

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.)

Legate Creek drainage, Bulkley Ranges of Hazelton Mountains, east of Terrace

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

CWHa, MH, AT

4. Approximate total acreage.

35,087 acres

5. Purpose of the reserve.

An excellent virgin area (the commercially useful lowest parts were logged) of a drainage, open to the north and northwest. It is an important counterpart and complement to the Hardscrabble Creek area. Commercially most useful

- (a) Primary (state acreage) forest was already logged, the remaining parts are economically problematic. However, they are full of scenic beauties, which should
- A: 8,093 acres

- (b) Others if any (state acreage) be preserved.

B: 26,994 acres

- (c) Buffer areas (state acreage)

are represented by the B.

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.

Tsuga heterophylla, T. mertensiana (and their hybrids), Pinus contorta, Picea engelmannii, P. sitchensis (and their hybrids), Abies amabilis, A. lasiocarpa, Thuja plicata, Populus trichocarpa, P. tremuloides, Betula papyrifera and Alnus rubra.

Signature V.J. Krajina  
I.B.P. Surveyor

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

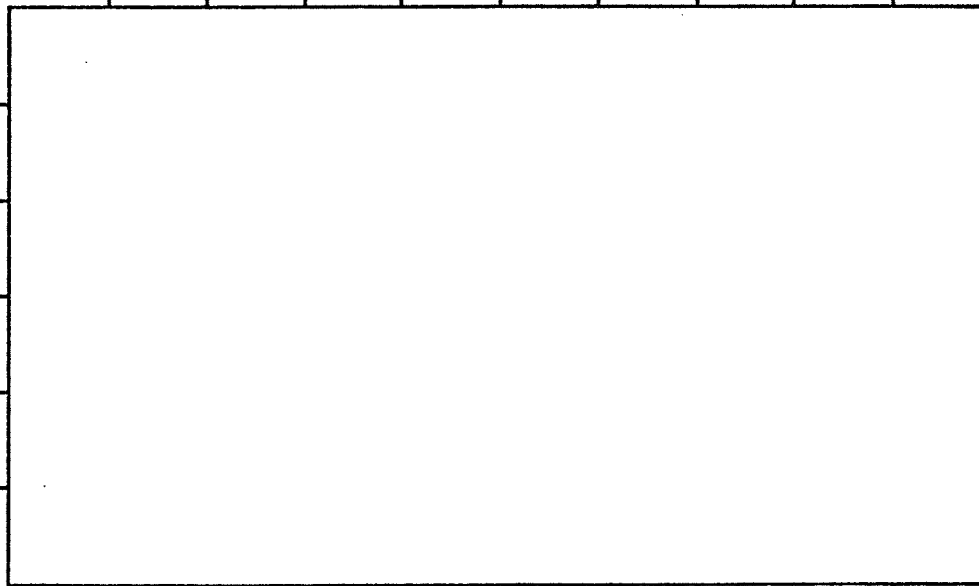
Serial Number

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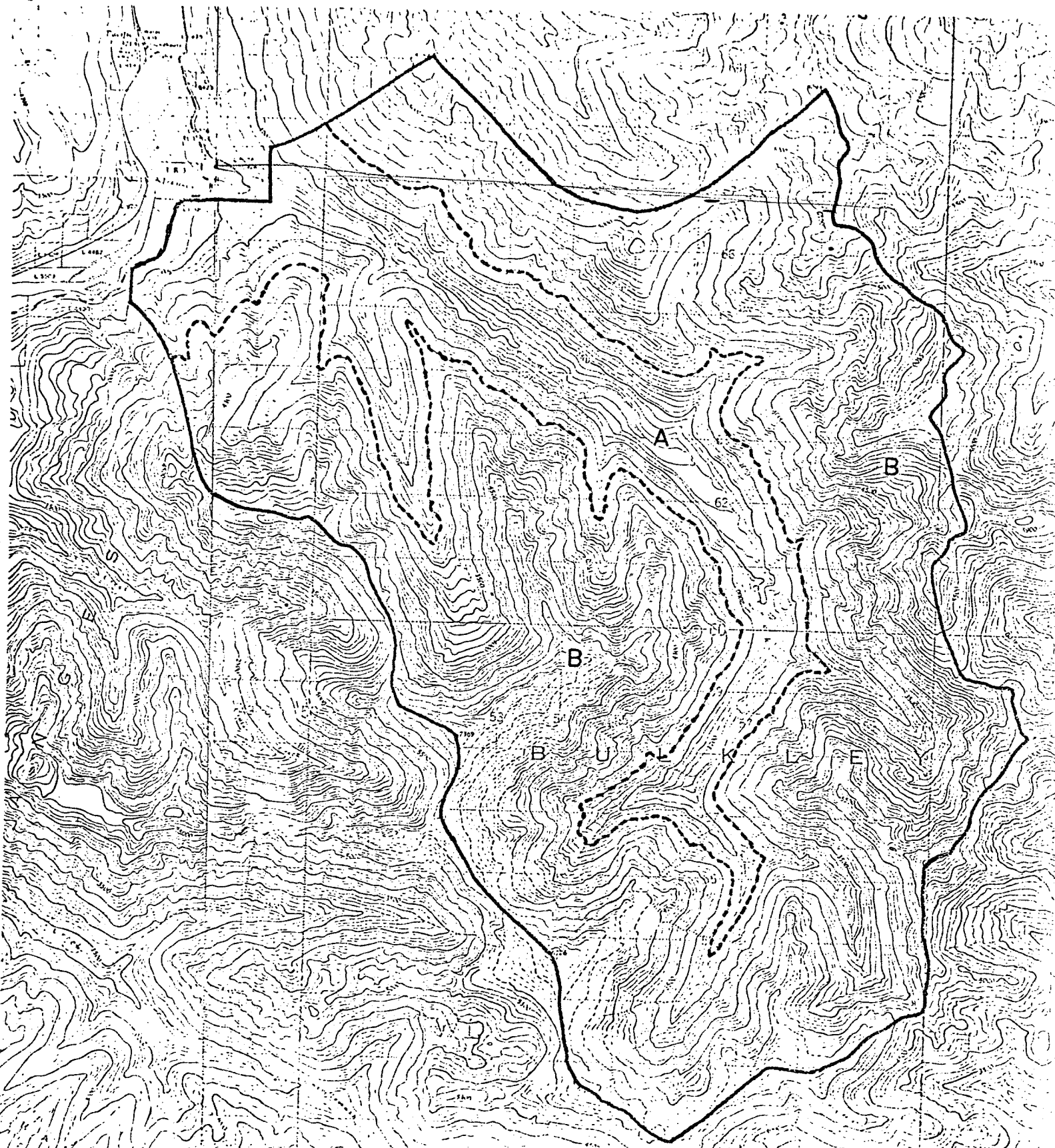
For Data  
Centre Use  
only

1. 1. Name of surveyor V.J. Krajina  
 2. Address of surveyor Department of Botany,  
University of British Columbia,  
Vancouver 8, B.C., Canada  
 3. Check Sheet completed (a) on site .......... (b) from records ..........  
 4. Date Check Sheet completed November 27, 1973

2. 1. Name of IBP Area Legate Creek Drainage, Bulkley Ranges of Hazelton  
Mountains, east of Terrace  
 2. Name of IBP Subdivision (or serial letter) CWHa, MH, AT  
 3. Map of IBP Area\* showing boundaries attached? Yes .......... No .....  
 4. Sketch map of IBP Area\*. Please mark direction of north, the scale and grid numbers where applicable.



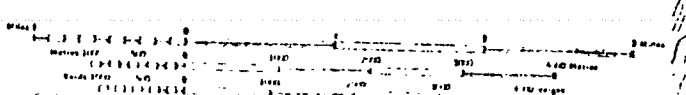
\* For "IBP Area", read IBP Area and/or IBP Subdivision.



37 29 38 39 40 41 42 115 20

**DORREEN**  
COAST DISTRICT RANGE 5  
BRITISH COLUMBIA

**USK**  
COAST DISTRICT RANGE 5  
BRITISH COLUMBIA



3. Location of IBP Area\*

1. Latitude 54 ° 37.65 - 46' N/S Longitude 128 ° 02.5 - 17' E/W
2. Country Canada  
 State or Province British Columbia County Terrace (Prince Rupert)  
 (State or Province ..... County .....) )

4. Administration

- National 1. Official category Crown Land
2. Address of administration B.C. Department of Lands, Forests and  
Water Resources,  
Victoria, B.C., Canada

International Class

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) 35,087 acres A (primary): 8.093 (up to 2500')  
 B (secondary): 26,994, commercially useless, ecologically very important
2. Altitude (state units of measurement) Maximum 8094' (2420m)  
 (unnamed mountain)  
 Minimum 350' (105m)

6. Climate

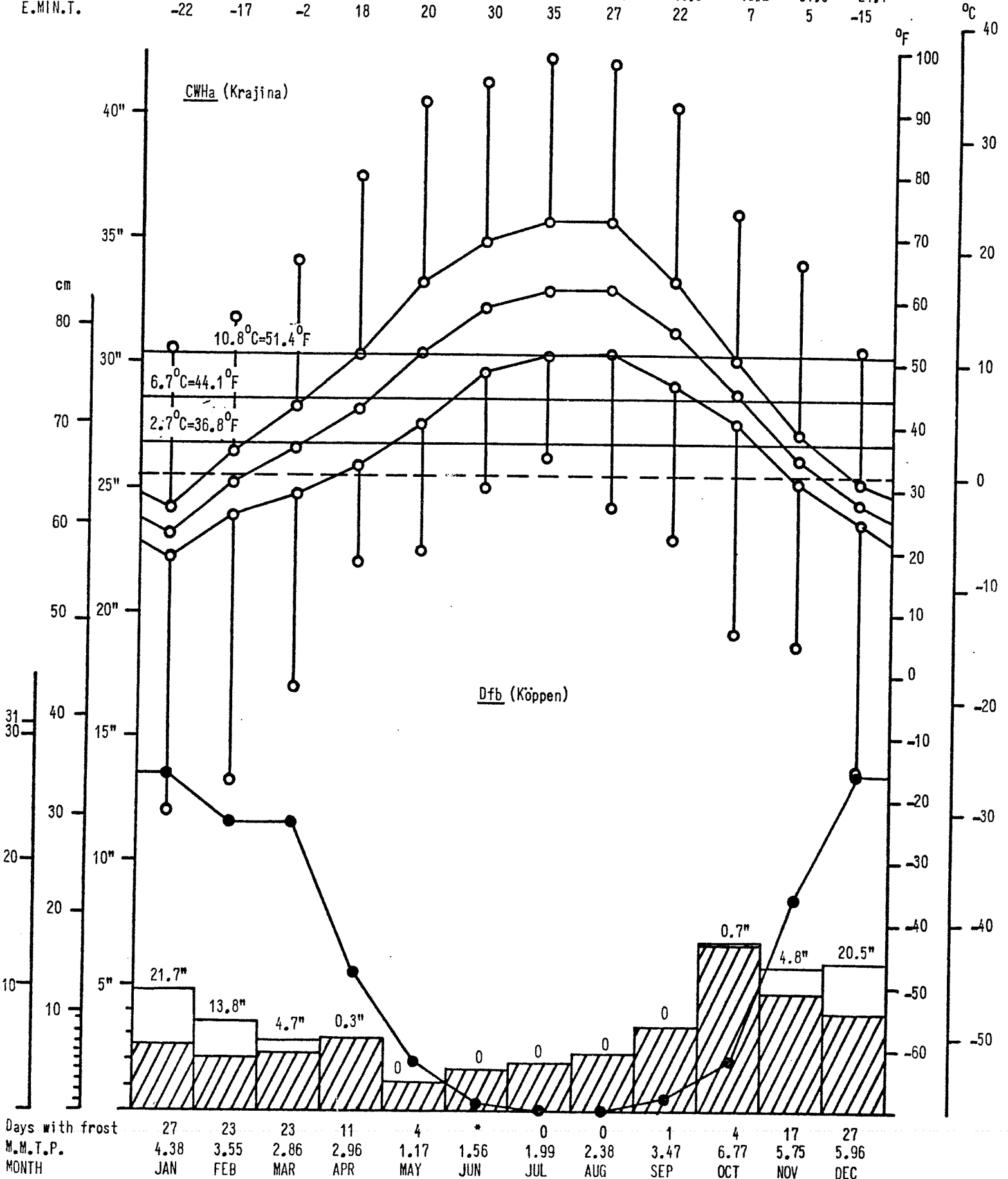
Nearest climatological station :

1. Name Terrace
2. Climatological station on IBP Area\*? Yes ..... No X
3. If (2) not, distance from edge of IBP Area\* (state units) 16 miles
4. Direction from IBP Area\* SW
5. Additional data sheet attached? Yes X No .....

TERRACE 54°30'N, 128°30'W, 200' ASL. Record: 10-41 years, adjusted.

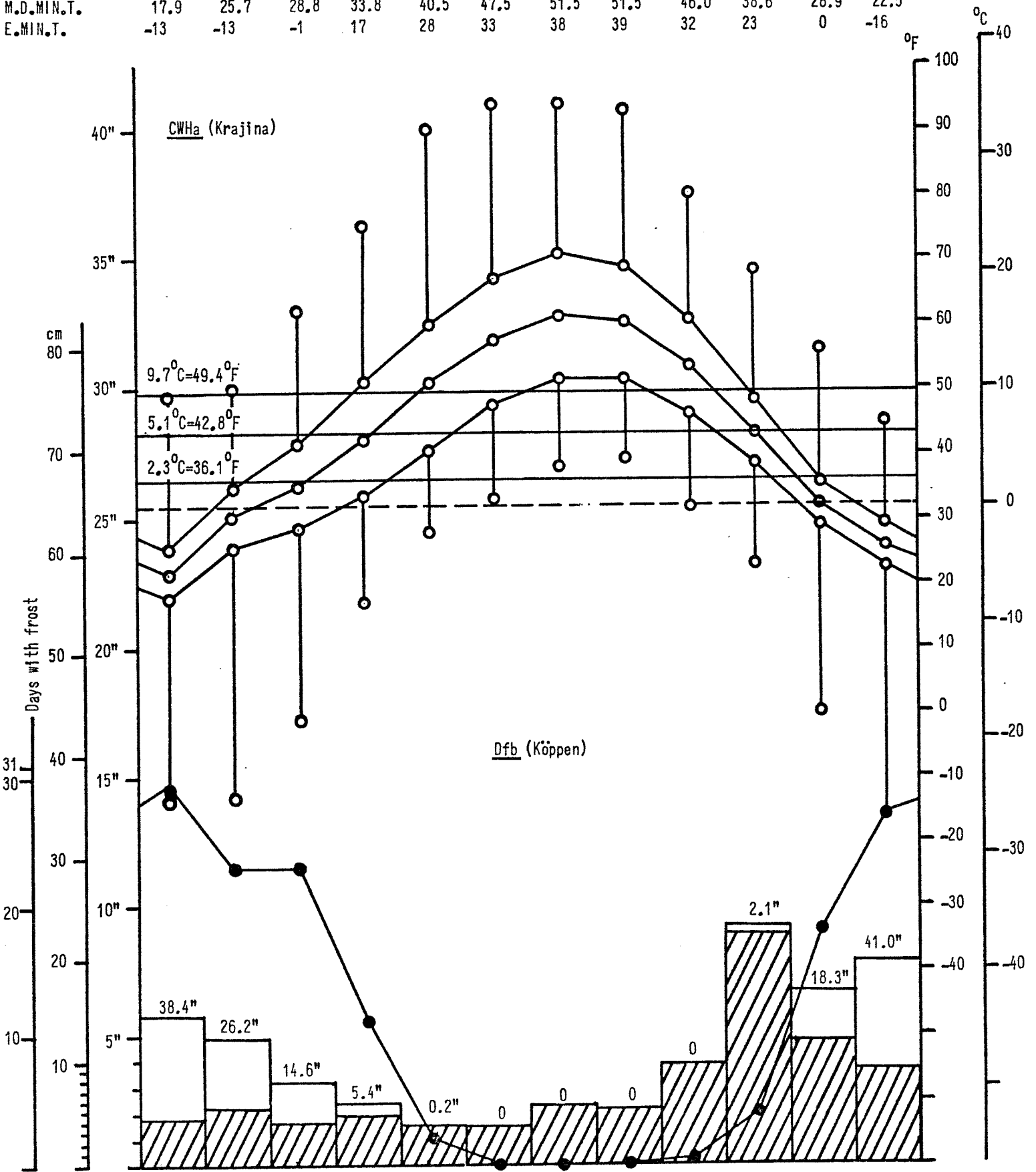
Months above 50°F: 5, below 32°F: 3, A.M.T.P. 43.25", A.M.S.F. 71.5", snow % A.M.T.P.: 16.53, days with frost, yearly: 137.

E.MAX.T.	52	57	66	80	92	95	99	98	91	74	66	52
M.D.MAX.T.	26.9	35.9	43.3	51.4	62.6	69.1	72.4	72.5	63.0	50.2	38.4	31.0
M.D.T.	23.0	30.9	36.2	42.6	51.7	58.6	61.7	61.9	59.8	45.2	34.9	27.9
M.D.MIN.T.	19.0	25.8	29.1	33.8	40.7	48.1	51.0	51.2	46.5	40.2	31.3	24.7
E.MIN.T.	-22	-17	-2	18	20	30	35	27	22	7	5	-15



TERRACE AIRPORT 54°28'N, 128°35'W, 719' ASL. Record: 15-16 years, adjusted.  
 Months above 50°F: 5, below 32°F: 3, A.M.T.P. 51.22", A.M.S.F. 146.2", snow % A.M.T.P.: 28.54, days with frost, yearly: 137.

E.MAX.T.	49	50	62	75	90	94	94	93	80	68	56	45
M.D.MAX.T.	25.7	34.9	41.5	50.7	59.9	66.8	70.6	68.5	60.6	48.1	35.8	29.3
M.D.T.	21.8	30.3	35.2	42.3	50.3	57.2	61.1	60.0	53.4	43.3	32.4	25.9
M.D.MIN.T.	17.9	25.7	28.8	33.8	40.5	47.5	51.5	51.5	46.0	38.6	28.9	22.5
E.MIN.T.	-13	-13	-1	17	28	33	38	39	32	23	0	-16



Days with frost	29	23	23	11	2	0	0	0	*	4	18	27
M.M.T.P.	5.70	4.97	3.11	2.47	1.55	1.54	2.32	2.23	3.89	9.13	6.60	7.71
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	Segate Creek (E. of Terrace)	
2	1	A	1	7	a		
3	1	A	1	7	a		
4	1	A	2	1			
5	1	A	1/2	7/1	a		
6	1	B	2	1			
7	1	A	1	7	a		
8	1	A	1	7	a		
9	1	B	1	6			
10	1	C	1	2	b		
11	2	G	1	3			
12	2	G	1	2			
13	1	M	2	1			
14	1	C	1	2	a		
15	1	M	2	1			
16	1	G	2	1			
17							And many more plant communities, not surveyed.
18							There is no Engelmann spruce in higher elevations.
19							Mountain hemlock here is damaged by frost.
20							

CWHa:

153

MH:

AT:

7.  
(cont.)

2

Soil

153

CWha:

MH

Community Reference Number	Soil type	Other notes
1	ABC F <sub>5</sub>	Podzol
2	ABC F <sub>5</sub>	Mini Podzol
3	ABGC F <sub>5</sub> /P <sub>2</sub>	Gleyed Podzol
4	AC I <sub>2</sub>	Regosol
5	AC I <sub>2</sub>	Regosol
6	AGC P <sub>2</sub>	Gleysol
7	ABC F <sub>5</sub>	Podzol
8	ABC F <sub>5</sub>	Podzol
9	AC/ABC F <sub>3</sub> /F <sub>5</sub>	Ranker - Brunisol
10	ABC F <sub>5</sub>	Dystric Brunisol
11	AC F <sub>3</sub>	Ranker
12	AC I <sub>2</sub>	Alpine hamada rawmark Regosol
13	ABC P <sub>2</sub>	Gleysol
14	AC F <sub>3</sub>	Ranker (Snow Basin)
15	AGC P <sub>2</sub>	Gleysol (Snow Basin Anmoor)
16	AC F <sub>3</sub>	Ranker
17		And many more soils which were not surveyed.
18		
19		
20		







11. Freshwater within IBP Area\*

1.

	Permanent	Intermittent
General		
Standing		
Running	X	

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps	?			
Ponds	X			
Lakes				

3. Running Water

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

Legate Creek

4. Special freshwater features ..... cascades and waterfalls (some intermittent ones)  
 .....

12. Salt and Brackish Water within IBP Area\*

nil

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

Skeena River

2. Salt and Brackish nil

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										
Reptilia		?										
Amphibia		X										
Pisces		?										
Insecta		X										

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

Golden eagle (Aquila chrysaetos canadensis) was seen.  
 .....  
 No goats were observed.  
 .....  
 .....  
 .....  
 .....  
 .....

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

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

Abies amabilis was not observed further to the east. Therefore, its distribution here is of some interest.

15. Exceptional Interest of IBP Area\*

A perfect sample of three zones: CWHa, MH, AT. It is a scenic and biological paradise which should be fully preserved. Any logging in this valley will cause such terrific damage, especially by erosion, that it cannot be repaired in future. The practical exploitation of this area is highly uneconomic. As a natural area for future studies it is ideal.

16. Significant Human Impact

1. General: None in entire IBP Area\*  (only at the bottom by logging operations in a limited area)

None in part of IBP Area\* .....

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	

3. Additional details on each type of impact attached?

Yes ..... No  .....

17.

Conservation Status

Future

	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.

103I9, 103I16

List attached? Yes ..... No .....

130-132

3. Aerial photographs for the IBP Area available?

B.C. 4092: 164-168

X  
For whole area ..... For part of area ..... None .....

19.

Other Relevant Information

A certain part of this area could become a Provincial Park if there would be an interest. However, building a road here for an access would be a great damage for relatively fragile nature of this area. It should be reached either by foot or by a helicopter.

*V.J. Krajina*

V.J. Krajina

Signed .....

(Surveyor)