Report No. 166.

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.)

   Itcha Range, NE of Anahim Lake, Coast District, British Columbia.

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

   ESSFb, ATb

4. Approximate total acreage.

   6475 hectares (= 16000 acres)

5. Purpose of the reserve.

   (a) Primary (state acreage)

   6475 hectares

   (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. Abies lasiocarpa, Picea engelmannii, Pinus albicaulis, Pinus contorta var. latifolia (perhaps commercially useful only for pulp, but difficult to obtain suitable access or adequate stands for use).

Signature R. D. Taylor
I.B.P. Surveyor

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3. **Location of IBP Area***

1. Latitude 52° 40' N o 52° 42' N Longitude 124° 47' W o 124° 54' W
2. Country Canada
   State or Province British Columbia County .....
   (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
   Victoria, British Columbia, 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) 6475.11 hectares = 16000 acres
2. Altitude (state units of measurement) Maximum 2368 m = 7768 ft
   Minimum 1600 m = 5250 ft

6. Climate

Nearest climatological station :

1. Name Puntzi Mountain = 52° 07' N 124° 05' W
2. Climatological station on IBP Area*? Yes ..... No X
3. If (2) not, distance from edge of IBP Area* (state units) ca. 50 miles
4. Direction from IBP Area* southeast
5. Additional data sheet attached? Yes ..... No X

Appl. No. 166.

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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1. 1. Name of surveyor Roy L. Taylor

2. Address of surveyor Botanical Garden
The University of British Columbia
Vancouver, B.C. V6T 1W5

3. Check Sheet completed (a) on site ..... (b) from records X

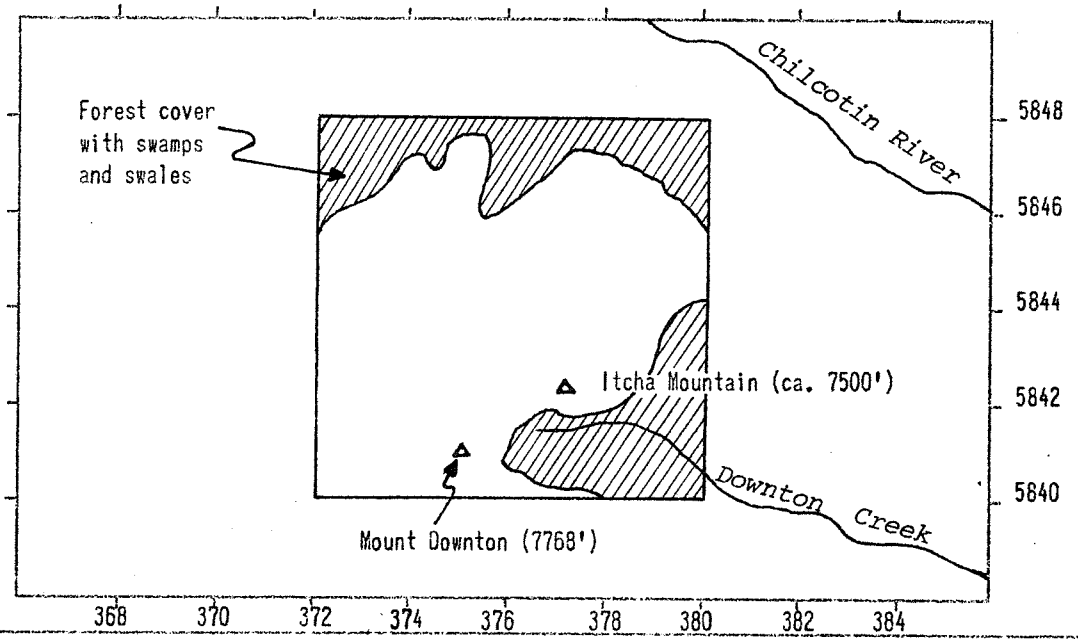
4. Date Check Sheet completed December 10, 1973

2. 1. Name of IBP Area Itcha Mountains

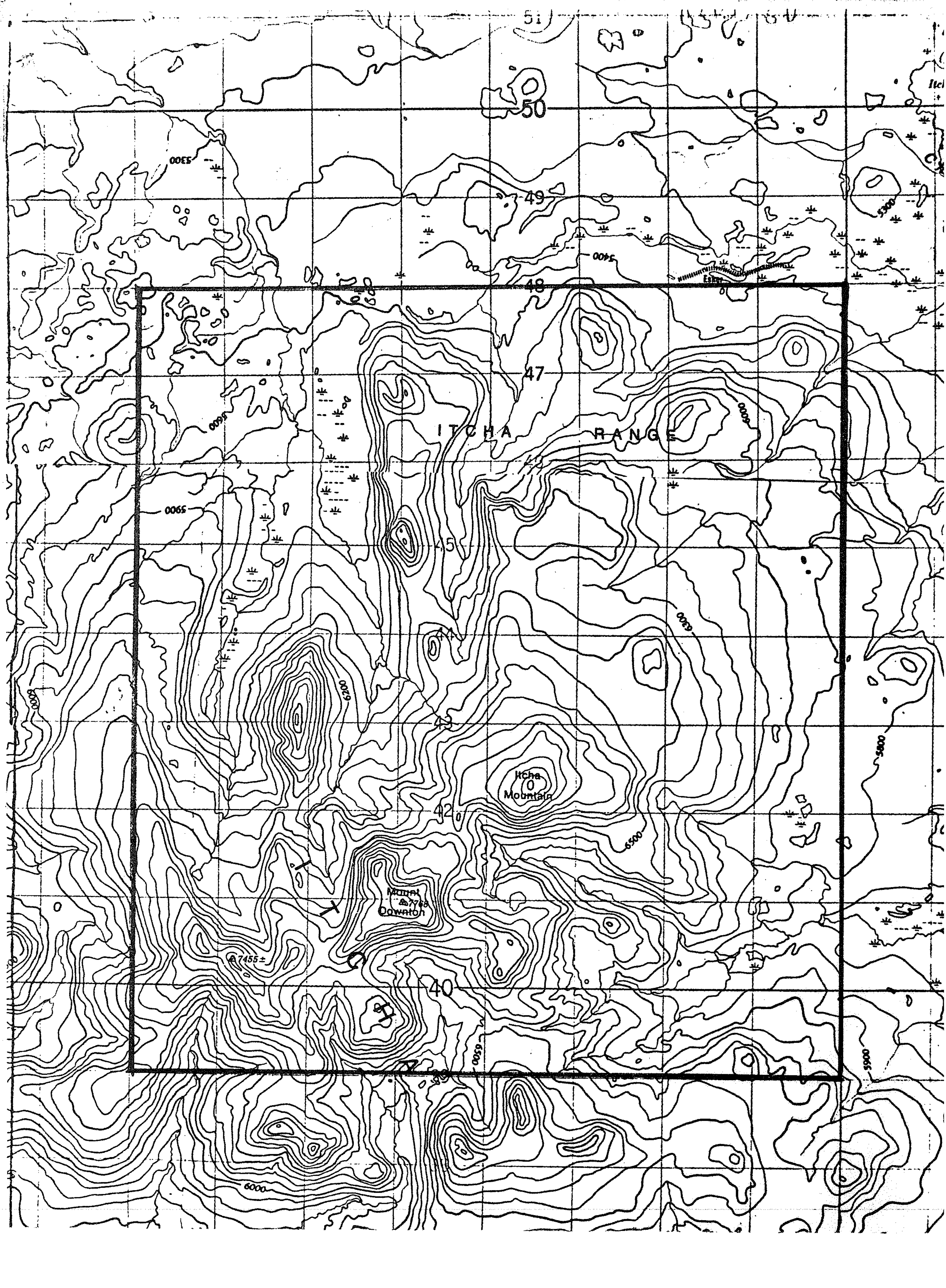
2. Name of IBP Subdivision (or serial letter) .....

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. Map 93C/10 Edition 1 MCE Series A 721, Map 93C/15 Edition 1MCE Series A 721



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



50
49
48
47
ITCHA RANGE
45
44
43
Itcha Mountain
42
Mount Downton
7768
7455 ±
40
39
ITCHA
Esker
5300
5400
5600
5900
6000
6200
6300
6500
5800

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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	Abies lasiocarpa, Juniperus communis, Vaccinium scoparium, Cladonia sp.	
2	1	A	1	7	a	Abies lasiocarpa, Rubus pedatus, Pleurozium schreberi	
3	1	A	1	7	a	Abies lasiocarpa, Cassiope mertensiana, Vaccinium membranaceum	
4	1	B	1	6		Abies lasiocarpa, Cassiope mertensiana, Phyllodoce empetriformis	
5	1	H	1	3		Cassiope mertensiana, Phyllodoce empetriformis (heath)	
6	1	M	2	1		Festuca altaica, Artemisia arctica (dry meadow complex)	
7	1	N	2	1		Senecio triangularis , Erigeron peregrinus, Castilleja miniata (wet subalpine meadow complex)	
8	1	N	2	1		Senecio triangularis, Veratrum eschscholtzii, Valeriana sitchensis	
9	1	M	2	1		Carex nigricans	
10	1	H	2	1		Salix spp., Festuca altaica	
11	1	M	2	1		Festuca altaica, Dryas octopetala, Arctostaphylos uva-ursi	
12	1	M	1	4		Eriophorum angustifolium, Carex canescens, Caltha leptosepala (bog)	
13	1	M	1	4		Carex rostrata, Carex aquatilis, Calamagrostis canadensis	
14	1	H	2	1		Betula glandulosa, Carex aquatilis, Potentilla palustris	
15	—	—	—	—		Saxifraga tolmiei, Campanula lasiocarpa	
16	—	—	—	—		Erigeron lanatus, Crepis nana, Agropyron caninum ssp. majus var. latiglume	
17	—	—	—	—		Oxyria digyna, Phacelia lyallii, Draba paysonii, Arabis lyrata, Solidago multiradiata, Saxifraga flagellaris	
18	3	C	1	3		Festuca altaica, Dryas octopetala, Salix reticulata, Cladonia spp. (extensive arid alpine tundra complex)	
19	3	C	1	3		Saxifraga tricuspidata, Silene acaulis, Luzula parviflora	
20	3	C	1	3		Salix reticulata, Carex capitata, Cladonia uncinalis, Rhacomitrium spp. (wind swept stone pavement)	

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7. (cont.) 2 **Soil**

Community Reference Number	Soil type	Other notes
1		NOTE: The soils have not been studied in detail. Most soils in
2		the region under study can be regarded as very young and
3		poorly developed. They can be generally classified as:
4		Regosols, Brunisols or Lithosols.
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

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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
1						X				
2						X				
3						X				
4						X				
5						X				
6							X			
7						X				
8						X				
9						X				
10							X			
11							X			
12						X				
13						X				
14						X				
15							X			
16							X			
17							X			
18							X			
19							X			
20							X			

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9. **Landscape**

1. General Landscape (give brief description) Tertiary volcanic mountain massif with gradual sloping alpine tundra to the northeast. Valley sides steep with extansive talus slopes. Some esker development in valley floors. Pinus contorta wooded slopes.

2. Relief Type

	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected				50	50
Gently dissected			25		25
Incised		25			25
Skeletonised					
%					100%

3. Special landscape features (list) Extensive alpine tundra eskers, boulder and talus fields, wet marshland.

10. **Coastline of IBP Area*** Not applicable

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

3. Physiography. % of coast

Cliffed	Sloping	Flat

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. ☐

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11. **Freshwater within IBP Area***

1.

	Permanent	Intermittent
General	X	X
Standing	X	
Running	X	X

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps	X			
Ponds	X			
Lakes				

3. Running Water

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

4. Special freshwater features High altitude quillwort lake .....

.....

12. **Salt and Brackish Water within IBP Area*** Not applicable

Salt Lakes		Lagoon		.....	
Estuaries		Salt pools		.....	

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

1. Fresh [ ] Lake [X] River [ ] Stream [ ]

2. Salt and Brackish Not applicable

Estuary	Salt lake	Salt pool	Lagoon	Ocean		

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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	X		X		X		
Aves								X				
Reptilia												
Amphibia												
Pisces												
Insecta												

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

Rangifer tarandus, Luscus luscus

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

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

Saxifraga flagellaris, Festuca altaica, Antennaria monocephala, Campnaula uniflora, Draba spp.

15. **Exceptional Interest of IBP Area***

The most eastern tertiary volcanic massif of the coastal region - conspicuously isolated with interesting phytogeographic relationships to the north, representing a transitional range between Chilcotin Plateau and Coast Mountains. The area can be classified as pristine with extensive Festuca meadows. The area represents a southern limit for Caribou in British Columbia.

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16. **Significant Human Impact**

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

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

Impact on entire IBP Area* X

2. Particular

	Past impact	Present impact	Trend			
			Increasing	Decreasing	No change	No information
Cultivation						
Drainage						
Other soil disturbance						
Grazing	X			X		
Selective flora disturbance						
Logging						
Plantation						
Hunting		X				X
Removal of predators						
Pesticides						
Introductions — plants						
Introductions — animals						
Fire						
Permanent habitation						
Recreation and tourism						
Research						

3. Additional details on each type of impact attached?

Yes ..... X ..... No ..... (See information from District Forester re - elimination of cattle grazing (letter April 17th, 1973))

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17. **Conservation Status**

	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

1. List major biological/geographical references for the IBP Area.

   Sheet attached? Yes ....X..... No .....

2. List main maps available for the IBP Area.

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

3. Aerial photographs for the IBP Area available?

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

19. Other Relevant Information

The area was originally surveyed by the Canada Department of Agriculture in 1957 as an important floristic region of the interior of British Columbia. In 1972, the adjacent massif to the West, i.e. Ilgachuz Range was surveyed for the Ecological Reserve Committee and a proposal made for the conservation of the Blue Canyon Creek reserve.

Signed R. L. Taylor
I.B.P. Surveyor

18. REFERENCES

A. Major biological/geographical

(1) Principal herbarium collection at Canada Department of Agriculture, Ottawa (DAO), duplicate sets at UBC and Provincial Museum, Victoria.

(2) Field collection notebook records of J. A. Calder, J. A. Parmelee and R. L. Taylor at the Biosystematics Research Institute, CDA, Ottawa. (Field Survey 1957).

(3) Late Tertiary Volcanic Rocks and Plant Bearing Deposits in British Columbia. W. H. Matthews and G. E. Rouse. Bull. Geol. Soc. America 74(1): 55 - 60.

B. Maps available:

(1) Anahim Lake 93C 1:250,000 (National Topographic Survey, Canada)

(2) Kushya River 93C/15 Edition 1MCE Series A 721

(3) Downton Creek 93C/10 Edition 1MCE Series A 721

(4) Anahim Lake, Geology Map 1202A (Geological Survey of Canada, 1969)

(5) British Columbia Physiographic Subdivisions. Map No. 1JPS. Department of Mines and Petroleum Resources, Victoria, British Columbia. 1964.