

Trend Study 30-26-08

Study site name: Grassy Flat Ridge .

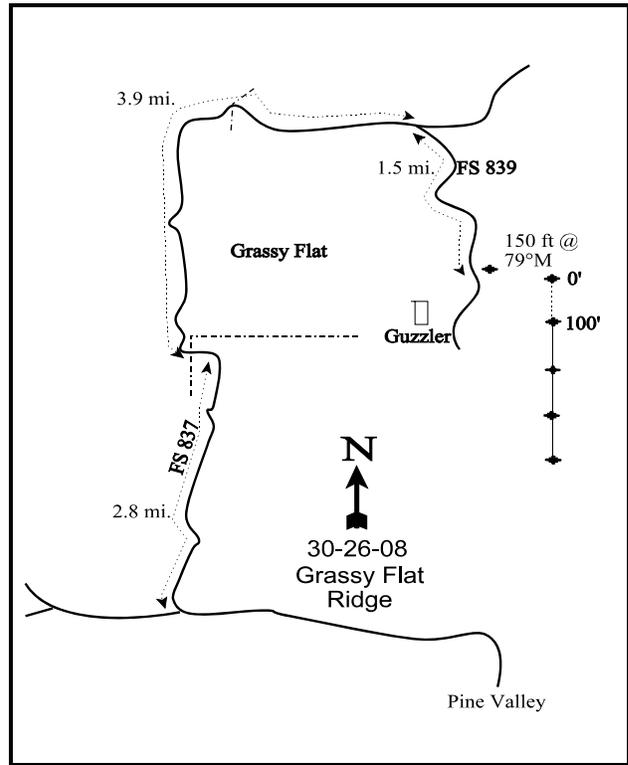
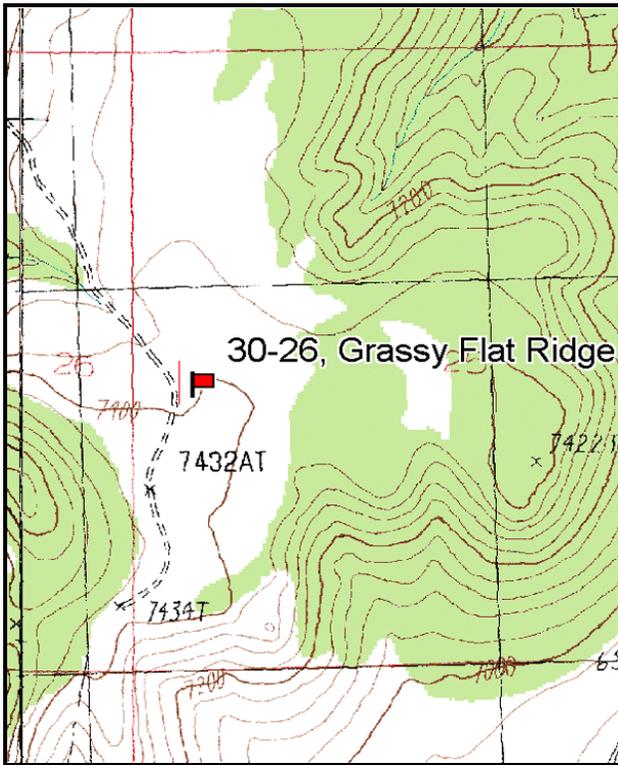
Vegetation type: Mountain Brush .

Compass bearing: frequency baseline 180 degrees magnetic.

Frequency belt placement: line 1 (16 & 89ft), line 2 (39ft), line 3 (48ft), line 4 (63ft). Rebar: belt 2 on 1ft, belt 3 on 4ft.

LOCATION DESCRIPTION

From the town of Pine Valley, travel west towards Central 1.5 miles to the dirt road to Pinto. Continue west 0.75 miles to the Gray's Ranch-Grassy Flat Road on the north side (right) of the road. Go north on this road approximately 2.8 miles and turn left. From here, continue on the road for 3.9 miles to Forest Service road #839. Bear right (south) and travel 1.5 miles to a witness post on the left (east) side of the road. A large guzzler can be found further down the road on the right (west) side. From the witness post, the 0-foot stake is 150 feet away at 79 degrees magnetic. The study is marked by green steel "T" fence posts approximately 12 to 18 inches in height



Map Name: Grass Valley & Central East

Diagrammatic Sketch

Township 38S, Range 15W, Section 25

GPS: NAD 83, UTM 12S 279212 E, 4147914 N

## DISCUSSION

### Grassy Flat Ridge - Trend Study No. 30-26

#### Study Information

This study is located on a relatively low elevation summer range near the summit of the ridge, lying between the South Fork of Pinto Creek and Grassy Flat [elevation: 7,400 feet (2,256 m), slope: 5%-10%, aspect: west]. The vegetative type is sagebrush-grass with low abundance of seeded grasses. A guzzler is located about 200 yards to the southwest of the study site. Wildlife and livestock use has been reported high in the past, most likely due to the close proximity of the guzzler. Pellet group data taken on the site estimated moderate use by deer in 1998 (32 deer days use/acre:79 ddu/ha), and high use in 2003 and 2008 (52 ddu/acre:129 ddu/ha and 57 ddu/acre:141 ddu/ha, respectively). No livestock use was noted in 1998, and was light in 2003 and 2008 (7 cow days use/acre:17 cdu/ha and 11 cdu/acre:20 cdu/ha, respectively). Livestock grazing typically occurs from July 1-August 15 on a deferred rotation system.

#### Soils

Soils are igneous in origin, coarse in texture, and very rocky over most of the area. Effective rooting depth is estimated at almost 12 inches. Texture is a clay loam which is moderately acidic (pH 5.8). Phosphorus may be marginally available for plant production at 7.2 ppm (Tiedemann and Lopez 2004). Relative combined vegetation and litter cover was 82% in 1998 and 2008, and 59% in 2003. Relative combined rock and pavement cover increased from 13% in 1998 to 28% in 2003, then decreased to 12% in 2008. The soil erosion condition was classified as stable in 2003 and 2008.

#### Browse

As this is considered summer range, browse is not as important of a component as the herbaceous understory. The key browse species are mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) and antelope bitterbrush (*Purshia tridentata*). Sagebrush accounted for 54% of the total browse cover in 1998, 72% in 2003, and 81% in 2008. Density of big sagebrush was estimated at 2,333 plants/acre in 1982. No seedlings or young plants were encountered. The population increased 64% to 6,399 plants/acre by 1992. Seedlings and young plants were then very abundant. Density increased an additional 12% by 1998 to 7,260 plants/acre, nearly doubled in 2003 to 13,440 plants/acre, and decreased slightly to 10,380 plants/acre in 2008. Seedlings were abundant and young plants accounted for a large proportion of the population in all sample years. Utilization of sagebrush has been mostly light to moderate over the years with a few individuals displaying heavy hedging. Sagebrush vigor has been good and decadence has remained low in all sample years.

Antelope bitterbrush has a relatively small population. It increased slightly in density in 1992 and 1998 to around 700 plants/acre, declined in 2003 to 580 plants/acre, and declined further in 2008 to 400 plants/acre. Utilization of bitterbrush was mostly moderate in 1982, but has been extremely heavy since. Most plants are partly unavailable due to the high level of use. Even with this heavy use, vigor is still normal on most plants and decadence was moderately low at 17% in 1998. However, decadence increased to 31% in 2003, and further to 60% in 2008. The population has poor recruitment and has decreased in average height and crown measurements since 1998. Annual leader growth, only found in protected areas, averaged only around 1 inch in 2003 and 2008. There was no sign of flowering in 2003.

Secondary browse species include Utah serviceberry (*Amelanchier utahensis*), dwarf rabbitbrush (*Chrysothamnus depressus*), and occasional individuals of Gambel oak (*Quercus gambelii*) and curlleaf mountain mahogany (*Cercocarpus ledifolius*). Serviceberry plants also have displayed heavy use but many plants have become partly unavailable due to height. Broom snakeweed (*Gutierrezia sarothrae*), an invader/increaser, also occurs on the site in moderate numbers.

### Herbaceous Understory

The herbaceous understory is moderately abundant and diverse. Six perennial grasses dominate the grass composition. These include intermediate wheatgrass (*Agropyron intermedium*), western wheatgrass (*Agropyron smithii*), mutton bluegrass (*Poa fendleriana*), Sandberg bluegrass (*Poa secunda*), bottlebrush squirreltail (*Sitanion hystrix*), and Letterman needlegrass (*Stipa lettermani*). Forbs are diverse, but the composition consists primarily of increasers, poisonous plants, and other low-growing species of minimal forage value. The most abundant forbs are wild onion (*Allium acuminatum*), littleleaf pussytoes (*Antennaria parvifolia*), and foothill deathcamas (*Zigadenus paniculatus*). Sulfur eriogonum (*Eriogonum umbellatum*) and Eaton fleabane (*Erigeron eatonii*) have also been fairly common.

### 1992 TREND ASSESSMENT

The trend for browse is slightly up. The key browse species, mountain big sagebrush and antelope bitterbrush, have both increased and should be able to tolerate the increase of broom snakeweed. The broom snakeweed population is expanding and should be monitored closely. Data in 1982 for the herbaceous understory is limited to species quadrat frequencies. The grass species are mostly palatable and the quadrat frequencies have increased for most species. The trend for grasses is slightly up. The forb species are mostly unpalatable and composition is poor. The quadrat frequencies increased slightly for many forbs. The trend for forbs is stable.

browse - slightly up (+1)

grass - slightly up (+1)

forb - stable (0)

### 1998 TREND ASSESSMENT

Trend for the key browse species is mixed. Differences in density of browse species may be related to the larger sample area used in 1998; therefore, trend for browse was determined using other parameters. Mountain big sagebrush displays an upward trend due to good reproduction, normal vigor, and lower decadence. Bitterbrush shows a stable to slightly downward trend. The bitterbrush population reproduction is limited with just enough young plants to replace decadent & dying plants. With this in mind, trend for browse is considered stable. Trends for both grasses and forbs are slightly down. Sum of nested frequency for both grasses and forbs has declined. Forb composition is still poor.

browse - stable (0)

grass - slightly down (-1)

forb - slightly down (-1)

### 2003 TREND ASSESSMENT

Trend for browse is up for sagebrush and slightly down for the more preferred browse, bitterbrush, although bitterbrush only contributes 10% of the browse cover. Density of mountain big sagebrush has grown to 13,440 plants/acre. Cover has increased from 9% in 1998 to 15%. Young recruitment remains extremely high, vigor remains good, and decadence is low. Bitterbrush has declined 17% in density and has increased in decadence to 31%. No seedlings or young plants were sampled and there was no sign of flowering in 2003. Overall, the browse trend is considered up due to the increase in sagebrush which contributes 72% of the browse cover. Trend for the grasses is down. Sum of nested frequency for perennial grasses declined and average cover of grasses fell from 14% in 1998 to only 3%. There was significant declines in the nested frequency of Letterman needlegrass, bottlebrush squirreltail, and mutton bluegrass. Trend is up for forbs. Sum of nested frequency for perennial forbs increased 33% and average cover increased from 6% in 1998 to 9%. The improvement comes from significant increases in wild onion, sego lily (*Calochortus nuttallii*), desert parsley (*Lomatium sp.*), and foothill deathcamas, all bulb or large tap root forbs.

browse - up (+2)

grass - down (-2)

forb - up (+2)

### 2008 TREND ASSESSMENT

Trend for browse is slightly down. The primary browse species, mountain big sagebrush, density decreased by 23% from 2003 to 10,380 plants/acre. Sagebrush vigor remains good, but decadence has increased slightly from 4% in 2003 to 17%. Recruitment of young sagebrush has also decreased, but still remains high with 26%

of the population comprised of young plants. The density of bitterbrush decreased by 31% from 2003 to 400 plants/acre. Bitterbrush plants displaying poor vigor has increased to 35% and decadence has increased to 60%. Recruitment has increased, but remains low with young plants accounting for 10% of the population. The trend for grasses is up. The sum of nested frequency of perennial grasses increased by 64% from 2003, and cover of perennial grasses increased from 3% in 2003 to 10%. The nested frequency of crested wheatgrass, intermediate wheatgrass, and Sandberg bluegrass all increased significantly. The trend for forbs is down. The sum of nested frequency of perennial forbs decreased by 37% from 2003, and cover of perennial forbs decreased from 9% in 2003 to 2%. There was a significant decrease in the nested frequency of desert parsley and foothill deathcamas.

browse - slightly down (-1)

grass - up (+2)

forb - down (-2)

HERBACEOUS TRENDS --

Management unit 30 , Study no: 26

T y p e	Species					Average Cover %		
		'92	'98	'03	'08	'98	'03	'08
G	Agropyron cristatum	a17	a5	a30	b57	.06	.33	1.50
G	Agropyron intermedium	a39	a46	a28	b112	3.02	.81	3.77
G	Agropyron smithii	b110	a29	a43	a25	.21	.29	.79
G	Bromus inermis	-	-	-	3	-	-	.15
G	Bromus tectorum (a)	-	5	-	5	.15	-	.01
G	Koeleria cristata	b32	ab27	a10	a10	.74	.05	.19
G	Poa bulbosa	a-	ab11	b23	a-	.33	.51	-
G	Poa fendleriana	bc144	c162	a71	ab104	5.16	.55	2.38
G	Poa secunda	b44	a3	a6	b64	.00	.15	.66
G	Sitanion hystrix	b153	b138	a31	a20	2.67	.26	.39
G	Stipa lettermani	b65	b61	a20	ab35	1.72	.13	.60
Total for Annual Grasses		0	5	0	5	0.15	0	0.01
Total for Perennial Grasses		604	482	262	430	13.94	3.09	10.46
Total for Grasses		604	487	262	435	14.09	3.09	10.47
F	Achillea millefolium	3	-	-	-	-	-	-
F	Agoseris glauca	b24	a11	a10	a13	.05	.10	.08
F	Allium acuminatum	a158	b267	c302	a169	2.50	6.21	.73
F	Antennaria parvifolia	b111	a38	a19	23	.71	.17	.16
F	Arabis sp.	9	3	2	6	.01	.00	.02
F	Artemisia ludoviciana	-	-	-	1	-	-	.00
F	Astragalus agrestis	b10	ab13	a-	a-	.12	-	-
F	Astragalus argophyllus	1	6	-	-	.04	-	-
F	Astragalus sp.	8	-	2	1	-	.00	.03
F	Balsamorhiza sagittata	-	-	2	-	-	.03	-
F	Castilleja linariaefolia	-	-	1	-	-	.00	-

Type	Species					Average Cover %		
		'92	'98	'03	'08	'98	'03	'08
F	<i>Calochortus nuttallii</i>	<sub>a</sub> 11	<sub>a</sub> 12	<sub>b</sub> 74	<sub>b</sub> 53	.05	.39	.27
F	<i>Chenopodium leptophyllum</i> (a)	-	-	-	4	-	-	.00
F	<i>Cirsium wheeleri</i>	5	7	-	-	.06	-	.00
F	<i>Comandra pallida</i>	-	-	6	-	-	.06	-
F	<i>Collinsia parviflora</i> (a)	-	<sub>a</sub> 61	<sub>a</sub> 68	<sub>b</sub> 101	.18	.35	.44
F	<i>Crepis acuminata</i>	-	3	3	-	.01	.00	-
F	<i>Delphinium nuttallianum</i>	<sub>a</sub> -	<sub>a</sub> -	<sub>b</sub> 7	<sub>ab</sub> 8	-	.03	.01
F	<i>Descurainia pinnata</i> (a)	-	-	3	-	-	.15	-
F	<i>Epilobium brachycarpum</i> (a)	-	<sub>b</sub> 27	<sub>a</sub> -	<sub>b</sub> 27	.10	-	.06
F	<i>Erigeron eatonii</i>	<sub>b</sub> 56	<sub>a</sub> 7	<sub>a</sub> 2	<sub>a</sub> -	.21	.01	-
F	<i>Eriogonum</i> sp.	-	-	-	-	-	-	.00
F	<i>Erigeron pumilus</i>	<sub>a</sub> 4	<sub>b</sub> 13	<sub>a</sub> 4	<sub>a</sub> -	.06	.01	-
F	<i>Eriogonum umbellatum</i>	<sub>b</sub> 76	<sub>a</sub> 28	<sub>a</sub> 21	<sub>a</sub> 6	.41	.07	.01
F	<i>Gayophytum ramosissimum</i> (a)	-	-	4	5	-	.01	.01
F	<i>Haplopappus</i> sp.	1	-	-	-	-	-	-
F	<i>Hymenoxys richardsonii</i>	4	-	-	-	-	-	-
F	<i>Ipomopsis aggregata</i>	<sub>a</sub> -	<sub>a</sub> -	<sub>a</sub> -	<sub>b</sub> 20	-	-	.04
F	<i>Lappula occidentalis</i> (a)	-	-	-	1	-	-	.00
F	<i>Lomatium</i> sp.	<sub>a</sub> 1	<sub>a</sub> 6	<sub>c</sub> 102	<sub>b</sub> 43	.03	.67	.16
F	<i>Lupinus argenteus</i>	2	-	-	-	-	-	-
F	<i>Machaeranthera canescens</i>	3	-	2	1	-	.00	.03
F	<i>Microsteris gracilis</i> (a)	-	<sub>a</sub> 1	<sub>a</sub> -	<sub>b</sub> 37	.00	-	.11
F	<i>Penstemon caespitosus</i>	1	-	-	-	-	-	-
F	<i>Penstemon</i> sp.	-	-	-	2	-	-	.00
F	<i>Phlox longifolia</i>	7	6	3	4	.03	.01	.02
F	<i>Polygonum douglasii</i> (a)	-	<sub>b</sub> 77	<sub>a</sub> 12	<sub>c</sub> 126	.21	.04	.37
F	<i>Ranunculus testiculatus</i> (a)	-	-	8	1	-	.02	.00
F	<i>Sphaeralcea coccinea</i>	<sub>ab</sub> 3	<sub>a</sub> 1	<sub>a</sub> -	<sub>b</sub> 11	.00	-	.03
F	<i>Tragopogon dubius</i>	-	3	-	-	.00	-	-
F	<i>Trifolium</i> sp.	-	-	-	2	-	-	.00
F	<i>Viguiera multiflora</i>	1	-	-	-	-	-	-
F	<i>Zigadenus paniculatus</i>	<sub>b</sub> 93	<sub>ab</sub> 69	<sub>b</sub> 94	<sub>a</sub> 48	.67	1.01	.65
Total for Annual Forbs		0	166	95	302	0.50	0.57	1.01
Total for Perennial Forbs		592	493	656	411	5.01	8.81	2.29
Total for Forbs		592	659	751	713	5.51	9.39	3.30

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

BROWSE TRENDS --

Management unit 30 , Study no: 26

Type	Species	Strip Frequency			Average Cover %		
		'98	'03	'08	'98	'03	'08
B	Amelanchier utahensis	12	14	10	1.54	1.52	.87
B	Artemisia tridentata vaseyana	93	95	92	9.15	14.67	16.11
B	Cercocarpus ledifolius	2	1	2	.15	.85	.85
B	Cercocarpus montanus	0	1	2	-	.00	.00
B	Chrysothamnus depressus	29	17	7	.42	.10	.10
B	Gutierrezia sarothrae	45	44	49	.39	.40	.67
B	Opuntia sp.	17	15	13	.31	.33	.56
B	Pediocactus simpsonii	0	0	1	-	-	.00
B	Pinus edulis	2	3	4	.38	.38	.63
B	Purshia tridentata	29	23	16	4.09	1.97	.01
B	Quercus gambelii	5	7	4	.56	.18	.03
B	Tetradymia canescens	4	0	2	.03	-	.00
Total for Browse		238	220	202	17.04	20.43	19.86

CANOPY COVER, LINE INTERCEPT --

Management unit 30 , Study no: 26

Species	Percent Cover	
	'03	'08
Amelanchier utahensis	2.36	.61
Artemisia tridentata vaseyana	17.23	20.38
Cercocarpus ledifolius	.46	-
Cercocarpus montanus	-	.23
Chrysothamnus depressus	.06	-
Gutierrezia sarothrae	.46	.76
Opuntia sp.	.86	1.31
Pinus edulis	.26	.63
Purshia tridentata	1.46	.31
Quercus gambelii	.80	.63

KEY BROWSE ANNUAL LEADER GROWTH --

Management unit 30 , Study no: 26

Species	Average leader growth (in)	
	'03	'08
Artemisia tridentata vaseyana	1.2	0.8
Purshia tridentata	1.0	0.7

BASIC COVER --

Management unit 30 , Study no: 26

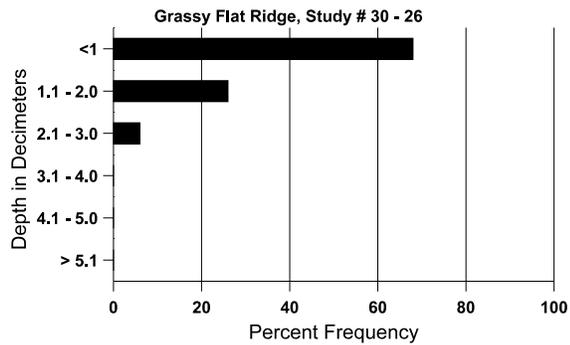
Cover Type	Average Cover %				
	'82	'92	'98	'03	'08
Vegetation	0	9.75	37.62	35.23	33.04
Rock	0	28.75	35.28	36.70	31.49
Pavement	0	17.75	5.62	3.02	8.41
Litter	0	25.00	29.13	17.67	23.30
Cryptogams	0	0	.15	.06	.26
Bare Ground	32.75	18.75	19.05	18.20	18.19

SOIL ANALYSIS DATA --

Management unit 30, Study no: 26, Study Name: Grassy Flat Ridge

Effective rooting depth (in)	Temp °F (depth)	pH	clay loam			%OM	PPM P	PPM K	ds/m
			%sand	%silt	%clay				
11.6	58.6 (13.8)	5.8	36.0	31.4	32.6	1.5	7.2	83.2	0.5

Stoniness Index



PELLET GROUP DATA --

Management unit 30 , Study no: 26

Type	Quadrat Frequency		
	'98	'03	'08
Sheep	2	-	-
Rabbit	3	1	29
Deer	31	16	24
Cattle	4	-	5

Days use per acre (ha)		
'98	'03	'08
-	-	-
-	-	-
32 (79)	52 (129)	57 (141)
-	7 (18)	8 (20)

BROWSE CHARACTERISTICS --  
Management unit 30 , Study no: 26

		Age class distribution (plants per acre)					Utilization					
Year	Plants per Acre (excluding seedlings)	Seedling	Young	Mature	Decadent	Dead	% moderate	% heavy	% decadent	% dying	% poor vigor	Average Height Crown (in)
<b>Amelanchier utahensis</b>												
82	<b>199</b>	-	-	199	-	-	100	0	0	-	0	20/24
92	<b>333</b>	-	-	333	-	-	20	80	0	-	0	29/26
98	<b>380</b>	20	20	360	-	-	32	47	0	-	0	38/40
03	<b>360</b>	20	80	140	140	40	0	94	39	11	11	31/34
08	<b>220</b>	20	40	80	100	60	9	55	45	18	18	41/45
<b>Artemisia tridentata vaseyana</b>												
82	<b>2332</b>	-	-	2199	133	-	6	0	6	-	6	11/18
92	<b>6398</b>	3733	3599	1866	933	-	22	9	15	-	4	18/21
98	<b>7260</b>	1400	3120	3860	280	620	21	.82	4	2	4	24/26
03	<b>13440</b>	620	4440	8500	500	540	11	2	4	.74	.74	12/21
08	<b>10380</b>	4960	2660	5920	1800	1220	34	4	17	5	6	11/22
<b>Cercocarpus ledifolius</b>												
82	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-
92	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-
98	<b>40</b>	-	-	40	-	-	0	50	-	-	0	44/50
03	<b>40</b>	-	20	20	-	20	0	50	-	-	0	60/44
08	<b>60</b>	-	40	20	-	-	0	33	-	-	0	52/39
<b>Cercocarpus montanus</b>												
82	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-
92	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-
98	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-
03	<b>20</b>	-	-	20	-	-	100	0	-	-	0	-/-
08	<b>40</b>	-	-	40	-	-	100	0	-	-	0	35/35
<b>Chrysothamnus depressus</b>												
82	<b>1132</b>	-	133	999	-	-	0	0	0	-	0	7/9
92	<b>3732</b>	399	1666	1733	333	-	14	13	9	-	0	4/8
98	<b>1680</b>	40	340	1280	60	-	17	1	4	-	0	6/11
03	<b>560</b>	-	20	520	20	-	25	21	4	4	4	5/10
08	<b>180</b>	60	-	120	60	-	0	78	33	-	0	5/8

		Age class distribution (plants per acre)					Utilization						
Year	Plants per Acre (excluding seedlings)	Seedling	Young	Mature	Decadent	Dead	% moderate	% heavy	% decadent	% dying	% poor vigor	Average Height Crown (in)	
<b>Gutierrezia sarothrae</b>													
82	<b>1332</b>	-	1266	66	-	-	0	0	0	-	0	9/10	
92	<b>5198</b>	466	1399	3733	66	-	0	0	1	-	0	12/7	
98	<b>2720</b>	-	880	1840	-	-	2	1	0	-	0	7/6	
03	<b>3060</b>	-	160	2800	100	-	0	0	3	2	2	4/5	
08	<b>5340</b>	400	380	4740	220	40	.74	4	4	.74	1	4/5	
<b>Opuntia sp.</b>													
82	<b>199</b>	-	-	199	-	-	0	0	0	-	0	6/15	
92	<b>399</b>	-	-	333	66	-	0	0	17	-	17	7/9	
98	<b>380</b>	-	20	320	40	40	0	0	11	11	11	7/20	
03	<b>420</b>	20	-	320	100	-	0	0	24	14	24	6/14	
08	<b>380</b>	-	-	260	120	20	0	0	32	-	11	6/17	
<b>Pediocactus simpsonii</b>													
82	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
92	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
98	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
03	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
08	<b>20</b>	-	-	20	-	-	0	0	-	-	0	-/-	
<b>Pinus edulis</b>													
82	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
92	<b>0</b>	-	-	-	-	-	0	0	-	-	0	-/-	
98	<b>40</b>	-	20	20	-	-	0	0	-	-	0	-/-	
03	<b>60</b>	20	40	20	-	20	0	0	-	-	0	-/-	
08	<b>80</b>	-	60	20	-	-	0	0	-	-	0	-/-	
<b>Purshia tridentata</b>													
82	<b>533</b>	-	-	533	-	-	88	0	0	-	0	16/22	
92	<b>732</b>	-	133	466	133	-	0	82	18	-	0	11/25	
98	<b>700</b>	-	60	520	120	120	9	83	17	9	9	12/34	
03	<b>580</b>	-	-	400	180	60	17	79	31	14	14	9/29	
08	<b>400</b>	-	40	120	240	40	0	90	60	35	35	10/25	
<b>Quercus gambelii</b>													
82	<b>0</b>	-	-	-	-	-	0	0	0	-	0	-/-	
92	<b>0</b>	-	-	-	-	-	0	0	0	-	0	-/-	
98	<b>460</b>	-	280	40	140	60	35	0	30	17	17	38/48	
03	<b>1240</b>	-	1140	100	-	20	0	0	0	-	0	42/48	
08	<b>680</b>	-	-	560	120	380	0	0	18	18	35	60/12	

		Age class distribution (plants per acre)					Utilization					
Year	Plants per Acre (excluding seedlings)	Seedling	Young	Mature	Decadent	Dead	% moderate	% heavy	% decadent	% dying	% poor vigor	Average Height Crown (in)
<i>Tetradymia canescens</i>												
82	<b>0</b>	-	-	-	-	-	0	0	0	-	0	-/-
92	<b>0</b>	-	-	-	-	-	0	0	0	-	0	-/-
98	<b>100</b>	-	-	100	-	-	0	0	0	-	0	6/9
03	<b>0</b>	-	-	-	-	-	0	0	0	-	0	-/-
08	<b>40</b>	-	-	20	20	-	50	50	50	-	0	-/-