

APPLICATION FOR ECOLOGICAL RESERVE

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

Forested land in Lot 3202, plus 70 acres to the East.

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

West of the junction of Little Gaspard and Gaspard Creeks.

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

Cariboo Aspen, Lodgepole Pine, Douglas Fir Zone (CALPdf)

- 4. Approximate total acreage.

368 ha (910 acres)

- 5. Purpose of the reserve.

Long term forestry research.

(a) Primary (state acreage) 368 ha (910 acres)
 Protection of representative vegetation communities in the
 Cariboo-Douglas Fir Zone.

(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.

Timber Volumes:

Pseudotsuga menziesii

F(P1) 831-P on 25% area.

Pinus contorta

Juniperus scopulorum

Signature Alan H. Vyse
 I.B.P. Surveyor
 S. Hardy, A Vyse

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

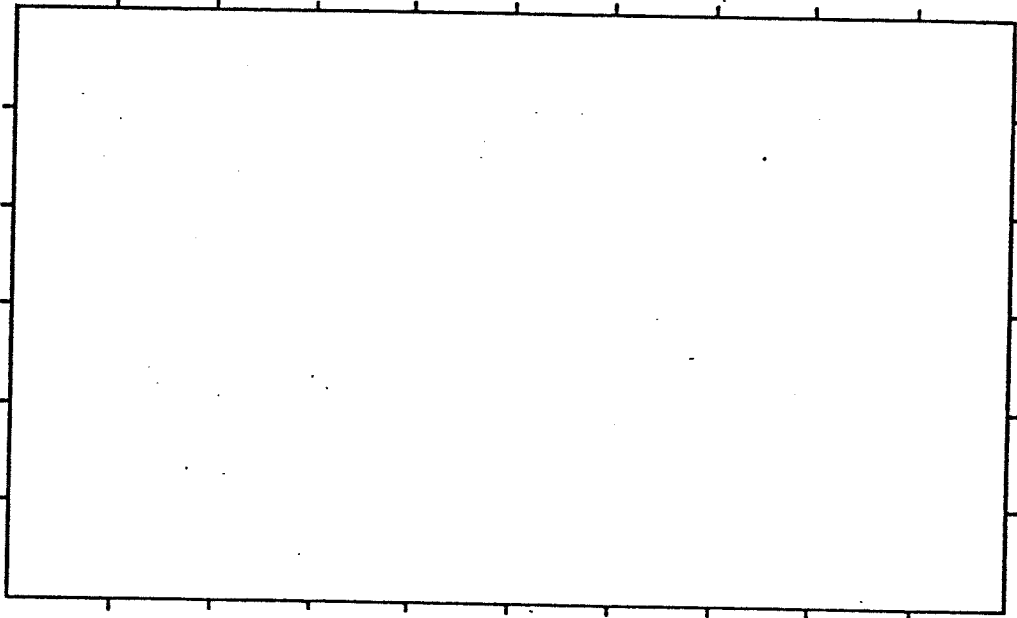
Serial Number

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For Data
Centre Use
only

- 1.
1. Name of surveyor **Stephen Hardy, Alan Vyse**
 2. Address of surveyor **Research Section, Cariboo Forest District**
..... **B. C. Forest Service,**
..... **Williams Lake, B. C.**
 3. Check Sheet completed (a) on site (b) from records
 4. Date Check Sheet completed **May 12, 1976**

- 2.
1. Name of IBP Area **Little Gaspard Creek**
 2. Name of IBP Subdivision (or serial letter) **CALPdf**
 3. Map of IBP Area* showing boundaries attached? Yes No
 4. Sketch map of IBP Area*. Please mark direction of north, the scale and grid numbers where applicable. See attached maps.

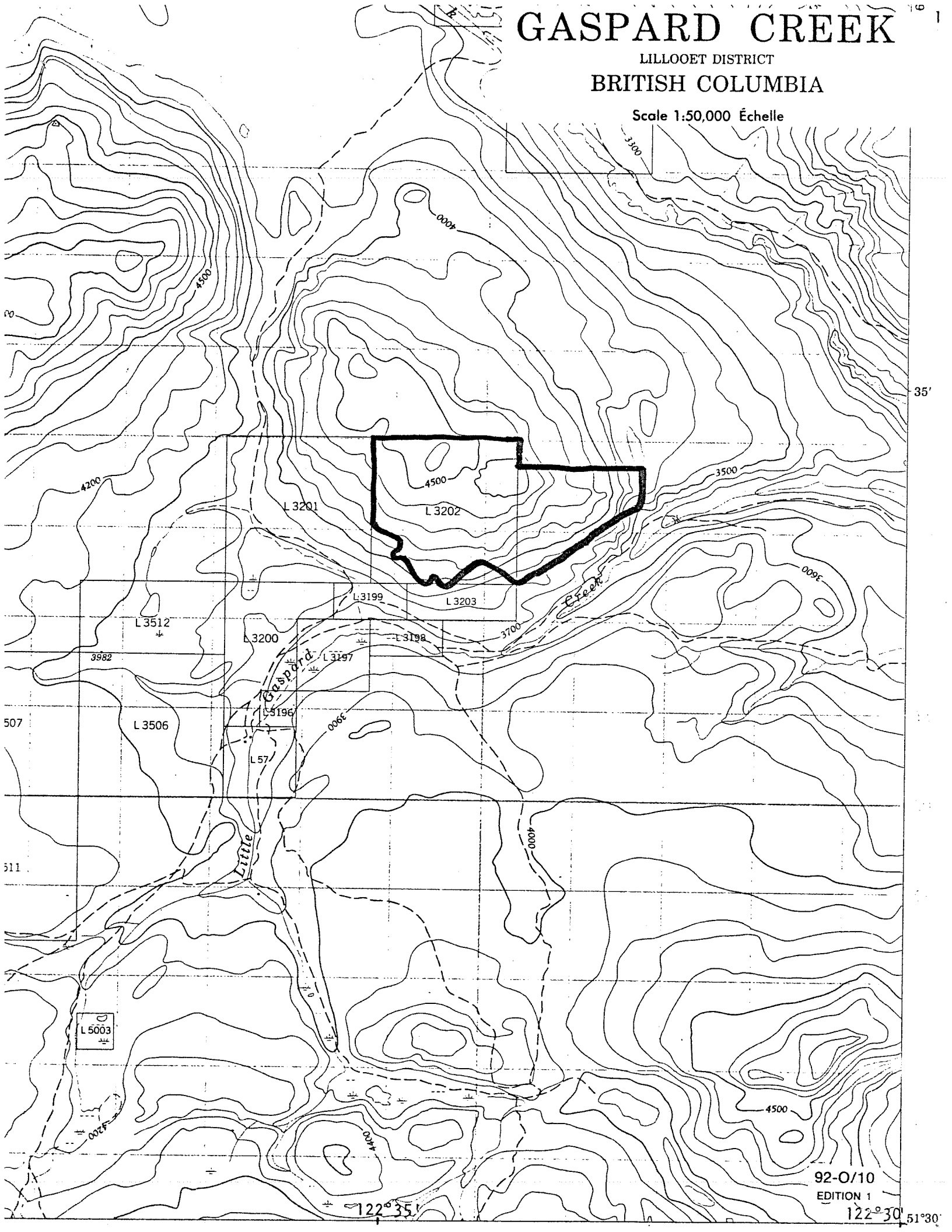


* For "IBP Area", read IBP Area and/or IBP Subdivision.

GASPARD CREEK

LILLOOET DISTRICT
BRITISH COLUMBIA

Scale 1:50,000 Échelle



92-O/10
EDITION 1

122°30' 51"30'

122°35'

3. Location of IBP Area*

1. Latitude.....51° 33.8-34.7' N Longitude.....122° 32.5-35.1' /W
 2. Country Canada
 State or Province British Columbia County
 (State or Province County)

4. Administration

- National 1. Official category ~~Provincial Ecological Reserve~~ CROWN LAND
 2. Address of administration LAND MANAGEMENT BRANCH
 B.C. MINISTRY OF ENVIRONMENT
 PARLIAMENT BUILDINGS
 VICTORIA, B.C. V8V 1X5

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) <input checked="" type="checkbox"/>

5. Characteristics of IBP Area*

1. Surface area (state units of measurement) (910 acres) 368 ha
 2. Altitude (state units of measurement) Maximum 1,400 meters
 Minimum 1,200 meters

6. Climate

Nearest climatological station :

1. Name Big Creek
 2. Climatological station on IBP Area*? Yes No
 3. If (2) not, distance from edge of IBP Area* (state units) 38 Kilometers
 4. Direction from IBP Area* North West
 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	2	A	1	4		<u>Pseudotsuga menziesii-Calamagrostis rubescens, Antennaria rosea phase</u>	
2	1	A	1	7	a	<u>Pseudotsuga menziesii - Calamagrostis rubescens, Vaccinium caespitosum phase</u>	
3	2	A	1	4		<u>Pseudotsuga menziesii - Agropyron spicatum</u>	
4	1	M	2	1		<u>Agropyron spicatum - higher altitude phase</u>	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Please give information about further communities on separate sheet

7.
(cont.)

2

Soil

Community Reference Number	Soil type	Other notes
1	Orthic Grey Luvisol F ₄	Tyee Association
2	Orthic Grey Luvisol F ₄	Tyee Association
3	Sombric Brunisol F ₄	Tyee Association
4	Sombric Brunisol F ₄	Tyee Association
5	Sombric Brunisol F ₄	Steep South Facing Slopes, Tyee Association.
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

9. Landscape

1. General Landscape (give brief description) The proposed reserve is on a section of a 900 foot hill. The hill is not dissected with any streams or runoff channels. The gradient varies which causes a variation in vegetation.

2. Relief Type

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

3. Special landscape features (list)

.....

.....

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
<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* **Not applicable.**

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* **Not applicable.**

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 **Wood Lake** River Stream

2. Salt and Brackish

Estuary	Salt lake	Salt pool	Lagoon	Ocean		

4. Flora

	Species diversity	Abundance of particular species	Rare species	Threatened/relict species	Spp. of biogeographical interest	Exceptional associations	Outstanding specimens				
Angiospermae :						X					
trees											
shrubs		X									
herbs		X				X					
grass		X				X					
Gymnospermae		X				X					
Pteridophyta											
Bryophyta											
Lichens and Algae		X									

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

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.....

.....

15. Exceptional Interest of IBP Area*

..... Representative vegetation of the CALP df, with
 several Douglas-fir types. Suitable for
 long-term forestry research.

16. Significant Human Impact

1. General : None in entire IBP Area*

None in part of IBP Area*

Impact on entire IBP Area* **Light except areas bordering the open range along the Little Gaspard Creek.**

2. Particular

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

Heavier on forest areas bordering on open range.

3. Additional details on each type of impact attached?

Yes No **X**

17. Conservation Status (required)

	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

2. List main maps available for the IBP Area.

List attached? Yes No

92-0/10 (1:50,000)
(Gaspard Creek)

3. Aerial photographs for the IBP Area available?

20 chain

For whole area B.C. 4307..... For part of area None

197-8

19. Other Relevant Information

Signed S. Hardy, A. Vyse
(Surveyor)

REPORT ON THE PROPOSED ECOLOGICAL RESERVE
AT LITTLE GASPARD CREEK

By S. HARDY, May-1976

The proposed reserve is primarily a mature stand of Pseudotsuga menziesii. On the south facing slopes Pseudotsuga menziesii - Calamagrostis rubescens association, Antennaria rosea phase was the dominate^{nt} community type. On areas where the gradient increased Pseudotsuga menziesii - Agropyron spicatum association occurred. There are two areas of open range on steep south facing slopes at the 4,000 - 4,300 foot level. The Agropyron spicatum had only been lightly grazed probably due to the steepness of the slope. Both open range areas are being heavily invaded by Pseudotsuga menziesii. Certain species were missing from these two areas, when surveyed, that commonly occur on the Agropyron spicatum sites along the Fraser River benchlands. Due to the early condition of the vegetation only an incomplete species list could be made.

<u>Agropyron spicatum</u>	<u>Poa</u> sp.
<u>Juniperus communis</u>	<u>Balsamorhiza sagittata</u>
<u>Pseudotsuga menziesii</u>	<u>Astragalus</u> sp.
<u>Amelanchier alnifolia</u>	<u>Juniperus scopulorum</u>
<u>Artemesia frigida</u>	<u>Aster conspicuus</u>
<u>Antennaria</u> sp.	<u>Taraxacum</u> sp.
<u>Rosa acicularis</u>	<u>Agoseris</u> sp.
<u>Achillea millefolium</u>	<u>Allium cernuum</u>
<u>Potentilla hippiana</u>	

Since Pseudotsuga menziesii is invading this open range eventually these should become a Pseudotsuga menziesii - Agropyron spicatum site.

For a description of the three forest communities see Beil and Hardy (1975). The north facing slope of the hill is predominately of the Vaccinium caespitosum phase. There are a couple of stands of Pinus contorta with Pseudotsuga menziesii regeneration on this north facing slope.

The reserve does not include the open range bordering the Little Gaspard Creek because it has been heavily grazed. The forested areas above this open range have only been lightly grazed (from observation of the herb and grass condition).

There is a proposed fencing program in the area. The range division has proposed a fence running through the lower section of the reserve to the boundary of the Little Gaspard and Gaspard Creeks. The purpose of this fence is to keep the cattle on the range bounded by the Gaspard Creek in the north, Alex Mountain in the west and the fence above the open range on the Little Gaspard Creek. By keeping the cattle on this range they hope to relieve some of the pressure on the currently heavily grazed open range on the south slopes of the Gaspard and Little Gaspard. By forcing the cattle to utilize this forested range damage could occur to areas of the proposed reserve especially the Agropyron sites. Instead the fence line should run on the north boundary of the reserve thus preserving the prime dry belt fir areas. The north facing slopes are not critical to the reserve as the vegetation type represented (Vaccinium caespitosum phase) is not as well developed or distinct a unit in this area as in other sites. Much of the north facing slope is also predominately Pinus contorta stands.

The southeast corner of the reserve would be the only boundary of the reserve not fenced. This area would not need to be fenced as there seems to be little evidence that the cattle penetrated very far into the forest, especially the steeper slopes.