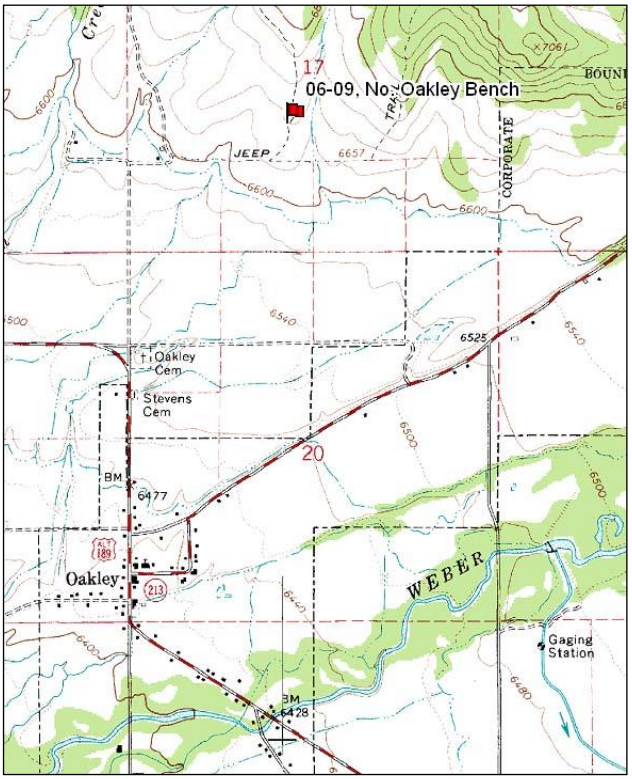
NORTH OAKLEY BENCH - TREND STUDY NO. 6-9-11

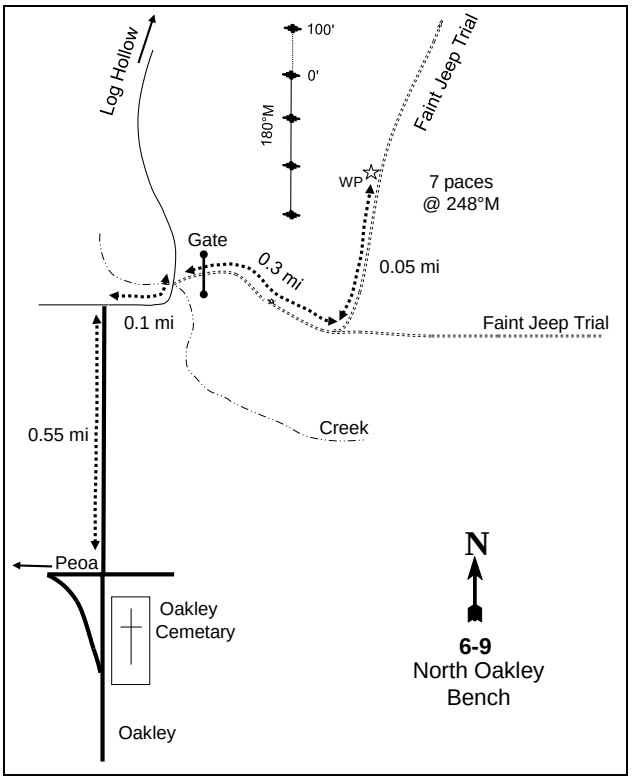
Vegetation Type: Mountain Brush
Range Type: Crucial Deer Winter
NRCS Ecological Site Description: Mountain Gravelly Loam (Mountain Big Sagebrush), R047XA406UT
Land Ownership: Private
Elevation: 6,700 ft (2,042 m)
Aspect: South
Slope: 3%
Transect bearing: 180° magnetic
Belt placement: line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft), line 4 (71ft). Rebar: belt 1 on 10ft.

Directions:
From the Oakley cemetery, just north of Oakley, proceed north 0.55 miles to an intersection and turn right. Proceed east 0.1 miles to a gate; pass through gate (private land; key needed) with creek on immediate right. Continue on a faint road for 0.3 miles to a fork. Turn left and proceed 0.05 miles to a witness post. From the witness post walk 7 paces at 248 degrees magnetic to the 0-foot baseline stake. The first 100 feet of the baseline runs 180 degrees magnetic. The remaining 300 feet run off the 0-foot baseline stake at 343 degrees magnetic.

Map Name: Kamas



Diagrammatic Sketch:



Township: 1S Range: 6E Section: 17

GPS: NAD 83, UTM 12S 475331 E 4509101 N

NORTH OAKLEY BENCH - TREND STUDY NO. 6-9

Site Information

Site Description: The study lies on a relatively uniform mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*), grass, and mountain brush community north of Oakley. Due to its location, this area has a high potential for residential home development. There is very little useful escape or thermal cover in the immediate area. The study is on privately owned land that is managed by the Oakley Cattlemen's Association, which means that the winter range is also used by domestic livestock most of the year. The study area is very representative of the south-facing slopes north of Oakley. Deer pellet groups were sampled in moderate abundance in 2001 and 2011, but high abundance in 2006. Elk pellet groups have been sampled in high abundance since 2001. Sampled cattle sign was moderate in 2001, but has been low in abundance since 2006. Cattle were on the study when it was monitored in 2001 and 2011. Sheep and horse pellets groups have also been sampled in limited numbers (Table - Pellet Group Data). A moose pellet group was identified in 2006, but was not sampled within the pellet group transect. Ants were extremely abundant in 2001 and 2006.

Browse: The preferred browse species are mountain big sagebrush, Saskatoon serviceberry (*Amelanchier alnifolia*), and antelope bitterbrush (*Purshia tridentata*). The key browse species is mountain big sagebrush, but density of sagebrush has steadily decreased since 1996. There was an infestation by the sagebrush defoliator moth (*Aroga websteri*) between the 2001 and 2006 study years similar to other studies in the region. There were 10% of the sagebrush plants that were classified as insect infested in 2006, and poor vigor and decadence increased substantially in that year. Utilization of sagebrush has been mostly light to moderate, though with heavy use in several years. Recruitment of young sagebrush plants has been good over the course of the study. Both serviceberry and bitterbrush occur in low density. Serviceberry and bitterbrush populations have shown moderate to heavy use, good vigor, and low decadence since 1996. Mountain snowberry (*Symphoricarpos oreophilus*) occurs in moderate density. Snowberry displayed moderate to heavy use in 1996, but use has been mostly light to moderate in other sample years. Other browse species sampled include stickyleaf low rabbitbrush (*Chrysothamnus viscidiflorus* ssp. *viscidiflorus*), gray horsebrush (*Tetradymia canescens*), and prickly pear cactus (*Opuntia sp.*) (Table - Browse Characteristics). Stickyleaf low rabbitbrush is abundant on the site, and has steadily increased in cover since 1996 (Table - Browse Trends).

Herbaceous Understory: Grass and forb composition is diverse, but includes many biennial and perennial weeds or species of poor forage value. The dominant grass species is the weedy species bulbous bluegrass (*Poa bulbosa*). Bulbous bluegrass has steadily increased in frequency and cover since 1996. Other common perennial species include crested wheatgrass (*Agropyron cristatum*), thickspike wheatgrass (*A. dasystachyum*), Kentucky bluegrass (*Poa pratensis*), Sandberg bluegrass (*P. secunda*), and Letterman needlegrass (*Stipa lettermani*). Kentucky bluegrass has steadily decreased in frequency and cover since 1996. Forb composition include species such as thistle (*Cirsium undulatum*), aster (*Aster chilensis*), western yarrow (*Achillea millefolium*), common dandelion (*Taraxacum officinale*), yellow salsify (*Tragopogon dubius*), death camas (*Zigadenus paniculatus*), and tapertip onion (*Allium acuminatum*) (Table - Herbaceous Trends).

Soil: The soil is in the Ayoub series, which occur on mountain slopes. The parent material consists of slope alluvium derived from andesite over residuum weathered from andesite (Soil Survey Staff 2011). The soil is a clay loam soil texture with a neutral soil reaction (pH 7.0) (Table - Soil Analysis Data). Bare ground cover is moderately low. Moreover, there is a large amount of vegetation cover providing protective ground cover (Table - Basic Cover). During the height of the 1987 to 1990 drought period, some trampling damage and soil compaction were evident from livestock, but have been less evident as vegetation recovered. The soil erosion condition has been classified as stable since 2001.

Trend Assessments

Browse:

- **1984 to 1990 - down (-2):** Density of mountain big sagebrush decreased 58% from 3,664 plants/acre to 1,531 plants/acre. Decadence of sagebrush decreased from 35% to 13%, and recruitment of young sagebrush plants remained excellent at 35% of the population. The serviceberry density increased slightly, and bitterbrush density remained similar.
- **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. There was little change in any of the preferred browse decadence or vigor. Recruitment of young sagebrush plants decreased to 17% of the population, but is still considered very good.
- **1996 to 2001 - slightly down (-1):** The density of mountain big sagebrush decreased 27% from 2,180 plants/acre to 1,600 plants/acre, but cover increased from 6% to 9%. Recruitment of young sagebrush decreased to 11%, but is still considered good. Serviceberry and bitterbrush populations remained similar.
- **2001 to 2006 - down (-2):** Sagebrush decreased 26% in density to 1,180 plants/acre, and cover decreased to 6%. Decadence increased to 47%, and poor vigor increased from 15% to 63%. This increase in decadence and poor vigor is likely due to an infestation of the sagebrush defoliator moth, which caused defoliation and drying of leaves on approximately 240 plants/acre.
- **2006 to 2011 - stable (0):** The density of sagebrush decreased by 19% to 960 plants/acre, though cover remained similar at 6%. Decadence of sagebrush decreased to 15%, and poor vigor decreased to 21% of the population. Density of bitterbrush has remained similar, but cover has steadily increased since 2001.

Grass:

- **1984 to 1990 - up (+2):** The sum of nested frequency of perennial grasses increased 34%.
- **1990 to 1996 - stable (0):** Bulbous bluegrass and annual grass species were included in the sample for the first time in 1996. The perennial grass sum of nested frequency remained similar due to the large amount of bulbous bluegrass sampled.
- **1996 to 2001 - slightly down (-1):** Excluding bulbous bluegrass, there was little change in the sum of nested frequency of perennial grasses. However, bulbous bluegrass increased significantly in nested frequency, and cover increased from 7% to 12%.
- **2001 to 2006 - slightly down (-1):** Excluding bulbous bluegrass, the sum of nested frequency of perennial grasses decreased by 10%. Bulbous bluegrass increased in nested frequency, but cover decreased slightly to 10%.
- **2006 to 2011 - slightly down (-1):** Excluding bulbous bluegrass, there was little change in the sum of nested frequency of perennial grasses. However, bulbous bluegrass has increased significantly in nested frequency since 2001, and cover increased to 16%.

Forb:

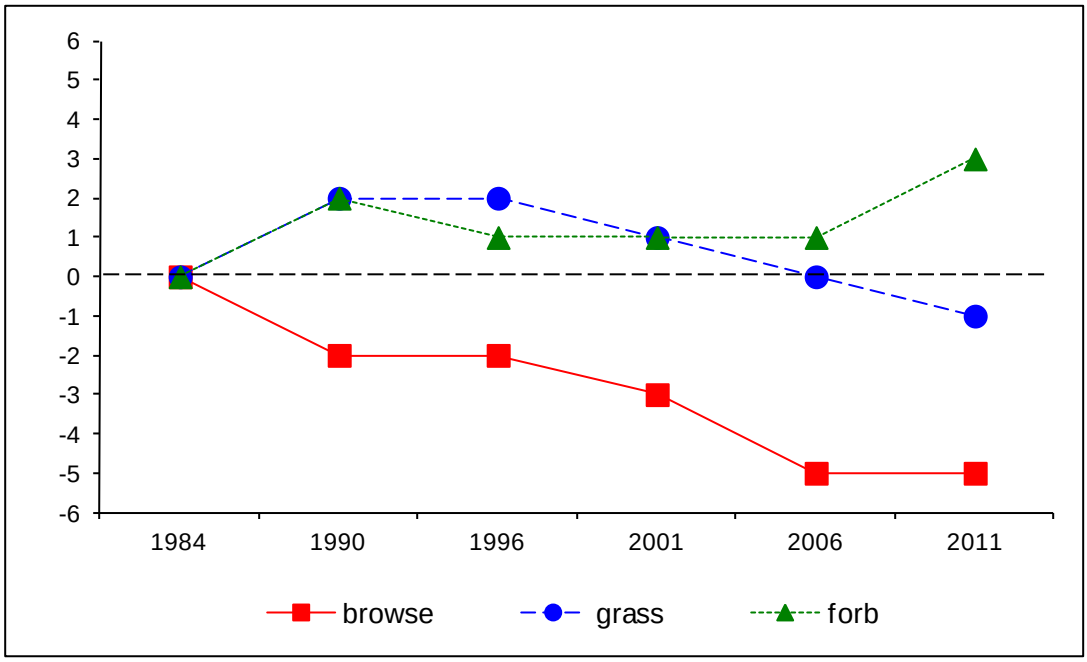
- **1984 to 1990 - up (+2):** The sum of nested frequency of perennial forbs increased by 37%.
- **1990 to 1996 - slightly down (-1):** The perennial forb sum of nested frequency decreased by 24%, but some of this decrease may be related to the larger sample area used in 1996.
- **1996 to 2001 - stable (0):** There was little change in the sum of nested frequency or cover of perennial forbs.
- **2001 to 2006 - stable (0):** The sum of nested frequency of perennial forbs remained similar, but cover increased slightly from 5% to 6%.
- **2006 to 2011 - up (+2):** The sum of nested frequency of perennial forbs increased 58%, and cover increased to 16%.

DEER DESIRABLE COMPONENTS INDEX - MID-LEVEL POTENTIAL SCALE --
Management unit 6, study no: 9

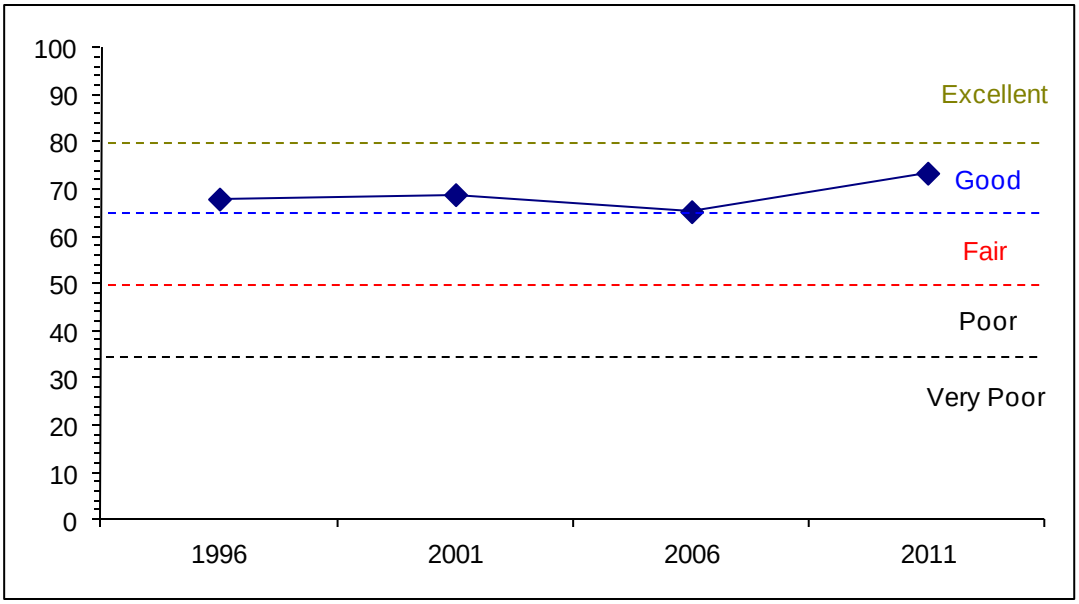
Year	Preferred Browse Cover	Preferred Browse Decadence	Preferred Browse Young	Perennial Grass Cover (-POBU)	Annual Grass Cover	Perennial Forb Cover	Noxious Weeds	**Total Score**	Ranking
96	9.2	12.8	7.5	30.0	-0.2	8.6	0.0	**67.9**	Good
01	15.3	11.2	4.9	28.0	-0.1	9.6	0.0	**68.9**	Good
06	11.7	5.9	7.8	30.0	0.0	10.0	0.0	**65.3**	Fair-Good
11	16.5	12.3	4.9	30.0	-0.3	10.0	0.0	**73.4**	Good

Trend Summary

CUMULATIVE RANGE TREND ASSESSMENT--
Management unit 6 Study no: 9



DEER DESIRABLE COMPONENTS INDEX TREND, MID-LEVEL POTENTIAL--
Management unit 6, Study no: 9



HERBACEOUS TRENDS--
Management unit 06, Study no: 9

Type	Species	Nested Frequency						Average Cover %			
		'84	'90	'96	'01	'06	'11	'96	'01	'06	'11
G	Agropyron cristatum	$_{b}$132	$_{c}$216	$_{a}$71	$_{a}$82	$_{a}$92	$_{a}$84	2.39	4.20	4.93	2.58
G	Agropyron dasystachyum	$_{b}$80	$_{a}$17	$_{b}$72	$_{c}$124	$_{bc}$94	$_{d}$158	.74	2.00	1.24	3.99
G	Agropyron intermedium	-	-	2	-	-	1	.15	-	-	.00
G	Agropyron spicatum	$_{b}$47	$_{a}$14	$_{b}$68	$_{a}$15	$_{a}$14	$_{a}$11	1.48	.60	.29	.33
G	Bromus brizaeformis (a)	-	-	-	3	-	-	-	.03	-	-
G	Bromus inermis	-	13	7	6	6	6	.18	.18	.06	.06
G	Bromus tectorum (a)	-	-	18	18	8	8	.22	.06	.04	.41
G	Koeleria cristata	-	-	4	16	21	29	.03	.39	.19	.38
G	Poa bulbosa	$_{a}$-	$_{a}$-	$_{b}$135	$_{c}$230	$_{cd}$233	$_{d}$282	6.46	11.66	9.93	15.83
G	Poa fendleriana	-	4	8	10	9	20	.21	.18	.09	1.27
G	Poa pratensis	$_{c}$116	$_{d}$182	$_{d}$182	$_{bc}$81	$_{ab}$59	$_{a}$27	4.97	2.01	1.74	.15
G	Poa secunda	$_{a}$10	$_{ab}$25	$_{a}$17	$_{c}$58	$_{abc}$36	$_{bc}$48	.42	.89	1.54	5.56
G	Sitanion hystrix	-	-	-	5	6	4	-	.18	.07	.06
G	Stipa columbiana	$_{b}$133	$_{c}$221	$_{a}$18	$_{a}$6	$_{a}$3	$_{a}$24	.27	.06	.15	.87
G	Stipa comata	$_{a}$-	$_{a}$-	$_{a}$-	$_{b}$6	$_{a}$-	$_{a}$-	-	.06	-	.03
G	Stipa lettermani	$_{a}$-	$_{a}$-	$_{b}$165	$_{b}$176	$_{b}$184	$_{a}$86	5.61	3.22	6.03	3.43
Total for Annual Grasses		0	0	18	21	8	8	0.22	0.09	0.03	0.41
Total for Perennial Grasses		518	692	749	815	757	780	22.95	25.68	26.29	34.59
Total for Grasses		518	692	767	836	765	788	23.18	25.77	26.33	35.00
F	Achillea millefolium	$_{ab}$52	$_{ab}$46	$_{a}$30	$_{a}$30	$_{ab}$47	$_{b}$65	.29	.46	1.02	1.98
F	Agoseris glauca	-	-	7	-	2	2	.01	-	.00	.00
F	Allium acuminatum	$_{ab}$29	$_{a}$6	$_{a}$14	$_{b}$42	$_{b}$55	$_{c}$135	.08	.13	.15	1.15
F	Alyssum alyssoides (a)	-	-	$_{a}$6	$_{ab}$29	$_{b}$62	$_{c}$178	.01	.14	.32	4.07

Type	Species	Nested Frequency						Average Cover %			
		'84	'90	'96	'01	'06	'11	'96	'01	'06	'11
F	Arabis sp.	-	13	7	-	5	-	.01	-	.04	-
F	Aster chilensis	a9	b34	a9	a13	a6	a2	.18	.42	.04	.03
F	Astragalus beckwithii	-	-	2	1	-	7	.03	.00	-	.33
F	Astragalus convallarius	ab13	ab12	a5	bc34	c59	cd43	.04	.60	.83	1.47
F	Balsamorhiza sagittata	-	-	-	-	-	4	-	.00	-	.06
F	Calochortus nuttallii	a3	a11	a13	a17	a9	b40	.04	.20	.02	.15
F	Camelina microcarpa (a)	-	-	-	-	2	6	-	-	.03	.06
F	Chenopodium fremontii (a)	-	-	-	3	-	-	-	.00	-	-
F	Cirsium undulatum	c137	b73	a38	a24	a17	b92	.61	.55	.10	2.39
F	Collinsia parviflora (a)	-	-	a-	bc35	c52	b8	-	.06	.10	.05
F	Collomia linearis (a)	-	-	-	26	-	20	-	.06	-	.09
F	Comandra pallida	a15	a22	b50	ab30	ab28	ab27	.38	.15	.61	.33
F	Cordylanthus ramosus (a)	-	-	a5	bc30	c29	ab9	.06	.35	.32	.09
F	Crepis acuminata	6	-	-	-	5	-	-	-	.04	-
F	Cruciferae	-	2	-	-	-	-	-	-	-	-
F	Cryptantha sp.	4	-	-	-	-	-	-	-	-	-
F	Cynoglossum officinale	-	2	2	-	-	-	.03	-	-	-
F	Delphinium nuttallianum	-	-	3	-	-	1	.00	-	-	.03
F	Descurainia pinnata (a)	-	-	-	-	2	2	-	-	.00	.00
F	Draba sp. (a)	-	-	a-	a-	a-	b25	-	-	-	.37
F	Epilobium brachycarpum (a)	-	-	a-	b12	c36	bc24	-	.05	.37	.11
F	Erigeron pumilus	a2	c34	c41	bc29	ab10	ab10	.30	.09	.07	.25
F	Eriogonum racemosum	4	15	5	3	5	-	.01	.01	.01	-
F	Eriogonum umbellatum	-	-	3	-	-	-	.01	-	-	-
F	Gayophytum ramosissimum(a)	-	-	b15	a-	b18	b14	.05	-	.05	.05
F	Hackelia patens	-	-	6	1	-	13	.30	.00	-	.25
F	Holosteum umbellatum (a)	-	-	a6	b40	a3	a5	.01	.21	.00	.15
F	Ipomopsis aggregata	-	2	1	-	-	-	.03	-	-	-
F	Lactuca serriola (a)	-	3	-	-	-	5	-	-	-	.01
F	Lithospermum ruderale	a-	a2	a4	a3	a2	b10	.03	.03	.69	1.23
F	Lupinus argenteus	a2	a4	ab22	b40	b37	c79	.74	1.28	1.71	5.71
F	Machaeranthera canescens	bc70	d128	c74	ab20	a14	a4	.51	.13	.09	.04
F	Microsteris gracilis (a)	-	-	a-	b68	a17	a6	-	.28	.04	.01
F	Navarretia intertexta (a)	-	-	-	3	-	-	-	.00	-	-
F	Penstemon sp.	-	2	-	-	1	-	-	-	.00	-
F	Phlox longifolia	a-	b22	ab10	ab15	b30	a1	.05	.04	.16	.00
F	Polygonum douglasii (a)	-	-	b81	a28	b80	a32	.22	.08	.43	.13
F	Ranunculus testiculatus (a)	-	-	a3	b22	a-	a-	.00	.09	-	-
F	Senecio integerrimus	-	-	-	16	9	14	-	.15	.06	.29
F	Senecio multilobatus	3	-	-	4	7	-	-	.01	.02	-
F	Sphaeralcea coccinea	4	18	14	8	4	3	.31	.06	.18	.06
F	Taraxacum officinale	ab6	c34	bc26	c32	a2	abc26	.21	.26	.01	.36
F	Tragopogon dubius (a)	a7	b56	a25	a19	a4	a32	.27	.24	.06	.38
F	Unknown forb-annual (a)	-	-	b12	a-	a-	a-	.07	-	-	-
F	Verbascum thapsus	11	9	2	-	-	-	.03	-	-	-
F	Veronica biloba (a)	-	-	-	-	-	3	-	-	-	.03

Type	Species	Nested Frequency						Average Cover %			
		'84	'90	'96	'01	'06	'11	'96	'01	'06	'11
F	Vicia americana	a-	b15	a-	a-	a-	a-	-	-	-	-
F	Viguiera multiflora	1	-	-	-	-	-	-	-	-	-
F	Zigadenus paniculatus	-	3	1	8	12	1	.03	.15	.18	.00
Total for Annual Forbs		7	59	153	315	305	369	0.70	1.61	1.76	5.65
Total for Perennial Forbs		371	509	389	370	366	579	4.32	4.78	6.09	16.16
Total for Forbs		378	568	542	685	671	948	5.02	6.40	7.85	21.81

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

BROWSE TRENDS--
Management unit 06, Study no: 9

Type	Species	Strip Frequency				Average Cover %			
		'96	'01	'06	'11	'96	'01	'06	'11
B	Amelanchier alnifolia	13	13	11	18	.97	1.42	1.47	2.44
B	Artemisia tridentata vaseyana	55	43	45	39	5.86	9.43	5.65	6.30
B	Chrysothamnus viscidiflorus viscidiflorus	85	86	94	92	3.79	6.31	8.35	8.97
B	Kochia prostrata	0	0	0	2	-	-	-	-
B	Mahonia repens	21	17	15	24	.93	.22	.32	1.00
B	Opuntia sp.	4	4	5	5	.91	.91	.60	.93
B	Purshia tridentata	11	16	11	12	.30	.89	1.59	3.28
B	Symphoricarpos oreophilus	28	25	24	22	3.65	5.55	4.56	5.85
B	Tetradymia canescens	3	2	5	3	-	.38	.15	-
Total for Browse		220	206	210	217	16.44	25.13	22.69	28.81

CANOPY COVER, LINE INTERCEPT--
Management unit 06, Study no: 9

Species	Percent Cover	
	'06	'11
Amelanchier alnifolia	1.28	2.15
Artemisia tridentata vaseyana	6.43	6.09
Chrysothamnus viscidiflorus viscidiflorus	12.25	12.33
Mahonia repens	.48	.85
Opuntia sp.	.41	.43
Purshia tridentata	2.21	4.41
Symphoricarpos oreophilus	7.53	8.06
Tetradymia canescens	-	.53

KEY BROWSE ANNUAL LEADER GROWTH--
Management unit 06, Study no: 9

Species	Average leader growth (in)		
	'01	'06	'11
Amelanchier alnifolia	2.0	2.0	5.7
Artemisia tridentata vaseyana	1.6	2.1	2.9
Purshia tridentata	2.0	1.6	2.9

BASIC COVER--
Management unit 06, Study no: 9

Cover Type	Average Cover %					
	'84	'90	'96	'01	'06	'11
Vegetation	7.75	12.00	46.85	55.62	55.27	75.12
Rock	2.00	1.50	1.37	1.79	2.08	1.31
Pavement	.25	1.50	.91	.32	1.07	1.37
Litter	60.50	47.00	39.72	38.70	35.50	27.04
Cryptogams	1.25	4.25	.97	2.75	.20	.74
Bare Ground	28.25	33.75	21.67	21.97	21.64	8.77

SOIL ANALYSIS DATA --
Management unit 06, Study no: 9, Study Name: North Oakley Bench

Effective rooting depth (in)	pH	Clay-Loam			%OM	PPM P	PPM K	ds/m
		%sand	%silt	%clay				
9.6	7.0	38.9	33.1	28.0	4.2	43.8	217.6	0.7

PELLET GROUP DATA--
Management unit 06, Study no: 9

Type	Quadrat Frequency			
	'96	'01	'06	'11
Sheep	1	-	-	-
Rabbit	3	3	10	4
Horse	-	3	2	-
Elk	5	21	43	17
Deer	15	11	15	10
Cattle	6	12	2	3

Days use per acre (ha)		
'01	'06	'11
-	-	-
-	-	-
-	3 (7)	-
30 (73)	59 (146)	48 (117)
19 (48)	46 (112)	21 (53)
22 (54)	13 (32)	8 (20)

BROWSE CHARACTERISTICS--
Management unit 06, Study no: 9

		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	**66**	0	0	100	-	100	0	0	-/-
90	**199**	67	33	0	66	67	33	33	25/31
96	**280**	7	93	0	20	29	50	0	25/30
01	**260**	0	85	15	-	23	77	0	28/34
06	**220**	27	73	0	-	18	64	0	29/29
11	**420**	10	86	5	-	38	29	5	28/31

		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	**3664**	27	38	35	66	56	18	5	13/7
90	**1531**	35	52	13	2466	30	4	4	14/17
96	**2180**	17	73	9	140	46	21	9	20/28
01	**1600**	11	76	13	40	46	23	15	22/35
06	**1180**	17	36	47	40	27	12	63	22/34
11	**960**	15	71	15	20	27	2	21	21/31
Chrysothamnus viscidiflorus viscidiflorus									
84	**6932**	0	74	26	-	0	0	0	16/15
90	**9932**	17	66	17	1133	27	5	21	9/10
96	**6660**	11	87	2	100	.30	0	0	11/16
01	**7500**	9	90	1	-	2	0	.26	9/16
06	**8640**	11	87	2	-	7	0	.92	10/21
11	**6960**	18	82	1	200	.57	0	.28	11/16
Kochia prostrata									
84	**0**	0	0	-	-	0	0	0	-/-
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	**60**	0	100	-	-	0	0	0	-/-
Mahonia repens									
84	**66**	100	0	-	-	0	0	0	-/-
90	**1932**	69	31	-	-	14	0	0	3/4
96	**6340**	79	21	-	320	0	0	0	3/5
01	**3960**	11	89	-	-	0	0	0	2/3
06	**5120**	13	87	-	20	0	0	0	2/3
11	**5220**	0	100	-	20	0	0	0	3/4
Opuntia sp.									
84	**0**	0	0	0	-	0	0	0	-/-
90	**0**	0	0	0	66	0	0	0	-/-
96	**80**	0	100	0	-	0	0	0	7/20
01	**80**	0	75	25	-	0	0	0	4/19
06	**180**	0	100	0	-	0	0	0	5/15
11	**100**	0	100	0	-	0	0	0	7/22
Purshia tridentata									
84	**265**	25	75	0	-	50	25	0	30/34
90	**265**	25	75	0	-	0	100	0	22/41
96	**260**	0	100	0	-	38	62	0	14/40
01	**320**	13	81	6	-	31	56	0	11/36
06	**240**	0	100	0	-	0	100	0	21/51
11	**260**	8	92	0	-	15	38	0	19/49

		Age class distribution				Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)
Symphoricarpos oreophilus									
84	**265**	0	75	25	-	75	0	0	11/15
90	**465**	29	57	14	-	57	14	14	12/14
96	**1000**	14	86	0	80	38	26	0	24/42
01	**560**	11	86	4	-	7	4	0	29/49
06	**840**	10	83	7	-	2	0	17	27/39
11	**620**	13	84	3	-	39	3	3	27/41
Tetradymia canescens									
84	**66**	100	0	0	-	0	0	0	-/-
90	**66**	0	100	0	-	100	0	0	13/14
96	**60**	33	67	0	40	100	0	0	11/19
01	**60**	67	33	0	20	0	0	0	9/17
06	**240**	25	67	8	-	0	0	0	9/16
11	**60**	33	67	0	-	0	0	0	13/25