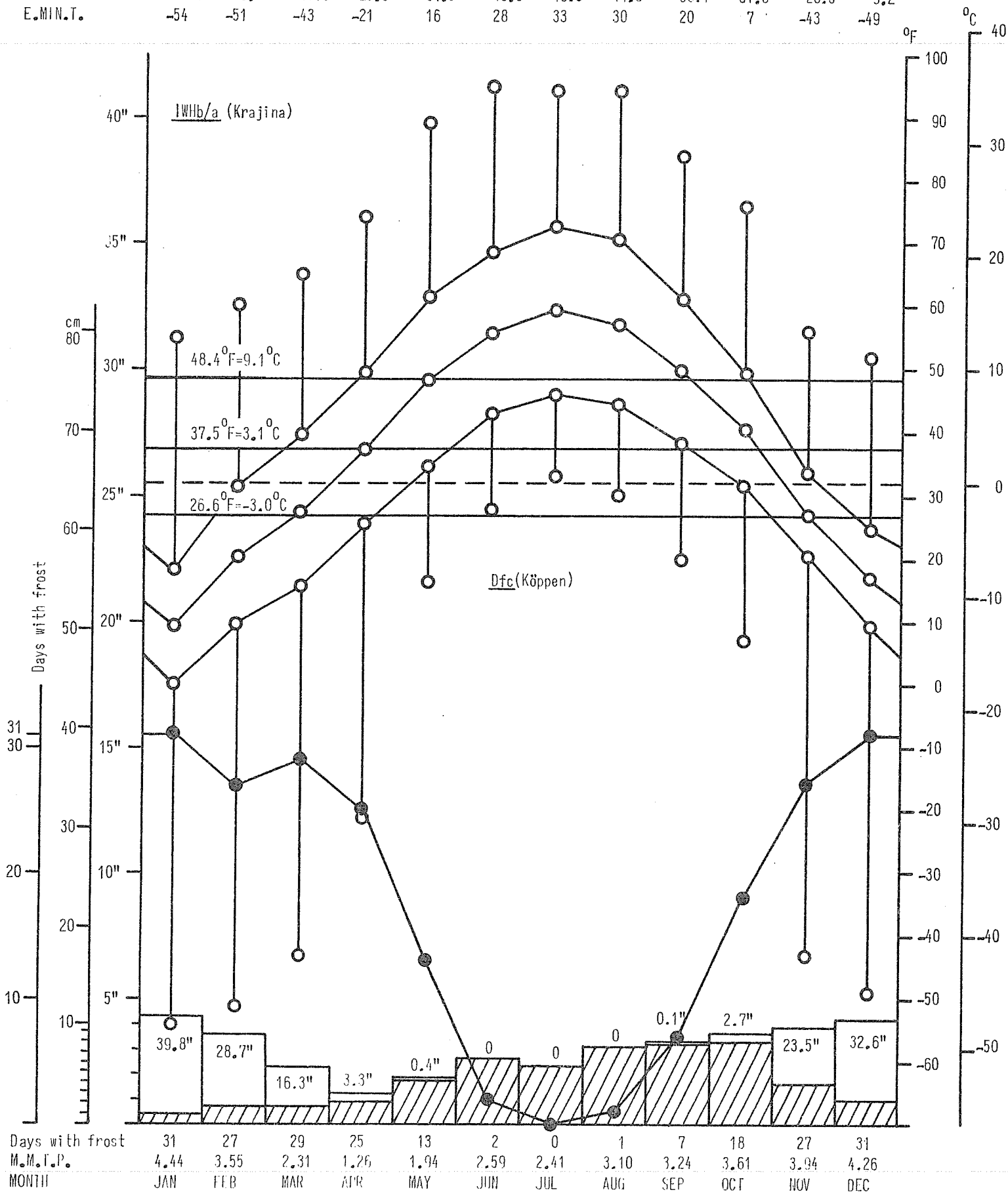
Nearest climatological station :

1. Name Aleza Lake
2. Climatological station on IBP Area*? Yes No X
3. If (2) not, distance from edge of IBP Area* (state units) ca. 12 mi.
4. Direction from IBP Area* S.W.
5. Additional data sheet attached? Yes X No

ALEZA LAKE 54°07'N, 122°04'W, 2050' ASL. Record: 15-13 years, adjusted.

Months above 50°F: 3, below 32°F: 5, A.M.T.P. 36.65", A.M.S.F. 147.4", snow % A.M.T.P.: 40.21, days with frost, yearly: 211.

E.MAX.T.	55	60	65	74	89	95	94	94	84	76	56	52
M.D.MAX.T.	18.5	31.6	39.3	49.6	61.6	68.3	72.5	70.2	61.2	49.2	33.7	24.9
M.D.T.	9.6	20.7	27.6	37.7	48.1	55.7	59.3	57.3	49.8	40.5	27.0	17.1
M.D.MIN.T.	0.0	9.8	15.9	25.9	34.5	43.0	46.0	44.8	38.4	31.8	20.3	9.2
E.MIN.T.	-54	-51	-43	-21	16	28	33	30	20	7	-43	-49



7. Vegetation and Soil

1

Vegetation

Community Reference Number	Vegetation Code					Plant communities (give usual name using full Latin names of a species where applicable)	Area (state units)
	Primary Structural Group	Class	Group	Formation	Sub-Formation		
1	1	A	1	7	a	<i>Picea glauca</i> - <i>Vaccinium membranaceum</i> - <i>Ptilium crista-castrensis</i> - <i>Pleurozium schreberi</i>	forest
2	1	A	1	7	a	<i>Picea glauca</i> - (<i>Abies lasiocarpa</i>) - <i>Oplopanax horridum</i> - <i>Gymnocarpium dryopteris</i>	forest
3	1	D	1	4	a	<i>Picea mariana</i> - <i>Betula pumila</i> - <i>Tomenthypnum nitens</i> - <i>Sphagnum</i> sp.	bog forest
4	1	B	2	1	a	<i>Alnus tenuifolia</i> - <i>Matteucia struthiopteris</i> - <i>Urtica dioica</i>	ravine bottoms and alluvial flats
5	2	I	2	3		<i>Menyanthes trifoliata</i> - <i>Potentilla palustris</i> - <i>Equisetum fluviatile</i>	pools
6	1	0	1	1		<i>Vaccinium oxycoccus</i> - <i>Drosera</i> (<i>anglica</i> , <i>rotundifolia</i>) - <i>Sphagnum</i> spp.	low moor
7	1	0	1	1		<i>Carex limosa</i> - <i>Scheuchzeria palustris</i> - <i>Drepanocladus aduncus</i> - <i>Sphagnum</i> spp.	depressions
8	1	0	1	1		<i>Andromeda polifolia</i> - <i>Carex pauciflora</i> - <i>Rubus chamaemorus</i> - <i>Sphagnum</i> spp. - <i>Solenostoma</i> sp.	hummocks
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Please give information about further communities on a separate sheet.

Partial species list:

- (1) white spruce - black huckleberry - moss forest (community no. 1)
- trees: *Picea glauca*, *P. engelmannii* (occasional) + their hybrid
Abies lasiocarpa (occasional old trees)
- shrubs: *Corylus cornuta*
Lonicera involucrata
Rubus parviflorus
R. strigosus
Sorbus scopulina
Vaccinium membranaceum
? *V. parvifolium* seedlings
Viburnum edule
- herb layer: *Aralia nudicaulis*
Calamagrostis canadensis
Clintonia uniflora
Cornus canadensis
Dryopteris austriaca
Galium triflorum
Gymnocarpium dryopteris
Listera cordata
Lycopodium annotinum
Maianthemum canadense
Rubus pedatus
Smilacina racemosa
Streptopus roseus
Tiarella unifoliata
- moss layer: *Pleurozium schreberi*
Ptilium crista-castrensis
Peltigera aphthosa
Dicranum fuscescens
- epiphytes: *Alectoria sarmentosa* + (*A. jubata*)
Lobaria pulmonaria
Platismatia glauca
- (2) white spruce - (subalpine fir) - devil's club - oak fern forest (community no. 2)
- trees: *Picea glauca*
Abies lasiocarpa
Betula papyrifera (rare)
- shrubs: *Lonicera involucrata*
Rubus parviflorus
Oplopanax horridum
Ribes lacustre
Vaccinium ovalifolium
Viburnum edule
- herb layer: *Actaea rubra*
Athyrium filix-femina
Aconitum delphinifolium
Cinna latifolia
Circaea alpina
Festuca subulata
Equisetum arvense
E. pratense
Gymnocarpium dryopteris
Rubus pedatus

(2) (cont'd):

herb layer: *Streptopus amplexifolius*
S. roseus
S. streptopoides
Tiarella unifoliata

moss layer: *Ptilium crista-castrensis*

(4) speckled alder - ostrich fern - stinging nettle ravine community (no. 4)

trees: occasional *Populus trichocarpa*

shrubs: *Alnus tenuifolia*
Lonicera involucrata
Oplopanax horridum
Ribes glandulosum
Rubus parviflorus
Sambucus racemosa

herb layer: *Aconitum delphinifolium*
Actaea rubra
Athyrium filix-femina
Cinna latifolia
Circaea alpina
Equisetum arvense
E. pratense
Gymnocarpium dryopteris
Glyceria elata
Habenaria hyperborea
Lysichitum americanum
Matteucia struthiopteris
Senecio triangularis
Streptopus amplexifolius
Urtica dioica
Valeriana sitchensis
Veratrum viride
Viola glabella
Thelypteris phegopteris

moss layer: *Mnium rugicum*
M. spinulosum
Sphagnum squarrosum

(5) bog bean - marsh cinquefoil - water horsetail pools (community no. 5)

herb layer: *Calamagrostis canadensis*
Carex rostrata
Equisetum fluviatile
Menyanthes trifoliata
Potentilla palustris

moss layer: *Drepanocladus* sp.
Calliargon sp.
Sphagnum sp.

"Sundew Bog" (includes communities nos. 3, 6, 7, 8)

trees: stunted *Pinus contorta*
 stunted *Picea mariana* (infrequent)

shrubs: *Andromeda polifolia*
 Betula glandulosa + *B. pumila*
 Kalmia polifolia
 Ledum groenlandicum
 Spiraea menziesii

herb layer: *Carex aquatilis*
 C. canescens
 C. limosa
 C. pauciflora
 Drosera anglica
 D. rotundifolia
 Eriophorum angustifolium
 E. russeolum
 Gaultheria hispidula
 Rubus chamaemorus
 Scheuchzeria palustris
 Spiranthes romanzoffiana
 Vaccinium oxycoccus

moss layer: *Sphagnum* spp.
 Drepanocladus sp.
 Aulacomnium palustre
 Tomenthypnum nitens
 Solenostoma sp.
 Cladina mitis
 C. rangiferina
 Cladonia gracilis

7.
(cont.)

2

Soil

Community Reference Number	Soil type	Other notes
1	ABC F ₅	Dystric Brunisol
2	AGC/AC P ₁ /I ₂	Gleyed Regosol
3	A 0	Low Moor or Fen
4	A(G)C P ₁ /I ₂	Gleyed Regosol
5	AGC P	Subaqueous Gleysol
6	A 0	Fen
7	A 0	Low Moor
8	A 0	High Moor or Peat Bog
9		
10		
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12		
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9. Landscape

1. General Landscape (give brief description) Steep-sided valley of Hubble Creek,
a strip of the adjacent, flatter lowlands, and a portion of
floodplain of the McGregor River.

2. Relief Type

	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected					
Gently dissected			100		100
Incised					
Skeletonised					
%			100		100%

3. Special landscape features (list)
Several small bogs present within the general lowland
landscape.

10. Coastline of IBP Area* NONE

1. Protected bays and/or inlets Many Few None

2. Substratum. % of coast

Rock	Boulder Beach	Shingle Beach	Sand Beach	Shell Beach	Mud	Coral	Ice
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Physiography. % of coast

Cliffed	Sloping	Flat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Special Coastal Features (list)

5. Tide. Maximum range (state units of measurement)

6. Total length of coastline :

Less than 1 km. 1-10 km. Above 10 km.

11. Freshwater within IBP Area*

1.

	Permanent	Intermittent
General	X	X
Standing	X	
Running	X	X

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps	X		X	
Ponds				
Lakes				

3. Running Water

	Permanent	Intermittent
Springs, cold	X	
Springs, hot		
Streams	X	X
Rivers		

4. Special freshwater features

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12. Salt and Brackish Water within IBP Area*

NONE

Salt Lakes	<input type="checkbox"/>	Lagoon	<input type="checkbox"/>	<input type="checkbox"/>
Estuaries	<input type="checkbox"/>	Salt pools	<input type="checkbox"/>	<input type="checkbox"/>

13. Adjacent Water Bodies (not within IBP Area*)

1. Fresh Lake River Stream
 McGregor River and Fraser River

2. Salt and Brackish NONE

Estuary	Salt lake	Salt pool	Lagoon	Ocean		

14. Outstanding Floral and Faunal Features

1. None

2. Fauna

	Species diversity	Abundance of individuals	Superabundance of individuals	Rare species	Threatened/Relict species	Spp. of biogeographical interest	Exceptional Associations	Breeding or Nesting Populations	Migrating Populations	Wintering Populations		
Mammalia		X										
Aves		X						X				
Reptilia												
Amphibia												
Pisces												
Insecta		X										

3. Names of main threatened, endemic, relict and rare species

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4. Flora

	Species diversity	Abundance of particular species	Rare species	Threatened/relict species	Spp. of biogeographical interest	Exceptional associations	Outstanding specimens				
Angiospermae :											
trees		?									
shrubs		X			X		X				
herbs		X			X		X				
grass					X						
Gymnospermae		X				X	X				
Pteridophyta	X	X	X		X		X				
Bryophyta		X									
Lichens and Algae		X									

5. Names of main threatened, endemic, relict and rare species

A stand of excellent growth of spruce (the best remaining in the McGregor River area).

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15. Exceptional Interest of IBP Area*

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16. Significant Human Impact

1. General : None in entire IBP Area*
 None in part of IBP Area* X
 Impact on entire IBP Area*

2. Particular

	Past impact	Present impact	Trend			
			Increasing	Decreasing	No change	No information
Cultivation					X	
Drainage					X	
Other soil disturbance			X			
Grazing					X	
Selective flora disturbance					X	
Logging			X			
Plantation					X	
Hunting			X			
Removal of predators					?	
Pesticides					X	
Introductions — plants			X			
Introductions — animals					?	
Fire			X			
Permanent habitation					X	
Recreation and tourism					X	
Research			?			

roads

3. Additional details on each type of impact attached?

Yes No X

17. Conservation Status (required)

	Protection			Utilisation			Conservation Management			Permitted Research		
	none	partial	total	none	controlled	uncontrolled	none	to alter status	to maintain status	experimental	observational	prohibited
Flora			X	X								
Fauna			X	X								
Non-living			X	X								

18. References

1. List major biological/geographical references for the IBP Area.

Sheet attached? Yes No

2. List main maps available for the IBP Area. 93 1/4 West Half
(+ FOREST COVER MAP)

List attached? Yes No

3. Aerial photographs for the IBP Area available?

For whole area For part of area None

19. Other Relevant Information

Jim Pojar, Calvin Parsons, V.J. Krajina
Signed Jim Pojar, Calvin Parsons, V.J. Krajina
(Surveyor)

APPLICATION FOR ECOLOGICAL RESERVE

1. Legal description of the area (or general "Metes and bounds" description)

2. Geographical location (relate to nearest settlement, mountain, river, etc.)

Lightning Creek forest, 2 mi. E. of Coldspring House, 20 miles E. of Quesnel, S. of Highway No. 26 (the Barkerville road).

3. Indicate the biogeoclimatic zone of which the reserve is representative.

SBS(/CALPDF)

4. Approximate total acreage.

717 acres

5. Purpose of the reserve.

Conservation of an area containing a variety of sub-boreal forest types.

- (a) Primary (state acreage)

717 acres

- (b) Others if any (state acreage)

-

- (c) Buffer areas (state acreage)

-

6. Attach a map and indicate: (a) the perimeters and acreage of the areas detailed in 5 above, and
(b) indicate the species and total timber volumes in these areas.

Pinus contorta
Picea engelmannii
P. glauca
Abies lasiocarpa
Pseudotsuga menziesii
Populus tremuloides
P. trichocarpa
Betula papyrifera

J. Pojar *V.J. Krajina*
Signature J. Pojar, R.G. McMinn,
I.B.P. Surveyor
V.J. Krajina, C. Parsons