

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.)
 Driftwood Creek near Smithers, the interior subalpine forest

3. Indicate the biogeoclimatic zone of which the reserve is representative.
 ESSF, AT

4. Approximate total acreage.
 956 acres

5. Purpose of the reserve.
 To conserve ecosystems of the interior Engelmann spruce - subalpine fir zone at its most western parts of distribution between Smithers and Hazelton.
 - (a) Primary (state acreage)
 956 acres
 - (b) Others if any (state acreage)
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 - (c) Buffer areas (state acreage)
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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.
Abies lasiocarpa (most common tree), Picea engelmannii, Picea glauca, (and their hybrids), Pinus contorta, Tsuga heterophylla (occasional) (commercially little producing)

V.J. Krajina
 Signature V.J. Krajina, R.C. McMinn,
 I.B.P. Surveyor
 Jim Pojar, and Calvin Parsons

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

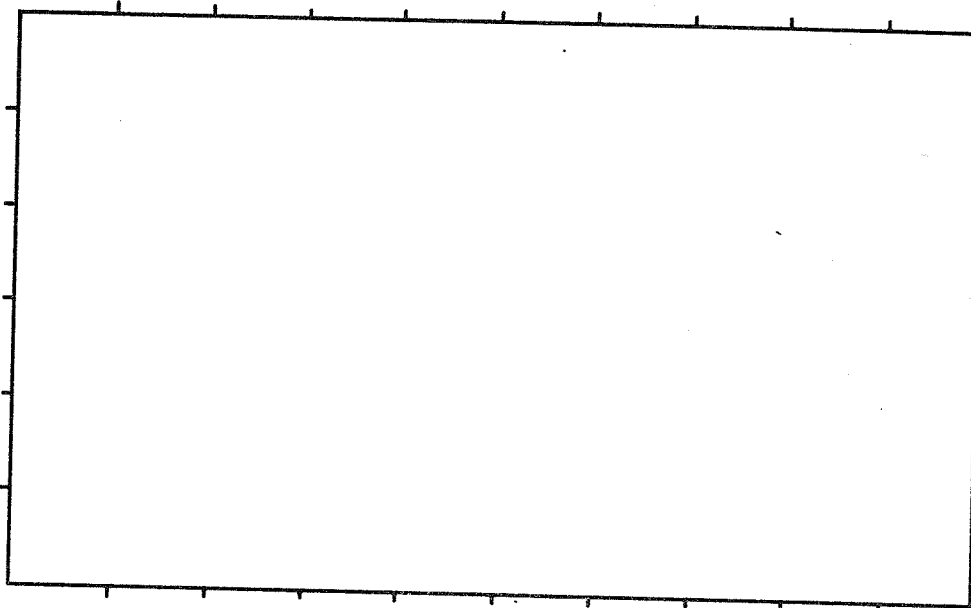
Serial Number

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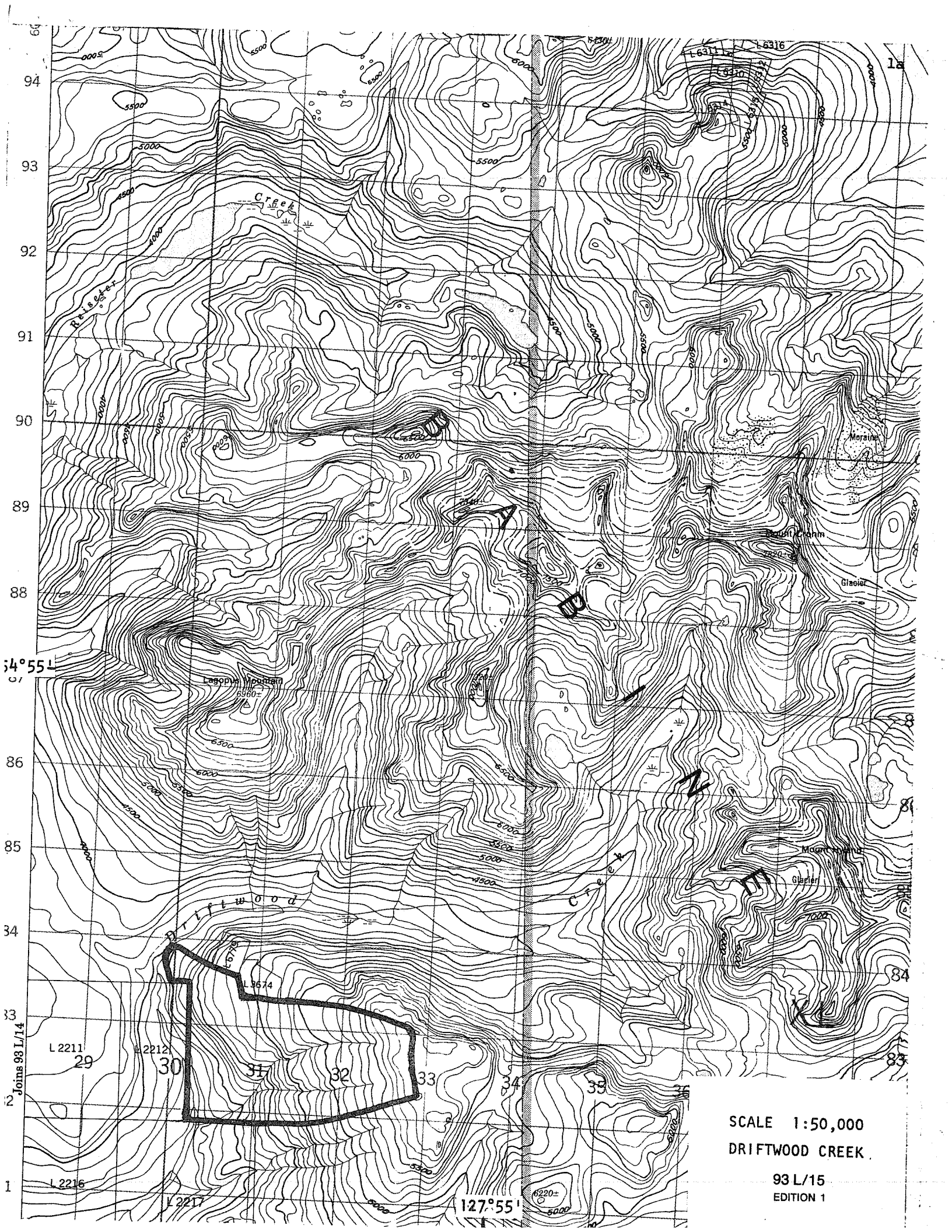
For Data Centre Use only

1. 1. Name of surveyor V.J. Krajina*, R.C. McMinn**, Jim Pojar* and Calvin Parsons*
 2. Address of surveyor * Dept. of Botany, University of British Columbia,
 Vancouver, B.C., Canada
 ** Department of Environment, Victoria, B.C., Canada
 3. Check Sheet completed (a) on site X (b) from records X
 4. Date Check Sheet completed July 19 and October 23, 1974

2. 1. Name of IBP Area Driftwood Creek near Smithers, the interior subalpine forest
 2. Name of IBP Subdivision (or serial letter) ESSF & AT
 3. Map of IBP Area* showing boundaries attached? Yes ...X... No
 4. Sketch map of IBP Area*. Please mark direction of north, the scale and grid numbers where applicable.



* For "IBP Area", read IBP Area and/or IBP Subdivision.



4°55' L

Joins 93 L/14

127°55'

SCALE 1:50,000
DRIFTWOOD CREEK

93 L/15
EDITION 1

3. Location of IBP Area*

1. Latitude 54 ° 52.2 - 53.25° N Longitude 126 ° 55.5 - 58.7° W

2. Country Canada

State or Province British Columbia County Smithers

(State or Province County)

4. Administration

National 1. Official category Crown Land

2. Address of administration British Columbia, Department of
 Lands, Forests and Water Resources,
 Parliament Buildings,
 Victoria, B.C.

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) <input checked="" type="checkbox"/>

5. Characteristics of IBP Area*

1. Surface area (state units of measurement) 956 acres

2. Altitude (state units of measurement) Maximum 5400° (1646 m)
 Minimum 3500° (1067 m)

6. Climate

Nearest climatological station :

1. Name Smithers, B.C.

2. Climatological station on IBP Area*? Yes No

3. If (2) not, distance from edge of IBP Area* (state units) 12 mi.

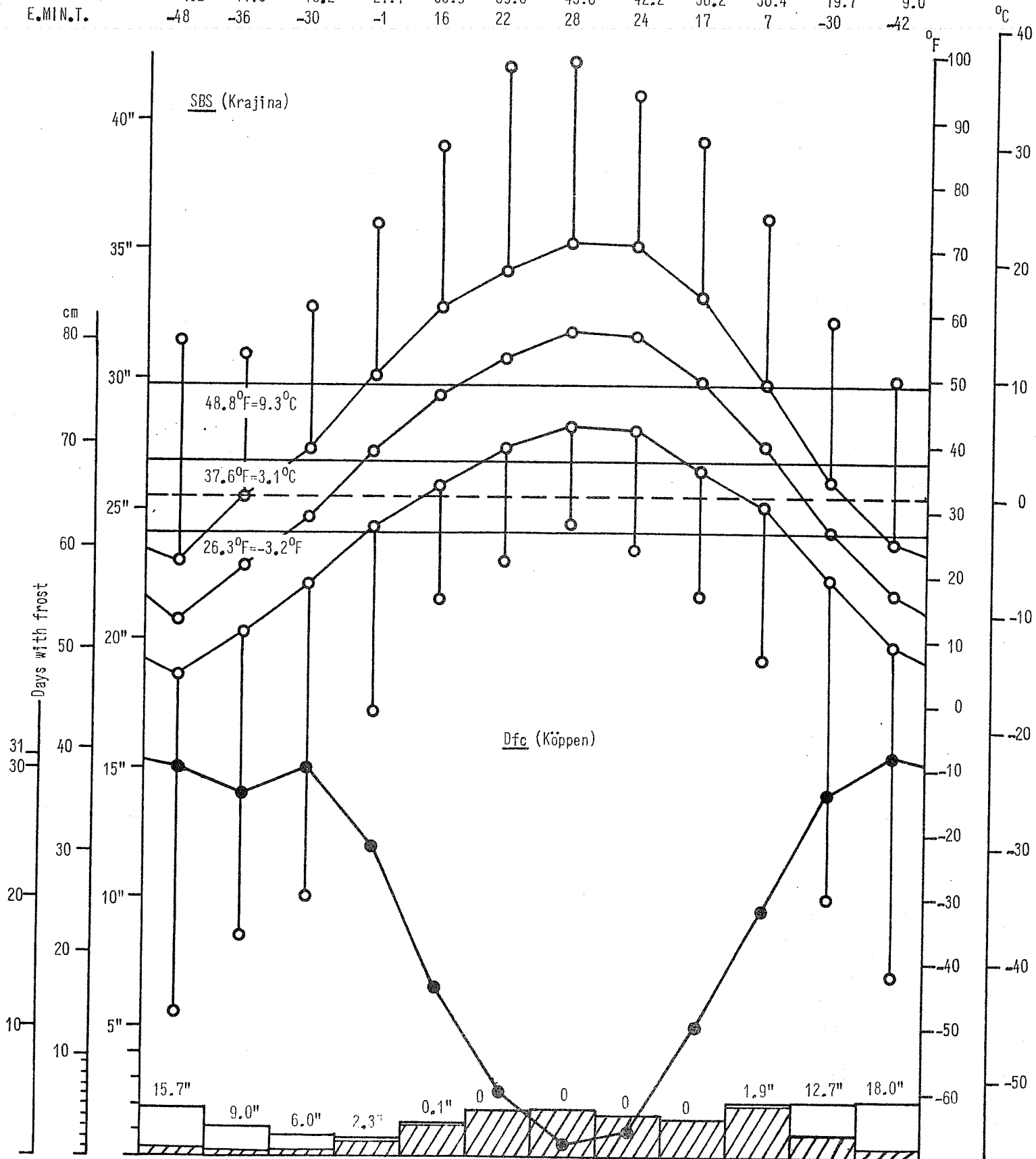
4. Direction from IBP Area* SSW

5. Additional data sheet attached? Yes No

SMITHERS (CDA) 54°44'N, 127°06'W, 1690' ASL. Record: 25-31 years.

Months above 50°F: 3, below 32°F: 5, A.M.T.P. 19.38", A.M.S.F. 65.7", snow % A.M.T.P.: 33.90, days with frost, yearly: 221.

E. MAX. T.	56	54	61	74	86	98	99	94	87	75	59	50
M. D. MAX. T.	22.0	32.0	39.6	50.2	61.5	66.9	71.0	70.5	62.8	49.1	34.3	25.5
M. D. T.	13.1	21.6	28.9	38.8	47.8	53.4	57.3	56.4	49.5	39.8	27.0	17.3
M. D. MIN. T.	4.2	11.0	18.2	27.4	33.9	39.8	43.6	42.2	36.2	30.4	19.7	9.0
E. MIN. T.	-48	-36	-30	-1	16	22	28	24	17	7	-30	-42



Days with frost	30	28	30	24	13	5	1	2	10	19	28	31
M.M.T.P.	1.90	1.10	0.88	0.21	1.38	1.74	1.89	1.64	1.54	2.18	2.13	2.19
MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

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	Peltigera apthosa - P. membranacea - Pleurozium schreberi - Empetrum hermaphroditum - Pinus contorta - xPicea engelmannii x P. glauca ass.	
2	1	A	1	7	a	Hylocomium splendens - Ptilium crista-castrensis - Vaccinium membranaceum - Abies lasiocarpa - xPicea glauca x P. engelmannii ass.	
3	1	A	1	7	a	Ptilium crista-castrensis - Vaccinium membranaceum - V. ovalifolium - Menziesia ferruginea - xPicea glauca x P. engelmannii - Abies lasiocarpa ass.	
4	1	D	1	4	a	Rhizomnium sp. - Sanguisorba sitchensis - Valeriana sitchensis - Abies lasiocarpa ass.	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

Please give information about further communities on a separate sheet

Driftwood Creek, subalpine forest
- partial list of plants -

trees: *Abies lasiocarpa*
Picea engelmannii, *P. glauca*
Pinus contorta
Tsuga heterophylla (occasional)

shrubs: *Empetrum hermaphroditum*
Menziesia ferruginea
Vaccinium membranaceum, *V. ovalifolium*

herb layer:

Arabis lyrata
Arnica cordifolia, *A. latifolia*
Carex ? atrata, *C. mertensii*, *C. rossii*
Epilobium lactiflorum
Lupinus nootkatensis
Luzula parviflora
Mitella trifida
Oxyria digyna
Poa arctica
Ranunculus eschscholtzii
Sagina saginoides
Sanguisorba sitchensis
Solidago multiradiata
Taraxacum laevigatum
Valeriana sitchensis
Viola orbiculata

bryophytes:

Barbilophozia barbata
Hylocomium splendens
Pleurozium schreberi
Ptilium crista-castrensis
Rhizomniun sp.

lichens: *Cetraria islandica*
Peltigera aphthosa
Peltigera membranacea

7.
(cont.)

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Soil

Community Reference Number	Soil type	Other notes
1	AC/ABC F ₃ /F ₅	Brown Rander - Lithic Mini Podzol
2	ABC F ₅	Mini Podzol
3	ABC F ₅	Humo Ferric Podzol
4	ABC/AGC F ₅ /P ₂	Gleyed Brunisol
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

9. Landscape

1. General Landscape (give brief description) NSW exposed slopes (with intersected streams) of a not very steeply raised mountain above a creek valley

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2. Relief Type

	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected				50	50
Gently dissected				50	50
Incised				-	
Skeletonised				-	
%				100	100%

3. Special landscape features (list)

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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)

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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		
Standing		
Running		X

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps		X		
Ponds				
Lakes				

3. Running Water

	Permanent	Intermittent
Springs, cold		
Springs, hot		
Streams	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 Driftwood Creek

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						X		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		X									
shrubs	X	X									
herbs	X	X									
grass		X									
Gymnospermae	X	X									
Pteridophyta		X									
Bryophyta		X									
Lichens and Algae		X									

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

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15. Exceptional Interest of IBP Area*

A very typical area of the interior subalpine (Engelmann spruce - subalpine fir) zone in its most western distribution in the Smithers 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					X	
Fire						X
Permanent habitation					X	
Recreation and tourism					X	
Research					X	

mining road in the vicinity of the proposed area.

3. Additional details on each type of impact attached?

Yes **X** No

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					X		X	
Fauna			X	X					X		X	
Non-living			X	X					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 L/15

List attached? Yes No

3. Aerial photographs for the IBP Area available?

For whole areaX..... For part of area None

19. Other Relevant Information

A mining road on the outskirts of the area leads probably to some claims, however, it has been said to us that nothing was found here.

Signed *Vadra Krajinac*, R.C. McMinn,.....
(Surveyor)

Jim Pojar, and Calvin Parsons

Jim Pojar