

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.)

Howson Creek area south of Telkwa River near Telkwa

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

SBS/CWHa/b; ESSF/MH

4. Approximate total acreage.

5,111 acres

5. Purpose of the reserve.

To conserve an area, which represents the most eastern distribution of amabilis fir and mountain hemlock, associated with Vaccinium alaskaense and Rubus spectabilis.

(a) Primary (state acreage)

A: 3, 328 acres

(b) Others if any (state acreage)

B: 1,783 acres (mainly the subalpine zone)

(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.

Abies amabilis, A. lasiocarpa

Picea engelmannii, P. glauca, xP. engelmannii x P. glauca,

Pinus contorta,

Populus tremuloides, P. trichocarpa,

Tsuga heterophylla, T. mertensiana

Signature

V. J. Krajina, J. Pojar
V. J. Krajina, J. Pojar,

I.B.P. Surveyor C. 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

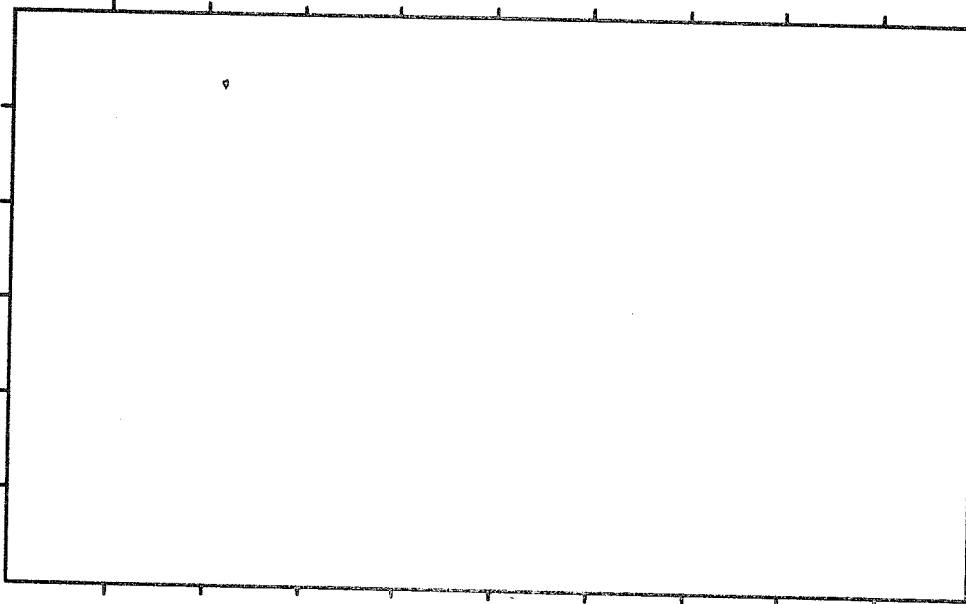
Serial Number

--	--	--	--	--	--	--	--

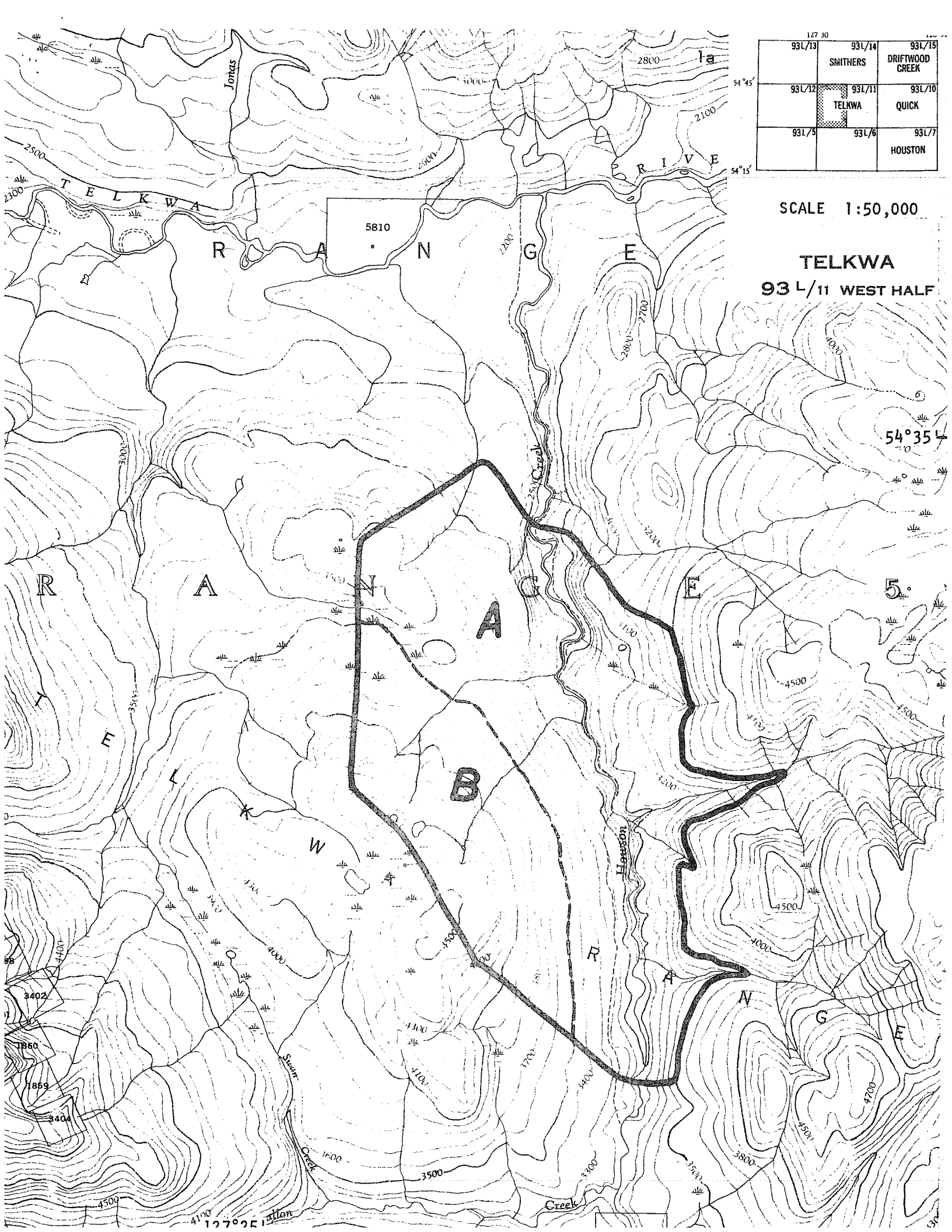
For Data Centre Use only

1. 1. Name of surveyor V. J. Krajina, J. Pojar, C. Parsons
2. Address of surveyor Department of Botany
 University of British Columbia,
 Vancouver, B. C., Canada
3. Check Sheet completed (a) on site X (b) from records X
4. Date Check Sheet completed October 19, 1974

2. 1. Name of IBP Area Howson Creek area south of Telkwa River
2. Name of IBP Subdivision (or serial letter) SBS/CWHa/b; ESSF/MH
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.



127 30	93L/13	93L/14	93L/15
		SMITHERS	DRIFTWOOD CREEK
54°45'	93L/12	93L/11	93L/10
		TELKWA	QUICK
54°15'	93L/9	93L/6	93L/7
			HOUSTON

SCALE 1:50,000

TELKWA
93 L/11 WEST HALF

54°35'

5.

4100
 127°25' E

3. Location of IBP Area*

1. Latitude 54 ° 31-34.8 ° N Longitude 127 ° 19.2-23.7 ° 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) X

5. Characteristics of IBP Area*

1. Surface area (state units of measurement) 5, 111 (A: 3,328; B: 1,783) acres
2. Altitude (state units of measurement) Maximum 4,500 ft. (1372 m)
Minimum 2,700 ft. (823 m)

6. Climate

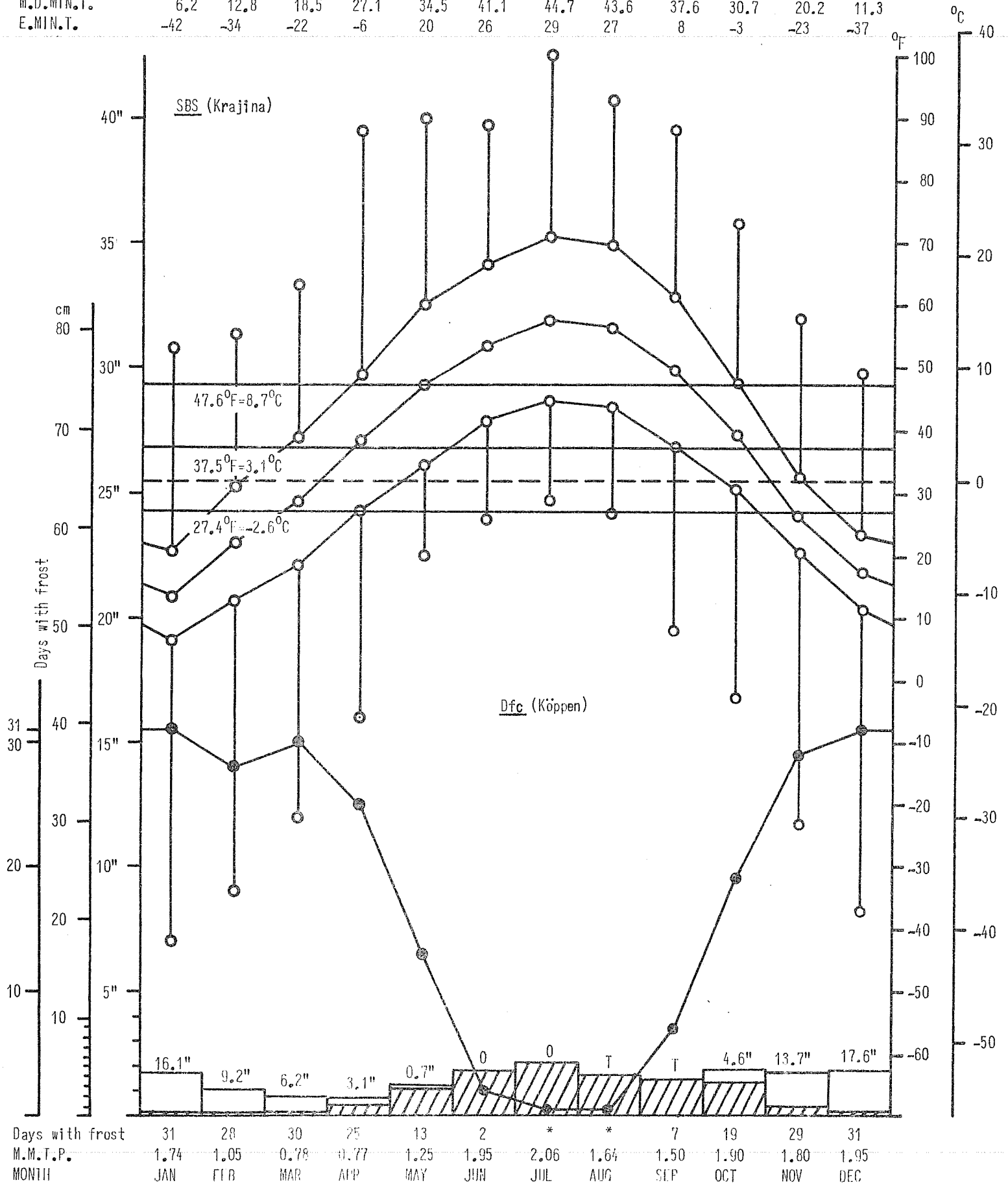
Nearest climatological station :

1. Name Telkwa
2. Climatological station on IBP Area*? Yes No X
3. If (2) not, distance from edge of IBP Area* (state units) 16 mi.
4. Direction from IBP Area* N.E.
5. Additional data sheet attached? Yes X No
- Telkwa

TELKWA 54°39'N, 126°50'W, 2240' ASL. Record: 25-46 years.

Months above 50°F: 3, below 32°F: 5, A.M.T.P. 18.39", A.M.S.F. 71.2", snow % A.M.T.P.: 38.71, days with frost, yearly: 215.

E.MAX.T.	53	55	63	88	90	89	100	93	88	73	58	49
M.D.MAX.T.	20.9	31.2	39.0	48.9	60.0	66.2	70.4	69.7	61.6	47.6	32.3	23.8
M.D.T.	13.6	22.0	28.8	38.1	47.3	53.7	57.6	56.7	49.6	39.2	26.2	17.6
M.D.MIN.T.	6.2	12.8	18.5	27.1	34.5	41.1	44.7	43.6	37.6	30.7	20.2	11.3
E.MIN.T.	-42	-34	-22	-6	20	26	29	27	8	-3	-23	-37



7.

Vegetation and Soil

1

Vegetation

Biogeoclimatic zones:

BS/CWHa/b

SSF/MH

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	<u>Cladonia rangiferina</u> - <u>Arctostaphylos uva-ursi</u> - <u>Pinus contorta</u> association	
2	1	A	1	7	a	<u>Pleurozium schreberi</u> - <u>Cornus canadensis</u> - x <u>Picea glauca</u> x <u>P. engelmannii</u> - <u>Tsuga heterophylla</u> association	
3	1	A	1	7	a	<u>Hylocomium splendens</u> - <u>Oplopanax horridum</u> - x <u>Picea glauca</u> x <u>P. engelmannii</u> - <u>Tsuga heterophylla</u> - <u>Abies lasiocarpa</u> association	
4	1	A	1	7	a	<u>Hylocomium splendens</u> - <u>Vaccinium alaskaense</u> - <u>Oplopanax horridum</u> - x <u>Picea glauca</u> x <u>P. engelmannii</u> - <u>Abies amabilis</u> association	
5	1	A	1	7	a	<u>Hylocomium splendens</u> - <u>Gymnocarpium dryopteris</u> - <u>Streptopus roseus</u> - x <u>Picea glauca</u> x <u>P. engelmannii</u> - <u>Tsuga mertensiana</u> - <u>Abies lasiocarpa</u> association	
6	1	A	1	7	a	<u>Ptilium crista-castrensis</u> - <u>Rhytidiopsis robusta</u> - <u>Picea engelmannii</u> - <u>Tsuga mertensiana</u> association	
7	1	A	1	7	a	<u>Ptilium crista-castrensis</u> - <u>Pleurozium schreberi</u> - <u>Vaccinium membranaceum</u> - <u>Picea engelmannii</u> - <u>Abies lasiocarpa</u> association	
8	1	A	1	7	a	<u>Plagiomnium</u> sp. - <u>Streptopus roseus</u> - <u>Oplopanax horridum</u> - <u>Picea engelmannii</u> - <u>Abies lasiocarpa</u> association	
9	1	A	1	7	a	<u>Pleurozium schreberi</u> - <u>Cladonia</u> spp. - <u>Vaccinium membranaceum</u> - <u>Menziesia ferruginea</u> - <u>Picea engelmannii</u> association	
10							
11							
12							
13							
14							
15							

Please give information about further communities on a separate sheet

Howson Creek area - partial list of plants:

trees: Abies amabilis (DBH: 27-30" at the elevation of 2920' [890 m])
Abies lasiocarpa (DBH: 10-18") (at the elevation of 3900-4000 ft.
 already without Tsuga mertensiana)

Acer glabrum
Alnus tenuifolia
Picea engelmannii
Picea glauca
xPicea engelmannii x P. glauca (DBH: 16-17")
Pinus contorta
Tsuga heterophylla (DBH: 22-32")
Tsuga mertensiana (occurring rarely already at the elevation of
 3470' [1058 m] DBH: 18-19")

shrubs:

Alnus sinuata
Arctostaphylos uva-ursi
Cornus stolonifera
Lonicera involucrata
Menziesia ferruginea
Opiopanax horridum
Pachystima myrsinites
Ribes lacustre
Rubus spectabilis
R. parviflorus
Sambucus pubens
Sorbus scopulina
Sorbus sitchensis
Vaccinium alaskaense
Vaccinium caespitosum
Vaccinium membranaceum
Vaccinium ovalifolium
Viburnum edule

herbs:

Actaea rubra
Anemone richardsonii
Arnica cordifolia
Athyrium filix-femina
Caltha leptosepala
Chimaphila umbellata
Clintonia uniflora
Cornus canadensis
Dryopteris austriaca
Epilobium alpinum
Equisetum arvense
Equisetum sylvaticum
Gymnocarpium dryopteris
Heraclium lanatum
Leptarrhena pyrrolifolia
Linnaea borealis
Listera cordata
Lycopodium annotinum
Mitella pentandra

herbs (cont.)

Osmorhiza purpurea
O. chilensis
Parnassia sp.
Petasites palmatus
Pyrola asarifolia
Pyrola secunda
Rubus pedatus
Sanguisorba sitchensis
Saxifraga lyallii
Saxifraga mertensiana
Senecio triangularis
Smilacina racemosa
Streptopus amplexifolius
Streptopus roseus
Streptopus streptopoides
Thalictrum occidentale
Tiarella trifoliata
Tiarella unifoliata
Valeriana sitchensis
Veratrum viride
Viola glabella
Viola orbiculata

bryo-
phytes:

Barbilophozia barbata
Barbilophozia hatcheri
Barbilophozia lycopodioides
Brachythecium frigidum
Dicranum fuscescens
Dicranum scoparium
Drepanocladus uncinatus
Hylocomium splendens
Lophozia spp.
Pleurozium schreberi
Pohlia nutans
Ptilidium pulcherrimum
Ptilium crista-castrensis
Rhizomnium nudum
Rhizomnium perssonii
Rhytidiopsis robusta
Sphagnum girgenschnii

lichens:

Alectoria americana
Alectoria sarmentosa
Cladonia coccifera
Cladonia fimbriata
Cladonia gracilis
Cladonia mitis
Cladonia nemoxyna
Cladonia rangiferina
Cladonia squamosa
Cladonia sylvatica
Hypogymnia tubulosa
Nephroma arcticum
Peltigera aphthosa
Peltigera canina
Peltigera polydactyla

Platismatia glauca
Stereocaulon tomentosum

7.
(cont.)

2

Soil

Community Reference Number	Soil type	Other notes
1	AC/ABC F ₃ /F ₅	Ranker --> Brunisol
2	ABC F ₅	Dystric Brunisol - Podzol
3	AGC/ABGC P ₂ /F ₅	Gleyed Podzol
4	ABGC F ₅ /P ₂	Gleyed Ferro — Humic Podzol
5	AB(G)C F ₅ /P ₂	Gleyed Brunisol — Luvisol
6	ABC F ₅	Ferro — Humic Podzol
7	ABC F ₅	Ferro → Humic Podzol
8	ABGC F ₅ /P ₂	Gleyed Podzol (or Brunisol)
9	ABC F ₅	Humo — Ferric Podzol
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

9. Landscape

1. General Landscape (give brief description) mostly gently dissected upland along an incised valley of the Howson Creek

2. Relief Type

	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected			5	10	15
Gently dissected			20	55	75
Incised			5	5	10
Skeletonised					
%			30	70	100%

3. Special landscape features (list) a small canyon carved by the Howson Creek

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		
Standing	X	
Running	X	

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps				
Ponds	X		X	
Lakes				

3. Running Water

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

-tributaries of the Howson Creek and the Howson Creek itself

4. Special freshwater features cascades

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
Telkwa 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						X				
Aves		X						X	X			
Reptilia												
Amphibia		?										
Pisces		?										
Insecta		X										

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

.....

.....

.....

.....

.....

.....

.....

.....

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

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

Abies amabilis on the most eastern distribution in the Smithers area; similarly interesting is the occurrence of Tsuga mertensiana, Vaccinium alaskaense, Rubus spectabilis and Leptarrhena pyrolifolia.

15. Exceptional Interest of IBP Area*

Very exceptional occurrence of a "lens" of the wetter subzone of the CWH zone in a relatively more continental climatic-geographic area, most distant from the Pacific Ocean.

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			X			
Pesticides					X	
Introductions — plants			X			
Introductions — animals					X	
Fire	?				?	
Permanent habitation					X	
Recreation and tourism			X			
Research					X	

-by the road

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							X	
Fauna			X	X							X	
Non-living			X	X							X	

18. References

- List major biological/geographical references for the IBP Area.
Sheet attached? Yes No **X**
- List main maps available for the IBP Area. **93 L/11 West half**
List attached? Yes No
- Aerial photographs for the IBP Area available?
X
For whole area For part of area None

19. Other Relevant Information

Besides the road, made originally for a mine, situated much higher, which should be kept for the access of the area, the uniqueness of this area requires its conservation. It would be most disturbing if this area cannot be conserved.

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