

APPLICATION FOR ECOLOGICAL RESERVE

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

The estuary of the Moyeha River from mean high tide line seaward to the 20 fathom line, including the tidal flats, the submerged estuary floor, and the water column above.

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

Moyeha River estuary, head of Herbert Inlet, west coast of Vancouver Island.

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

CWHb + West Coast Littoral biotic area of Vancouver Island

4. Approximate total acreage.

240 acres

5. Purpose of the reserve.

Conservation of the estuary of the Moyeha River. The entire drainage of this river is within Strathcona Park, but the estuary is not.

(a) Primary (state acreage)

240 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.

treeless

Signature Jim Pojar, Hans Roemer  
I.B.P. Surveyor

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

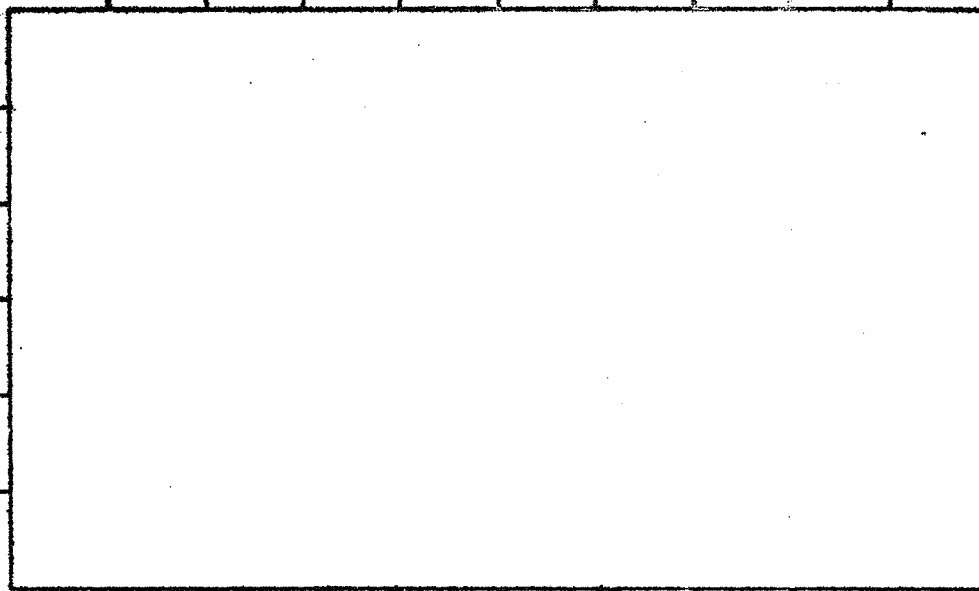
Serial Number

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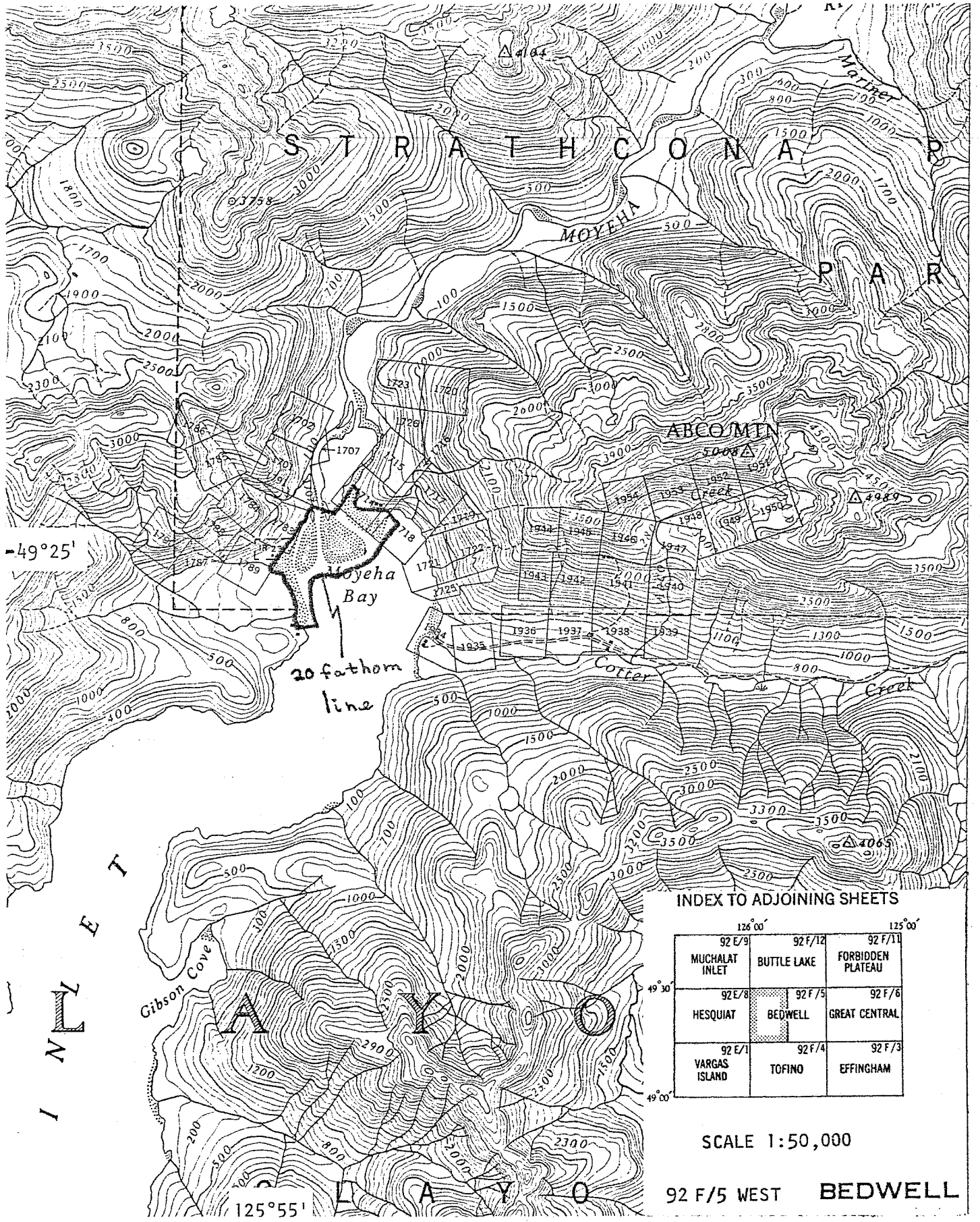
For Data Centre Use only

1. 1. Name of surveyor \*J. Pojar, \*\*H.L. Roemer
2. Address of surveyor \*Ecological Reserves Programme, Victoria, B.C.  
 \*\*Dept. of Biology, University of Victoria, B.C.
3. Check Sheet completed (a) on site ..... (b) from records  X  
 Oct. 8, 1975
4. Date Check Sheet completed .....

2. 1. Name of IBP Area Moyeha River estuary
2. Name of IBP Subdivision (or serial letter) CWHb
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.

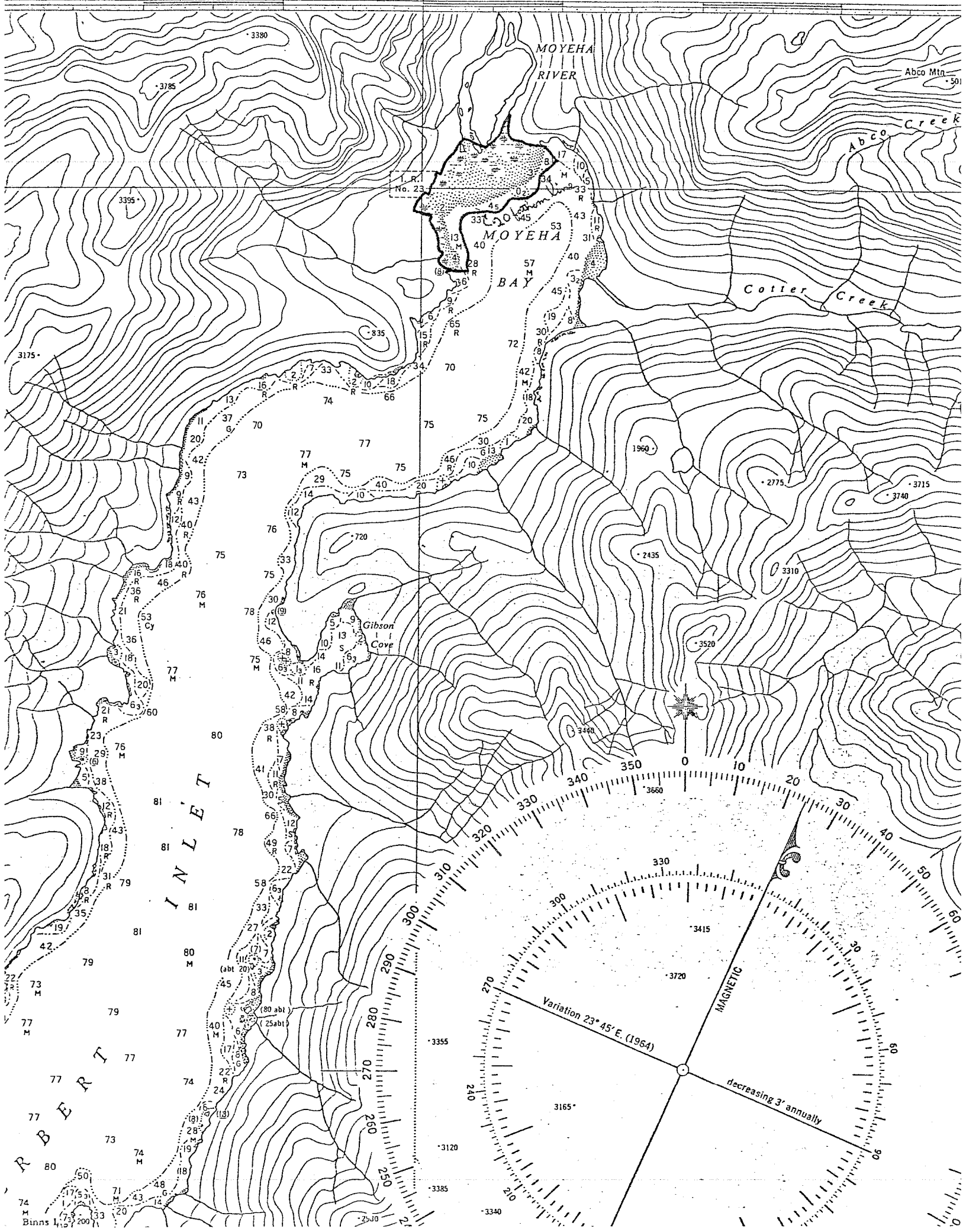


INDEX TO ADJOINING SHEETS

126°00'		125°00'	
92 E/9 MUCHALAT INLET	92 F/12 BUTLE LAKE	92 F/11 FORBIDDEN PLATEAU	
92 E/8 HESQUIAT	92 F/5 BEDWELL	92 F/6 GREAT CENTRAL	
92 E/1 VARGAS ISLAND	92 F/4 TOFINO	92 F/3 EFFINGHAM	
49°30'		49°00'	

SCALE 1:50,000

92 F/5 WEST BEDWELL



3. Location of IBP Area\*

1. Latitude ..... 49 ° 24.6-25.3' N Longitude ..... 125 ° 54.0-54.8' W  
 2. Country ..... Canada  
 State or Province ..... British Columbia County ..... Tofino  
 (State or Province ..... County .....)

4. Administration

National 1. Official category ..... Tidelands  
 2. Address of administration ..... Crown Land  
 B.C. Dept. 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) ..... ca. 240 acres  
 2. Altitude (state units of measurement) Maximum .....  
 Minimum } +/- sea level

6. Climate

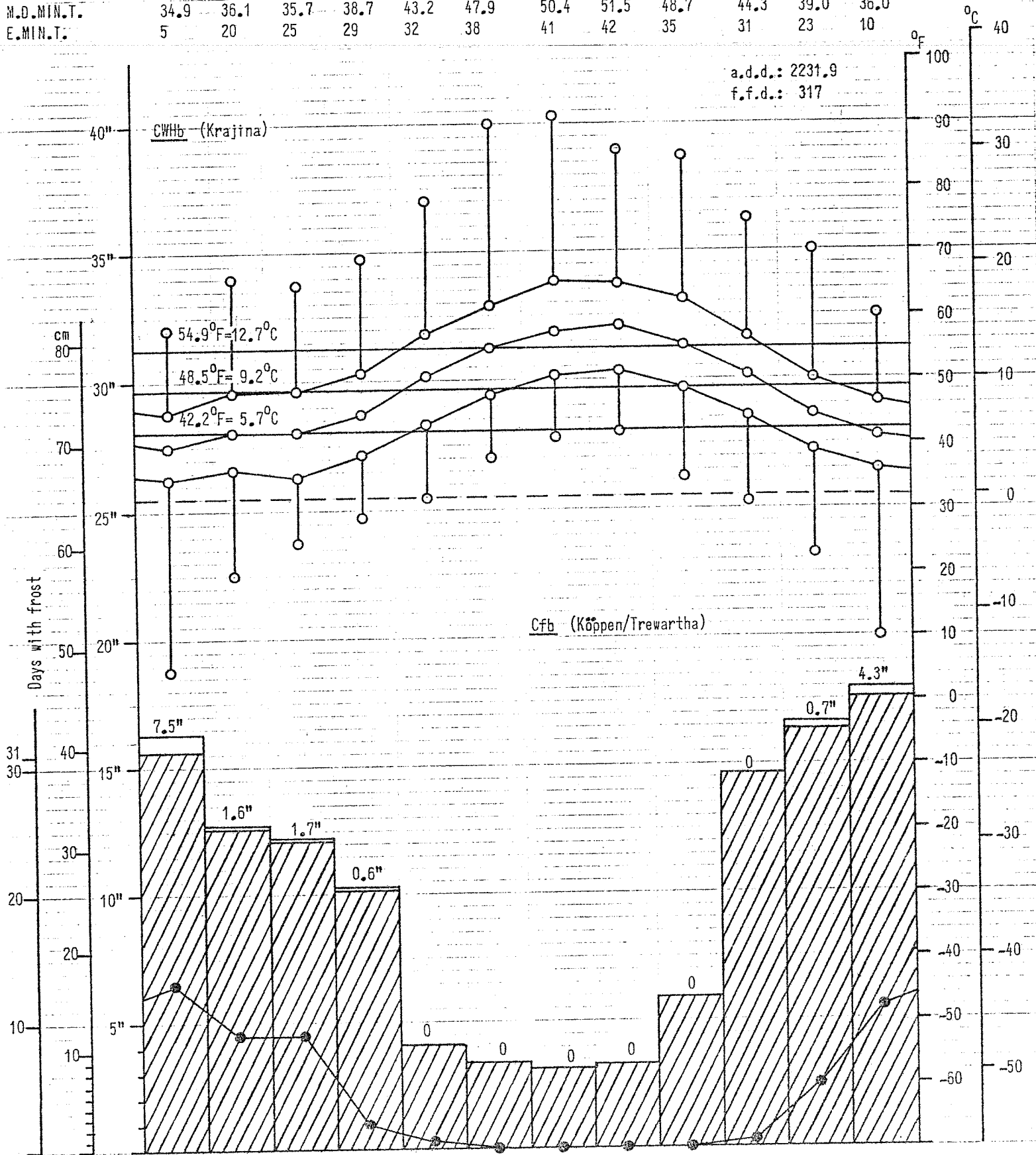
Nearest climatological station :

1. Name ..... Tofino Airport  
 2. Climatological station on IBP Area\*? Yes ..... No ..... X  
 3. If (2) not, distance from edge of IBP Area\* (state units) ..... 38.6 km (24 mi.)  
 South  
 4. Direction from IBP Area\* .....  
 5. Additional data sheet attached? Yes ..... X No .....

TOFINO AIRPORT 49°05'N, 125°46'W, 80' ASL. Record: 14-16 years.

Months above 50°F: 6, below 32°F: 0, A.M.T.P. 120.52", A.M.S.F. 16.4", snow % A.M.T.P.: 1.36, days with frost, yearly: 49.

E. MAX. T.	58	66	65	69	78	90	91	86	85	75	70	60
M. D. MAX. T.	45.0	48.2	48.5	51.4	57.5	61.8	65.2	65.0	62.7	56.6	50.0	46.3
M. D. T.	39.9	42.1	42.1	45.0	50.4	54.9	57.8	58.2	55.6	50.5	44.5	41.2
M. D. MIN. T.	34.9	36.1	35.7	38.7	43.2	47.9	50.4	51.5	48.7	44.3	39.0	36.0
E. MIN. T.	5	20	25	29	32	38	41	42	35	31	23	10



Days with frost	13	9	9	2	*	0	0	0	0	*	5	11
M.M.T.P.	16.31	12.74	12.24	10.31	4.08	3.40	3.12	3.25	5.94	14.62	16.54	17.97
Months	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	M	2	2		<u>Salicornia virginica</u> - <u>Plantago maritima</u> - <u>Fucus</u> spp. association	
2	1	M	2	2		Caricetum lyngbyei	
3	1	M	2	2		<u>Deschampsia caespitosa</u> - <u>Juncus balticus</u> - <u>Carex lyngbyei</u> - <u>Potentilla pacifica</u> association	
4	1	M	2	2		<u>Calamagrostis nutkaensis</u> - <u>Hierochloë odorata</u> - <u>Fritillaria camschatcensis</u> - <u>Maianthemum dilatatum</u> association (fringing the forest)	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

7.  
(cont.)

2

Soil

Community Reference Number	Soil type	Other notes
1	I <sub>2</sub>	regosol
2	I <sub>2</sub>	regosol
3	I <sub>2</sub>	gleyed regosol
4	I <sub>2</sub>	gleyed regosol
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		





9. Landscape

1. General Landscape (give brief description) .....  
 tidal flats and estuarine waters at the mouth of a medium sized  
 river (Moyeha 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) .....  
 located at head of coastal fjord  
 .....

10. Coastline of ISP Area\*

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
5%			20%		75%		

3. Physiography. % of coast

Cliffed	Sloping	Flat
5%		95%

tidal flats

4. Special Coastal Features (list) .....  
 estuary  
 .....

5. Tide. Maximum range (state units of measurement) Tofino: 12.9 ft.  
 Kennedy Cove: 14.9 ft.

6. Total length of coastline :

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

11. Freshwater within IBP Area\* NONE

1.

	Permanent	Intermittent
General		
Standing		
Running		

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps				
Ponds				
Lakes				

3. Running Water

	Permanent	Intermittent
Springs, cold		
Springs, hot		
Streams		
Rivers		

4. Special freshwater features .....

.....

12. Salt and Brackish Water within IBP Area\*

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

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

1. Fresh  Lake  River  Stream

2. Salt and Brackish

Estuary	Salt lake	Salt pool	Lagoon	Ocean		
				X		

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						X	X			
Reptilia												
Amphibia												
Fishes	X	X							X			
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											
shrubs											
herbs		X			X						
grass		X			X						
Gymnospermae											
Pteridophyta											
Bryophyta											
Microscopic Algae		X									

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

Lilaeopsis occidentalis

.....  
 .....  
 .....

15. Exceptional Interest of IBP Area\*

The estuary of a river whose entire drainage is within Strathcona Provincial Park and thus, for the time being at least, protected. Such an estuary could provide valuable comparisons with the estuaries of the numerous logged drainages on Vancouver Island.

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16.

Significant Human Impact

1. General: None in entire IBP Area\* ..... X

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						
Drainage						
Other soil disturbance						
Grazing						
Selective flora disturbance						
Logging	X					
Plantation						
Fishing / Hunting	X	?	?			
Removal of predators						
Pesticides						
Introductions -- plants						
Introductions -- animals						
Fire						
Permanent habitation	X	?		X		
Recreation and tourism		X	X			
Research						

- nearby

3. Additional details on each type of impact attached?

Yes ..... No ..... X

17.

Conservation Status (required)

\*if native Indians (of I.R. #23) have fishing rights

	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 .....X.....

2. List main maps available for the IBP Area.

List attached? Yes .....<sup>X</sup>..... No ..... 92 F/5 WEST HALF (Bedwell, B.C.)

3. Aerial photographs for the IBP Area available?

B.C. 5498:187 (40 chain)

For whole area .....<sup>X</sup>..... For part of area ..... None .....

19.

Other Relevant Information

The estuary of the Moyeha River which keeps congenial habitats to many birds for their survival especially during their migration periods.

Signed Dr. Jim Pojar, Dr. Hans L. Roemer  
(Surveyor)