

Forest Service Cryptogamic Habitat Study

Gps: L0719128 S: 2783985.3 E: 722369.3

Site#: R2047

Date: 7.29 Time: 17:55

Elev: 3459

Surveyors: PLM

Directions to Site: 51m W. of fence.

General Site observations:

Primary Aspect: 78° Secondary Aspect: _____

Primary slope & direction: 37° U↗

Secondary slope and direction: _____

Canopy cover of site:

Mid-transect: 35 m from _____ end Open quarters facing: _____

Within 1m at SW end. Open quarters facing: _____

Within 1m at NE end. Open quarters facing: _____

North: 89°
North: 94°
North: 91°

South: 91°
South: 82°
South: 86°

East: 93
East: 96°
East: 83

West: 96
West: 38°
West: 96

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant)

- Eriogon
- Erigeron
- Xan Par
- Star Moss
- Brown fruy
- Colima - under tree
- Usnea on downed wood

Woody debris within: 1.5 m of transect; in what part of transect: downed tree parallel to line (N) to 4.6 out.

Species: Pursh Tree at West end. Standing: _____

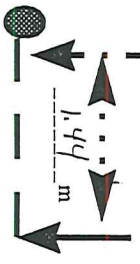
7 m away + 0 - 23 m away + 39 - 18

(%: right side of clinometer) (%: right side of clinometer)

_____ End

NE End

Tree = Picea (canopy = 1.04 m)
Trunk = 8.15 m Rebar = 7.31 m



Tree = Picea (canopy = 1.3 m)
Rebar = .3 m Trunk = 0 m



precise direction of line w.r.t. tree

Length from tree trunk to tree trunk = 8.75 m
Length from rebar to rebar = 7.91 m

precise direction of line w.r.t. tree

Record of transects

Plot #	Date	AZIMUTH	Direction		Pair	Azimuth		Azimuth
				NW NE	RNA		MAN	
RNA 1	7/22	320/140	NW / SE	1	Ø 3	352/172	Ø 3	352/172
MAN 1	7/22	350/170	NW / SE	1				
RNA 2	7/23	278/98	NW / SE	1				
MAN 2	7/23	350/170	NW / SE	1				
RNA 3	7/23	352/172	NW / SE	1				
MAN 3	7/23	352/172	NW / SE	1				
RNA 4	7/24	258/78	NE / SW		1			
MAN 4		/66	NE / SW		1			
RNA 5	7/25	184/4	NE / SW		1			
MAN 5	7/25	1/107	NW / SE					
RNA 6		90	E					
MAN 6		223						
RNA 7		190	W / E					
MAN 7		252/72						
RNA 8		188						
MAN 8		202/22						
RNA 9		220/40						
MAN 9		216/36	NW / SE					
RNA 10								
MAN 10								
RNA 11								
MAN 11								
RNA 12								
MAN 12								
RNA 13								
MAN 13								
RNA 14								
MAN 14								
RNA 15								
MAN 15								
RNA 16								
MAN 16								
RNA 17								
MAN 17								
RNA 18								
MAN 18								
RNA 19								
MAN 19								
RNA 20								
MAN 20								

Puanitas record

Forest Service Cryptogam Habitat Study

Site No. RNA #1 Date: 7.22.97 Surveyors: JMK/ks/ GPS #: _____ S: _____ E: _____ Time: _____ Page 3 of 5 Elev: _____

	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravels < 1 cm	5	29	10	5		7	4	5	4	4	8	6	7	8	3
Gravel 1-2						2					2	5			2
Gravel > 2-6															5
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	7	27	15	65	10	4	8	3	5	3	12	18	20	25	30
Sand															
litter/basal veg															
Woody debris 3-8cm	55	29	21.9	10	24	61	56	66	56.5	65	26	27	29	25	16
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)															
Open area basal	7			2		10	6	8	5	6		4		5	3
Lichen brown fr	12	20	23	4	10	7	17	8	19	4	9	15	3	2	11
Lichen green fr					4			1	5			1	1		2
Lichen yellow fr	14	3	30	8	45	14	8	9	6	22	40	22	40	33	27
Lichen white crust															
Lichen															
Lichen white crust (rock)		(1)													
Redstart					1										
Moss STAR									2	1	3	2		2	1
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
<i>Thuja occidentalis</i>				1											1
<i>Juniperus communis</i>					1										
<i>Empetrum nigrum</i>															
Wild seedling			.1												

(Alvin)

Summer 1997

Forest Service Cryptogamic Habitat Study

Site#: MANM1 Date: 7-22-97 Surveyors: JAK/JNM KS Gps: LO72222A

S: 3783919.8 E: 7224375 UTM 12

Time: 1630 Elev: 2326

Directions to Site: 18m east of Pass.

General Site observations:

Slope and direction: 4.5° 60° Aspect: 60°

Canopy cover of site:

Mid-transect: Open quarters facing: North: 96

South: 76

East: 96

West: 94

SE - A end: Open quarters facing: North: 88

South: 90

East: 76

West: 86

NW - B end: Open quarters facing: North: 96

South: 52

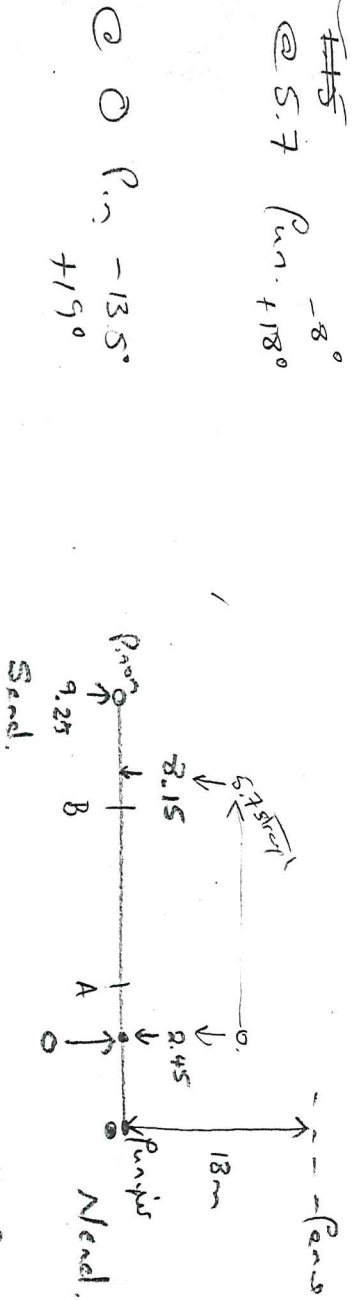
East: 96

West: 80

Community:

Plnts/burn/disturbance

Sketch:



Forest Service Cryptogam Habitat Study

Site No. M51281

Date: 7-22-97

Surveyors: _____

GPS #: _____

S: _____

E: _____

Time: _____

Elev: _____

	Quad <u>31</u>	Quad <u>32</u>	Quad <u>33</u>	Quad <u>34</u>	Quad <u>35</u>	Quad <u>36</u>	Quad <u>37</u>	Quad <u>38</u>	Quad <u>39</u>	Quad <u>40</u>	Quad <u>41</u>	Quad <u>42</u>	Quad <u>43</u>	Quad <u>44</u>	Quad <u>45</u>
Gravel < 1 cm	30	29.5	45	10	36	70	25	20	5	10	15	5	21	7	14
Gravel 1-2	2	4			2	3							3		
Gravel > 2-6					3					15					
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	32.4	35	3	12	5	15	36	40	27	40	54	61	63	23	7
Sand		3				5				4					
litter/basal veg	30	10	40	53	45	7	30	32	56	20	21	20	12	33	70
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)															
Bunny scat										1				2	1
Lichen Cladonia	.1														
Lichen															
Lichen															
Lichen															
Lichen															
Moss star	.5	.5					3				1				
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
Basal plant, scd		18	12	25	9		6	8	12	10	9	4	1	35	8

Forest Service Cryptogamic Habitat Study

Site#: RMAD2 Date: 7/23/97 Surveyors: Pat Gps: 4672316A S: 3783790.0 E: 712354.2 Time: 10:20 Elev: 2182

Directions to Site: 16m west of fence

General Site observations: Downed wood in vicinity not on list

Slope and direction: 60 260 Aspect: 260

Canopy cover of site:

Mtd-transect: Open quarters facing: North: 60 South: 60 East: 90 West: 59 Posn: 235m from E end

N/NE end: Open quarters facing: North: 76 South: 44 East: 88 West: 86

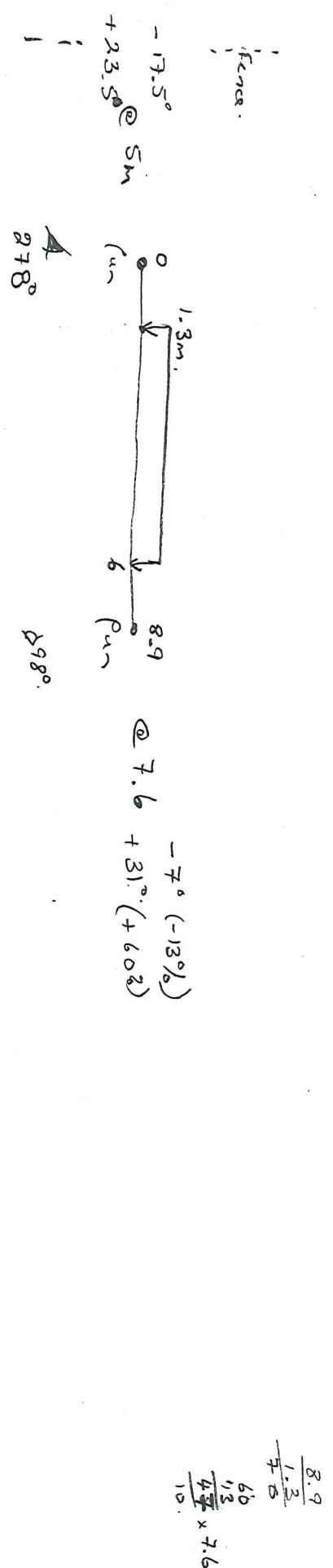
SE end: Open quarters facing: North: 67 South: 80 East: ∅ West: 59

Community: PF's No recent fire; Downed wood as evidence of major fire

Plnts/burn/disturbance

Peltigera officinalis - Abundant Make Ben Fungus off list
Quad 25 black minute Pagnets ~ 25% = ? Simpson Quad 35

Sketch:



Forest Service Cryptogam Habitat Study

Site No. RN0 d2 Date: 7/23/97 Surveyors: PAZL GPS #: _____ S: _____ E: _____
 N. Side of cut Time: _____ Page 1 of 4
 Elev: _____

	Start	End	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravel < 1 cm			0.5					5					3	20	10	13	20
Gravel 1-2															2	3	5
Gravel > 2-6															4	1	
Stones 6-15cm																	
Rocks 15cm-1m																	
Boulder > 1m																	
Bedrock																	
Soil			7	12	35	3	40	65	20	25	29	9	4	30	30	43	22
Sand																	
litter/leaf litter			80.5	76	57	81.5	37	29	69	64	66	27.5	81	41	43	6	27
Woody debris 3-8cm																	
Woody debris 8-30cm																	
Woody debris > 30 cm																	
Scat (type and size)						0.5				1		1	1				
Lichen <i>cladonia</i>							1										1
Lichen <i>obscure castanea</i>													2				(3)
Lichen <i>on rock</i>																	
Lichen <i>Bryn Fry</i>														2			
Lichen <i>Black Rx</i>														1			
Lichen																	
Lichen																	
Moss <i>Star</i>			7	6	5	3	20	5	5	1	1	0.5	2	4	13	0.5	0.1
Moss <i>Grey</i>				1				1					1				
Moss																	
Moss																	
Moss																	
Moss																	
Moss																	
Liverwort																	
Algae																	
Canopy-grass																	
Canopy-forb																	
Canopy-shrub																	
Vascular Species																	
<i>Bougain</i>			5	5	2	5	2	1	5	8	4	2	5	5	7	2	25

Forest Service Cryptogam Habitat Study

Site No. RSA02 Date: 7/23/97 Surveyors: _____ GPS #: _____ S: _____ E: _____ Time: _____ Elev: _____

	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravels < 1 cm		18	28	15	30	5	3.5	27	41	55	57	59	64	35	30
Gravel 1-2		2	2		2			3	6	5	2	12	6	3	2
Gravel > 2-6									4				2		
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	6	20	35	25	25	12	20	8	15	10	40	25	13	12	6
Sand			5									5			
Litter/ground	64	59.5	25	50	40	68	68	43	15	5	1	1	15	47	35
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)															
Lichen Stos						1									
Lichen (shrub on soil)									(5)				(8)	(8)	
Lichen (barn on soil)															
Lichen															
Lichen															
Black Frae deaps.										25					
Moss Stos		0.5	3				0.5								
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
Bougan	30	5	2	10	3	14	8	18						3	27
Kusquade								1							

Forest Service Cryptogam Habitat Study

Site No. R2N02 Date: 7/23/97 Surveyors: PKL GPS #: _____ S: _____ E: _____ Time: _____ Page 3 of 4
 Elev: _____

Quads on N side of line	Start at W end	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravels < 1 cm	60	53	40	42	34	33	44	24	6	35	30	25	8	15	13	
Gravel 1-2	5	12	6	6	6	6	7	4	2	2	1	2	1	2	3	
Gravel > 2-6																
Stones 6-15cm																
Rocks 15cm-1m																
Boulder > 1m																
Bedrock																
Soil	30	30	28	30	33	35	30	35	37	37	38	46	24	3	57	40
Sand	1				5											
litter/veg	4	5	25	20	7	22	12	37	38	18	16	40	40	45	26	35
Woody debris 3-8cm																
Woody debris 8-30cm																
Woody debris > 30 cm																
Scat (type and size)	Wormy															
Lichen ^{white} Rock	(6)	(6)	(6)													
Lichen ^{stos}																
Lichen																
Lichen																
Lichen																
Lichen																
Black Frag dep.					15	1			9	3	3	5	38	3		2
Moss																
Moss																
Moss																
Moss																
Moss																
Moss																
Moss																
Liverwort																
Algae																
Canopy-grass																
Canopy-forb																
Canopy-shrub																
Vascular Species																
<u>Bongva</u>	1	2			3		3	4	4	1	4	4	4	1		7

Summer 1997

Forest Service Cryptogamic Habitat Study

Site#: MAN 02 Date: 7/23/97 Surveyors: NW/ks/sjps S: 7892415.3 E: 37833895.80 Time: 9:55 Elev: 2888m

Directions to Site: 15m East of Base

General Site observations: Abundant down wood BS not on line

Slope and direction: 3% 91° Aspect: 91°

Canopy cover of site: Mid-transsect: Open quarters facing: North: 91 South: 37 East: 96 West: 90 Posn: 209 m from rebar end

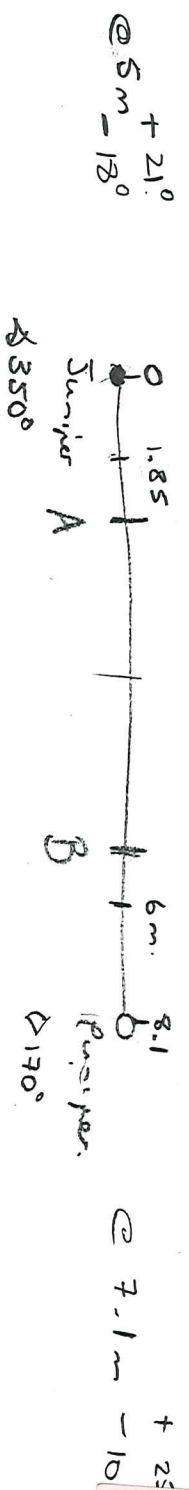
A end: Open quarters facing: North: 96 South: 48 East: 94 West: 58

B end: Open quarters facing: North: 82 South: 80 East: 96 West: 93

Community: of down wood

Plnts/burn/disturbance

Sketch:



M7402

Summer 1997

Forest Service Cryptogamic Habitat Study

Site#: RVA 83 Date: 7/23/97 Surveyors: KS/NM/KS GPS: _____ S: _____ E: _____ Time: _____ Elev: _____

Directions to Site: 17m from fence west.

General Site observations: West of site ~ 15m higher prepoller area of brown fru. cladonia crust, Pinon-juniper

Slope and direction: 2070 Aspect: 168° Downed wood.

Canopy cover of site: _____

Mid-transect: Open quarters facing: _____ North: 74 South: 94 East: 196 West: 80 Posn: 2.25m from _____ end below

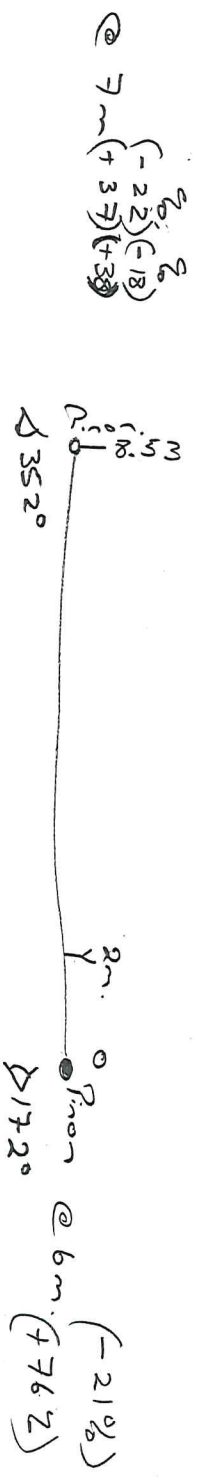
A end: Open quarters facing: _____ North: 82 South: 86 East: 74 West: 59

B end: Open quarters facing: _____ North: 88 South: 78 East: 69 West: 84 (1.58m from rebar)

Community: _____

Plnts/burn/disturbance _____

Sketch: _____



Fence

Forest Service Cryptogam Habitat Study

Site No. MAN 03 Date: F. 23 Surveyors: NM GPS #: _____ S: _____ E: _____ Time: _____ Page 2 of 4 Elev: _____

	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravel < 1 cm	4	20	20	10	5	15	19	3	5	10	3	5	5	5	18
Gravel 1-2		2		1	2	3	3		5	2	4	4	5	3	2
Gravel > 2-6						4	4								
Stones 6-15cm		13	22												
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	30	35	55	15	10	24	20	1	29	20	10	10	27	22	18
Sand															
litter/leaf-lug	34	18	20	65	65	50	50	88.5	50	64	72.5	65	55.5	23	53.5
Woody debris 3-8cm	17														
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)	1		1		2	1		24.5	1		1	3	4		
Lichen black crusty	(2)	(1)													
Lichen <i>D. sax. curvata</i>	(1)	(6)													
Lichen white crusty															
Lichen <i>D. frax. frax.</i>		(.5)													
Lichen <i>D. frax. frax.</i>									5		7	11	1.5	4.5	8
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
<i>M. v. v.</i>	1														
<i>BOUGERA</i>	2		4	9	6	3	4	7	5	4	1.5	1.5	7	2	1

Forest Service Cryptogam Habitat Study

Site No. RNA 4 Date: 7-24-97 Surveyors: LS / NM GPS #: _____ S: _____ E: _____ Time: _____ Page 2 of 4
 Elev: _____

	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravels < 1 cm	37	35	35	60	40	30	40	70	34	32	15	22	17	12	5
Gravel 1-2	2	3.5	1		2			4	3	7	2	4	6	6.5	8
Gravel > 2-6											5				
Stones 6-15cm															
Recks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	26	31.5	44	12	22	40	20	23	10	50.5	30	40	70	50.5	60
Sand															
litter/branches	35	30	20	20	20	25	25	3	40	8	28	15	5	15	18
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)	Kudzu				1										
Lichen <u>Wright, Munter</u>															1
Lichen <u>Black, Munter</u>								(1)							
Lichen <u>Brown FM</u>										(1)	(1)				
Lichen <u>glaucocinctus</u>											14	9		(.5)	
Lichen <u>g</u>															
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
<u>BOGRA</u>	2			8	15	5	14		10	1.5	6	10	7	10	9

Forest Service Cryptogam Habitat Study

Site No. WANN04 Date: 7.24 Surveyors: JAKL
NW GPS #: _____ S: _____ E: _____

Page 4 of 5
 Time: _____ Elev: _____

	Quad 46	Quad 47	Quad 48	Quad 49	Quad 50	Quad 51	Quad 52	Quad 53	Quad 54	Quad 55	Quad 56	Quad 57	Quad 58	Quad 59	Quad 60
Gravels < 1 cm	45	35	30	12	67	26	25	18	25	4	5	15	24		
Gravel 1-2		2	3	1	4	8	2	7		2	5	3		1.5	6
Gravel > 2-6		4				20			12	8	3	5	15		4
Stones 6-15cm							89	15	25						
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	38	14	35.5	25	35	35	10	30	24	36.5	25	33	30	55	40
Sand	3			2							1		5		2
Litter/leaf-layers	10	40.9	30	53	4	10	6	30	14	42	52	40	25	40	40
Woody debris 3-8cm							18								
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)	val 1.5		1.5			1				.5			1		
Lichen nostoc	1														
Lichen Winst crusto		(1)	(1)		(10)			(7)		(1)	1				
Lichen black crusto						(16)	(12)	(10)		(5)					
Lichen orange crusto								(1)		(15)					
Lichen green crusto								(.5)		(1)	2				
Lichen blown crusto															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
CRJAM	1			2				2							
MDGPA	.5	4	1	5					7	6	4			35	8

Summer 1997

108 P15

Forest Service Cryptogamic Habitat Study

Site#: RNAD5 Date: 7/25 Surveyors: LO72518A S: 37840783E Time: 1245 Elev: 2567m

Directions to Site: 27 km W of Pass

General Site observations:

Slope and direction: 3.5% 88° Aspect: 88°

Canopy cover of site:

Mtd-transect: <u>(S)</u>	Open quarters facing: <u>North</u>	<u>84</u>	South: <u>81</u>	East: <u>96</u>	West: <u>96</u>	Posn: <u>2.8</u> m from <u>A</u> end
<u>(A)</u> end:	Open quarters facing: <u>North</u>	<u>95</u>	South: <u>35</u>	East: <u>85</u>	West: <u>91</u>	
<u>(N)</u>	<u>B</u> end: Open quarters facing: <u>North</u>	<u>1</u>	South: <u>93</u>	East: <u>67</u>	West: <u>68</u>	

South

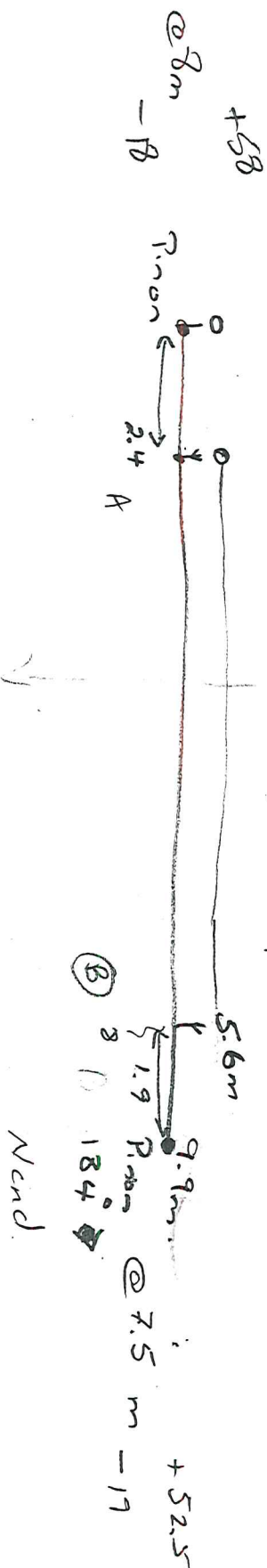
Community:

Plnts/burn/disturbance

Add and note s in in Erugolatum bin 3m Oxytropis. disquerella Erugolatum Open (35m x 10m)

Sketch:

Plots 11
@ 220°



5.6
2.4
3.2

Forest Service Cryptogam Habitat Study

Site No. R20075 Date: 7/25

Surveyors: _____

GPS #: _____

S: _____

E: _____

Time: _____

Page 1 of 4
Elev: _____

Strat Sed	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravels < 1 cm	10	22	20	10	14		17	23	15	20	29	30	15	6	2
Gravel 1-2	4	4	2	4	9		3	2	1	2	7	10	9		2
Gravel > 2-6	5							2.5	2.5	2			1.6		3
Stones 6-15cm									2.5						10
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil															
Sand	25	30	10	30	20	38	34	15	32	46	57	45	18	24	20
litter/leaf litter	52	43.5	63	48.5	64.5	60	45	45	25	30	6	10	40	57	58
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)						1.5									
bunny															
Lichen Brn Fur	4	0.5		7	0.5		1	2							1
Lichen chl. br. 2-3%					(2)			(1)							
Lichen Xan per								7						1	
Lichen Pallens								1							1
Lichen Gray Crust on rock									(1)		(2)	(3)			
Lichen brn " " "												(1)			
Moss Brn (Star)															
Moss wand								1							
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae Mastoc								0.5							
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
Bamboo	1		5			0.5		1						6	3

Forest Service Cryptogam Habitat Study

Site No. RND05 Date: 7/25

Surveyors: _____

GPS #: _____

S: _____

E: _____

Time: _____

Page 3 of 4
Elev: _____

	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravel < 1 cm	20.5	33.5	39	7	15	30	25	27	35	15	30	29	20	32	32
Gravel 1-2	2	1.5	3		1	5	5	27	1	5	3	4	1	5	3
Gravel > 2-6	4.5		3								7				
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	40	53	50	75	53	35	23	50	50.5	56	54	48	39	48	55
Sand		10	4	10	15	5	5	3	10	5	4	8	8	2	5
Litter/bedrock	15	2	1	2	2	15	10	2	3.5	4	2	10	25	8	4
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)															
Lichen Xanpar bunny													1		
Lichen					14	8	22	18							
Lichen															
Lichen															
Lichen															
Lichen															
Lichen															
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-fern															
Canopy-shrub															
Vascular Species															
Bougera	10					2	10			3			1	6	2

Summer 1997

Forest Service Cryptogamic Habitat Study

Site#: MA 285 Date: 7/25/97 Surveyors: NM JCS Gps: S: _____ E: _____ Time: _____ Elev: _____

Directions to Site: _____

General Site observations:

Slope and direction: 174° N→E Aspect: 1756°

Canopy cover of site: 213° 27112°

Mid-transect: Open quarters facing: North: 95 South: 94 East: 96 West: 86 Posn: 3.7m from A end

A end: Open quarters facing: North: 78 South: 76 East: 96 West: 14

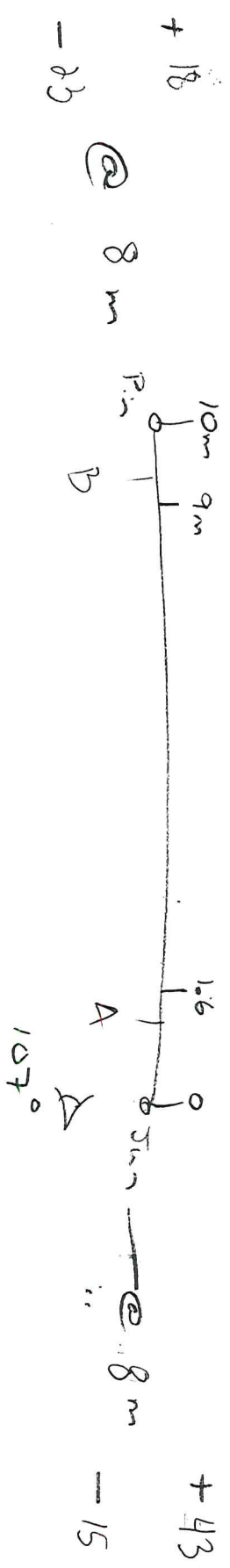
B end: Open quarters facing: North: 95 South: 94 East: 36 West: 96

Community: _____

Plnts/burn/disturbance _____

Sketch:

photo 10 E end in foreground at $\approx 315^\circ$



Red ant hill v. early in background on a 1.1m from west end
Large red ant hill south of line at 4.9m from west end (1.5 meters from line.)

Sketch at W END	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravel < 1 cm															
Gravel 1-2		1.5		2	2	2	1		5	5	2	12	6	4	8
Gravel > 2-6	6	2							4		3	3	5		4
Stones 6-15cm								14			4	5			2
Rocks 15cm-1m		48	60	20	2									52	
Boulder > 1m															
Bedrock															
Soil															
Sand	59	1.5	20	8	30	30	18	58	70	58	46	70	67	27.5	53.5
litter/leaf litter															
Woody debris 3-8cm	35	27	17	61.5	56	56.5	38	13	8	25	15	10	18	12	30
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (Type and size) % dbh				45											
Lichen Xawn						1.5	40	11	5					1.5	
Lichen															
Lichen															
Lichen															
Lichen 11 Gray rock			(5)	(3)											
Lichen H. green (rock)		(55)	(15)	(1)				(1)						(5)	
Moss: black			(3)	(3)										(.5)	
Moss: white			(3)	(3)										(1.1)	
Moss: green			(3)	(3)										(.1)	
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
ROCK			3	8	9	10	3	4	3	8	8	4	3	3	2.5

Forest Service Cryptogam Habitat Study

KS

Site No. MN 5 Date: 7-25-97 Surveyors: M/M

GPS #:

S:

E:

Time:

Page 2 of 5
Elev:

	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravels < 1 cm	20	11	2	2	3	12	4	16	20	30	24	21	12	4	16
Gravel 1-2	4	3		3	2	3	2		14	15	5	2	2		
Gravel > 2-6															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	70	71	66	62	72	53	59	10	59	50	22	54	95	79	39
Sand															
litter/basal veg	3	8	25	21	6	19	4	4	3	3	35	11	5	8	15
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)															
Rabbit															
Lichen Xan par	3	5		2	4	1	6	1	4	1			2	3	6
Lichen															27
Lichen lf green (crust)															
Lichen orange crust (crust)															
Lichen white crust (crust)								(1)					(1)		
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
Xan gra	2	7	10	3	7	2	1	1	14	4	3	3	3	3	3

Forest Service Cryptogam Habitat Study

K5

Site No. MAMP 5

Date: 7.25

Surveyors: NWL

GPS #:

S:

E:

Time:

Page 3 of 5
Elev:

	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravels < 1 cm	13	3	15	40	6	7	3	6	30	15	60	80	38	5	25
Gravel 1-2	1	1		5	3	2		4	1	2	11	5	3		8
Gravel > 2-6	5			2	2					5	3	5			
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	69.5	38	29	29.5	43.5	48.5	8	19	44	16	11	10	12	45.5	55
Sand															
litter/bedrock															
Woody debris 3-8cm	1.5	35	20	3	30	25	40	22	10	30	4	2	25	40	8
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)	Yummy			.5	1.5	.5		1							
Lichen XMM	10	26	30	20	4	14	45	45	15	26	11	3	13	4.5	3
Lichen <i>of green shrubs</i>										(3)					
Lichen <i>of green shrubs</i>											(1)				
Lichen <i>of green shrubs</i>											(.5)	(2)			
Lichen <i>of green shrubs</i>											(1)	(.1)			
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
<i>BODGR</i>		3	6		10	3	4	3		6			9	7	1

Forest Service Cryptogam Habitat Study

Site No. MM 05

Date: 7.25

Surveyors: KS/NM

GPS #:

S:

E:

Time:

Page 5 of 5
Elev:

	Quad 61	Quad 62	Quad 63	Quad 64	Quad 65	Quad 66	Quad 67	Quad 68	Quad 69	Quad 70	Quad 71	Quad 72	Quad 73	Quad 74	Quad 75
Gravels < 1 cm	6	7	10	35	39	3	20	25	10	30	35	28.5			
Gravel 1-2				3	2			4				3			2
Gravel > 2-6															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	54	35.5	41	29	18	20	20	31.7	58.9	42	39	30	12	12	31.3
Sand															
litter/leaf litter															
Woody debris 3-8cm	35	50	38	30	38	54.4	47.5	18	17	20	18	18	53	79.4	50
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (type and size)	1					.5	.5								
Lichen X9N	3	4.5	2					20	10	3	4	20	28	.1	7
Lichen black crustace								.1							
Lichen brown fr								.1							
Lichen brown crust								.1							
Lichen Cladonia								.1							
Lichen green pro wood									.1						
Lichen <i>Peltigera</i>															
Moss white crust															
Moss black crust															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Canopy-grass															
Canopy-forb															
Canopy-shrub															
Vascular Species															
<i>BOUGRA</i>	2	3	5	3	8	10	10	4	4	5	4		7	10	4

Photolog
Surveyors:

Installation Record Traverses

0-90
90-180
180-270
270-360

Exp.	Date	Subject	Azimuth	Location/description
RNA01	7/22	NW / SE	320°	
MAN01	7/22	NW / SE	170°	
RNA02	7/23	NW / SE	278° (98)	
MAN02	7/23	NW / SE	170° (350)	
RNA03	7/23	NW / SE	172°	
MAN03	7/23	NW / SE	172°	
RNA04			258/78°	
MAN04		NE / SW	65	22m E of fence
* RNA05	*	Near NW.	50° or 32°	27.6m W of fence could go to nearest
MAN05		NW / SE	277 (97)	26.2m E of fence
RNA06		E W	90°	17.4m W of fence
MAN06		NE / SW	223	Pumper to Pion 21.2m E from fence
RNA07		(N)E / (S)W	90°	51m W of fence
MAN07		NE / SW	72 (252)	25m E from fence @ ~ 50 is NE of Ass'd Pen
RNA08		(N)E / (S)W	88°	30.3m W of fence
MAN08		NE / SW	22° (202)	15.3m from fence
RNA09		NE / SW	40 (220)	42m W of fence note u. close trees bet 15m + 42m
MAN09		NE / SW	36° 216°	21.28m from fence

*

23.5

Exp.	Date	Subject	Azimuth	Location/description
2	7/22	RNAØ1/MANØ1	NW/SE	
2	7/23	RNAØ2/MANØ2	NW/SE	
2	7/23	RNAØ3/MANØ3	NW/SE	
2	7/24			
2	7/25			
	24	MANØ4	NE/SW	65° 22m E of fence.
	24	MANØ5	NW/SE	97°/277° 26.2" " "
	25	MANØ6		
	25			
	25			
M	1			
T	2			
W	3			
T	3			
F	2			
M				
T				
W				
T				
F				

32

15

8

Protocol for choice of trees:

Go out perpendicularly from the fence 15 m (i.e. go out from fence at 90o)

Find the nearest tree that is 8m-12m from its neighbor, with the provision that:

- 1 There is no canopy on or within 1m of the line from any other tree.
- 2 There is only woody debris from branches on the line and there are no uprooted (root end) tree trunks on or within 3m of the line.
- 3 That there will be an equal number of NE/SW and NW/SE facing lines in the study.
- 4 Areas that are obvious drainage areas are avoided on both sides of the fence.

File Name	Session ID	# Way Pts	Date	Time (24hr)	20/30	Raw Field Easting	Raw Field Northing	Record Notes	Corrected Position Easting	Corrected Position Northing	Cor. ELEV
L0721	A1	-	7.21	PM	3D	-	-	Along E-W Fenceline VECTOR	-	-	-
L0721	A1	-	7.21	PM	3D	-	-	Along N-S Fenceline VECTOR	-	-	-
L0722	SA	-	7.22	9:50	3D	722283.7	53783907.5	246m	site RNA1	-	-
L0722	15B	114	7.22	10:00	3D	722363.115	53783865.5	2490m (UTM12) / site RNA1	-	-	-
L0722	22A	82	7.22	16:30	3D	722432.5	53783917.8	2326m (UTM12) / site MAN01	-	-	-
L0723	15A	71	7.23	19:55	3D	722415.3	53783899.8	2383m (UTM12) / site MAN02	-	-	-
L0723	16A	52	7.23	10:20	3D	722394.2	53783790.0	2182m (UTM12) / site RNA02	-	-	-
L0723	20A	65	7.23	14:10	3D	722391.0	53783933.1	2193m (UTM12) / site RNA03	-	-	-
L0723	21A	19	7.23	16:05	3D	722446.0	53783912.4	2470m (UTM12) / site MAN03	-	-	-
L0724	19A	190	7.24	13:45	3D	722368.8	53783708.6	2531m (UTM12) / site RNA04	-	-	-
L0724	21A	66	7.24	15:30	3D	722469.3	53783794.4	2455m (UTM12) / site MAN04	-	-	-
L0725	15A	102	7.25	10:10	3D	722437.9	53784001.8	2417m (UTM12) / site MAN05	-	-	-
L0729	15A	59	7.29	19:35	3D	722410.6	53784014.1	2487m (UTM12) / site MAN06	-	-	-
L0729	18A	61	7.29	18:45	3D	722437.9	53784001.8	2487m (UTM12) / site MAN06	-	-	-
L0729	22A	80	7.29	16:30	3D	722366.3	53784004.4	2312m (UTM12) / site RNA08	-	-	-
L0729	24A	150	7.29	17:15	3D	722369.3	53783985.3	2459m (UTM12) / site RNA08	-	-	-
L0730	08A	104	7.30	17:20	3D	722381.3	53784035.8	2381m (UTM12) / site MAN08	-	-	-
L0731	11A	180	7.31	16:45	3D	722442.7	53784094.5	2370m (UTM12) / site MAN07	-	-	-
L0731	18A	94	7.30	12:46	3D	722434.2	53784082.2	2472m (UTM12) / site MAN09	-	-	-
L0801	15A	118	8.1	9:35	3D	722331.2	53784062.4	2373m (UTM12) / site MAN10	-	-	-

ELEV

Record Notes

Along E-W Fenceline VECTOR

Along N-S Fenceline VECTOR

site RNA1

site RNA1

site MAN01

site MAN02

site RNA02

site RNA03

site MAN03

site RNA04

site MAN04

site MAN05

site MAN06

site RNA08

site RNA08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

site MAN08

Directions to Site: 17.4 m W. of fence.

General Site observations:

Downed wood scattered N.A. North of transect

Primary Aspect: 90°

Secondary Aspect:

Primary slope & direction: 3° EAST

Secondary slope and direction:

Canopy cover of site:

Mid-transect: 3.33m from E end Open quarters facing:

North: 96

South: 82

East: 96

West: 75

Within 1m at E end. Open quarters facing:

North: 96

South: 88

East: 72

West: 96

Within 1m at W end. Open quarters facing:

North: 92

South: 72

East: 96

West: 76

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant)

- Bov. gra
- Eri. gra
- Xan. par
- Sit. a. hystrix
- Urn. (on downed wood)
- Urid #1 - spec. taken

Woody debris within: 2.6 m of transect; in what part of transect: North of transect large downed tree

Woody debris within: 2.8 m of transect; in what part of transect: "

Species: Pinon Tree at east end. Standing: 7 m away

Pinon Tree at west end. Standing: 7 m away

Pinon Tree at west end. Standing: 7 m away

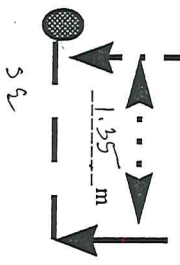
(%; right side of clinometer)

West End

East End

Tree = JUNIPER (canopy = 1.35 m)

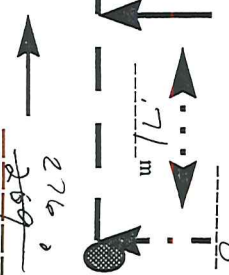
Trunk = 8.7 m Rebar = 7.35 m



precise direction of line w.r.t. tree

Tree = Pinon (canopy = 1.71 m)

Rebar = 7.1 m Trunk = 0 m



precise direction of line w.r.t. tree

Length from tree trunk to tree trunk = 8.7 m

Length from rebar to rebar = 6.04 m

Site No. <i>ANAP06</i>	Date: <i>7-29-99</i>	Surveyors: <i>V5 MN</i>	GPS #:	Work on downslope side of line = <i>NO</i>											
Start at east end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravels < 1 cm															
Gravel 1-2cm			1												
Gravel > 2-6cm															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	89.7	76	18.5	18.8	42.9	50.8	60.9	58.9	33	35.5	50.5	62.8	50.9	38.9	2.0
Sand															
Litter	8	22.9	6.5	6.5	50	40	23	26	28	25	22	22	30	22	5.5.4
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm									15						
Seat <i>Kahbit</i>															
<i>C- Dyrlo</i>															
Lichen <i>clay</i>	.1		.5			.1	1	.5							
Lichen <i>brown fr</i>				2			1	.1		1.5	2	2.5			
Lichen <i>white crust</i>					.1			4							
Lichen <i>petiolar</i>						1	1	4							
Lichen <i>rock white crust</i>							(1)				.5	(1)	(1)	(.1)	
Moss <i>star</i>	.1						(1)	.5			.1				
Moss															
Moss															
Moss															
Moss <i>on NW corner - rock</i>															(.1)
<i>rock</i> <i>11 gray</i>															
Liverwort															
Algal veneer						1						.5	3	2	
Algae															
Nostoc															
Vascular Species															
Basal veg: <i>Bougrea</i>	2	1	15	22	7	7	4	4	3	35	8	7	8	8	5.5-
<i>Wid seed loss</i>	2(.1)	(.1)		.1		.1	.1					.1	.1		.1
Canopy-shrub															
Canopy-forb															
Canopy-grass	4	2	25	23	16	14	7	10	8	50	13	10	23	12	15

Forest Service Cryptogam Habitat Study

Site No. RNA 06	Date: 7.29	Surveyors: K5/NM	GPS #:	Work on downslope side of line = NORTH															
Start at East end	Quad 14	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30				
Gravels < 1 cm	2	8	5	5	5	3	2												
Gravel 1-2cm		3	4																
Gravel > 2-6cm		2	3																
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	50	81.5	52	79	62.9	20.5	3	28											
Sand																			
litter	39	3	25	10	15	55	67	61.5	45.9	3	2.5	2	55	25	25				
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat																			
Lichen <i>guth</i> <i>trifido</i>	(1)	(1.1)	(11)																
Lichen <i>glaberrima</i>	1	2.5	5	3	1	1.5	8												
Lichen <i>prymoriana</i>																			
Lichen <i>rostrata</i>																			
Lichen <i>rostrata</i> <i>trifido</i>																			
Lichen <i>trifido</i>																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss <i>straw</i>																			
Liverwort																			
Algae																			
Nostoc																			
Vascular Species																			
Basal veg: Bougrea	9		6	3	6	10	20	8	10					1	15	20	8		
Canopy-shrub																			
Canopy-forb																			
Canopy-grass	25		8	10	12	25	40	25	12	6	4	4	35	25	30				

61	62	63	64	65	66	67	68	69	70	71	72
27	23	25	8	10	5	13	40	22	45	40	
1-2		2					6	3	8	1	
2-6		4									

brunmycot			1				1	1			
size	50.9	54	47.9	48.5	30.9	38	49	38.9	70	31	23.9
delta	15	15	12	35	45	45	30	14	4	16	35

lichen
brown fm 5
brown crus 1

mosses .1 .1 .5 1.5 2

algae 2 2 4

rock white (.1) (.1) (.1) (.5) (.5)
green (.1) (.5) (.1) (.1) (.1)
spores (.5) (.1) (.1) (.1) (.1)

noogva 7 3 7 4 12.5 6 4
wind 1
weed seedling 1 .1

15g seed .1
eribG alatum
carnegy 4
frs 4
gms 5
shrub 12 5 15 10 18 10 5 10 2 2 2 2 2

Forest Service Cryptogam Habitat Study

Site No. <i>QNA 86</i>	Date: <i>7-29-97</i>	Surveyors: <i>ES / NM</i>	GPS #:	Work on downslope side of line =								
Start at East end	Quadrant 1	Quadrant 2	Quadrant 3	Quadrant 4	Quadrant 5	Quadrant 6	Quadrant 7	Quadrant 8	Quadrant 9	Quadrant 10	Quadrant 11	Quadrant 12
Gravels < 1 cm	27	23	25	8	10	5	13	40	22	45	40	
Gravel 1-2cm			2					6	3	8	1	
Gravel > 2-6cm			4									
Stones 6-15cm												
Rocks 15cm-1m												
Boulder > 1m												
Bedrock												
Soil	50.9	54	47.9	48.5	30.9	38	49	28.9	70	31	23.9	
Sand												
litter	15	15	12	35	45	45	20	14	4	16	35	
Woody debris 3-8cm												
Woody debris 8-30cm												
Woody debris > 30 cm												
Scat Rabbit				1					1			
Lichen brown fr		5										
Lichen brown crust				1								
Lichen												
Lichen green crust rock (1)		(1)	(5)				(1)	(1)		(5)	(1)	
Lichen white crust rock (1)		(1)	(1)				(.5)			(.5)	(1)	
Moss gray crust rock												
Moss												
Moss												
Moss star	.1		.1	.5	1.5	2						
Liverwort												
Algae venger			2	2		4						
Nostoc												
Vascular Species												
Basal veg: Bougrea	7	3	7	4	12.5	4	4					
Res. seedling					.1							
Eni ala						4						
UNID seedling											.1	
Canopy-shrub												
Canopy-forb											.5	
Canopy-grass	12	5	15	10	18	10	5	2	2		2	

Forest Service Cryptogamic Habitat Study

Gps: L071912B S: 3783985.3

E: 722369.3

Time: 1715

Elev: 2459

Site#: R2047

Date: 7.29

Surveyors: PO/VM

Directions to Site: 51m W. of Pens.

General Site observations:

Primary Aspect: 78°

Secondary Aspect: _____

Primary slope & direction: 37° WSE

Secondary slope and direction: _____

Canopy cover of site:

Mid-transect: 3.5 m from _____ end Open quarters facing:

North: 89%

South: 91%

East: 93

West: 96

Within 1m at SW end.

Open quarters facing:

North: 94%

South: 92%

East: 96%

West: 98%

Within 1m at NE end.

Open quarters facing:

North: 91%

South: 86

East: 83

West: 96

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant)

- Ericaceae
- Erica elva
- Xan Gar
- Star Moss
- Brown Fan
- Usnea
- Colima - under tree
- on downed wood

Woody debris within: 1.5 m of transect; in what part of transect: downed tree parallel to line (N) to 4.6 out

Species: Pison Tree at North end. Standing: 7 m away + 0 - 23 (%; right side of clinometer)

----- End

NE End

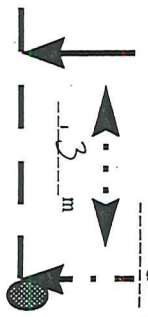
Tree = Pison
(canopy = 1.04 m)

Trunk = 8.95 m Rebar = 7.31 m



Rebar = .3 m Trunk = 0 m

Tree = Pison
(canopy = .3 m)



precise direction of line w.r.t. tree



Length from tree trunk to tree trunk = 8.75 m
Length from rebar to rebar = 7.01 m

precise direction of line w.r.t. tree



Site No. RWA 07 Date: 7/30 Surveyors: VM/KS GPS #: Work on downslope side of line = SOUTH

Start at East end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
m South side	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Gravels < 1 cm	1	3	5	3	1.5	10	15	15	20	20	15	6	7	5	25
Gravel 1-2cm	3		4	3	2	6		9	9	7	5	6	8	3	5
Gravel > 2-6cm															4
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	10	15	12	18	83.4	77.6	76.8	72.1	67.3	62.4	60.9	34.4	62.5	65.9	37.8
Sand															
litter	71.3	69.2	40	45.8	10	1	.5	.1	1	5	5	8	18	20	20
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat	1				1										.5
Lichen WWK C	2	3													
Lichen Xmm PAR	20	33	25	15				3.5						2.5	
Lichen w/flat swabs - 1000	.1	.5		5					.1						
Lichen acadmia	.5	2	.1												
Lichen prorm fru	3.5	1.5	12	(1)	.1	5	7	.1	2.5	(2)	1	6	.5	(2)	
green crusts .5						(1)			(1)						(1)
Moss white crusts - rock															
Moss grey swabs - rock															
Moss															
Moss															
Moss str	.1	.1	.1			.1								.5	
Liverwort															
algae vmm												2.5			
Algae															
Nostoc			2	.1		.1	.5	.1	.1	.5	.1				
Vascular Species															
Basal veg: Bougra	4.5	4		10										8.5	1
ERIAM															
invid seedling	.1	.1	.1	.1	2	12	.2	.1	.1	.1	.1	.1	.1	.1	.1
PK															
Canopy-shrub															
Canopy-forb	5	10	.1	.1	2	.2	.2	.1	.1	.5		.1	9	.1	.1
Canopy-grass	15	7	2	14						4	10	6		6	15

Forest Service Cryptogam Habitat Study

Site No. RNP057	Date: 7.30	Surveyors: NM/KS	GPS #:	Work on downslope side of line = South											
Start at	end														
Gravels < 1 cm	Quad 16 33	Quad 17 18	Quad 18 12	Quad 19 8	Quad 20 7	Quad 21 23	Quad 22 25	Quad 23 12	Quad 24 12	Quad 25 12	Quad 26 21	Quad 27 50	Quad 28 12	Quad 29 35	Quad 30 22
Gravel 1-2cm	8	6	3					7	3				10	11	
Gravel > 2-6cm			4												
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	51.9	53.5	78.9	81.5	76	52.5	49.8	208	56.9	46.9	49.9	19.5	39.9	24.4	54.9
Sand						20	20	17	15	8	9	17	15	15	13
litter	4	5	2	2	4		3	25		10	6	2	20	12	3
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat (Rabbit)	.5														
Xan Par	2	11	3	4	7		.1	2	4	3	1		1		
Lichen Green frn		15	.1												
Lichen															
Lichen grey cr. rock															
Lichen green cr. rock	(.5)														
Lichen grey cr. rock	(.5)														
Lichen grey cr. rock	(.5)														
Lichen grey cr. rock	(.5)														
Moss light green cr. rock															
Moss black cr. rock															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae v. Parlt															
Nostoc															
Vascular Species															
Basal veg: Bougra		3		1	1		2	22		12	3		12	8	1
VMD S&D L106	.1						.1	.2			.1	.5	.1	.1	.1
Canopy-shrub	.1						.1	.2			.1		.1	.1	.1
Canopy-forb															
Canopy-grass		1	5	3	3		10	55		35	10	1	24	10	15

Forest Service Cryptogam Habitat Study

Work on downslope side of line = 50074

Site No. (VA #)	Date:	7.20.97	Surveyors:	FS/MM	GPS #:	Work on downslope side of line = 50074													
Start at	end	Quad 46	Quad 47	Quad 48	Quad 49	Quad 50	Quad 51	Quad 52	Quad 53	Quad 54	Quad 55	Quad 56	Quad 57	Quad 58	Quad 59	Quad 60			
Gravels < 1 cm		11	35	12	11	8	15	27	35	30	8	28	6	13	27	17			
Gravel 1-2cm		2	3	1		2	5	4	3	4	2	3		4	2	1			
Gravel > 2-6cm																			
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil		68	49	72	61.5	75.5	59	41	41.8	41.9	52	36.4	44	35	34.9	41			
Sand		5	6	5	6	6	7	15	15	15	10	12	8	17	25	2			
Litter		4	6	8	12	5	8	9	4	6	20	15	25	22	10	30			
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat	litter					1.5										1			
Lichen																			
Lichen green cras rock																			
Lichen white cras (rock)							(.5)	(.5)								(.1)			
Lichen black cras rock					(.5)		(.1)	(.1)											
Lichen gray cras rock	(1)						(.5)		(.1)	(.1)						(.1)			
Lichen green cras rock							(.1)												
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Liverwort																			
Algae vander																			
Nostoc			1										1						
Vascular Species																			
Basal veg: Bougrea				2	9	3	2	2	1	3	8	5	16	7	1	8			
Grass		16																	
Wnf seed									.1			.1			.1				
Grass																			
Canopy-shrub																			
Canopy-forb		14																	
Canopy-grass			3	3	10	4	3	4	.1	4	15	4	35	6	4	14			

Forest Service Cryptogamic Habitat Study

Gps: 20° 29' 22.9" N 106° 37' 40.039" W

Site#: R20973

Date: 7/29

Time: 16:30

Elev: 2306 m

Surveyors: K5/NM1

Directions to Site: 30.3 m W. of fence

General Site observations: Pinon-juniper, downed wood

Primary Aspect: bb Secondary Aspect: wa Primary slope & direction: 49° Secondary slope and direction: wa

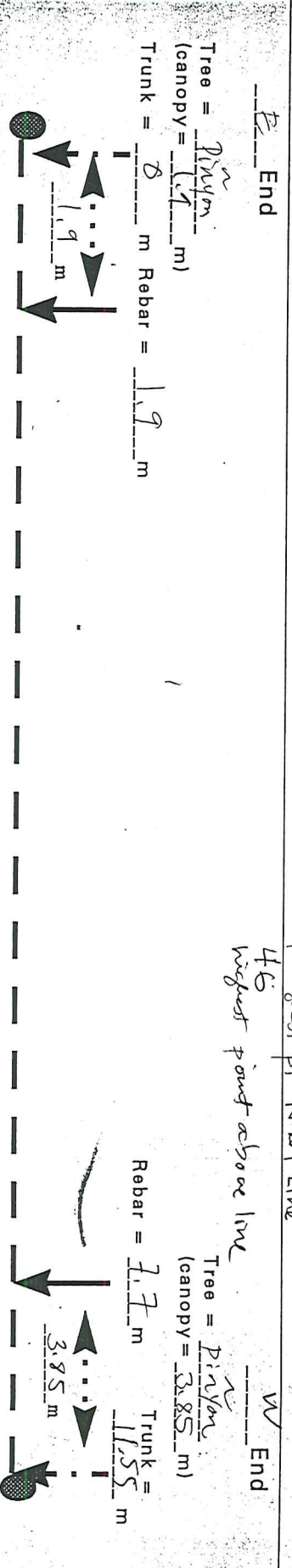
Canopy cover of site: _____
 Mid-transect: 2.65 m from E end Open quarters facing: North: 86 South: 86 East: 55 West: 74
 Within 1m at E end. Open quarters facing: North: 80 South: 85 East: 24 West: 90
 Within 1m at W end. Open quarters facing: North: 32 South: 96 East: 95 West: 16

Plants (vascular and nonvascular) within 3m of transect:
 (Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant) }
Begonia eriola Descurainia
Stachys
Xan Par
Gonimia just outside 3m

Woody debris within: 3 m of transect; in what part of transect: north 3 m of transect; in what part of transect: SE
 Woody debris within: .05 ± .7 m of transect; in what part of transect: _____

Species: Pinon Tree at E end. Standing: 6 m away + 59 - 27 (%; right side of clinometer) 77
Pinon Tree at W end. Standing: 8 m away + 58 - 14 (%; right side of clinometer) 1.9

46
 suggest point above line
 to suggest pt N of line



precise direction of line w.r.t. tree 270°
 Length from tree trunk to tree trunk = 11.55 m
 Length from rebar to rebar = 5.8 m
 precise direction of line w.r.t. tree 90°

11.55
 7.7
 3.85
 3.8
 1.9
 1.6

Site No. RVA 09 Date: 7-31-97 Surveyors: ES/MLM

GPS #:

Work on downslope side of line = east South

Start at	NZ end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravels < 1 cm		3	4	3	1	4										
Gravel 1-2cm																
Gravel > 2-6cm																
Stones 6-15cm																
Rocks 15cm-1m		7	5				6									
Boulder > 1m																
Bedrock																
Soil		75	74			52	59	59.4	65	69	31	43	45	75	62.5	71
Sand			4			2		2	12	7		7				
litter		10	7			42	35	30	18	10	20	7	45	5		20
Woody debris 3-8cm																
Woody debris 8-30cm																
Woody debris > 30 cm																
Scat			1													
Xen Parc							1					1				
Lichen <i>Cladonia</i>			3				1									
Lichen <i>Bryoran</i> sp.											1				8	2
Lichen yellow crust rock																
Lichen green par rock		(4)	(1)													
Lichen H Gray crust hb		(5)														
Dark strap crust rock																
Moss black crust rock																
Moss Gray crust rock																
Moss White crust rock																
Moss brown crust rock																
Moss star																
H Green crust rock								(1.1)								
Liverwort																
<i>Colima</i>																
Algae																
Nostoc																
Vascular Species																
Basal veg: Bougra		2	1	4	7	2	7	8	4	2	3		8	3	3	7
Hand seedling								.1								
Canopy-shrub																
Canopy-forb																
Canopy-grass		4	2	9	15	4	20	25	10	4	7	2	17	6	6	12

Directions to Site: 21.2 m E. of Fence
Road - juniper Large at down wood upslope 25m from transect

General Site observations: _____

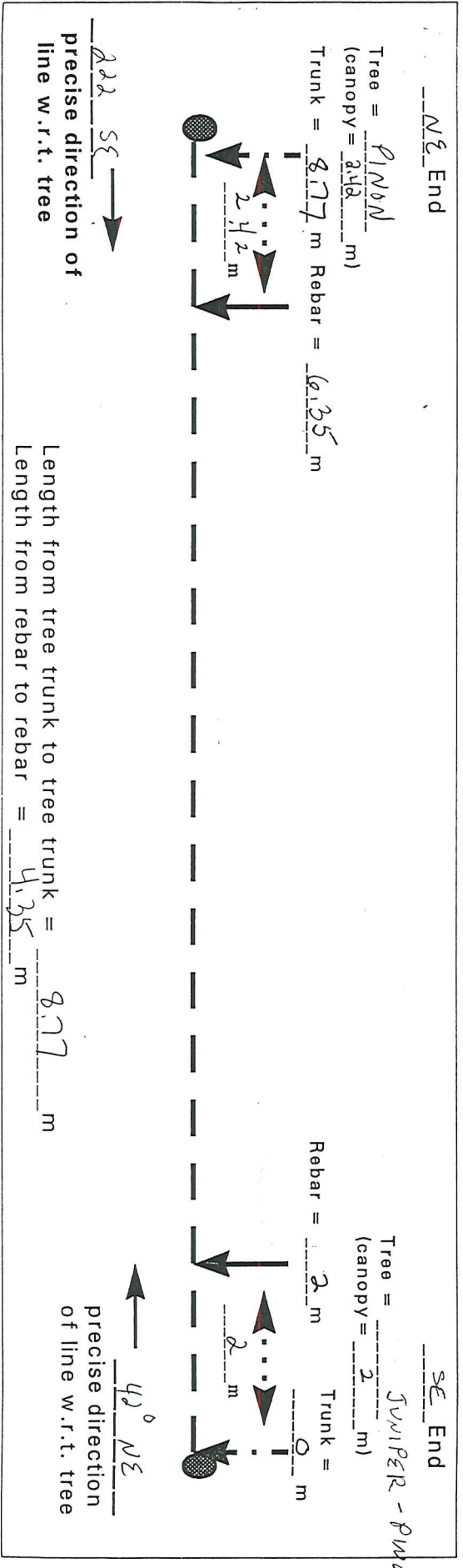
Primary Aspect: 59° Secondary Aspect: 118° Primary slope & direction: 5% SW → NE Secondary slope and direction: 5° NW → SE

Canopy cover of site: _____
 Mid-transect at 2.17m from W end Open quarters facing: North: 96° South: 92° East: 70° West: 89°
 Within 1m at West end. Open quarters facing: North: 93° South: 61° East: 16° West: 72°
 Within 1m at East end. Open quarters facing: North: 86° South: 92° East: 46° West: 85°

Plants (vascular and nonvascular) within 3m of transect:
 (Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant):
13 on spr. Rock porance lichen Star Moss Asparagus Des
(2) (back) green par Xan Par Usnea on down wood
Erids. Alata

Woody debris within: 11m NE m of transect; in what part of transect: SE
 Woody debris within: 12 m of transect; in what part of transect: SE

Species: JUNIPER Tree at SW end. Standing: 10 m away + 80 - 21 (%; right side of clinometer)
 Species: RUBEN Tree at NE end. Standing: 7 m away + 63 - 25 (%; right side of clinometer)



Work on downslope side of line = mostly rock

Site No. QNA 08	Date: 7-30-97	Surveyors: KS / MM	GPS #:	Work on downslope side of line = <u>mostly rock</u>														
Start at <u>Quadrant end</u>	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15			
Gravel < 1 cm	1		2		4	1	4		2									
Gravel 1-2 cm	2				4								3	3	3			
Gravel > 2-6 cm													2					
Stones 6-15 cm																		
Rocks 15 cm-1 m																		
Boulder > 1 m																		
Bedrock																		
Soil	42.5	22	74.8	43	69.3	24.5	6.4	28	30	31	56.5	47	66	66	73			
Sand																		
litter	37	60	8	7	6	23	18	6	10	15	12	30	14	8	12			
Woody debris 3-8 cm																		
Woody debris 8-30 cm																		
Woody debris > 30 cm																		
XAN Par									1				3					
Scat Rabbit	1	1							1.5					1				
Scat Chitonia						1			.5									
Lichen white crustace	3			40	17	40	65	55	50	40	85	11	10	19	1			
Lichen brown Fru	9	10	12	40	17	40	65	55	50	40	85	11	10	19	1			
Lichen colima				2	.5		.5			1								
Lichen nostoc				1			(.1)											
Lichen light green crustace rock					(.5)		(.1)		1				(.5)					
Lichen light green crustace rock					(.1)								(.5)					
Moss black crustace rock													(.5)					
Moss																		
Moss																		
Moss																		
Moss star	.5		.1		.1													
Liverwort																		
Algae verner	2	1	1	5														
Nostoc											1							
Vascular Species																		
Basal veg: Bougna	5	6	2	2	3	12	0	1	4	3	3	8	4	2	2			
Unit seedlings			.01		.1	.5												
Unit Fock											.5							
Canopy-shrub					.1	.5												
Canopy-fohb																		
Canopy-grass	7	10	10	10	7	25	11	2	7	7	5	15	2	4	4			

Forest Service Cryptogam Habitat Study

Site No. RNA 08	Date: 7-30-97	Surveyors: JM / LR	GPS #:	Work on downslope side of line = No/Yes											
Start at	end														
Gravels < 1 cm	Quad 11a	Quad 11b	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravel 1-2cm	16	12	5	3	1	7	3	14	3	3	5	5	10	10	4
Gravel > 2-6cm	3	2												7	1
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	55.9	63.4	45	31.9	61.5	35.9	19	42	51.9	42.5	35	36.5	75	65	67.9
Sand	12	3	5				15	15	8	20	6	5	12	15	7
litter	15	13	35	50	24	50	35	20	28	25	43	45	3	3	18
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat	1	1													
Lichen bryous fr															
Lichen Lecanora							2.5								
Lichen Xan par							1.5								
Lichen							8								
Lichen															
Moss S															
Moss															
Moss															
Moss															
Moss SFW	.1	.5			.1	.3									.1
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougra	7	5	10	12	8	10	9	6	7	6	8	8	8	8	2.5
Wild strawberries															
Canopy-shrub															
Canopy-forb															
Canopy-grass	2	10	8	8	13	35	15	14	13	14	12	10			8

Site No. RNA094 Date: 7.26.97 Surveyors: NW1 KS GPS #: 1 Work on downslope side of line = N. 274

Start at	end	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravels < 1 cm		4	4		8																
Gravel 1-2cm			3		5																
Gravel > 2-6cm			4																		
Stones 6-15cm																					
Rocks 15cm-1m			2		90	35															
Boulders > 1m																					
Bedrock																					
Soil		46.4	70.5	1.9	37	79.4	92.8	79	83	70	77	80.9	87.9	69.5	68	82					
Sand		12				8				6	12	8	4	4	8						
litter		22	12	4	9	6	3	11	10	12	2	6	5	15	9	2					
Woody debris 3-8cm																					
Woody debris 8-30cm																					
Woody debris > 30 cm																					
Scat rabbit						.5															1
Lichen Bryn frn	2																				
Lichen yellow crusts			(1)	(10)	(4)																
Lichen white crusts rck			(1)	(14)	(1)																
Lichen black crusts rck			(.5)	(10)	(7)																
Lichen light green rck	(.5)		(3)	(2)																	
more crust rck			(.1)	(6)	(2)																
Moss light gray rck				(10)	(15)																.5
Moss dark gray crusts rck																					.5
Moss green crusts rck																					
Moss																					
Moss str	1		.1	1	1	1	.1	2	3	4	.1	.1	.5								
Liverwort																					
Algae green			.5	1	1	2	1	1	1												
Nostoc																					
Vascular Species																					
Basal veg: Bougrea	10	4	3	4	2	1	.1	4	2	3	8										
wide spreading	.1				.1	.1															
Canopy-shrub																					
Canopy-forb	1				.5	.1															
Canopy-grass	3	9	5	7	4	7	5	5	5	5	1	1	20	4	3						

Site No. (NA#)	Date:	Surveyors:	GPS #:	Work on downslope side of line =											
Start at	end														
Gravels < 1 cm	Quad 46	Quad 47	Quad 48	Quad 49	Quad 50	Quad 51	Quad 52	Quad 53	Quad 54	Quad 55	Quad 56	Quad 57	Quad 58	Quad 59	Quad
Gravel 1-2cm	6	4	3	5	3	1									
Gravel > 2-6cm	5	4	3	4											
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	55	81	45	43.9	48.5	69.5	37	2	29	10	17	12	18		
Sand	10	5	9	10	5	5	8								
litter	4	0	1.5	23	37	25	8	3	35	86	82.5	77.5	76		
Woody debris 3-8cm	17		15												
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat	40.9		rabbits												
Lichen celtina			1.5		1.5	2.5					0.5	1			
Lichen brown fra															
Lichen															
Lichen															
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougra				13	5										
Wind seedling				1											
Wind herb															
Canopy shrub															
Canopy forb															
Canopy grass															

29. of road looks burnt

* * *

* * *

* * *

* * *

Forest Service Cryptogamic Habitat Study

Gps: 407 31214 S: 37 8406216

E: 722331.2

Time: 1525

Elev: 2393m

Site#: RMA 89

Date: 7.31

Surveyors: NM/KS

Directions to Site: 42m W. of Fence

General Site observations: Pinon-juniper, large burned wood NW of line, almost parallel

Primary Aspect: 67 Secondary Aspect: Primary slope & direction: 30° W→E Secondary slope and direction:

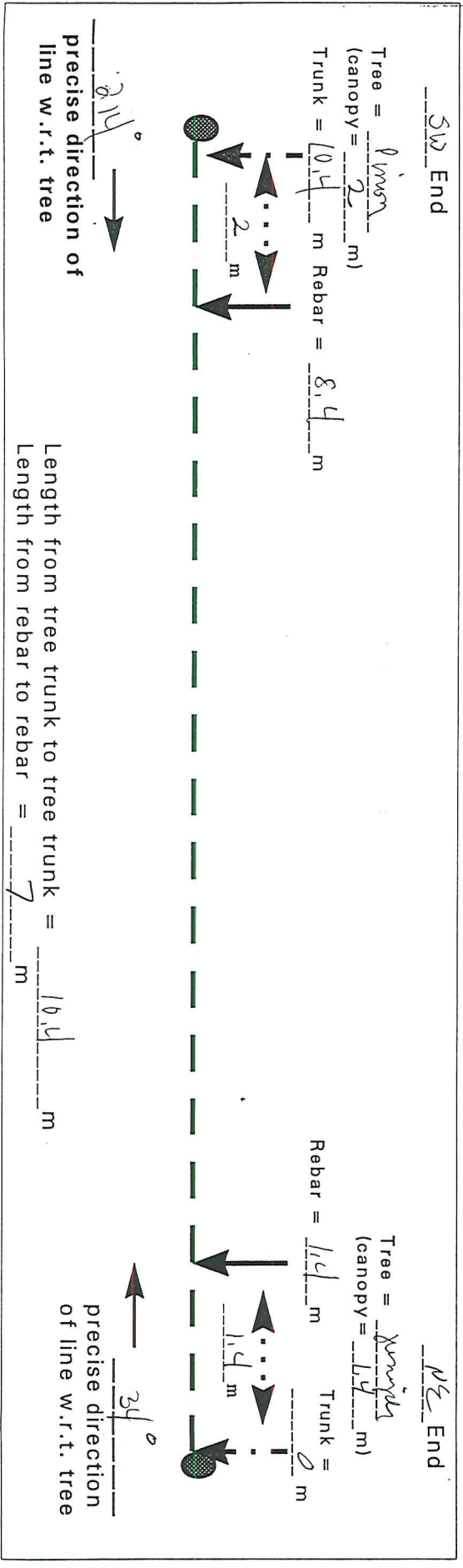
Canopy cover of site: Mid-transsect: 2.5 m from NW end ^{rebar} Open quarters facing: North: 22 South: 44 East: 95 West: 83
 Within 1m at NW end. Open quarters facing: North: 61 South: 96 East: 51 West: 69
 Within 1m at SW end. Open quarters facing: North: 84 South: 10 East: 90 East: 68

Plants (vascular and nonvascular) within 3m of transect:
 (Indicate when there are greater than 10 individuals in vicinity-ie if particularly abundant)

- Box Sca Grass - dryopsis
- Ericum
- Erica
- Yucca
- Stachys
- Urena
- Brown Fru

Woody debris within: 3.4 m of transect; in what part of transect: SW
 Woody debris within: 0-2 m of transect; in what part of transect: SW

Species: Juniper Tree at SW end. Standing: 2 m away + 3) - 20 (%; right side of clinometer)
 Species: Pinon Tree at SW end. Standing: 9 m away + 57 - 15 (%; right side of clinometer)



Forest Service Cryptogam Habitat Study

Work on downslope side of line = 55

Site No. 0912810	Date: 7/29/97	Surveyors: KS/AM	GPS #:												
Start at 58	end														
Gravels < 1 cm	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravel 1-2cm	2	3	4	4	3	1	2	35	45	11	61	50	14	4	
Gravel > 2-6cm		2	3				3	14	10	3					
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil															
Sand	2	2	2	3	3	3	6	15	21.5	30	15	32	15.5	12	
litter															
Woody debris 3-8cm	77	90.4	85.5	86.8	86.5	88	81.5	30	15	57	8	12	12	76.9	20.5
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat Rabbit	2	1.5	.5												
Lichen gya sw/wh lock			(11)		(11)		(11)			.5				.5	.5
Lichen lacle sw/wh - wood			(.11)				(1)	(.5)	(1)					(.5)	
Lichen phyllocladon				2											
Lichen Xan pars				.1											
Lichen wite sw/wh (.11)					(.5)		(.5)	(1)	(2)		(.5)				
Cladonia					.5		2.5	(1)							
Moss															.5
Moss															
Moss															
Moss															
Moss wid				.1											
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougrea	7	1	5	4	6	8	4	6	3	10	3	4		10	9
Wood Auding		.1												.1	
Canopy-shrub															
Canopy-forb															
Canopy-grass	20	4	20	8	25	21	0	18	4	14	8	5	.1	15	14

Site No. <i>MANN 016</i>	Date: <i>7.29.97</i>	Surveyors: <i>ES NM</i>	GPS #:	Work on downslope side of line = <i>SE</i>											
Start at <i>SE end</i>	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravel < 1 cm	30	2	2	6	25	10	14	15	12	4	30	32	11	8	16
Gravel 1-2cm					13				3		4	4			12
Gravel > 2-6cm															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	25	6	13	40	55	51.9	50	80	78	42.9	44.9	58	72	48.	40
Sand															
litter	35	67	74	45	4	25	27	4	7	27	10	4	8	20	10
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat <i>litter</i>	1	1		1	1	1	1			1	1				
Lichen															
Lichen															
Lichen <i>Custose whit rock (.1)</i>						(.1)	(.1)				(.1)	(.1)	(.1)		(.5)
Lichen <i>Crustose SC rock (.1)</i>						(.1)	(.1)								(.1)
Lichen <i>L+ orange crustose rock</i>															(.5)
Moss <i>star</i>	1					.1									
Moss															
Moss															
Moss															
Moss															
Liverwort															
<i>Algalveener</i>															3
Algae															
Nostoc															
Vascular Species															
Basal veg: <i>Bougrea</i>	8	9	9	8	2	12	8			25	6	2	9	18	12
<i>VNIID 522DLWB</i>								.1		.1					
Canopy-shrub															
Canopy-forb															
Canopy-grass	15	15	12	18	6	25	17	1	2	40	12	7	19	40	27

Site No. <i>M4406</i>	Date: <i>7-29-97</i>	Surveyors: <i>MM/WS</i>	GPS #:	Work on downslope side of line =											
Start at <i>SE</i> end															
Gravels < 1 cm	Quad <i>4/6</i>	Quad <i>4/7</i>	Quad <i>4/8</i>	Quad <i>4/9</i>	Quad <i>5/0</i>	Quad <i>5/1</i>	Quad <i>5/2</i>	Quad <i>5/3</i>	Quad <i>5/4</i>	Quad <i>5/5</i>	Quad <i>5/6</i>	Quad <i>5/7</i>	Quad <i>5/8</i>	Quad <i>5/9</i>	Quad <i>6/0</i>
Gravel 1-2cm	<i>8</i>	<i>10</i>	<i>6</i>	<i>15</i>	<i>6</i>	<i>15</i>	<i>30</i>	<i>41</i>	<i>10</i>	<i>6</i>	<i>35</i>	<i>30</i>	<i>4</i>	<i>15</i>	<i>50</i>
Gravel > 2-6cm	<i>11</i>	<i>11</i>	<i>4</i>	<i>12</i>	<i>8</i>	<i>15</i>	<i>15</i>	<i>7</i>	<i>5</i>	<i>8</i>	<i>5</i>	<i>13</i>	<i>12</i>	<i>13</i>	<i>13</i>
Stones 6-15cm	<i>6</i>	<i>4</i>		<i>9</i>	<i>7</i>										
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	<i>1.2</i>	<i>54.5</i>	<i>52.9</i>	<i>54</i>	<i>46</i>	<i>17.9</i>	<i>1/6</i>	<i>25</i>	<i>65</i>	<i>60.4</i>	<i>54.4</i>	<i>55</i>	<i>54</i>	<i>25</i>	<i>23.8</i>
Sand															
litter	<i>7</i>	<i>3</i>	<i>2.5</i>	<i>10</i>	<i>25</i>	<i>40</i>	<i>5</i>	<i>20</i>	<i>15</i>	<i>8</i>	<i>4</i>	<i>2</i>	<i>23</i>	<i>42.9</i>	<i>12</i>
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Seat <i>PURNY</i>										<i>2</i>					
<i>Xua Par</i>															
Lichen <i>Parva</i> <i>fav</i>		<i>.5</i>		<i>2.5</i>					<i>1</i>						<i>.1</i>
Lichen															
Lichen <i>black crust</i> <i>crk</i>															
Lichen <i>white crust</i> <i>fav</i>		<i>(1)</i>		<i>1</i>					<i>(2)</i>						<i>(1)</i>
Lichen <i>green crust</i> <i>rock</i> <i>(D)</i>		<i>(3)</i>		<i>(4)</i>											<i>(1)</i>
<i>IF SPAN</i> <i>rock</i>		<i>(1)</i>		<i>(4)</i>											
Moss <i>Collima</i>		<i>(1)</i>													
Moss <i>Peltigera</i>										<i>.5</i>					
Moss															
Moss <i>str</i>		<i>7</i>	<i>5</i>												
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal vege: <i>Bougra</i>	<i>10</i>	<i>7</i>	<i>2</i>	<i>2</i>	<i>18</i>			<i>10</i>	<i>4</i>	<i>6</i>			<i>6</i>	<i>5</i>	<i>1</i>
<i>And 1</i>					<i>.1</i>					<i>.1</i>				<i>.1</i>	
<i>And seedling</i>														<i>.1</i>	<i>.1</i>
Canopy-shrub															
Canopy-forb						<i>2</i>				<i>1</i>				<i>1</i>	<i>2</i>
Canopy-grass	<i>25</i>		<i>15</i>	<i>10</i>	<i>25</i>	<i>20</i>	<i>15</i>	<i>15</i>	<i>10</i>	<i>10</i>	<i>10</i>		<i>15</i>	<i>10</i>	<i>18</i>

Forest Service Cryptogamic Habitat Study

Gps: L073116AS: 3784094.5

E: 72244217

Time: 1025

Date: 7-31-97

Elev: 2370

Surveyors: RM/KS

Directions to Site: 25m E. of Pans Larson NE of Na Ringon Rd (road)

General Site observations:

at diagonal angle from southwest end. Most of ground wood at diagonal L from southwest end
Mostly pine, 1 juniper large downed part of tree west of line

Primary Aspect: 98 Secondary Aspect: _____ Primary slope & direction: 59° SE Secondary slope and direction: _____

Canopy cover of site:

Mid-transect: 3.15 m from 0 end Open quarters facing: North: 90 South: 54 East: 80 West: 74
 Within 1m at SW end. Open quarters facing: North: 90 South: 33 East: 85 West: 47
 Within 1m at NE end. Open quarters facing: North: 75 South: 82 East: 63 West: 92

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity if particularly abundant)
2.8 NE of transect down tree Bor Sita Ashrusalis sp.? Composite - same as yellow near camp - ric?
2.5 mid transect Southern pine Erica sp. MID Erica, etc. Bahia dis.
.75 USA Star Moss Xen Par

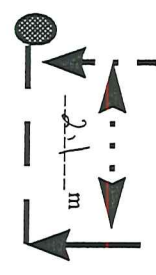
Woody debris within: .35 m of transect; in what part of transect: SW of line large fallen tree
.9 m of transect; in what part of transect: SW of line large fallen tree

Species: R10N Tree at SW end. Standing: 8 m away + 29 - 15 (%; right side of clinometer)
 Species: R10N Tree at NE end. Standing: 8 m away + 42 - 23 (%; right side of clinometer)

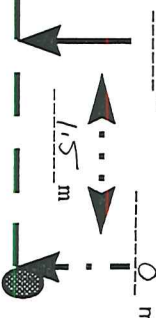
N1 End

SW End

Tree = R10N
 (canopy = 2.1 m)
 Trunk = 1.0 m Rebar = 7.9 m



Tree = R10N
 (canopy = _____ m)
 Rebar = 1.5 m Trunk = 0 m



25° SW →
 precise direction of line w.r.t. tree

Length from tree trunk to tree trunk = 10 m
 Length from rebar to rebar = 6.4 m

→ 77° NE
 precise direction of line w.r.t. tree

Site No. MAN07	Date: 7.8	Surveyors: RS/NM	GPS #:	Work on downslope side of line = SOUTH-EAST											
Start at West end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravels < 1 cm															
Gravel 1-2cm				2	3										
Gravel > 2-6cm															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil			8	15	20	8	20	18	35	13	26	46	39.8	47	49.8
Sand							2					5			
litter	80	89	92	82	74	90	58	73	53	88.5		26	30	40	35
Woody debris 3-8cm	20	11													
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat										0.5		1			
Lichen pyrenium frn															
Lichen Nadelman															
Lichen w/white omyc															0.1
Lichen															
Lichen															
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougra			3		2										
pyrid siddlingy															
Canopy-shrub															
Canopy-forb															
Canopy-grass			6	5				10		15	12	8	15	18	18

Site No. <u>M1107</u>	Date: <u>F. 31</u>	Surveyors: <u>NM/KS</u>	GPS #:	Work on downslope side of line = <u>South east</u>															
Start at	end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15	Quad 16		
Gravels < 1 cm	3	3	2	1	7	1	3	6	3	3	2	2	6	2	6	8	4	12	
Gravel 1-2cm																		3	
Gravel > 2-6cm																			
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	14	45	12	5	22	2	12	21.9	38.9	2	45	71	42.5	13.5	35.5				
Sand							2	2											
litter	74.9	46.5	85.5	89.9	26.45	42	80	65	22	91.5	46	10	32	75	40				
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat	4	1	1					1		1		1				1		1.5	
Lichen <u>Bryum</u>																			
Lichen																			
Lichen																			
Lichen <u>green crus rock</u>					(.1)		(.1)	(.1)	(.5)									(.5)	
Lichen <u>white crus (rock)</u>																			
Moss																			
Moss																			
Moss																			
Moss <u>star</u>		.5	.5						.1		1						.5	1	
Liverwort																			
Algae <u>yellow</u>								.1									.5		
Noctoc																			
Vascular Species																			
Basal veg: <u>Bougra</u>	4	4	1	4			3	4	3	5	4	3	1	6	3				
<u>Wild sorrel</u>	.1			.1															
Canopy-shrub																			
Canopy-forb	.1																		
Canopy-grass	10	9	2	11			8	8	7	20	10	5	6	15	9				

Site No.	Date	Surveyors	GPS #:	Work on downslope side of line = SOUTH EAS															
MAN 07	7/21	NW/KS		Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45	
Start at	end																		
Gravels < 1 cm	15	12	25	10	11	30	70	10	8	25	25	25	25	25	25	25	25	25	25
Gravel 1-2cm	6	2	3		2.5	5	3	3	5	5	5	5	5	5	5	5	5	5	5
Gravel > 2-6cm																			
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	36.9	27.5	4	4	7.5	24	12	5	16	5	16	5	13	10.5	17	7.9	21	45	8
Sand	12	10	25	10	15	10	3	5	10	10	10	10	10	10	10	10	10	10	10
litter	15	35	35	65	60	20	5	72	50	47	30	30	30	30	30	30	30	30	30
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat	1.5		2					1											
Lichen wet, dwarf-rock		(.5)	(.5)		(1.5)		(.5)												
Lichen open dwarf-rock							(.5)												(.5)
Lichen																			
Lichen																			
Lichen																			
Lichen																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Liverwort																			
Algae																			
Nostoc																			
Vascular Species																			
Basal veg: Bougrea		6	8	8	3	6	4	7	6	7	4	12	2	3					
WVND RELIN																			
ERL ALA																			
LD PIN																			
Canopy-shrub																			
Canopy-forb	1																		
Canopy-grass		12	14	15	8	12	10	11	5	12	6	25	20	30	4	10			

Forest Service Cryptogam Habitat Study

Site No. MA1102	Date: 7-28-97	Surveyors: NM / KS	GPS #:	Work on downslope side of line = East												
Start at	end	Quad 46	Quad 47	Quad 48	Quad 49	Quad 50	Quad 51	Quad 52	Quad 53	Quad 54	Quad 55	Quad 56	Quad 57	Quad 58	Quad 59	Quad 60
Gravels < 1 cm		1	2		9	4	10	9	6	1	1	1	1	2	7	25
Gravel 1-2cm																
Gravel > 2-6cm																
Stones 6-15cm																
Rocks 15cm-1m																
Boulder > 1m																
Bedrock																
Soil		83	45	53.9	74.9	64.9	72.9	57.9	65.4	65	51.9	35.8	55.9	47.9	75.9	50
Sand																
litter		8	33	35	12	25	15	22	25	30	37	55	45	40	12	20
Woody debris 3-8cm																
Woody debris 8-30cm																
Woody debris > 30 cm																
Scat 50000				1		1					2				1	
Lichen																
Lichen																
Lichen																
Lichen																
Lichen																
Lichen																
Moss																
Moss																
Moss																
Moss																
Moss																
Liverwort																
Algae																
Nostoc																
Vascular Species																
Basal veg: Bougra		3	18	10	4	4	6	5	3	4	8	8	1	10	2	5
UMID Sca 1000																
Canopy-shrub																
Canopy-forb																
Canopy-grass		9	45	88	6	7	17	12	15	7	18	25	5	20	10	15

Forest Service Cryptogam Habitat Study

Site No. WAW/dg	Date: 7.3	Surveyors: NM/KS	GPS #:	Work on downslope side of line = EAST											
Start at SW end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravels <1 cm		5	15	10	5	10	4								
Gravel 1-2cm	4		2	3	4		1							4	8
Gravel >2-6cm								4							3
Stones 6-15cm															
Rocks 15cm-1m															
Boulder >1m															
Bedrock															
Soil	21	76.4	53.4	52	51.9	41.9	56.8	53.9	18	63.5	74.5	40	45.9	52	60.3
Sand	10	7	5	5	10	5	3	5	10	20	9	3	25	10	3
litter	50	20	10	25	23	40	28	30	60	20	9	57.8	15	25	23
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris >30 cm															
Scat v algt											1				.5
Lichen Cladonia	4.5		2.6	.5			.1		1		.5				.1
Lichen Parmelia			4		.5				4	4.5	6		1		
Lichen urost. crusto - rocks											(1)				
Lichen calmar															
Lichen lft green - rocks											(.5)				
Lichen with crusta dryobolus															
Moss															
Moss															
Moss															
Moss star	.5						.1					.11			
Livewort															
Algae verueta							.5								
Nostoc															
algae v															
Vascular Species															
Basal veg: Bougrea	10	.5	8	4	5	3	7	6	6	6	5	5	5	3	
LES 94															
wild seedling	.1	.1	.1		.1	.1		.1					.1		.1
Canopy-shrub															
Canopy-forb															
Canopy-grass	50	4.1	.1	10	7	14	18	12	13	20		12	10	9	2

Site No. <u>WAK109</u>	Date: <u>7/31</u>	Surveyors: <u>NJM</u>	<u>K5</u>	GPS #:	Work on downslope side of line = <u>Yes</u>											
Start at <u>W</u>	end	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30
Gravel < 1 cm	2	2	3	7	6	8	3	1								
Gravel 1-2cm																
Gravel > 2-6cm	3															
Stones 6-15cm																
Rocks 15cm-1m																
Boulder > 1m																
Bedrock																
Soil	88.6	48	80.9	70.9	80	77	28	12	60.5	62	90	73	17.5	84	45	
Sand																
litter	5	46	10	15	12	9	65	82.4	32	30	3	20	6	6	50	
Woody debris 3-8cm																
Woody debris 8-30cm																
Woody debris > 30 cm																
Scat		2					1	1.5	1		1				2	
Lichen brown frx	1.5		1	1												
Lichen Cladonia																
Lichen white crusts	1.5															
Lichen lt green crusts	1.5															
Lichen white crusts	1.5															
Lichen white crusts	1.5															
Moss green crusts	1.5															
Moss																
Moss																
Moss																
Moss																
Liverwort																
Algae Veger				2												
Nostoc																
Vascular Species																
Basal veg: Bougrea		8	4	4	2	3	3	1	1	1	2		3		20	
Wild seed	1		.1													
Wild Ashwaglas?																
Canopy-shrub																
Canopy-forb	1						2		3+1							
Canopy-grass	3	18	8	7	4	6	7	2	2	2	3	1	5		5	

Site No.	Date:	Surveyors:	GPS #:	Work on downslope side of line =																	
Start at	end																				
Gravels < 1 cm	Quad 3.1	Quad 3.2	Quad 3.3	Quad 3.4	Quad 3.5	Quad 3.6	Quad 3.7	Quad 3.8	Quad 3.9	Quad 3.10	Quad 3.11	Quad 3.12	Quad 3.13	Quad 3.14	Quad 3.15	Quad 3.16	Quad 3.17	Quad 3.18	Quad 3.19	Quad 3.20	
Gravel 1-2cm	10	7	8	3	9	8	12	23	6	6	6	4	12	7	5	3					
Gravel > 2-6cm	2																				
Stones 6-15cm																					
Rocks 15cm-1m																					
Boulder > 1m																					
Bedrock																					
Soil	74	50	48.9	43	53.9	54.9	80	36	51.9	81.9	55.9	55.9	55	47.8	76						
Sand			4	2	1	1	9	1	1	1	1	1	1	1	1						
litter	11	35	35	45	32	30	9	35	30	12	30	35	30	40	12						
Woody debris 3-8cm																					
Woody debris 8-30cm																					
Woody debris > 30 cm																					
Scat				1																	
Lichen																					
Lichen																					
Lichen																					
Lichen (F. gray cras)																					
Lichen (black cras)																					
Moss																					
Moss																					
Moss																					
Moss																					
Moss																					
Moss																					
Liverwort																					
Algae v Papper																					
Nostoc																					
Vascular Species																					
Basal veg: Bougrea		8	2.	6	4	6	5	12	11	4	7	8	7	3							
Mid seedling			.1		.1	.1		.1	.1	.1	.1	.1	.1	.1							
Les 11																					
Canopy-shrub																					
Canopy-forb																					
Canopy-grass	3	12	.4	8	.1	.1	4	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	

(.5)
(.11)
(.11)

Forest Service Cryptogamic Habitat Study

Gps: 407 30234 S: 378463518

Site#: MAN 8

Date: 7-31-97

Surveyors: KS / NM

Elev: 2384 m

Directions to Site: 15.3 m E. of Pole

General Site observations: Run, small ant mound

Primary Aspect: 92° Secondary Aspect: _____ Primary slope & direction: 5% Secondary slope and direction: WSE

Canopy cover of site:

Mid-transect: 3.17 m from SW end ^{rebar} Open quarters facing: North: 93 South: 89 East: 92 West: 75
 Within 1m at SW end. Open quarters facing: North: 96 South: 25 East: 87 West: 65
 Within 1m at NE end. Open quarters facing: North: 60 South: 96 East: 75 West: 96

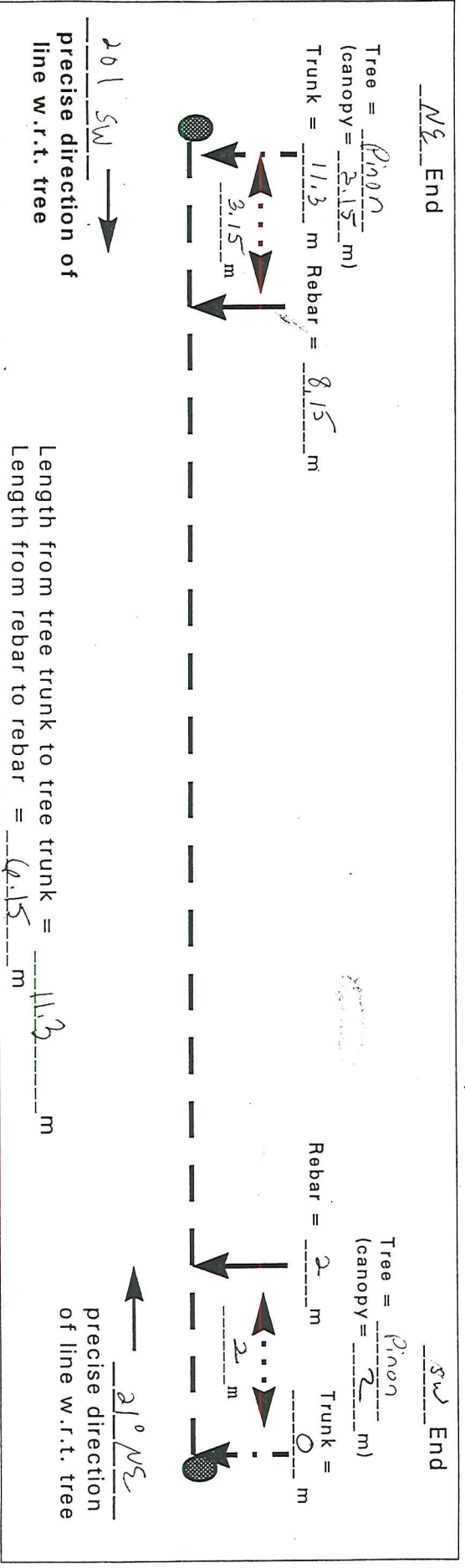
Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals
 In vicinity - ie if particularly abundant)

- hou.sra. heu.eri. 7/0
- grec. sitanion hysprij lupin Asparagus sp?
- Eric. sta. DESCURANIA
- USNE? YANFAR Brown find - small ant n 2cm

Woody debris within: 05 m of transect; in what part of transect: NE section end of fallen tree
 Woody debris within: 12 m of transect; in what part of transect: Middle North side - 2, SWX.15

Species: PINON Tree at WEST end. Standing: 8 m away + 47 - 22 (%; right side of clinometer)
 Species: PINON Tree at EAST end. Standing: 8 m away + 60 - 19 (%; right side of clinometer)



Site No. <i>MAN 08</i>	Date: <i>7-30-97</i>	Surveyors: <i>WJ/RS</i>	GPS #:	Work on downslope side of line = <i>east</i>														
Start at <i>SKD end</i>	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15			
Gravels < 1 cm		2	4	4	22	7	4	12	17	8	7	2	9	20	18			
Gravel 1-2cm				3									2	2	4			
Gravel > 2-6cm														3	5			
Stones 6-15cm																		
Rocks 15cm-1m																		
Boulder > 1m																		
Bedrock																		
Soil	4	4	8	7	9	17	50	45	60.4	60.9	59.4	27.5	40.9	54.5	47			
Sand																		
litter	93.5	91.5	87.5	83	66.9	72.4	44.5	42	20	30	30	100	45	20	24			
Woody debris 3-8cm																		
Woody debris 8-30cm																		
Woody debris > 30 cm																		
Seat <i>Leafy</i>										1								
Lichen <i>Brown Sw</i>	2	2	.5	3	2	1	1	.5	.1	.1	.1	.5	.1	.5				
Lichen <i>Collina</i>																		
Lichen <i>Cladonia</i>																		
Lichen <i>H green crvs rck</i>									(.5)					(.5)	(.1)			
Lichen <i>Black crvs rck</i>															(.5)			
Lichen <i>green crvs rck</i>															(.5)			
Moss <i>H gray crvs rck</i>															(1)			
Moss																		
Moss																		
Moss <i>Star</i>	.5							.5										
Liverwort																		
Algae																		
Nostoc		.5																
Vascular Species																		
Basal veg: <i>Bougrea</i>													2	3	2			
Wild seed						.1												
Canopy-shrub																		
Canopy-forb						.1												
Canopy-grass													4	5	5			

Site No.	Date:	Surveyors:	GPS #:	Work on downslope side of line =															
MAN 08	7-30-97	NM	K5	FASJ															
Start at	end	Quad 16	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30			
Gravel < 1 cm	10	12	12	3	18	25	25	23	13	25	7	5	15	12	15	33			
Gravel 1-2 cm	11	14	6	1	7	6	11	11	2				11	18	5	4			
Gravel > 2-6 cm																			
Stones 6-15 cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	54.5	54	46	46	47	42	28	54	26	36	52	58.5	42	66	76.4				
Sand	516	5	38	5	16	10	15	10	22	5	15	8	13	9	17				
Litter							30	15	25	40	25	6	5	5	15				
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Seat	1.5			.5		1				1		1.5							
Lichen																			
Lichen																			
Lichen																			
Lichen																			
Lichen																			
Lichen																			
Lichen																			
Moss																			
Moss																			
Moss																			
Moss																			
Liverwort																			
Algae																			
Nostoc																			
Vascular Species																			
Basal veg: Bougrea				4.5	1		3	4	2	7	3				4.5				
Wood seedling																			
Canopy-shrub																			
Canopy-forb																			
Canopy-grass	5	8	15	7	2	6	7	6	15	9				2	.1				

Forest Service Cryptogam Habitat Study

Site No.	Date:	Surveyors:	GPS #:	Work on downslope side of line =											
MAV 10	8-1-97	ES WM		SE											
Start at SW end															
Gravel < 1 cm	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15
Gravel 1-2cm	11	2	5	10	4	12	6	18	6	17	5	13	10	5	4
Gravel > 2-6cm	5	2	1			7	3	6	20	5	3	10	10	5	2
Stones 6-15cm															6
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	28	15	20	18	20	26	35	6	39	29	36.5	23	23	20	8
Sand					5	15		20	10	20	8	16	16	15	15
litter	43	54.5	58	38.5	36	18	36	22	18	25	16	40	40	55	50
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat	1							1					1	3	2
Lichen X ₄ Y ₄	1.8	25	10	28	30	13	12	18		4	14			7	5
Lichen															
Lichen															
Lichen															
Lichen green crust cork				(15)											
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougrea	4		6	5.5	11	10	5	9	7	8	2.5	10		2	16
David peddling		15													
LES seedling		15													
Canopy-shrub															
Canopy-forb		3.12	2	16	24	25									
Canopy-grass	5		16	16	24	25	20	26	25	25	10	22	12	28	

Forest Service Cryptogamic Habitat Study

Gps: L0801154 S: 2 E: - Site#: MAN18

Time: 9:35 Date: 8-1-97

Elev: -

Surveyors: NM/KS

Directions to Site: 24 Meters from Fence line

General Site observations: NE Juniper is 3/4 dead and SE of it is downed tree

Equal Pinon and Juniper largest Brown fir SE of here about 20m

Primary Aspect: 83° Secondary Aspect: 117° Primary slope & direction: SW → NE 49% Secondary slope and direction: NW → SE 49%

Canopy cover of site:

Mid-transsect: 2.7 m from SW end Open quarters facing: North: 96

Within 1m at SW end. Open quarters facing: North: 73

Within 1m at NE end. Open quarters facing: North: 75

South: 83 East: 96 West: 42

South: 94 East: 96 West: 7

South: 93 East: 29 West: 86

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity if particularly abundant)

Erigeron heulei Boussa Composite (like near camp)
Erigeron Astragalus sittkys Des

1.1 m North of mid transect is Yan BC Brown fir Pinon tree
1.6 m of transect; in what part of transect: bottom of trunk - tree falls north west (NE) of End rebar
1.2 m of transect; in what part of transect: part of Green tree SE of End rebar

Species: Pinon Tree at SW end. Standing: 7 m away + 84 - 19 (%: right side of clinometer)
 Species: Juniper Tree at NE end. Standing: 8 m away + 16 - 25 (%: right side of clinometer)

N2 End

Tree = JUNIPER
 (canopy = .89 m)

Trunk = 10.27 m Rebar = 9.38 m



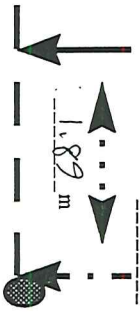
24 SW →

precise direction of line w.r.t. tree

SW End

Tree = Pinon
 (canopy = 1.89 m)

Rebar = 1.89 m Trunk = 0 m



64° NE

precise direction of line w.r.t. tree

Length from tree trunk to tree trunk = 10.27 m
 Length from rebar to rebar = 7.49 m

489
4.5
4.3
4.2
4.1
4.0
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3.0
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

Forest Service Cryptogam Habitat Study

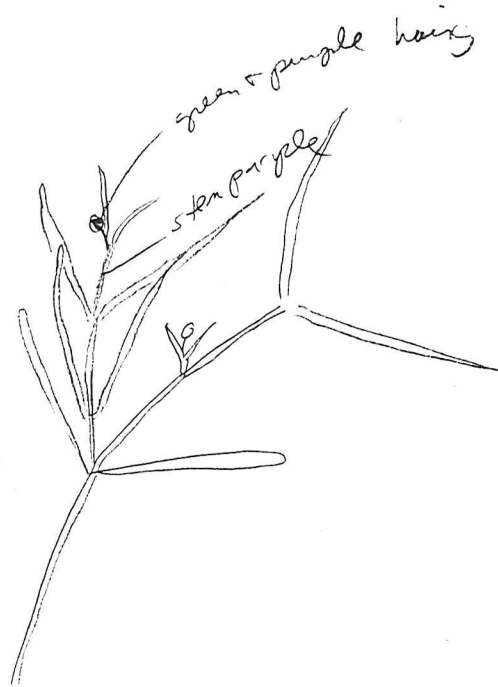
Work on downslope side of line = EAST

Site No. WBN09	Date: 7.31	Surveyors: NM/KS	GPS #:	Work on downslope side of line = EAST															
Start at	end	Quad 1/1	Quad 1/2	Quad 1/3	Quad 1/4	Quad 1/5	Quad 1/6	Quad 1/7	Quad 1/8	Quad 1/9	Quad 1/10	Quad 1/11	Quad 1/12	Quad 1/13	Quad 1/14	Quad 1/15	Quad 1/16		
Gravels < 1 cm	3																		
Gravel 1-2cm	3																		
Gravel > 2-6cm																			
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	31.5	37.9	46.4	20	78.8	32	20	25	30	43	15								
Sand																			
litter	30	55	45	54.5	12	27	72.5	64	54.9	43	76.9								
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat	valkit	1.5	2		3.5			2		2	1								
Lichen brown frw	6																		
Lichen Xmpyr	25	1	.5	10	2	6	1.5	3		.1	.1								
Lichen																			
Lichen																			
Lichen																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Liverwort																			
Algae																			
Nostoc																			
Vascular Species																			
Basal veg: Bougra	2	4	7	2	4	3	6	6	12	3	7								
wind seedling		.1	.1		.1				.1										
Canopy-shrub																			
Canopy-forb																			
Canopy-grass	4	11	12	4	5	5	12	9	15	12	15								

Work on downslope side of line = 52

Site No. <i>MA2410</i>	Date: <i>8-1-97</i>	Surveyors: <i>ks/mm</i>	GPS #:	Work on downslope side of line = 52															
Start at <i>SW</i> end	Quad 14	Quad 17	Quad 18	Quad 19	Quad 20	Quad 21	Quad 22	Quad 23	Quad 24	Quad 25	Quad 26	Quad 27	Quad 28	Quad 29	Quad 30				
Gravels < 1 cm	5	7	4	4	1	45	2	1	3	2	1	5	1	1	2				
Gravel 1-2cm	1	7	2	2	1	3	1	1	2	2	9	9	12	5	2				
Gravel > 2-6cm																			
Stones 6-15cm																			
Rocks 15cm-1m																			
Boulder > 1m																			
Bedrock																			
Soil	12	23	12	6	10	5	20.9	5	2	8	4	12.9	31	5	16				
Sand	42.5	54.5	15	25.9	26	24.5	22	17	27	3	27	23	7	36	30				
litter	30	10	45	53	40	42	40	30	40	52.9	28	23	19	19	30				
Woody debris 3-8cm																			
Woody debris 8-30cm																			
Woody debris > 30 cm																			
Scat		1	1								5244		5244	5244					
Lichen <i>Xan Par</i>	5	4	16	5	7	13	8	32	15	18	12	9	24	27	13				
Lichen <i>Grav Fru</i>				.1				2	3										
Lichen																			
Lichen																			
Lichen																			
Moss																			
Moss																			
Moss																			
Moss																			
Moss																			
Liverwort																			
Algae <i>Vandellia</i>					2														
Nostoc																			
Vascular Species																			
Basal veg: <i>Bougra</i>	4.5		5	4	14	7	5	12	8	12	3	9	13	7	9				
<i>VIVID SIDA</i>		.5																	
<i>K&A ERISSELIUS</i>						1		1		.1		.1		2					
<i>LIVID FULVA</i>							11					4	1						
<i>ERIDYAN</i>																			
Canopy-shrub																			
Canopy-forb																			
Canopy-grass	12	7	9	15	28	25	10	30	20	25	9	12	26	8	18				

7/2/97



long thin leaves
of

Forest Service Cryptogam Habitat Study

Site No. MW #13	Date: 8-1-92	Surveyors:	GPS #:	Work on downslope side of line = SE											
Start at SW end															
Gravels < 1 cm	Quad 31	Quad 32	Quad 33	Quad 34	Quad 35	Quad 36	Quad 37	Quad 38	Quad 39	Quad 40	Quad 41	Quad 42	Quad 43	Quad 44	Quad 45
Gravel 1-2cm	7	3	3	2	4	10	5	3	5	2	4	6	22	20	20
Gravel > 2-6cm															
Stones 6-15cm															
Rocks 15cm-1m															
Boulder > 1m															
Bedrock															
Soil	58	76	87	59	78.5	74	73	57	84	63	13	81	67	66	68
Sand	12	5	10	4	6	3		12	5	10	7	7	10	12	3
litter	10	9		25	5	17	25	18	4	10	23	3		1	3
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris > 30 cm															
Scat	4				15										
Lichen <i>Xan Par</i>	7		4	2	2		15	6	4	7	1			1	
Lichen <i>Brown Fru</i>															
Lichen															
Lichen															
Lichen <i>H gray crus rock</i>												(1)			(.5)
Moss															
Moss															
Moss															
Moss															
Moss															
Liverwort															
Algae															
Nostoc															
Vascular Species															
Basal veg: Bougra		7		8	1										
Canopy-shrub															
Canopy-forb															
Canopy-grass	6	30	10	25	2		9	4	1	9	10				

Work on downslope side of line =

Site No	Date	Surveyors	GPS #	Work on downslope side of line =															
Start at	end			Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15	
Gravels < 1 cm	4	12	3	4	10	4	8	12	20	12									
Gravel 1-2 cm	6	3					4												
Gravel > 2-6 cm																			
Stones 6-15 cm																			
Rocks 15 cm-1 m																			
Boulder > 1 m																			
Bedrock																			
Soil	82	81	49	67	69	65	80	82	84	75	82	78	77	69					
Sand																			
litter	5	2	22	17	10	24	11	4	1	2	2	14	12	15					
Woody debris 3-8 cm																			
Woody debris 8-30 cm																			
Woody debris > 30 cm																			
Scat Rabbit							1					1							
Colima					.5														
Lichen Brown fr	2	.5																	
Lichen																			
Lichen																			
Lichen green crust	(1)	(1)		(1)	(.1)		(.5)	(.5)	(1)	(1)	(1)								(.1)
white bark	(1)	(1)		(1)	(.5)		(.5)	(.5)	(1)	(1)	(1)								
Moss XAN PAN																			
Moss																			
Moss																			
Moss																			
Moss Star																			
Liverwort																			
Algae yellow																			
Nostoc																			
Vascular Species																			
Basal veg: Bougra	1	1	26	12	11	7	4					4	4	16					6
Canopy-shrub																			
Canopy-forb																			
Canopy-grass	2	2	40	20	20	15	10	4	2	2	1	6	13	28					10

Forest Service Cryptogam Habitat Study

Site No. PNA #6	Date: 7-29-97	Surveyors: ES / DM		GPS #:	Work on downslope side of line =										
Start at East end	Quad 6e1	Quad 6e2	Quad 6e3	Quad 6e4	Quad 6e5	Quad 6e6	Quad 6e7	Quad 6e8	Quad 6e9	Quad 70	Quad 71	Quad e	Quad	Quad	Quad
Gravels <1 cm	27	23	25	8	10	5	13	40	22	45	40				
Gravel 1-2cm			2					6	3	8	1				
Gravel >2-6cm			4												
Stones 6-15cm															
Rocks 15cm-1m															
Boulder >1m															
Bedrock															
Soil	50.9	54	47.9	48.5	30.9	38	49	28.9	70	31	23.9				
Sand															
litter	15	15	12	35	45	45	20	14	4	16	35				
Woody debris 3-8cm															
Woody debris 8-30cm															
Woody debris >30 cm															
Scat Rabbit				1				1	1						
Lichen brown frx			5												
Lichen brown crust				1											
Lichen															
Lichen green crust rock (1)		(1)	(5)				(1)	(1)							
Lichen white crust rock (1)		(1)	(1)				(1)	(1)							
gray crust rock			(.5)				(.5)			(.5)	(.1)				
Moss															
Moss															
Moss															
Moss star	.1		.1	.5	1.5	2									
Liverwort															
Algae venger			2	2		4									
Nostoc															
Vascular Species															
Basal veg: Bougrea	7	3	7	4	12.5	6	4								
Res. seedlings					.1										
ENI Q/LK							4								
UNID SANDLIND															
Canopy-shrub															
Canopy-forb															
Canopy-grass	12	5	15	10	18	10	10	2	2		.5				

Forest Service Cryptogamic Habitat Study

Gps: L072912B S: 3783985.3

E: 722369.3

Date: 7.29

Elev: 2459

Surveyors: N/VN

Directions to Site: 51m W. of Fence.

General Site observations:

Primary Aspect: 78°

Secondary Aspect: _____

Primary slope & direction: 37° WSE

Secondary slope and direction: _____

Canopy cover of site: _____

Mid-transect: 35 m from _____ end

Open quarters facing: _____

North: 89%

South: 91%

East: 93

West: 96

Within 1m at SW end. Open quarters facing: _____

North: 94%

South: 83%

East: 96%

West: 38%

Within 1m at NE end. Open quarters facing: _____

North: 91%

South: 86

East: 83

West: 96

Plants (vascular and nonvascular) within 3m of transect:

(Indicate when there are greater than 10 individuals in vicinity - ie if particularly abundant)

- Erica jun
- Erica elia
- Xan for
- Star Moss
- Brown for
- Usnea
- Colima - under tree
- on downed wood

Woody debris within: 15 m of transect; in what part of transect: downed tree parallel to line (N) to 4.6 but

Species: Pursh Tree at SW end. Standing: _____

Tree at SW end. Standing: _____

Tree at SW end. Standing: _____

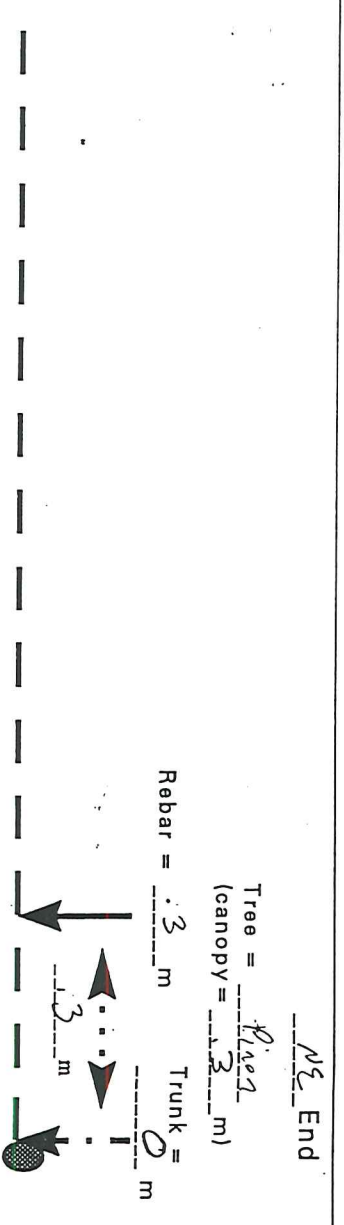
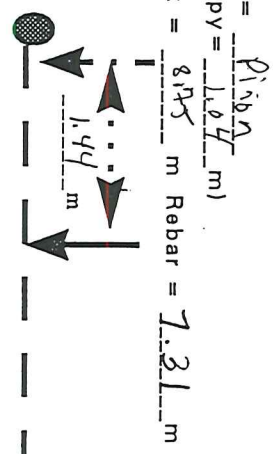
Tree at SW end. Standing: _____

Tree at SW end. Standing: _____

Tree at SW end. Standing: _____

End

NE End



precise direction of line w.r.t. tree

Length from tree trunk to tree trunk = 8.75 m
Length from rebar to rebar = 7.01 m

precise direction of line w.r.t. tree

Work on downslope side of line = SOUTH

Site No. RNA 07	Date: 7/30	Surveyors: NM/KS	GPS #:	Work on downslope side of line = SOUTH														
Start at Foot end	Quad 1	Quad 2	Quad 3	Quad 4	Quad 5	Quad 6	Quad 7	Quad 8	Quad 9	Quad 10	Quad 11	Quad 12	Quad 13	Quad 14	Quad 15			
Gravels < 1 cm	1		5	3	1.5	10	15	15	20	20	15	1	7	5	25			
Gravel 1-2cm	3		4	3	2	6		9	9	7	5	6	8	3	5			
Gravel > 2-6cm															4			
Stones 6-15cm																		
Rocks 15cm-1m																		
Boulder > 1m																		
Bedrock																		
Soil	10	15	12	18	83.4	77.6	76.8	72.1	67.3	62.4	60.9	34.4	62.5	65.9	37.8			
Sand																		
litter	71.3	69.2	40	45.8	10	1	.5	.1	1	5	5	8	18	20	20			
Woody debris 3-8cm																		
Woody debris 8-30cm																		
Woody debris > 30 cm																		
Scat rabbit	1				1										.5			
Lichen WWL C	2	3																
Lichen Xan PAR	20	3	25	15				3.5	1				2.5					
Lichen WWL SWP -Alph. 1		.5		5														
Lichen glaucina	.5	2																
Lichen hibernica	3.5	1.5	12		.1	5	7	.1	2.5	(2)	1	6	.5		(2)			
green swathe .5				(1)														
Moss <i>Platycnium</i> -rock						(1)												
Moss <i>Dryoglossum</i> -rock																		
Moss																		
Moss star	.1	.1	.1			.1									.5			
Liverwort																		
Algal wrenw													2.5					
Algae						.1	.5	.1	.1	.5	.1							
Nostoc			2	.1		.1	.5	.1	.1	.5	.1							
Vascular Species																		
Basal veg: Bougrea	4.5	4		10														
ERI JAN																		
wind seedling	.1	.1	.1	.1	2	4.2	.2	.1	.1	.1		.3						
PAI																		
Canopy-shrub																		
Canopy-forb	5	10	.1	.1	2	.2	.2	.1	.1	.5		.1	9	.1	.1			
Canopy-grass	15	7	2	14						4	10	6		6	15			