

ERP39

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

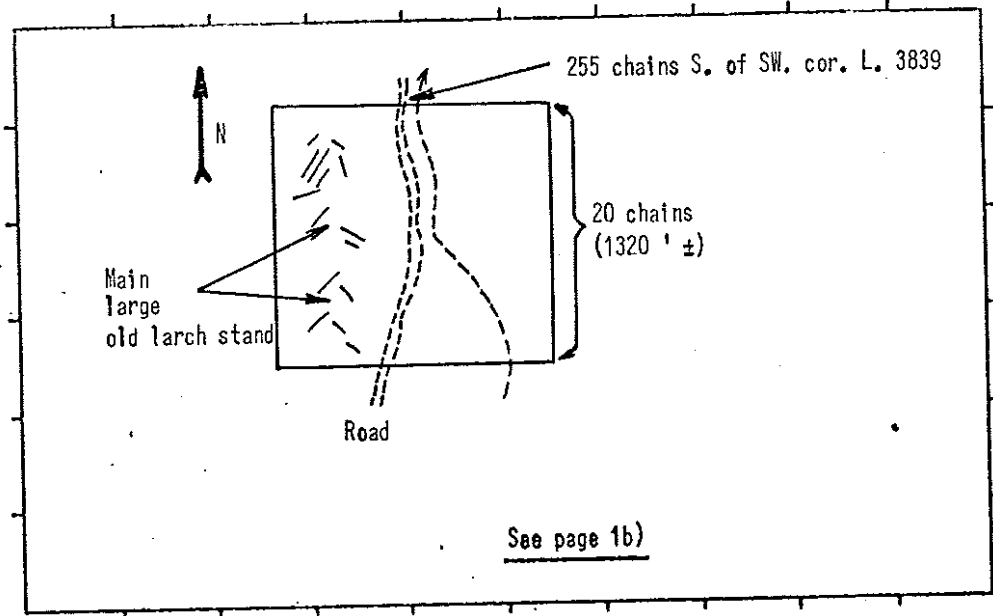
Serial Number

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For Data Centre Use only

1. 1. Name of surveyor P.G. Haddock, Joan E. Herriot and John Shephard
2. Address of surveyor Faculty of Forestry, University of B.C., Vancouver 8, B.C.
3. Check Sheet completed (a) on site (b) from records X
4. Date Check Sheet completed

2. 1. Name of IBP Area Mature Western Larch - Buck Hills road
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



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

USE R82 L/S

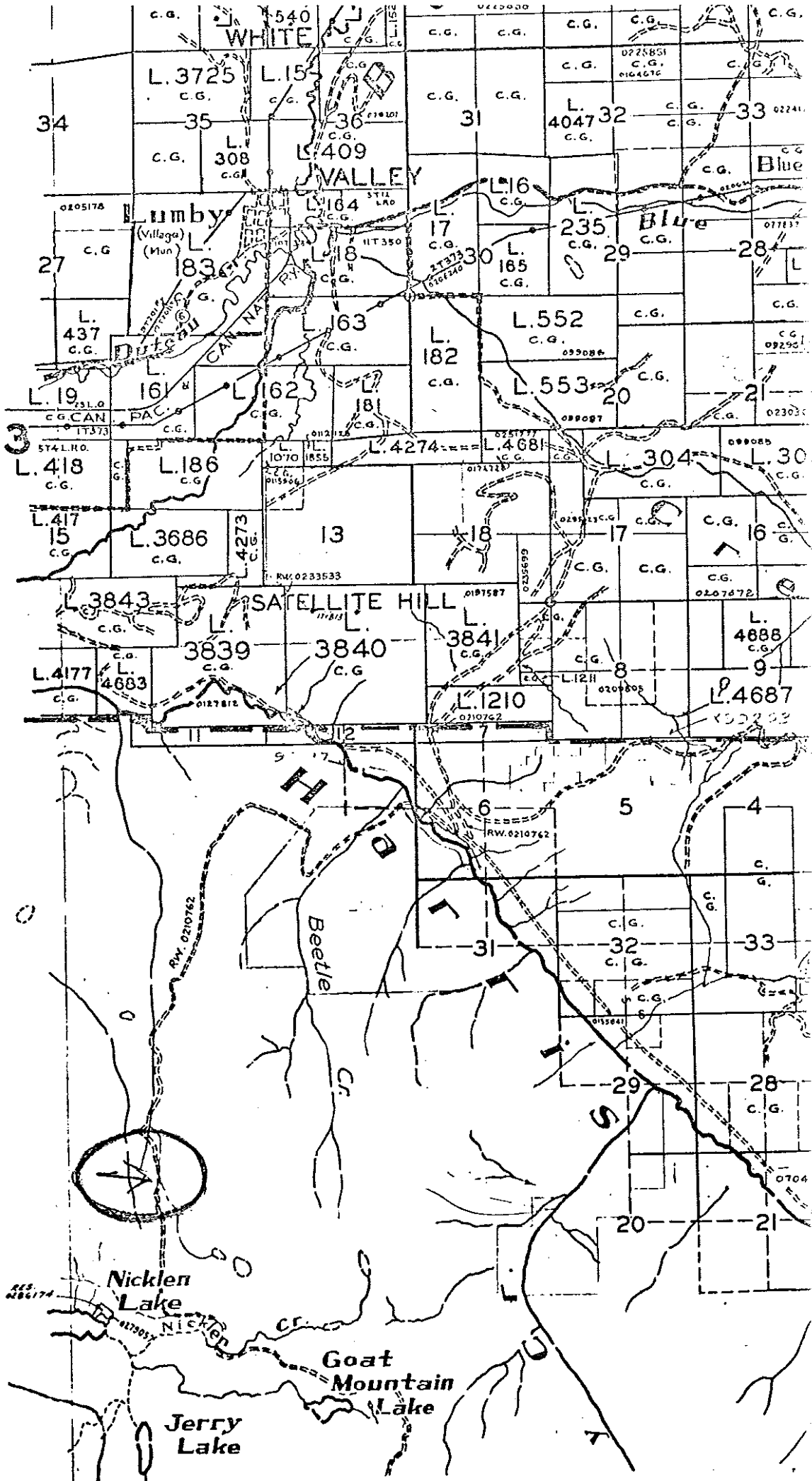
15' ⊕

T.P. 3

C

10' ⊕

B



3. Location of IBP Area*

1. Latitude.....50...° ...8' 50" N Longitude.....119...° ...0' E

2. CountryCanada.....

State or Province ..British Columbia..... County

(State or Province 6 1/2 miles south of Lumby, B.C. County

4. Administration

National 1. Official category Province of British Columbia

2. Address of administration Victoria, B.C. Forest Service

..... locally: Lumby District Ranger Station

.....

.....

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)

5. Characteristics of IBP Area*

1. Surface area (state units of measurement) 40 acres

2. Altitude (state units of measurement) Maximum about 4400'

Minimum

6. Climate

Nearest climatological station :

1. Name Coldstream Ranch near Vernon and Lumby, B.C.

2. Climatological station on IBP Area*? Yes No ...X....

3. If (2) not, distance from edge of IBP Area* (state units)

4. Direction from IBP Area*

5. Additional data sheet attached? Yes No

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						Larix occidentalis - Tsuga heterophylla - Gymnocarpium dryopteris - Cornus canadensis - Pleurozium schreberi association	
2						Larix occidentalis - Tsuga heterophylla - Vaccinium scoparium association	
3						Larix occidentalis - Calamagrostis rubescens association	
4						Picea engelmannii - Gymnocarpium dryopteris association	
5						Larix occidentalis - Lonicera involucrata - Calamagrostis canadensis association	
6						Larix occidentalis - Lonicera utahensis - Vaccinium membranaceum - Vaccinium scoparium - Cladonia gracilis association	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Please give information about further communities on a separate sheet.

Soil

7.
(cont.)

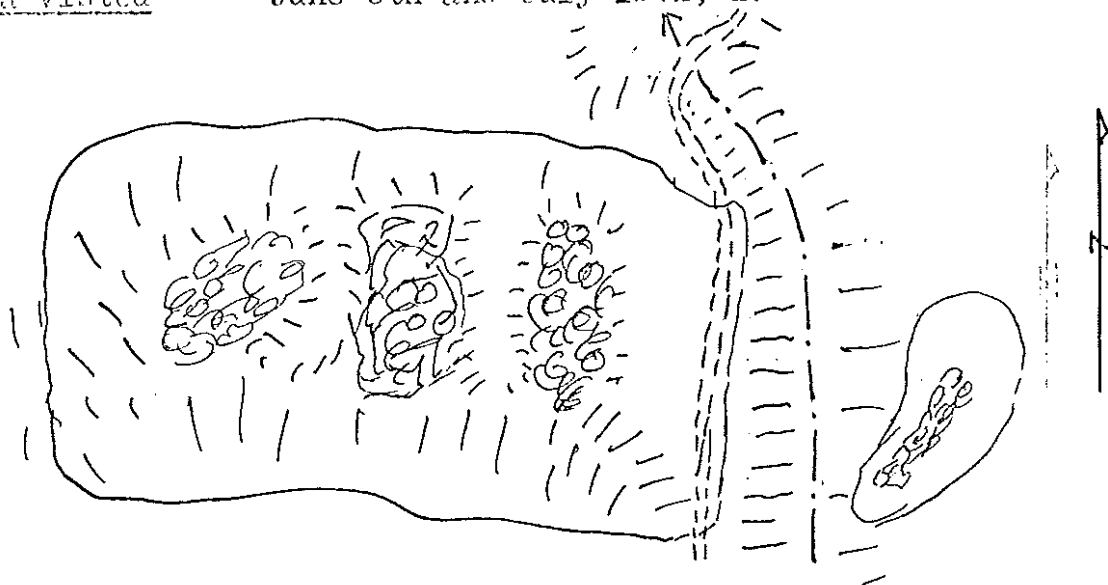
2

Community Reference Number	Soil type	Other notes
1		Brown Wooded Luvisols
2		Thin Podzol
3		Gleyed Brown Wooded Luvisols
4		Brown Wooded Luvisols
5		Gleyed Regosol
6		Thin Podzol
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

LARCH STAND

1. Dates Area Visted June 5th and July 12th, 1969

2. Map



3. Location 50° 8' 50" N. 118° 59' 20" W.
6 $\frac{1}{2}$ miles south of Jubby, B.C.; on Nicklen Lake (or Buck Hills) Rd.

5. Altitude about 4400'

Area 40 acres, including surrounding woods.

6. Nearest Climatogical Station Coldstream Ranch

7. Plants See attached list

9. Landscape Flat to rolling plateau; the special feature of the stand, setting it apart from the surrounding boulder clay, being the piles of granite(?) boulders. These may have originally been without finer material, but have now weathered along their sides producing a loose soil.

11. Water There is a seepage down the gulley, it was quite wet in July, but hardly could be described as running water.

16. Human Impact There was signs of moderately strong grazing, especially in the gulley. The lower shrubs and the earlier tall herbs were most damaged; possibly the cattle had been let loose too soon.

LARCH STAND

PLANTS

1. Gulley to East of Road Depth about 10 m.; the bottom is flat, about 5 m. wide, and saturated with water; the sides are about 30°. Small area of larch and boulders to west of gulley.

On Drier Sides of Gulley

Denser west Side

Trees Cover approx. 60% Species in about equal numbers.

Larix occidentalis
Pinus contorta
Picea engelmannii
Tsuga heterophylla

smaller than others

Populus tremuloides

Arborescent Shrubs, 5-8 m. high.

Salix sp. few
Alnus incana few

Shrubs 1-2 m. high

Clematis columbiana 1-2 moderate
Ribes lacustre few
Rubus parviflorus very few
Sorbus scopulina moderate
Shepherdia canadensis moderate
Cornus stolonifera moderate
Vaccinium myrtillus #1310 moderate
Lonicera utahensis moderate
Sambucus racemosa 1
Viburnum edule very few

Vaccinium myrtillus Dougl. ex Hook.

Herbs and low shrubs

Bromus vulgaris #1296 few *Bromus pacificus* Shear
Gymnocarpium dryopteris dense, towards bottom
Lycopodium annotinum few
Clintonia uniflora common
Lilium columbianum 2-3, near upper(road) edge
Smilacina racemosa few
Streptopus amplexifolius few
Actaea rubra few
Fragaria vesca few
Rubus pedatus dense, towards top
Epilobium angustifolium few along road edge
Vaccinium scoparium common towards top
Gentiana amarella few
Cornus canadensis moderate
Castilleja rhexifolia (?) few along road edge
Gallium triflorum few
Linnaea borealis moderate

Non-flowering grass

moderate along upper edge

More Open East Side

Trees

Larix occidentalis 16 very large
36 large

1 sapling
no seedlings

Sheet 1

1. Cladonia coccifera (L.) Willd.

[with: Polytrichum juniperinum Hedw.]

2. Lycopodium annotinum L.

3. Polytrichum juniperinum Hedw.

4. Stereocaulon paschale (L.) Hoffm.

Shrubs

Rubus ideaus
Ribes lacustre

Herbs

Grass (~~CALAMAGROSTIS~~ ~~ROSECOCKE~~)

Fragaria vesca
Gentiana amarella
Achillea millefolium not flowering yet
Aster sp.
Senecio pseudoaureus
Arnica cordifolia
Antennaria rosea
Moss and lichens Sheets 2 to 5

On Gulley Bottom

Trees much thinner than sides, mostly:

Picea engelmannii
Populus trichocarpa 1

Shrubs mostly about 30% cover, lower badly grazed.

Salix sp.
Alnus incana
Cornus stolonifera
Ribes lacustre

Herbs

Botrychium lunaria moderate
Cystopteris fragilis abundant
Gymnocarpium dryopteris very few, not flowering
Equisetum arvense (?)

~~Bromus vulgaris~~
~~Muhlenbergia~~
~~Carex~~

#1296 Bromus pacificus Shear
#1297 Cinna latifolia (Trevir.) Griseb.
#1299 Carex deweyana Schw.

Ranunculus uncinatus few
Cardamine sp. very weak
Mittella sp. common
Tiarella unifoliata
Fragaria vesca
Geum macrophyllum common

Rubus pedatus
Viola orbiculata
Circaea alpina
Epilobium sp.
~~Osmorhiza chilensis~~ #1295 Osmorhiza purpurea (Coul. & Rose) Suksd.
Heracleum lanatum
Pyrola secunda
Pyrola uniflora
Veronica americana
Gallium triflorum
Petasites frigidus (?) small leaves only
Taraxacum officinale

~~Chrysosplenium tetrandrum~~ (Lund) Fries #1300

Heavy growth of Moss & liverworts (Marchantia) Sheet 6

1. Cladonia gracilis (L.) Willd. var. dilatata (Hoffm.) Vain.

[with: Barbilophozia hatcheri,
Dicranum scoparium, etc.]

2. Dicranoweisia crispula (Hedw.) Lindb.

[with: Peltigera scutata (Dicks.) Duby
Cladonia chlorophaea (Flörke) Spreng.]

3. Dicranum polysetum Sw.

4. Dicranum tauricum Sapeh. (= D. strictum Schleich.)

[with: Pohlia ? nutans]

5. Pleurozium schreberi (Brid.) Mitt.

[with: Dicranum scoparium Hedw.
Ceratodon purpureus (Hedw.) Brid.
Dicranum tauricum Sapeh.]

1. Cetraria pinastri (Scop.) S.Gray
 [with: Barbilophozia hatcheri (Evans) Loeske
Polytrichum juniperinum Hedw.
Cladonia gracilis (L.) Willd.]

2. Cladonia chlorophaea (Flörke) Spreng.
 [with: Pohlia nutans (Hedw.) Lindb.
Peltigera canina (L.) Willd.
Eurhynchium pulchellum (Hedw.) Jenn.]

3. Cladonia cornuta (L.) Hoffm.
 [with: Peltigera aphthosa (L.) Willd.
 var. leucophlebia Nyl.]

4. ? Cladonia ochrochlora Flörke
 [with: Dicranum tauricum Sapeh.
Pohlia nutans (Hedw.) Lindb.]

5. Pohlia nutans (Hedw.) Lindb.
 [with: Dicranum tauricum Sapeh.
Cladonia fimbriata (L.) Fr.]

1. Alectoria glabra Motyka
2. Cladonia chlorophaea (Flörke ex Somm.) Spreng.
 [with: Barbilophozia hatcheri (Evans) Loeske
 Pohlia nutans (Hedw.) Lindb.]
3. Peltigera venosa (L.) Baumg.
 [with: Leptobryum pyriforme (Hedw.) Wils.
 Desmatodon latifolius (Hedw.) Brid.]
4. Pleurozium schreberi (Brid.) Mitt.
 [with: Barbilophozia hatcheri (Evans) Loeske]
5. Pohlia nutans (Hedw.) Lindb.
 [with: Barbilophozia hatcheri (Evans) Loeske]
6. Stereocaulon tomentosum Fr.
 [with: Barbilophozia lycopodioides (Wallr.) Loeske
 Ptilidium ciliare (Web.) Hampe]

1. Cladonia botrytes (Hag.) Willd.
[with: Cladonia deformis (L.) Hoffm.]
2. Cladonia chlorophaea (Flörke) Spreng.
3. Cladonia coccifera (L.) Willd.
4. Dicranum tauricum Sapeh.
5. Letharia vulpina (L.) Hue
6. Peltigera apthosa (L.) Willd. var. leucophlebia Nyl.
[with: Barbilophozia hatcheri (Evans) Loeske
Dicranum scoparium Hedw.
Pleurozium schreberi (Brid.) Mitt.]
7. Peltigera spuria (Ach.) DC.
8. Polytrichum juniperinum Hedw.

1. Atrichum selwynii Aust.
2. Brachythecium salebrosum (Web. & Mohr) B.S.G.
3. Bryum pseudotriquetrum (Hedw.) G., M. & S.
 [with: Marchantia aquatica Nees
 Leptobryum pyriforme (Hedw.) Wils.]
4. Cladonia coniocraea (Flörke) Spreng.
 [with: Homalothecium fulgescens (Mitt. ex C.Müll.) Lawt.]
5. ? Eurhynchium pulchellum (Hedw.) Jenn. (= E. substrigosum Kindb.)
 [with: Philonotis americana Dism.
 Chiloscyphus polyanthus (L.) Corda ap. Opiz]
6. Marchantia aquatica Nees
 [with: Atrichum selwynii Aust.
 Leptobryum pyriforme (Hedw.) Wils.
 Mnium insigne Mitt.]
7. Pellia neesiana (Gottsche) Limpr.
 [with: Mnium spinulosum B.S.G.
 Bryum pseudotriquetrum (Hedw.) Schwaegr.
 Leptobryum pyriforme (Hedw.) Wils.
 Campylium radicale (P.B.) Grout]
8. Peltigera apthosa (L.) Willd. var. leucophlebia Nyl.

SHEET 6
(Cont.)

9. Peltigera venosa (L.) Baumg.

[with: Brachythecium salebrosum (Web. & Mohr.) B.S.G.
Eurhynchium pulchellum (Hedw.) Jenn.]

10. Plagiomnium affine (Funck.) Koponen

[with: Eurhynchium pulchellum (Hedw.) Jenn.
Marchantia aquatica Nees]

11. Pleurozium schreberi (Brid.) Mitt.

[with: Dicranum fuscescens Turn.
Drepanocladus uncinatus (Hedw.) Warnst.]

Main Part of Larch StandTrees Cover 10 or 20%

Larix occidentalis - very large 97
 large 130
 saplings 25
 seedlings 66

Populus tremuloides a few small ones along upper south edge.
 Underneath the above, the area is divided as follows:

Rock Piles about 40% areaTop of Piles

Lonicera involucrata few, only about 4 dm. high
 Rubus idaeus thin
 Woodsia scopulina thin

Sides of Piles

Rubus idaeus numbers moderate
 Ribes lacustre numbers moderate
 Lonicera involucrata mod. few, very low
 Gallium triflorum moderate
 Calamagrostis canadensis #1311 abundant
 (Michx.) Beauv.

Upper top of Rocks covered with a thin layer of soil and merging with next.

Vaccinium scoparium dense
 Trisetum ^{flavescens} spicatum 1-2 clumps, short
 Arnica mollis (?) few

Mosses and lichens Sheets 7-8

East & West Sides, and South(upper)Side Deeper and more clay in soil, merging along edges with normal forest of area. The south side slopes north about 20°, the westside north-west; the east side along the road is flatter.

Shrubs 1-3 m.

Juniperus communis 1-2
 Alnus incana (linifolia) along edges of woods
 Ribes lacustre moderate
 Sorbus scopulina 1-2
 Lonicera involucrata moderate
 Lonicera utahensis few
 Amelanchier alnifolia

Low Shrubs about 5 dm.

Vaccinium membranaceum ! #1310 Vaccinium membranaceum Dougl. ex Hook. common, but very low abundant,
 Vaccinium scoparium

Herbs

~~Agropyron~~ #1305 few Elymus glaucus Buckl., var. glaucus
~~Bromus vulgaris~~ #1296 few Bromus pacificus Shear
~~Festuca ovina~~ #1304 mod. common Festuca occidentalis Hook.
~~Trisetum spicatum~~ #1306 few Trisetum flavescens (L.) Beauv.
~~Trisetum~~ #1303 common Trisetum flavescens (L.) Beauv.
 and probably other grasses in small quantities, non-flowering grass common.

1. Barbilophozia hatcheri (Evans) Loeske
 [with: Pleurozium schreberi (Brid.) Mitt.
 Dicranum scoparium Hedw. s.l.]
2. Cladonia chlorophaea (Flörke) Spreng.
 [with: Polytrichum juniperinum Hedw.]
3. Cladonia deformis (L.) Hoffm.
4. Cladonia gracilis (L.) Willd. var. dilatata (Hoffm.) Vain.
 [with: Ptilidium ciliare (Web.) Hampe
 Dicranum scoparium Hedw. s.l.
 Pohlia nutans (Hedw.) Lindb.
 Barbilophozia hatcheri (Evans) Loeske]
5. Cladonia major (Hag.) Sandst.
 [with: C. chlorophaea (Flörke) Spreng.
 Polytrichum juniperinum Hedw.]
6. Dicranum tauricum Sapeh.
 [with: Cladonia gracilis (L.) Willd.]
7. Pohlia nutans (Hedw.) Lindb.
 [with: Ptilidium ciliare (Web.) Hampe]
8. Polytrichum juniperinum Hedw.

1. Cladonia gracilis (L.) Willd.
var. dilatata (Hoffm.) Vain.
2. Cladonia gracilis (L.) Willd.
var. dilatata (Hoffm.) Vain.
3. Letharia vulpina (L.) Hue
4. Pleurozium schreberi (Brid.) Mitt.
[with: Cladonia coniocraea (Flörke) Spreng.
Barbilophozia hatcheri (Evans) Loeske]
5. Pohlia nutans (Hedw.) Lindb.

<i>Carex phaeocephala</i> Piper	#1309	very few, darper flat
<i>Calypso bulbosa</i>		common
<i>Habenaria umalaskensis</i>		1-2, damper flat east side
<i>Goodyera oblongifolia</i>		few
<i>Littella</i> #114 <i>trifida</i> Graham	#1260	few
<i>Fragaria virginiana</i>		common
<i>Viola adunca</i>		common
<i>Viola orbiculata</i>		common
<i>Epilobium</i> sp.		(<i>angustifolium</i> not flowering?) few
<i>Epilobium</i> sp.		(small type) few
<i>Cornus canadensis</i>		mod. common, but uneven
<i>Gentiana amarella</i>		common
<i>Limnæa borealis</i>		dense
<i>Agoseris auneana</i>	#1307	few <i>Agoseris glauca</i> (Pursh) Raf.
<i>Antennaria neglecta</i> and <i>racemosa</i>		common
<i>Antennaria rosea</i>		common
<i>Arnica mollis</i> (?)		common
<i>Cirsium hookerianum</i>		about 5, in one spot, east flatter
<i>Erigeron acris</i>	#1301 *	few to more in 1-2 spots
<i>Hieracium albiflorum</i>		common
<i>Senecio pseudoaureus</i>		few
<i>Achillea millefolium</i>		few
Mosses & lichens	Sheet 9	

* *Erigeron acris* L., var. *debilis* Gray (# 1301)

SHEET 9

1. *Cladonia fimbriata* (L.) Fr.
2. *Cladonia gracilis* (L.) Willd. var. *elongata* (Jacq.) Fr.
3. *Pohlia nutans* (Hedw.) Lindb.
 [with: *Barbilophozia barbata* (Schmid.) Loeske
Leptobryum pyriforme (Hedw.) Wils.
Eurhynchium pulchellum (Hedw.) Jenn.]
4. *Polytrichum juniperinum* Hedw.
 [with: *Barbilophozia hatcheri* (Evans) Loeske
 and *B. barbata* (Schmid.) Loeske,
 with: *Timmia megapolitana* Hedw.]

9. Landscape

1. General Landscape (give brief description) Rolling plateau with rock outcrops of granite (?) with granite (?) boulders, and surrounding slopes including a gully with seepage but no running water east of road bisecting area

2. Relief Type

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

3. Special landscape features (list) Rock piles (granitic) which have protected stand from fire, apparently

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		
Standing		
Running		

2. Standing Waters

	Permanent	Intermittent	Unproductive	Productive
Swamps				
Ponds				
Lakes				

3. Running Water

	Permanent	Intermittent
Springs, cold		
Springs, hot		
Streams	X	X
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 type="checkbox"/>	Salt pools	<input type="checkbox"/>	<input type="checkbox"/>

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

1. Fresh Lake River Stream

2. Salt and Brackish

Estuary	Salt lake	Salt pool	Lagoon	Ocean		

14. Outstanding Floral and Faunal Features

1. None

2. Fauna signs of pika, chipmunk, squirrels and a variety of birds; possibly deer mice
Birds: Yellow-bellied Sapsucker, Winter Wren

	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				pika						
Aves										
Reptilia										
Amphibia										
Pisces										
Insecta										

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

Larix occidentalis

Insects: very sparse, but weather cold, nothing came to baited areas.

1 brown skipper caught, 1 bumblebee seen, centipedes and millipedes under logs .

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											
herbs											
grass											
Gymnospermae											
Pteridophyta											
Bryophyta											
Lichens and Algae											

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

Larix occidentalis - western larch -

.....
mature stands are rare
.....
.....

15.

Exceptional Interest of IBP Area*

Larix occidentalis with associated flora and fauna
.....
.....
.....
.....
.....

16. Significant Human Impact

- 1. General : None in entire IBP 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						
Drainage						
Other soil disturbance						
Grazing						
Selective flora disturbance						
Logging						
Plantation						
Hunting						
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 No

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												
Fauna												
Non-living												

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 area For part of area None

19. Other Relevant Information

Signed
 P. G. Haddock
 Joan E. Herriot
 John Shephard
 (Surveyor)