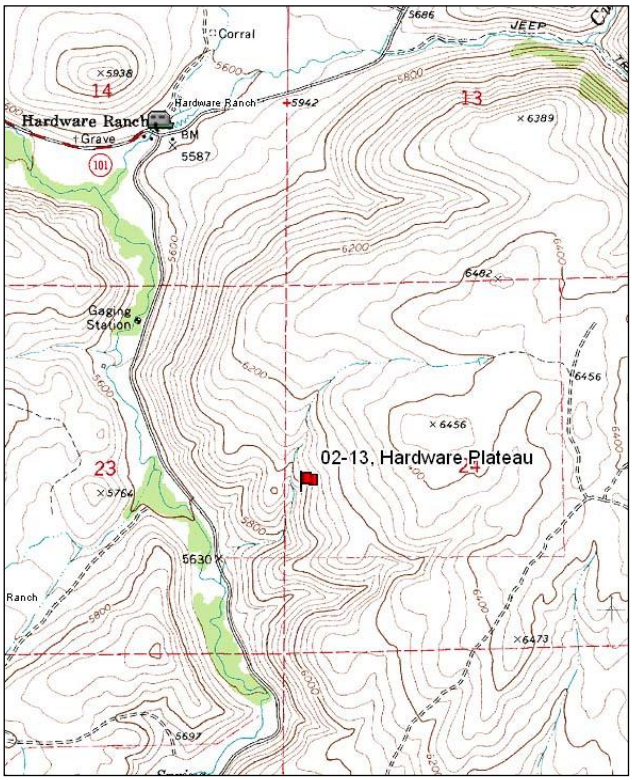
HARDWARE PLATEAU - TREND STUDY NO. 2-13-11

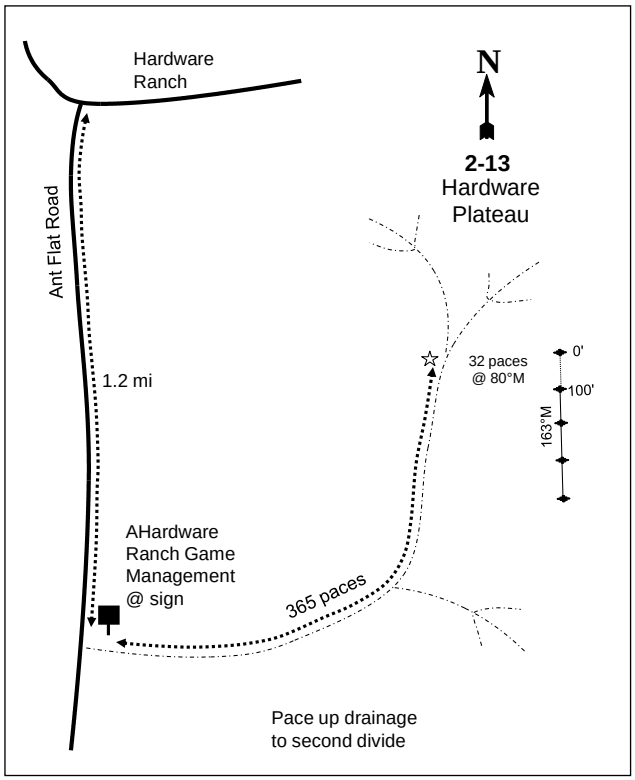
Vegetation Type: Mountain Big Sagebrush
Range Type: Crucial Deer Winter, Crucial Elk Winter
NRCS Ecological Site Description: Mountain Stony Loam (Mountain Big Sagebrush), R047XA461UT
Land Ownership: DWR
Elevation: 6,000 ft (1,829 m)
Aspect: West
Slope: 50%
Transect bearing: 163° magnetic
Belt placement: line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft), line 4 (71ft)

Directions:
From Hardware Ranch, proceed south on the Ant Flat road for 1.2 miles. This mileage should end at a sign that reads: "Welcome to Hardware Ranch Game Management Area." Stop here. Walk up the bottom of the wash (to the east of the sign) 365 paces, to the second very definite fork in the drainage. From the point where the wash divides take a bearing of 80 degrees magnetic and walk 32 paces to the 0-foot stake of the baseline, marked by browse tab #7984. The baseline runs at 163 degrees magnetic.

Map Name: Hardware Ranch



Diagrammatic Sketch:



Township: 10N Range: 3E Section: 24

GPS: NAD 83, UTM 12S 453427 E 4604171 N

HARDWARE PLATEAU - TREND STUDY NO. 2-13

Site Information

Site Description: This study is located a short distance up one of the small draws at the western edge of the Hardware Plateau, which is located on Hardware Ranch administrated by the Division of Wildlife Resources (DWR). The area is crucial wintering range for deer and elk. The site is characterized by a mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) community, but the study area is dominated by perennial grasses. Pellet groups for elk were numerous in 1984. However, elk pellet groups have been sampled in low abundance since 2001. Deer pellet groups were high in abundance in 2001, but have been sampled in low abundance since 2006. Deer carcasses were found in all sample years, except 1990 and 2011; and a deer was flushed from a draw in 1996. Sampled cattle sign has been minimal since 2001 (Table - Pellet Group Data). Chukars were seen in 1990, and yellow bellied marmots were seen in 2001.

Browse: The preferred browse species found on the site are mountain big sagebrush, Saskatoon serviceberry (*Amelanchier alnifolia*), and antelope bitterbrush (*Purshia tridentata*). Mountain big sagebrush occurs in low densities, with decreases in density over the course of the study. The sagebrush population has had a history of high decadence. The population is centered within the mature age class, with little recruitment of young plants over the duration of the study. Dead sagebrush plants have been numerous in the past; however, no dead plants were observed in 2011. Saskatoon Serviceberry and antelope bitterbrush both are low density populations. The serviceberry population has historically been centered within the young age class. However, the serviceberry demographic population has shifted to the mature age class. Serviceberry has displayed good health and low decadence over the duration of the study. Serviceberry was heavily browsed in 2011. The bitterbrush population has historically had lower numbers within the mature population and centered within the decadent population, but has since become an exclusively mature population. Bitterbrush was moderately browsed in 2011. Woods rose (*Rosa woodsii*) and mountain snowberry (*Symphoricarpos oreophilus*) are the most numerous browse species, but have displayed mostly light use. Increaser shrubs are numerous on the site and include narrowleaf low rabbitbrush (*Chrysothamnus viscidiflorus* ssp. *viscidiflorus*) and Oregon grape (*Mahonia repens*) (Table - Browse Characteristics).

Herbaceous Understory: The study area has good perennial grass cover; however, cheatgrass (*Bromus tectorum*) provided a high amount of fine fuel litter. Bluebunch wheatgrass (*Agropyron spicatum*) and Sandberg bluegrass (*Poa secunda*) are the dominant perennial grasses occupying the site. Bluebunch wheatgrass appears to be maintaining a stable population, while Sandberg bluegrass has slowly decreased in abundance. Cheatgrass cover and nested frequency have steadily declined with each reading since 1996. However, cover for cheatgrass increased in 2011that is likely due to a cool, wet spring. Common perennial forbs include Louisiana sagebrush (*Artemisia ludoviciana*), arrowleaf balsamroot (*Balsamorhiza sagittata*), western yarrow (*Achillea millefolium*), tapertip hawksbeard (*Crepis acuminata*), and silvery lupine (*Lupinus argenteus*) (Table - Herbaceous Trends). Forbs and grasses show little evidence of grazing with the exception of Arrowleaf balsomroot, the noxious weed Dyer's woad (*Isatis tinctoria*) and tapertip hawksbeard, which were moderately browsed in 2011.

Soil: The soil is part of the Yeates Hollow component, and is found on mountain slopes. The parent material consists of residuum, colluvium, and alluvium derived from quartzite and sandstone. The soil has poor permeability and runoff is quite rapid (Soil Survey Staff 2011). The soil texture is a loam with a neutral soil reaction (pH 6.7) (Table - Soil Analysis Data). Bare ground cover is low with a high amount of vegetation, rock, and litter providing protective ground cover (Table - Basic Cover). The soil erosion condition was classified as slight in 2001 and 2006 due to gullies and rills. In 2011, the soil erosion condition was classified as stable.

Trend Assessments

Browse:

- **1984 to 1990 - down (-2):** The density for mountain big sagebrush decreased 60% from 332 plants/acre to 132 plants/acre. Decadence increased from 70% to 75% of the population, and poor vigor increased to 0% to 25% of the population. No recruitment of young plants was observed. Serviceberry increased in density by 55% from 365 plants/acre to 566 plants/acre. Decadence increased from 9% to 23% of the serviceberry population. Young serviceberry plants comprised 82% of the population. Poor vigor increased to 6% of the population. The density for bitterbrush decreased 60% from 332 plants/acre to 132 plants/acre. Decadence decreased from 60% to 50% of the population, but is still considered to be very high.
- **1990 to 1996 - stable (0):** Differences in density may be related to the larger sample area used in 1996; therefore, trend was determined using other parameters. Sagebrush decreased in decadence to 21% of the population, and poor vigor decreased to7% of the population. Serviceberry had no decadence or poor vigor observed within the population. Bitterbrush had 25% of the population displaying decadence, while poor vigor was not observed within the population.
- **1996 to 2001 - down (-2):** The density for sagebrush decreased 57% from 280 plants/acre to 120 plants/acre, and cover decreased to less than 1%. Decadence increased to 50% of the population, while poor vigor was not observed within the population. Serviceberry decreased in density by 64% from 440 plants/acre to 160 plants/acre. The serviceberry population displayed no decadence, and had good vigor. Bitterbrush displayed no change in density at 80 plants/acre. Decadence remained at 25% of the population, and poor vigor was not observed within the bitterbrush population.
- **2001 to 2006 - stable (0):** The density for the sagebrush population had no change. However, decadence decreased to 33% of the population, and poor vigor was not observed within the population. Serviceberry increased in density by 25% to 200 plants/acre. Decadence was not observed within the serviceberry population and was vigorous. The bitterbrush population did not change in density. Decadence and poor vigor was not observed.
- **2006 to 2011 - stable (0):** The density for sagebrush decreased 33% from 120 plants/acre to 80 plants/acre. Decadence decreased to 25% of the sagebrush population, and poor vigor increased to 25% of the population. There was no new recruitment of young plants. The serviceberry population decreased in density by 20% from 200 plants/acre to 160 plants/acre. Decadence and poor vigor was not observed within the serviceberry population. The density for bitterbrush increased by 25% from 80 plants/acre to 100 plants/acre. Decadence and poor vigor was not observed within the bitterbrush population. All plants were classified as mature.

Grass:

- **1984 to 1990 - slightly up (+1):** The sum of nested frequency for perennial grasses increased 10%. The increase in nested frequency is associated with the significant increase in the nested frequency for bluebunch wheatgrass.
- **1990 to 1996 - down (-2):** The sum of nested frequency for perennial grasses decreased 23% and is associated with the significant decrease in nested frequency for bluebunch wheatgrass and Sandberg bluegrass. However, cover for both grasses were 10% and 8%, respectively. In 1996, annual grasses were included in the sample for the first time. The weedy annual cheatgrass (*Bromus tectorum*) had a high nested frequency, and provided 10% cover.
- **1996 to 2001 - slightly up (+1):** The sum of nested frequency for perennial grasses increased 14%. The increase was directly related to a significant increase in nested frequency for Sandberg bluegrass, which increased in cover to 8%. Bluebunch wheatgrass remained similar in nested frequency, but cover increased to 18%. Cheatgrass had a significant decrease in nested frequency, and cover decreased to 6%.
- **2001 to 2006 - stable (0):** The sum of nested frequency for perennial grasses remained similar, though cover decreased from 26% to 22%. Sandberg blue grass had a significant decrease in nested

frequency, and cover decreased to 3%. Cheatgrass also had a significant decrease in nested frequency, and cover decreased to 1%.

- **2006 to 2011 - slightly down (-1):** The sum of nested frequency for perennial grasses decreased 19%, though cover increased to 24%. Sandberg bluegrass decreased significantly in nested frequency, but maintained cover near 3%.

Forb:

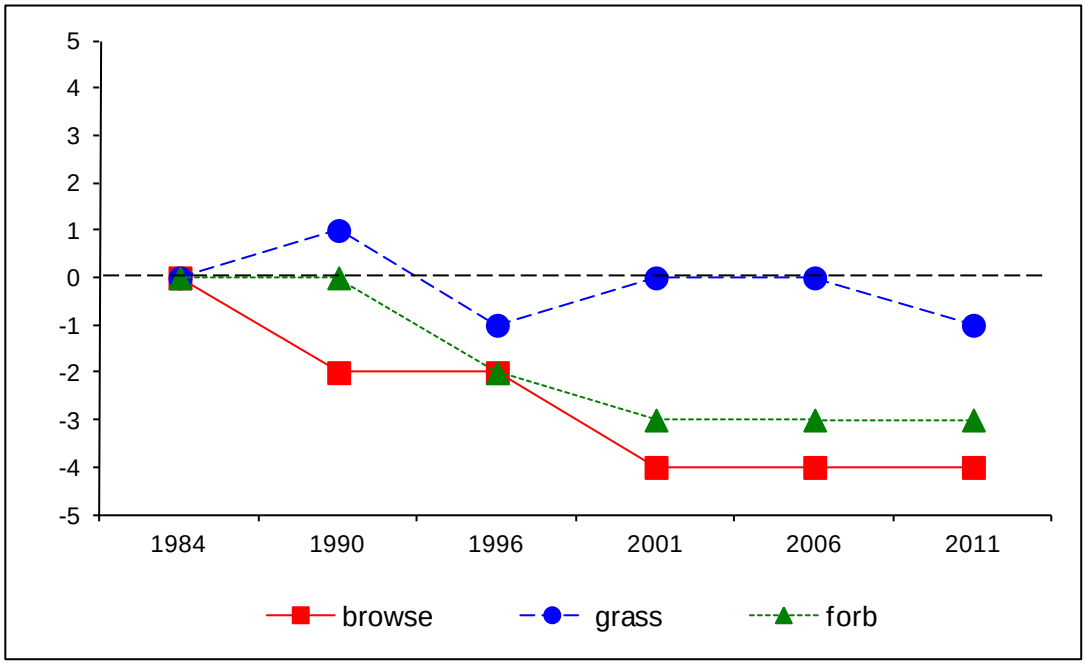
- **1984 to 1990 - stable (0):** The sum of nested frequency for perennial forbs remained similar. The forb community is fairly diverse, but occurs in low frequencies.
- **1990 to 1996 - down (-2):** The sum of nested frequency for perennial forbs decreased 52%. The preferred forbs within the study include western yarrow, arrowleaf balsamroot, sulfur eriogonum (*Eriogonum umbellatum*), and silvery lupine, which have all declined significantly in nested frequency.
- **1996 to 2001 - slightly down (-1):** The sum of nested frequency for perennial forbs decreased 11%. Spotted stickseed (*Hackelia patens*) decreased significantly in nested frequency, and had a cover near 0%.
- **2001 to 2006 - stable (0):** The sum of nested frequency for perennial forbs remained similar.
- **2006 to 2011 - stable (0):** The sum of nested frequency for perennial forbs remained similar, though cover increased from 7% to 9%. The cymopterus species (*Cymopterus sp.*) and tapertip hawksbeard increased significantly in nested frequency, and increased in cover from less than 1% to 2% and from 1% to 2%, respectively. The sum of nested frequency of annual forbs has increased substantially since 1996, and cover has increased from 2% to 13% over the sample years.

DEER DESIRABLE COMPONENTS INDEX - MID-LEVEL POTENTIAL SCALE --
Management unit 2, study no: 13

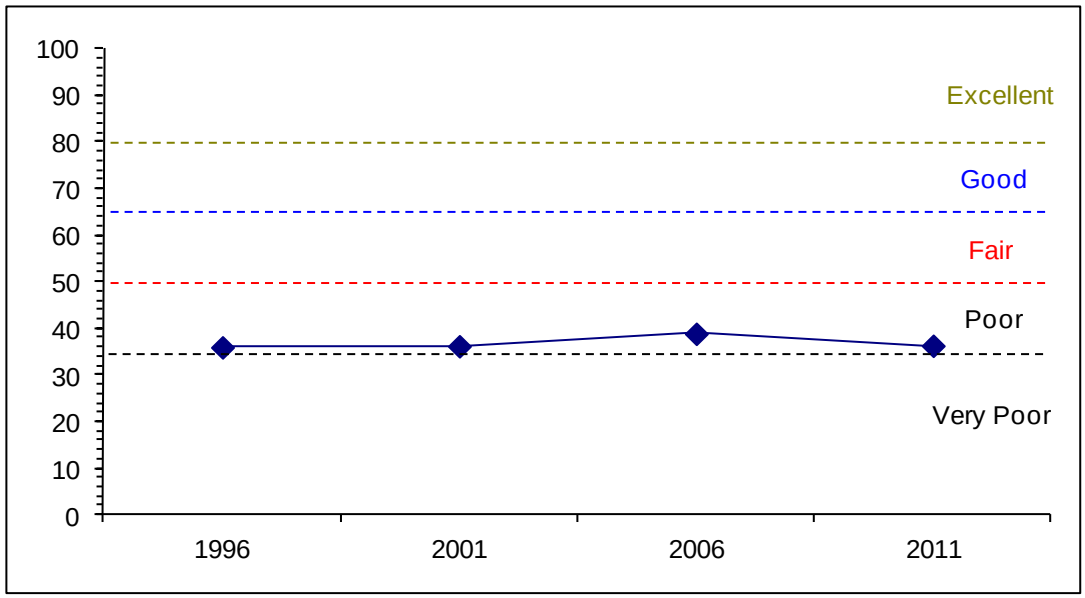
Year	Preferred Browse Cover	Preferred Browse Decadence	Preferred Browse Young	Perennial Grass Cover (-POBU)	Annual Grass Cover	Perennial Forb Cover	Noxious Weeds	**Total Score**	Ranking
96	3.2	0.0	0.0	30.0	-7.3	10.0	0.0	**35.9**	Very Poor-Poor
01	2.7	0.0	0.0	30.0	-4.5	10.0	-2.0	**36.2**	Very Poor-Poor
06	1.6	0.0	0.0	30.0	-0.8	10.0	-2.0	**38.8**	Poor
11	1.6	0.0	0.0	30.0	-3.3	10.0	-2.0	**36.3**	Very Poor-Poor

Trend Summary

CUMULATIVE RANGE TREND ASSESSMENT--
Management unit 2 Study no: 13



DEER DESIRABLE COMPONENTS INDEX TREND, MID-LEVEL POTENTIAL--
Management unit 2, Study no: 13



HERBACEOUS TRENDS--
Management unit 02, Study no: 13

Type	Species	Nested Frequency						Average Cover %			
		'84	'90	'96	'01	'06	'11	'96	'01	'06	'11
G	Agropyron intermedium	-	-	-	-	-	3	-	-	-	.00
G	Agropyron spicatum	a267	c305	a232	ab244	bc258	ab237	9.70	17.86	18.21	18.88
G	Bromus japonicus (a)	-	-	ab10	ab14	a2	b29	.05	.10	.00	.15
G	Bromus tectorum (a)	-	-	c296	b250	a174	a201	9.67	5.96	1.04	4.28
G	Koeleria cristata	-	2	-	2	2	2	-	.03	.03	.03
G	Poa bulbosa	-	-	-	-	-	3	-	-	-	.01
G	Poa fendleriana	-	-	4	-	-	-	.04	-	-	-
G	Poa pratensis	a-	a4	a3	a3	b62	b29	.03	.03	1.49	2.12
G	Poa secunda	c244	c252	bc197	c249	b171	a128	7.83	7.89	2.53	2.70
Total for Annual Grasses		0	0	306	264	176	230	9.72	6.06	1.05	4.44
Total for Perennial Grasses		511	563	436	498	493	402	17.61	25.82	22.27	23.76
Total for Grasses		511	563	742	762	669	632	27.33	31.88	23.32	28.20
F	Achillea millefolium	b175	b133	a69	a65	a48	a49	.82	1.52	1.93	2.00
F	Agoseris glauca	-	1	-	6	6	3	-	.04	.05	.00
F	Alyssum alyssoides (a)	-	-	ab64	bc95	a37	c138	.42	.30	.10	.43
F	Arabis sp.	-	6	8	2	-	-	.01	.00	-	-
F	Artemisia ludoviciana	15	20	21	23	21	23	2.30	1.77	1.02	2.43
F	Balsamorhiza sagittata	c60	c61	b26	ab19	ab13	a2	.77	.60	.66	.22
F	Calochortus nuttallii	-	3	-	-	-	5	-	-	-	.01
F	Camelina microcarpa (a)	-	-	-	-	-	10	-	-	-	.19
F	Cirsium undulatum	10	19	5	13	12	3	.19	.71	.30	.18
F	Collinsia parviflora (a)	-	-	a50	a66	a47	b147	.15	.16	.09	1.68
F	Collomia linearis (a)	-	-	a-	b15	c74	c68	-	.03	.22	.36
F	Comandra pallida	-	-	-	1	-	-	-	.00	-	-
F	Crepis acuminata	a-	d153	b28	b18	b34	c60	.34	.45	1.17	1.47
F	Cymopterus sp.	a-	a-	a2	a21	b32	c57	.00	.40	.38	1.64
F	Descurainia sp. (a)	-	-	a-	a-	a-	b36	-	-	-	.18
F	Draba sp. (a)	-	-	a-	b21	c92	d175	-	.03	.27	1.54
F	Epilobium brachycarpum (a)	-	-	b83	a11	c123	c124	.93	.03	.90	1.72
F	Eriogonum umbellatum	20	12	7	-	-	-	.33	-	-	-
F	Erodium cicutarium (a)	-	-	a52	c132	b103	a25	.65	7.74	1.45	.08
F	Galium aparine (a)	-	-	-	-	2	-	-	-	.00	-
F	Hackelia patens	b27	ab15	b33	a7	ab24	a3	.33	.07	.69	.18
F	Holosteum umbellatum (a)	-	-	a12	b168	c205	ab205	.03	.65	.49	2.70
F	Isatis tinctoria	-	-	-	1	3	7	-	.15	.15	.12
F	Lactuca serriola (a)	a-	a-	a16	a19	a8	b110	.03	.07	.02	.84
F	Lappula occidentalis (a)	-	-	a-	a1	a-	b162	-	.03	-	1.82
F	Lomatium grayi	-	1	-	1	6	-	-	.03	.06	-
F	Lupinus argenteus	c58	b34	a12	a11	a5	a6	.34	.39	.30	.18
F	Microsteris gracilis (a)	-	-	a-	a4	b67	b72	-	.01	.16	.49
F	Navarretia intertexta (a)	-	-	-	-	-	3	-	-	-	.03
F	Penstemon humilis	13	12	4	4	4	2	.06	.24	.21	.18
F	Phacelia sp.	-	-	12	10	-	-	.48	.12	.00	-

Type	Species	Nested Frequency						Average Cover %			
		'84	'90	'96	'01	'06	'11	'96	'01	'06	'11
F	Phlox longifolia	-	-	-	-	2	-	-	-	.00	-
F	Ranunculus testiculatus (a)	-	-	$_{ab}$23	$_{a}$13	$_{c}$118	$_{b}$46	.07	.05	.47	.32
F	Senecio multilobatus	$_{b}$80	$_{a}$-	$_{a}$-	$_{a}$-	$_{a}$4	$_{a}$3	-	-	.03	.03
F	Sisymbrium altissimum (a)	-	-	$_{b}$12	$_{a}$-	$_{a}$-	$_{b}$15	.09	-	-	.28
F	Tragopogon dubius (a)	2	-	2	3	3	8	.01	.06	.00	.21
Total for Annual Forbs		2	0	314	548	879	1344	2.41	9.19	4.20	12.93
Total for Perennial Forbs		458	470	227	202	214	223	6.00	6.53	7.00	8.68
Total for Forbs		460	470	541	750	1093	1567	8.41	15.72	11.20	21.62

Values with different subscript letters are significantly different at alpha = 0.10

BROWSE TRENDS--
Management unit 02, Study no: 13

Type	Species	Strip Frequency				Average Cover %			
		'96	'01	'06	'11	'96	'01	'06	'11
B	Amelanchier alnifolia	9	7	8	7	.06	.03	.06	.03
B	Artemisia tridentata vaseyana	14	6	6	4	1.30	.36	-	-
B	Chrysothamnus viscidiflorus viscidiflorus	17	16	18	10	1.79	1.27	.91	.56
B	Eriogonum heracleoides	0	1	1	0	-	-	-	-
B	Mahonia repens	15	19	18	18	.07	.67	.49	1.30
B	Prunus virginiana	5	4	5	5	.03	.03	.03	.15
B	Purshia tridentata	3	3	3	5	.38	1.00	.21	.33
B	Rosa woodsii	12	16	14	14	.72	.51	.95	.70
B	Sambucus cerulea	0	2	0	0	-	.03	-	-
B	Symphoricarpos oreophilus	6	4	8	6	1.31	1.62	1.25	.93
Total for Browse		81	78	81	69	5.68	5.55	3.90	4.01

CANOPY COVER, LINE INTERCEPT--
Management unit 02, Study no: 13

Species	Percent Cover	
	'06	'11
Amelanchier alnifolia	.98	.90
Artemisia tridentata vaseyana	.18	.50
Chrysothamnus viscidiflorus viscidiflorus	2.20	2.25
Mahonia repens	.90	1.25
Prunus virginiana	.43	.45
Purshia tridentata	.90	.88
Rosa woodsii	.70	.86
Symphoricarpos oreophilus	2.36	1.23

KEY BROWSE ANNUAL LEADER GROWTH--
Management unit 02, Study no: 13

Species	Average leader growth (in)		
	'01	'06	'11
Amelanchier alnifolia	-	4.8	3.5
Artemisia tridentata vaseyana	4.9	2.5	3.4
Purshia tridentata	5.3	-	2.9

BASIC COVER--
Management unit 02, Study no: 13

Cover Type	Average Cover %					
	'84	'90	'96	'01	'06	'11
Vegetation	1.75	16.25	43.72	48.98	36.74	53.76
Rock	17.50	20.50	25.35	30.16	30.41	30.43
Pavement	2.25	.75	5.00	4.30	3.75	3.55
Litter	66.75	44.50	45.87	33.00	29.17	27.56
Cryptogams	6.50	1.25	1.18	1.94	.56	4.30
Bare Ground	5.25	16.75	7.04	4.88	16.10	5.41

SOIL ANALYSIS DATA --
Management unit 02, Study no: 13, Study Name: Hardware Plateau

Effective rooting depth (in)	pH	Loam			%OM	PPM P	PPM K	ds/m
		%sand	%silt	%clay				
9.9	6.7	42.3	31.7	26.0	4.0	34.0	307.2	0.5

PELLET GROUP DATA--
Management unit 02, Study no: 13

Type	Quadrat Frequency			
	'96	'01	'06	'11
Rabbit	-	6	-	1
Elk	7	3	-	2
Deer	18	19	8	3
Cattle	-	-	-	-

Days use per acre (ha)		
'01	'06	'11
-	-	-
13 (31)	9 (22)	9 (23)
39 (96)	28 (69)	7 (18)
-	3 (7)	-

BROWSE CHARACTERISTICS--
Management unit 02, Study no: 13

		Age class distribution				Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)
Amelanchier alnifolia									
84	**365**	82	9	9	166	82	18	0	27/22
90	**566**	77	0	23	-	29	53	6	-/-
96	**440**	55	45	0	-	36	36	0	17/21
01	**160**	13	88	0	-	38	25	0	20/21
06	**200**	50	50	0	-	0	90	0	21/21
11	**160**	0	100	0	-	13	38	0	18/24

		Age class distribution				Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)
Artemisia tridentata vaseyana									
84	**332**	0	30	70	-	30	50	0	14/9
90	**132**	0	25	75	-	0	75	25	13/13
96	**280**	14	64	21	-	71	14	7	24/34
01	**120**	17	33	50	-	67	0	0	32/37
06	**120**	17	50	33	-	33	17	0	29/37
11	**80**	0	75	25	-	0	0	25	30/34
Chrysothamnus viscidiflorus viscidiflorus									
84	**765**	13	83	4	-	4	0	4	16/18
90	**432**	8	92	0	-	8	0	0	17/21
96	**440**	0	100	0	-	9	0	0	15/24
01	**500**	4	96	0	-	0	0	0	12/22
06	**480**	13	83	4	-	0	4	0	16/26
11	**240**	8	92	0	-	0	0	8	14/20
Eriogonum heracleoides									
84	**0**	0	0	-	-	0	0	0	-/-
90	**0**	0	0	-	-	0	0	0	-/-
96	**0**	0	0	-	-	0	0	0	-/-
01	**20**	0	100	-	-	0	0	0	4/7
06	**20**	0	100	-	-	0	0	0	-/-
11	**0**	0	0	-	-	0	0	0	-/-
Gutierrezia sarothrae									
84	**66**	50	50	-	-	0	0	0	7/11
90	**0**	0	0	-	-	0	0	0	-/-
96	**0**	0	0	-	-	0	0	0	-/-
01	**0**	0	0	-	-	0	0	0	-/-
06	**0**	0	0	-	-	0	0	0	-/-
11	**0**	0	0	-	-	0	0	0	-/-
Mahonia repens									
84	**0**	0	0	0	-	0	0	0	-/-
90	**0**	0	0	0	-	0	0	0	-/-
96	**980**	16	84	0	-	0	0	0	4/5
01	**3120**	2	97	1	-	0	0	0	4/5
06	**3380**	0	100	0	-	0	0	0	2/6
11	**1040**	56	44	0	100	0	0	0	3/4
Prunus virginiana									
84	**0**	0	0	0	-	0	0	0	-/-
90	**0**	0	0	0	-	0	0	0	-/-
96	**100**	40	60	0	-	20	40	0	19/18
01	**100**	40	60	0	-	80	0	0	16/35
06	**260**	92	8	0	-	38	62	0	14/19
11	**240**	50	42	8	-	33	8	8	13/15

		Age class distribution				Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)
Purshia tridentata									
84	**332**	0	40	60	-	0	100	0	18/20
90	**132**	0	50	50	-	0	100	0	15/18
96	**80**	0	75	25	-	0	50	0	19/36
01	**80**	0	75	25	-	25	75	0	20/44
06	**80**	0	100	0	-	0	100	0	23/59
11	**100**	0	100	0	-	20	40	0	26/54
Rhus glabra cismontana									
84	**66**	0	100	-	-	50	0	0	43/41
90	**0**	0	0	-	-	0	0	0	-/-
96	**0**	0	0	-	-	0	0	0	-/-
01	**0**	0	0	-	-	0	0	0	-/-
06	**0**	0	0	-	-	0	0	0	-/-
11	**0**	0	0	-	-	0	0	0	55/78
Rosa woodsii									
84	**0**	0	0	-	-	0	0	0	-/-
90	**0**	0	0	-	-	0	0	0	-/-
96	**1520**	22	78	-	20	11	62	0	12/11
01	**1220**	36	64	-	-	8	0	0	13/12
06	**1900**	15	85	-	-	26	0	0	12/11
11	**1460**	36	64	-	-	12	0	0	12/13
Sambucus cerulea									
84	**0**	0	0	-	-	0	0	0	-/-
90	**33**	0	100	-	-	0	100	0	31/20
96	**0**	0	0	-	-	0	0	0	84/135
01	**60**	0	100	-	-	0	0	0	47/69
06	**0**	0	0	-	-	0	0	0	73/91
11	**0**	0	0	-	-	0	0	0	43/76
Symphoricarpos oreophilus									
84	**0**	0	0	0	-	0	0	0	-/-
90	**0**	0	0	0	-	0	0	0	-/-
96	**460**	35	65	0	-	78	0	0	20/27
01	**100**	0	100	0	-	0	0	0	26/50
06	**180**	11	89	0	-	44	0	0	28/46
11	**180**	22	67	11	-	11	0	11	20/30