

APPLICATION FOR ECOLOGICAL RESERVE

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

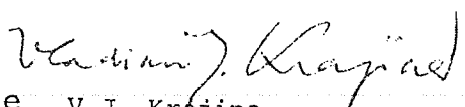
2. Geographical location (relate to nearest settlement, mountain, river, etc.)
 Mount Morse, Tsimpsean Peninsula, north of Prince Rupert

3. Indicate the biogeoclimatic zone of which the reserve is representative.
 CWHb, MH

4. Approximate total acreage.
 7,318 acres

5. Purpose of the reserve.
 Most outstanding sample of nature and its ecological phenomena along the Pacific coast at the 54°N latitude.
 - (a) Primary (state acreage)
 A: 4,037 acres
 - (b) Others if any (state acreage)
 B: 3,281 acres
 - (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:
Tsuga heterophylla, T. mertensiana (and their hybrids), Thuja plicata, Picea sitchensis, Pinus contorta, Chamaecyparis nootkatensis, Alnus rubra (mostly in scrubby growth, commercially useless).


 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

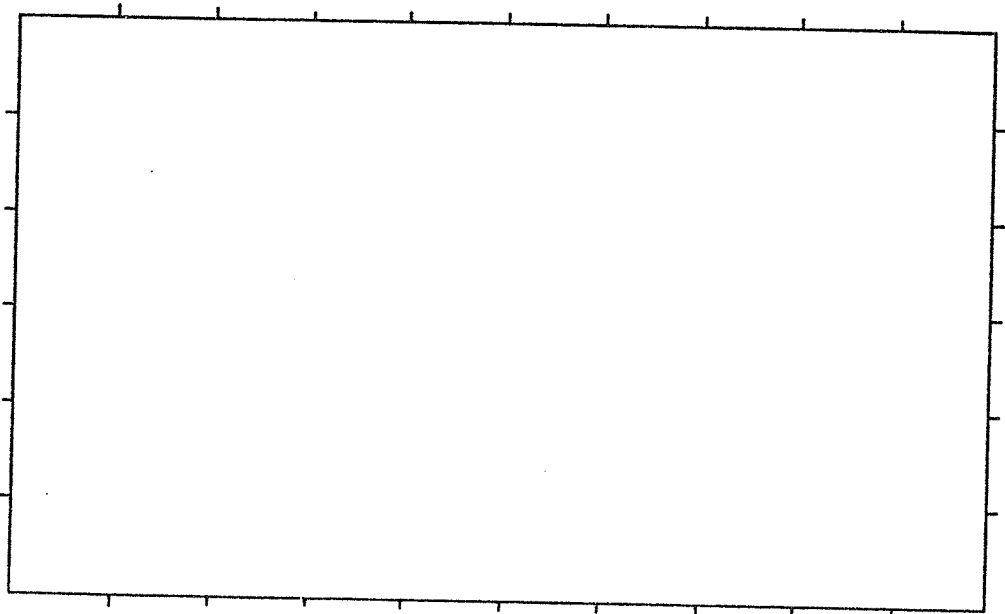
Serial Number

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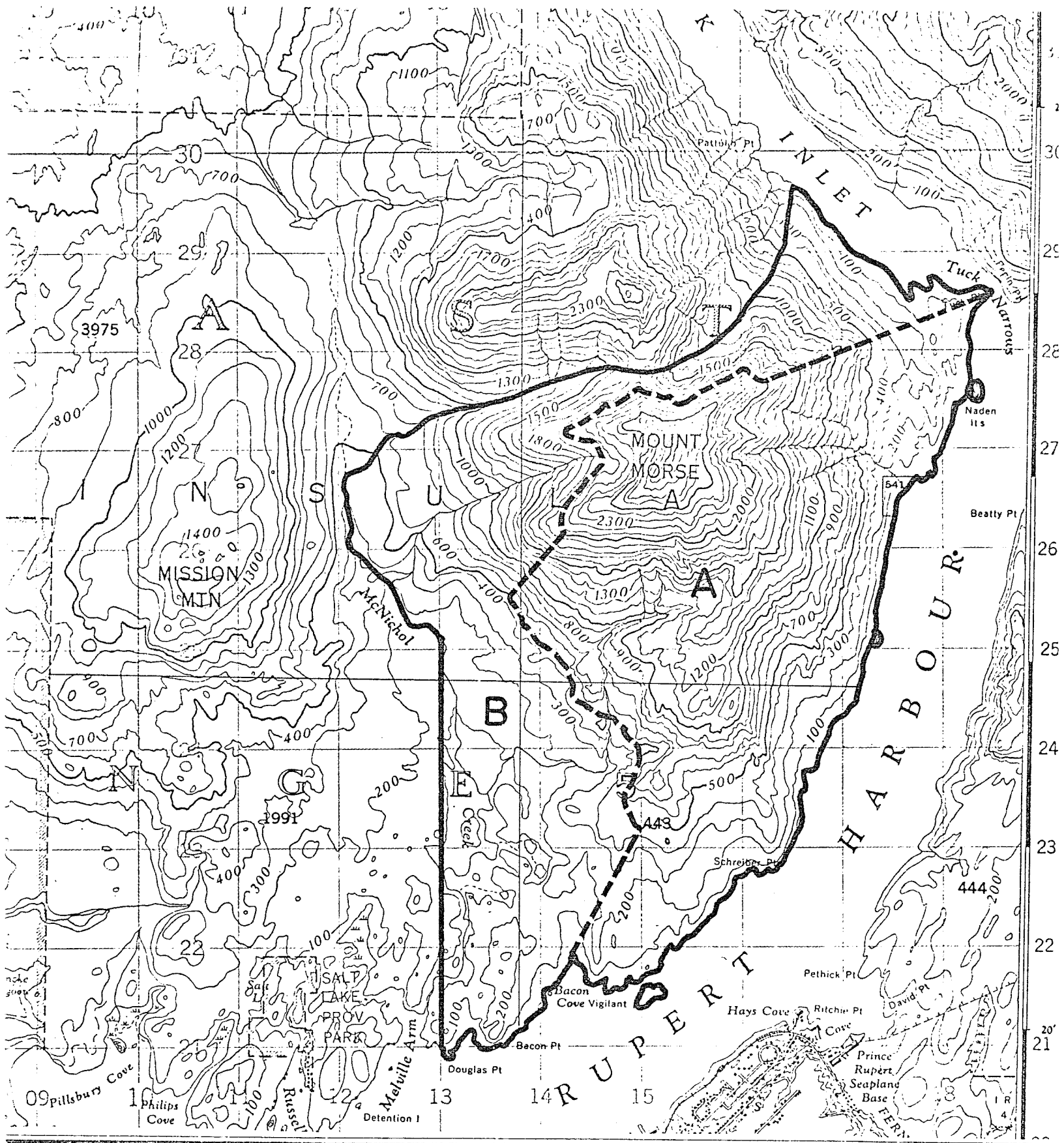
For Data Centre Use only

- 1. Name of surveyor V.J. Krajina
- 2. Address of surveyor Dept. of Botany
..... University of British Columbia
..... Vancouver 8, B.C., Canada
- 3. Check Sheet completed (a) on site X (b) from records
- 4. Date Check Sheet completed July 31 - August 5, 1973

- 1. Name of IBP Area Mount Morse, Tsimpsean Peninsula, north of Prince Rupert
- 2. Name of IBP Subdivision (or serial letter) CWHb, 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.



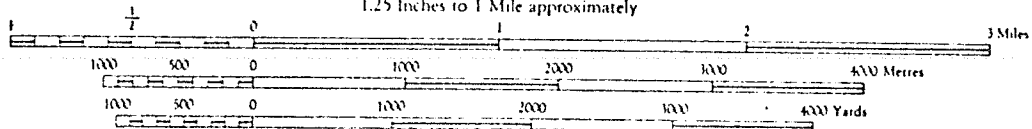
* For "IBP Area", read IBP Area and/or IBP Subdivision.



PRINCE RUPERT

BRITISH COLUMBIA

Scale 1:50,000
1.25 Inches to 1 Mile approximately



3. Location of IBP Area*

1. Latitude..... 54 ° 19.9-24.7' N Longitude..... 130 ° 15.4-21.5' W
 2. Country Canada
 State or Province British Columbia County Prince Rupert
 (State or Province County)

4. Administration

National 1. Official category Crown Land
 B.C. Department of Lands, Forests, and
 2. Address of administration Water Resources
 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) 7,318 acres (A: 4,037 acres, B: 3,281 acres)
 2. Altitude (state units of measurement) Maximum 3100 ft. (930 m)
 Minimum 0 ft. (sea level)

6. Climate

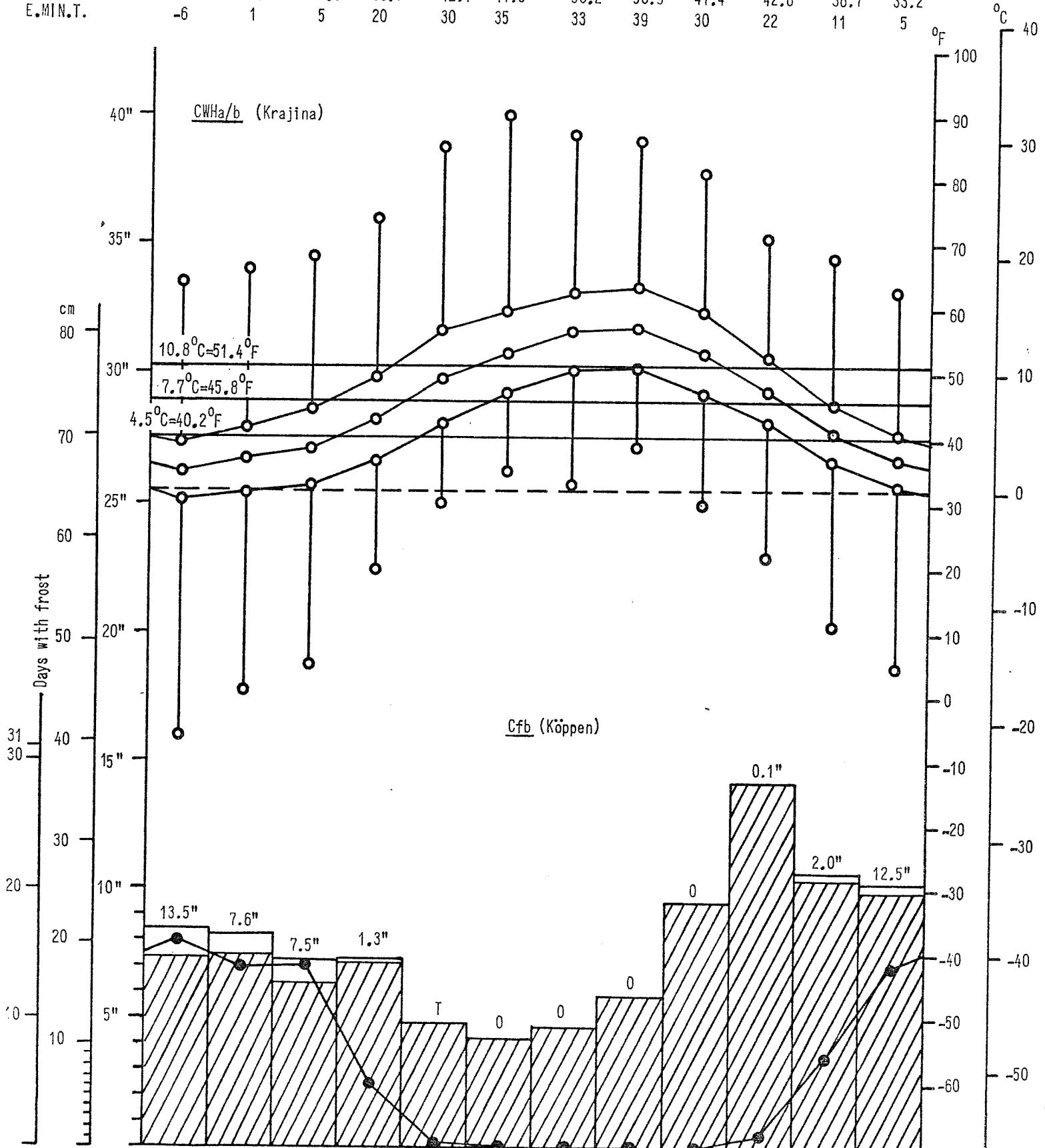
Nearest climatological station :

1. Name Prince Rupert
 2. Climatological station on IBP Area*? Yes No ^X
 3. If (2) not, distance from edge of IBP Area* (state units) 4 mi.
 4. Direction from IBP Area* SSW
 5. Additional data sheet attached? Yes ..X..... No

PRINCE RUPERT 54°17'N, 130°23'W, 170' ASL. Record: 20-55 years, adjusted.

Months above 50°F: 4, below 32°F: 0, A.M.T.P. 95.06", A.M.S.F. 44.5", snow % A.M.T.P.: 4.68, days with frost: 71.

E.MAX.T.	64	66	68	74	85	90	87	86	81	71	68	63
M.D.MAX.T.	39.9	41.8	44.4	49.7	56.5	59.5	62.5	63.3	59.8	52.6	45.7	41.4
M.D.T.	35.3	36.9	38.7	43.2	49.3	53.3	56.4	57.1	53.6	47.6	41.2	37.3
M.D.MIN.T.	30.6	31.9	32.9	36.7	42.1	47.0	50.2	50.9	47.4	42.6	36.7	33.2
E.MIN.T.	-6	1	5	20	30	35	33	39	30	22	11	5



Days with frost	16	14	14	5	*	0	0	0	0	1	7	14
M.M.T.P.	8.43	8.22	7.10	7.24	4.83	4.22	4.76	5.79	9.52	14.14	10.60	10.21
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	?	?	?	?	?	<i>Fucus</i> spp. plant association (litoral)	
2	1	M	2	2		<i>Confioselino</i> (<i>pacifici</i>) - <i>Potentilla</i> (<i>pacificae</i>) - <i>Deschampsietum caespitosae</i>	
3	1	M	2	2		<i>Caricetum lyngbyei</i>	
4	1	A	2	1		<i>Heracleo</i> (<i>lanati</i>) - <i>Alnetum rubrae</i>	
5	1	A	1	7		<i>Calamagrostido</i> (<i>nutkaensis</i>) - <i>Maianthemo</i> (<i>dilatati</i>) - <i>Picetum sitchensis</i>	
6	1	A	1	7	a	<i>Leucopledo</i> (<i>menziesii</i>) - <i>Plagiomnio</i> (<i>insignis</i>) - <i>Oplopanaco</i> (<i>horridi</i>) - <i>Thujetum plicatae</i>	
7	1	A	1	7	a	<i>Plagiothecio</i> (<i>undulati</i>) - <i>Rhytidiadelpho</i> (<i>lorei</i>) - <i>Vaccinio</i> (<i>alaskaensis</i>) - <i>Tsugetum heterophyllae</i>	
8	1	A	1	7	a	<i>Rhizomnio</i> (<i>pseudopunctati</i>) - <i>Lysichito</i> (<i>americani</i>) - <i>Alno</i> (<i>rubrae</i>) - <i>Piceo</i> (<i>sitchensis</i>) - <i>Thujetum plicatae</i>	
9	1	A	1	7	a	<i>Streptopo</i> (<i>rosei</i>) - <i>Gymnocarpio</i> (<i>dryopteridis</i>) - <i>Abieto</i> (<i>amabilis</i>) - <i>Tsugo</i> (<i>heterophyllae</i>) - <i>Thujetum plicatae</i>	
10	1	B	1	3	d	<i>Sphagno</i> (<i>fusci</i>) - <i>Pino</i> (<i>contortae</i>) - <i>Chamaecyparido</i> (<i>nootkatensis</i>) - <i>Tsugetum heterophyllae</i> - <i>mertensianae</i>	
11	1	A	2	1		<i>Maianthemo</i> (<i>dilatati</i>) - <i>Lysichito</i> (<i>americani</i>) - <i>Malo</i> (<i>fuscae</i>) - <i>Alnetum rubrae</i>	
12	1	C	1	2	b	<i>Phyllodoco</i> (<i>empetriformis</i>) - <i>Cassiopetum mertensianae</i>	
13	1	B	1	7		<i>Cassiopo</i> (<i>mertensianae</i>) - <i>Phyllodoco</i> (<i>empetriformis</i>) - <i>Nano-Tsugetum mertensianae</i>	
14	1	M	2	1		<i>Faurio</i> (<i>cristae-galli</i>) - <i>Caricetum nigricantis</i>	
15	1	C	1	2	b	<i>Vaccinio</i> (<i>caespitosi</i>) - <i>Cassiopetum stellerianae</i>	
16	1	D	1	2		<i>Siphulo</i> (<i>ceratitis</i>) - <i>Anthelietum juratzkanae</i>	
17	1	C	1	2	b	<i>Geo</i> (<i>calthifolii</i>) - <i>Sibbaldio</i> (<i>procumbentis</i>) - <i>Loiseleurietum procumbentis</i>	
18	1	N	2	1		<i>Dodecatheo</i> (<i>jeffreyi</i>) - <i>Luetkeo</i> (<i>pectinatae</i>) - <i>Calthetum leptosepalae</i>	
19	1	G	1	3		<i>Valeriano</i> (<i>sitchensis</i>) - <i>Abieto</i> (<i>amabilis</i>) - <i>Chamaecyparidetum nootkatensis</i>	
20	1	G	1	3		<i>Hylacomio</i> (<i>alaskani</i>) - <i>Rhytidiopsido</i> (<i>robustae</i>) - <i>Nano-Tsugetum mertensianae</i>	

CWHb:

151

MH:

7.
(cont.)

2

Soil

CWHb:

151

Community Reference Number	Soil type	Other notes	
1	? ?	On rocks, submerged during the high tide	
2	AC I ₂	Regosol - influenced by brackish water	
3	AC I ₂	Regosol	
4	AC I ₂	Alluvial regosol	
5	AC I ₂	Regosol - affected slightly by ocean spray	
6	ABGC F ₅ /P ₂	Gleyed Humic Podzol	
7	ABC F ₅	Humic Podzol	
8	AC/A P ₂ /O	Gleysol / Organic	
9	ABGC F ₅ /P ₂	Gleyed Humic Podzol	
10	A O	Organic Bog	
11	AC/A P ₂ /O	Gleysol / Organic	
MH:	12	ABC F ₅	Humic Brunisol
	13	ABC F ₅	Humic Brunisol / Humic Mini Podzol
	14	AC I ₂	Regosol - Snow Basin Anmoor
	15	A(B)C F ₃ /F ₅	Ranker / Humic Brunisol
	16	A(G)C I ₂	Snow Regosol (gleyed)
	17	A[(B)]C F ₃ /I ₂	Ranker - Snow Regosol
	18	AGC P ₂	Gleysol
	19	ABGC P ₂ /F ₅	Gleyed Humic Brunisol
	20	ABC F ₅	Dystric Humic Brunisol - Mini Podzol

8. Similar Communities in Country (or State)

Community Reference Number	Protected					Protected and Unprotected				
	Abundant	Infrequent	None known	Decreasing	Increasing	Abundant	Infrequent	None known	Decreasing	Increasing
CWHb : 1			X			X				
2			X				X			
3			X				X			
4			X				X			
5			X				X			
6			X				X			
7			X				X			
8			X				X			
9			X				X			
10			X				X			
11			X				X			
MH: 12			X				X			
13			X				X			
14			X				X			
15			X					X		
16			X					X		
17			X					X		
18			X					X		
19			X					X		
20			X				X			

9. Landscape

1. General Landscape (give brief description)
 A hill (small mountain) fairly isolated from other mountains.

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)

10. Coastline of IBP Area*

(not protected)
 1. Protected bays and/or inlets Many Few None

2. Substratum. % of coast Tuck Inlet and Prince Rupert Harbour

Rock	Boulder Beach	Shingle Beach	Sand Beach	Shell Beach	Mud	Coral	Ice
X							

3. Physiography. % of coast Cliffed Sloping Flat

	X	
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4. Special Coastal Features (list)

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

6. Total length of coastline :

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

Tuck Inlet and the coastal line of Prince Rupert Harbour is used for booming the logs.

11. Freshwater within IBP Area*

1.

	Permanent	Intermittent
General		
Standing	X	
Running	X	

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps	X			
Ponds	X		X	
Lakes				

3. Running Water

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

McNichol Creek
(should be protected)

4. Special freshwater features

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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

Salt Lake Provincial Park

2. Salt and Brackish

Estuary	Salt lake	Salt pool	Lagoon	Ocean		
	X			X		

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

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

Many rare herbs and shrubs occur here. Small krummholz Sitka spruce occurs near the top (3000').

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15. Exceptional Interest of IBP Area*

Most outstanding sample of coastal mesothermal forest and subalpine zone. It is fairly isolated and accessible either by boat or helicopter. Forest is scrubby and has very little value for forestry.

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16. Significant Human Impact

1. General : None in entire IBP Area* X (with a small disturbance close to the top)
 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					X	
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 X

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								
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.


List attached? Yes No

3. Aerial photographs for the IBP Area available?

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

19. Other Relevant Information

It would be most desirable to keep this mountain (opposite a city which will grow) in a natural status and not to allow any further "development" there. The city will gain from that action. The aesthetic values are great. On the top of Mount Morse is a B.C. Hydro - Radio Repeater. There was one old car dumped close to the station which should be removed (allegedly deposited by Department of Transport).


 Signed V.J. Krajina
 (Surveyor)