

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.)

Top of the World, Kootenay Range, lying between the Hughes Range and Van Nostrand Range
near Fort Steele, British Columbia

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

Engelmann Spruce - Subalpine Fir Zone
Alpine Zone (interior)

4. Approximate total acreage.

23,040 acres (approx.)

5. Purpose of the reserve.

(a) Primary (state acreage)

(b) Others if any (state acreage)

(d) 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.

Signature

Robert C. Brooke
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 R. C. Brooke and R. W. Mathewes
2. Address of surveyor Department of Biological Sciences Botany Department
- Simon Fraser University Univ. of British Columbia
- Burnaby, 2, British Columbia Vancouver 8, B. C.
3. Check Sheet completed (a) on site ..X.. (August 1970).... (b) from recordsX.....
4. Date Check Sheet completed 27 October, 1970

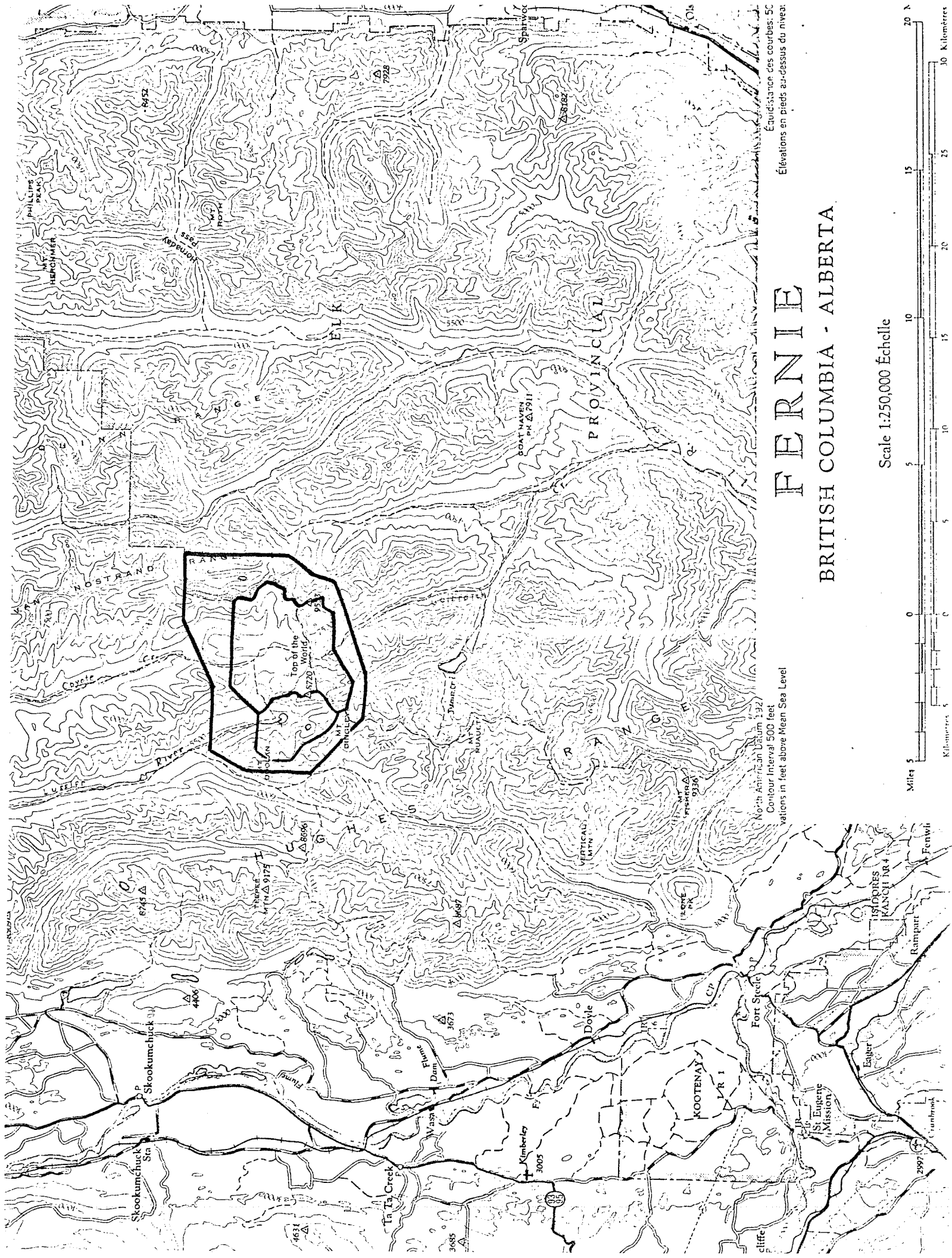
2. 1. Name of IBP AreaTOP OF THE WORLD, Kootenay Ranges near Fort Steele, B. C.
2. Name of IBP Subdivision (or serial letter)
3. Map of IBP Area* showing boundaries attached? Yes ...X.... No
4. Sketch map of IBP Area*. Please mark direction of north, the scale and grid numbers where applicable.

Map attached 1:250,000 scale

Detailed map in preparation from:

Quinn Creek sheet, Kootenay District, British Columbia
82 G / 14 W
Edition 1, ASE
Series A 721

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

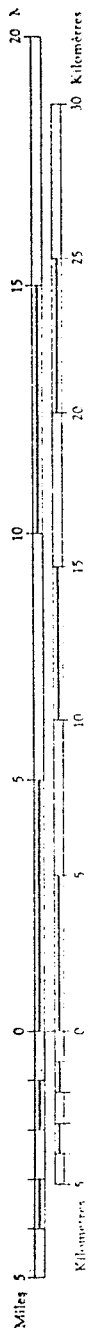


Équidistance des courbes: 50
 Élévations en pieds au-dessus du niveau

FERNIE

BRITISH COLUMBIA - ALBERTA

Scale 1:250,000 Échelle



North American Datum 1922
 Contour Interval 500 feet
 Elevations in feet above Mean Sea Level

3. Location of IBP Area*

1. Latitude 49° 48' N/SX Longitude 115° 19' XXE/W
 To 49° 54' N 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, Forest and
 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) 36 mi² (approx. 23,040 acres)
2. Altitude (state units of measurement) Maximum 9553 ft
 Minimum 5200 ft

6. Climate

Nearest climatological station :

1. Name Fernie, British Columbia
2. Climatological station on IBP Area*? Yes No ..X.....
3. If (2) not, distance from edge of IBP Area* (state units) 26 miles
4. Direction from IBP Area* SSE
5. Additional data sheet attached? Yes No

Data in Province of British Columbia, Department of Agriculture.
 Climate of British Columbia. Annual reports.

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		
						<u>Dryas octopetala</u> v. <u>hookeriana</u> - <u>Polygonum viviparum</u> - <u>Salix</u> sp. - <u>Selaginella densa</u> (ridge habitats)	X
1						<u>Dryas octopetala</u> - Sedge (sorted stripe habitats)	
2						<u>Oxyria digyna</u> - <u>Saxifraga</u> - <u>Epilobium</u> (late snow-lie habitat)	
3						<u>Saxifraga oppositifolia</u>	
4						<u>Ranunculus</u> - <u>Saxifraga</u> (<u>lyallii</u> ?) (Sink-like basin habitats)	
5						<u>Saxifraga</u> - <u>Philonotis</u> (Melt water irrigated habitats)	
6						<u>Antennaria</u> - <u>Carex</u> <u>moorea</u> complex	
7						<u>Picea engelmannii</u> - <u>Abies lasiocarpa</u> - <u>Pinus albicaulis</u> krummholz	
8						<u>Picea</u> - <u>Abies</u> - <u>Juniperus communis</u> - <u>Arctostaphylos</u> krummholz	
9						<u>Larix lyallii</u> - <u>Anemone</u> - <u>Luzula</u> parkland habitats	
10						<u>Phylodoce glanduliflora</u> - <u>Salix</u> - <u>Antennaria</u> - Sedge hummock complex	
11						<u>Parnassia</u> - <u>Senecio triangularis</u> (moist herb complex)	
12						<u>Epilobium latifolium</u> - <u>Senecio</u> - <u>Valeriana</u>	
13						<u>Betula glandulosa</u> - <u>Salix</u>	
14						<u>Picea</u> - <u>Abies</u> - <u>Rhododendron</u>	
15						<u>Picea</u> - <u>Abies</u> - (<u>Pinus contorta</u>) - <u>Vaccinium scoparium</u>	
16						<u>Picea</u> - <u>Abies</u> - <u>Streptopus</u> - <u>Tiarella</u>	
17							
18							
19							
20							

Please give information about further communities on a separate sheet.

9. Landscape

1. General Landscape (give brief description) ... Rugged mountainous topography consisting of flat-topped and tilted Paleozoic strata to sharp-edged mountain ridge crests... Karst-like topographic forms in limestone areas of gentle relief. Limestone surfaces appear quarried. Cirques, U-shaped valleys occupy areas flanking the plateau-like surface.

2. Relief Type

	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected			10	40	50
Gently dissected	30		10	10	50
Incised					
Skeletonised					
%	30		20	50	100%

3. Special landscape features (list)
 Limestone beds quarried by glaciation
 Unique sharp-edged 'aretes' on limestone surfaces
 Karst-like topographic forms

10. Coastline of IBP 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
<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	X	
Standing	X	
Running	X	X

2. Standing Water

	Permanent	Intermittent	Unproductive	Productive
Swamps				
Ponds	X (few)		Mesotrophic	
Lakes				

3. Running Water

	Permanent	Intermittent
Springs, cold	X (rare)	X
Springs, hot		
Streams	X (rare)	X
Rivers	X	

4. Special freshwater features
 Persistent snow patches are rare

12. Salt and Brackish Water within IBP Area*

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 X Lake X River X Stream X Hot springs

2. Salt and Brackish

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						X		X		
Aves								X				
Reptilia												
Amphibia												
Pisces												
Insecta												

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

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

..... Exceptional stands of *Larix lyallii*

..... Lower elevation subalpine forest habitats threatened by encroaching logging

.....

15. Exceptional Interest of IBP Area*

..... Stands of *Larix lyallii* extensive and exceptionally well-developed

..... Paleozoic (Cambrian?) fossil beds

..... Diversity of communities and habitats representing two biogeoclimatic zones:

..... Engelmann spruce - Subalpine fir Zone and Alpine Zone (interior), much of

..... these zones developed on limestone strata and carbonate-rich soils.

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

3. Additional details on each type of impact attached?

Yes No

For Data Centre Use only
 X
 Y.80
 A. 412X.8017-30
 onat

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 None in part of IBP Area* X
 Impact on entire IBP Area*

2. Particular

	Past impact	Present impact	Trend			
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Cultivation						
Drainage						
Other soil disturbance		X	X			
Grazing		X	X			
Selective flora disturbance		X				
Logging		X	X			
Plantation						
Fishing and Hunting		X	X			
Removal of predators						
Pesticides						
Introductions — plants						
Introductions — animals						
Fire	X	X				
Permanent habitation						
Recreation and tourism		X	X			
Research						
Temporary habitation		X				X

3. Additional details on each type of impact attached?

Yes No