

TRAIL MOUNTAIN ENCLOSURE - TREND STUDY NO. 16C-19-09

Vegetation Type: Mixed Mountain Brush

Range Type: Crucial Deer Winter, Substantial Elk Winter

NRCS Ecological Site Description: Not Available

Land Ownership: USFS

Elevation: 8,350 ft (2,545 m)

Aspect: Southwest

Slope: 6%-8%

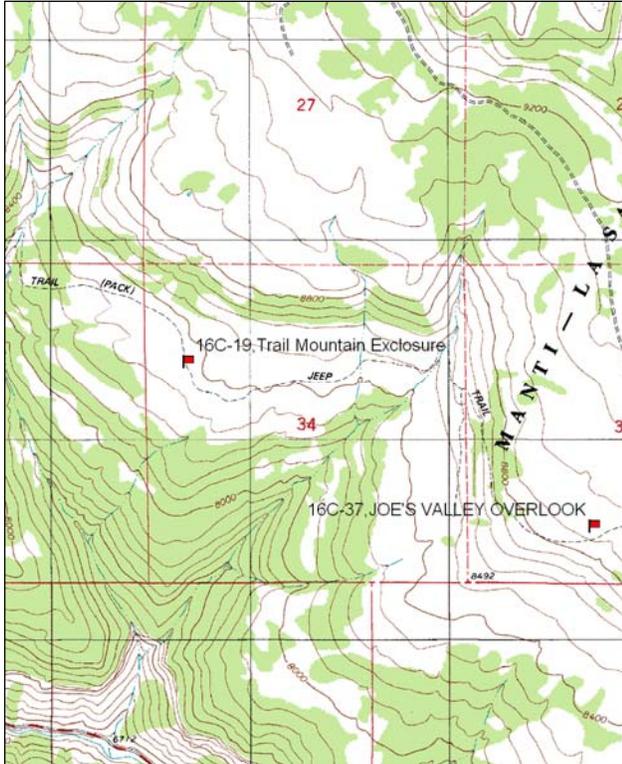
Transect bearing: 239 degrees magnetic.

Belt placement: line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft), line 4 (71ft), belt 4 rebar @ 4'

Directions:

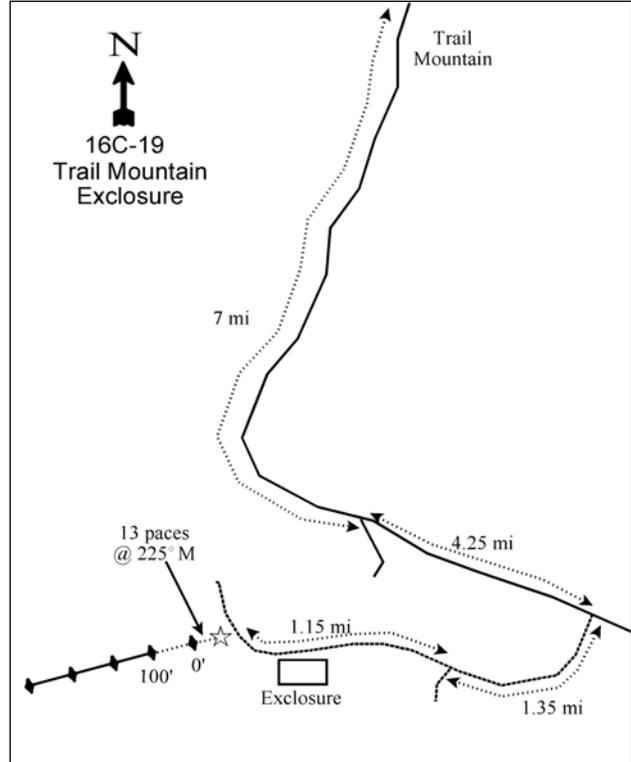
From the pass between Upper Joes Valley and the head of Cottonwood Creek (T16S, R6E, sec 27), take the road south onto Trail Mountain. Go 7.0 miles on this road to a fork. Take the left fork, towards Miles Point. Go 4.25 miles to a fork. Bear right down the side of the mountain for 1.35 miles. Bear right at another fork and continue 1.0 miles to the enclosure. Continue past the enclosure for 0.15 miles to just past where the road crosses a gully at a sharp bend in the terraces to a witness post. The 0 ft stake is located 13 paces away at 225°M, and is marked with a browse tag. There is rebar next to the 0 ft stake.

Map Name: Mahogany Point



Township: 17S, Range: 6E, Section: 34

Diagrammatic Sketch:



GPS: NAD 83, UTM 12S 479609 E 4350569 N

TRAIL MOUNTAIN ENCLOSURE - TREND STUDY NO. 16C-19

Site Information

Site Description: The Trail Mountain Big Game Enclosure was constructed on the southwest end of Trail Mountain in the 1960's. Considerable watershed work, contour trenching and seeding was done on this Forest Service land at that time. The area has since been closed to livestock grazing, although there is trespass use by cattle. This side of the mountain is occupied primarily by a mixed mountain brush communities. The trend study is on the same location as the 1980 line-intercept study #35-3. The bench itself has a gentle slope, but drops off steeply to the west and south. Pellet group data has estimated moderately heavy elk use since 1999. Estimated deer use was light in 1999, but was minimal in 2004 with no deer sign sampled in 2009. Trespass cattle use has steadily increased on the site and was moderately high in 2009 (Table - Pellet Group Data).

Browse: The mixed brush community on this site is composed largely of mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) with significant populations of Utah serviceberry (*Amelanchier utahensis*) and true mountain mahogany (*Cercocarpus montanus*). Utilization of mountain big sagebrush has been mostly moderate, with heavier use noted on serviceberry and true mountain mahogany. Mountain big sagebrush displays moderate decadence, but has mostly good vigor and good recruitment of young plants. The serviceberry and true mountain mahogany populations are healthy with low decadence, good vigor, and excellent recruitment of young plants. In 1999, some of the large serviceberry plants in the vicinity appeared to have been knocked down in what appeared to be a mechanical treatment to promote more available growth. Other common species include black sagebrush (*Artemisia nova*), dwarf rabbitbrush (*Chrysothamnus depressus*), snowberry (*Symphoricarpos oreophilus*), curleaf mountain mahogany (*Cercocarpus ledifolius*), and a few antelope bitterbrush (*Purshia tridentata*). Many of the curleaf mountain mahogany are large highlined trees that have experience heavy use (Table - Browse Characteristics).

Herbaceous Understory: Grasses on the site are diverse and abundant. Salina wildrye (*Elymus salina*) is the dominant grass species with other native perennial species such as mutton bluegrass (*Poa fendleriana*), pinewoods needlegrass (*Stipa pinetorum*), and bluebunch wheatgrass (*Agropyron spicatum*) being common. Introduced species such as smooth brome (*Bromus inermis*) occur primarily on the terraced areas of the bench. Forbs are also diverse and abundant; however, most species provide little forage due to their low growing growth form. Some of the most common forbs include mat penstemon (*Penstemon caespitosus*), sulfur eriogonum (*Eriogonum umbellatum*), and desert phlox (*Phlox austromontana*) (Table - Herbaceous Trends).

Soil: The soil is a moderately deep, clay loam with a slightly alkaline pH. Phosphorus has limited availability for plant growth and development at 2.9 ppm (Tiedemann and Lopez 2004) (Table - Soil Analysis Data). A large gully by the site is vegetated and stable. Bare ground cover is moderately low due to good litter and vegetation cover (Table - Basic Cover). The contour trenches also remain effective in slowing erosion. The soil erosion condition was classified as stable in 2009.

Trend Assessments

Browse:

- **1988 to 1994 - stable (0):** Differences in density may be related to the larger sample area used in 1994; therefore, trend was determined using other parameters. There was a decrease in the decadence of mountain big sagebrush and serviceberry, but other measurements have remained similar.
- **1994 to 1999 - stable (0):** Serviceberry density decreased by 21% and mountain big sagebrush density decreased by 10%, though the density of true mountain mahogany increased by 78%. Cover of true mountain mahogany also increased from 1% to 3%. The populations of all three species remain healthy with low decadence, good vigor, and good recruitment of young plants.

- **1999 to 2004 – slightly up (0):** Density of mountain big sagebrush increased by 27%, but the density of serviceberry decreased by 24%. Cover of mountain big sagebrush decreased from 10% to 7% and decadence increased from 16% to 22%.
- **2004 to 2009 - up (+2):** There was a large increase in the density and cover of black sagebrush, as well as a substantial increase in the density of serviceberry and mountain big sagebrush. All preferred browse populations show good signs of health, though decadence of mountain big sagebrush has moderate decadence at 25%.

Grass:

- **1988 to 1994 - stable (0):** There was a slight decrease in the sum of nested frequency of perennial grasses with a mutton bluegrass decreasing significantly in nested frequency.
- **1994 to 1999 - stable (0):** The sum of nested frequency and cover of perennial grasses increased slightly, but not substantially. Mutton bluegrass decreased significantly in nested frequency again.
- **1999 to 2004 - slightly down (-1):** Perennial grass sum of nested frequency decreased by 16%, but cover remained similar. Western wheatgrass (*Agropyron smithii*) was sampled for the first time in 2004, but mutton bluegrass decreased significantly in nested frequency again.
- **2004 to 2009 - slightly up (+1):** The sum of nested frequency of perennial grasses increased by 18%, though cover decreased to 9%. Mutton bluegrass increased significantly in nested frequency.

Forb:

- **1988 to 1994 - down (-2):** The sum of nested frequency of perennial forbs decreased by 37% with a significant decrease in the nested frequency of lupine (*Lupinus sp.*), looseflower milkvetch (*Astragalus tenellus*), and Eaton fleabane (*Erigeron eatonii*).
- **1994 to 1999 - slightly up (+1):** The sum of nested frequency of perennial forbs increased 14% and cover increased to 10%. Hoary aster (*Machaeranthera canescens*) increased significantly in nested frequency, but looseflower milkvetch decreased significantly and is no longer sampled.
- **1999 to 2004 - down (-2):** Perennial forb sum of nested frequency decreased by 29% and cover decreased to 6%.
- **2004 to 2009 - up (+2):** There was a 28% increase in the sum of nested frequency of perennial forbs and cover increased to 7%.

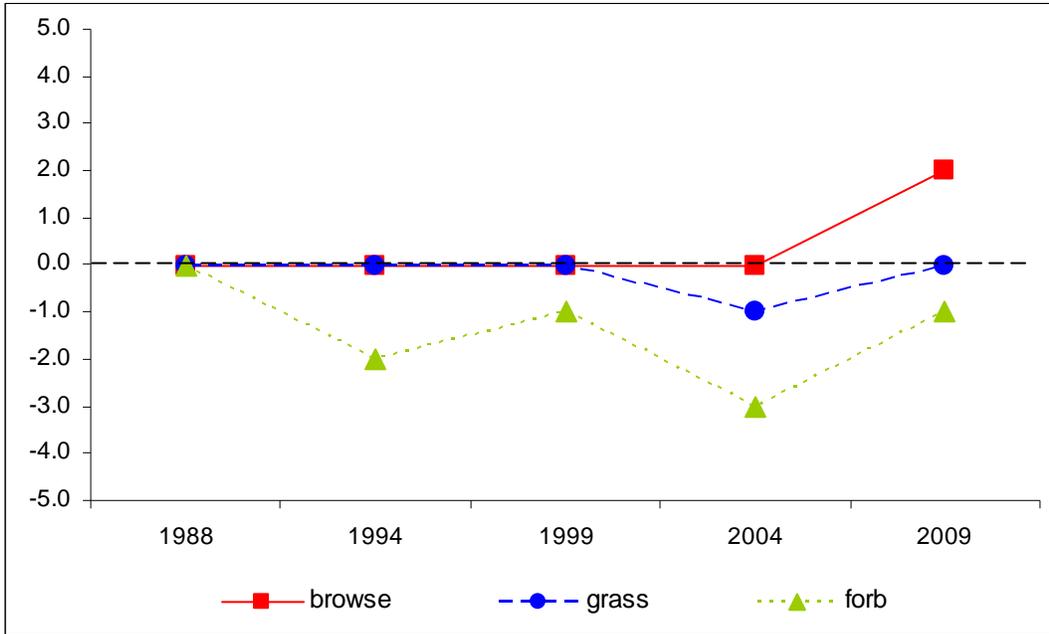
DEER DESIRABLE COMPONENTS INDEX - HIGH POTENTIAL SCALE --

Management unit 16C, study no: 19

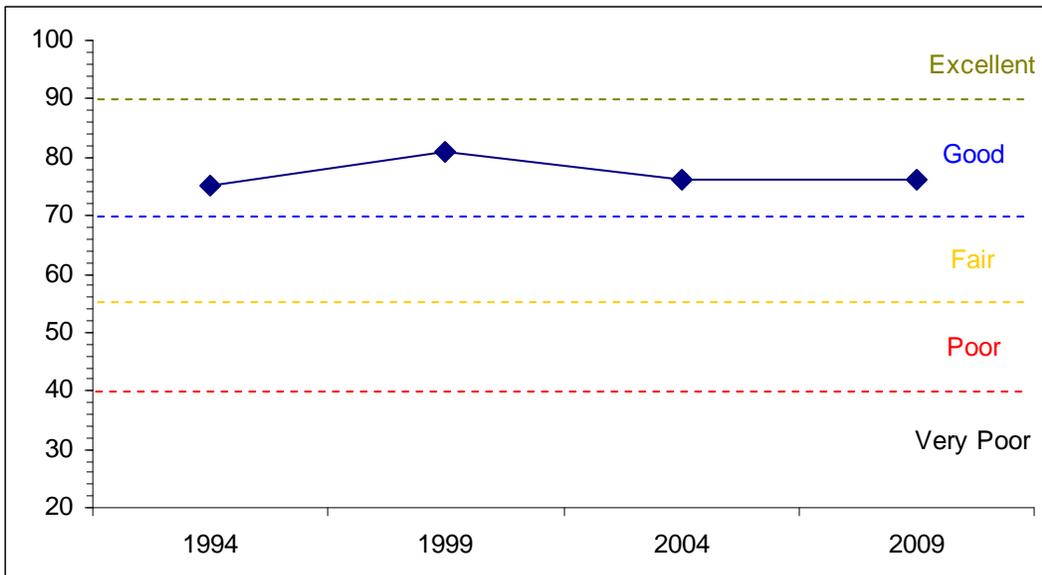
Year	Preferred Browse Cover	Preferred Browse Decadence	Preferred Browse Young	Perennial Grass Cover	Annual Grass Cover	Perennial Forb Cover	Noxious Weeds	Total Score	Ranking
94	25.1	9.7	11.1	19.3	0.0	10.0	0.0	75.1	Good
99	23.7	11.7	15.0	20.5	0.0	10.0	0.0	80.8	Good
04	20.1	11.1	15.0	20.0	0.0	10.0	0.0	76.1	Good
09	22.9	11.2	15.0	17.1	0.0	10.0	0.0	76.1	Good

Trend Summary

CUMULATIVE RANGE TREND ASSESSMENT--
Management unit 16C Study no: 19



DEER DESIRABLE COMPONENTS INDEX TREND, HIGH POTENTIAL
Management unit 16C, Study no: 19



HERBACEOUS TRENDS--

Management unit 16C, Study no: 19

Type	Species	Nested Frequency					Average Cover %			
		'88	'94	'99	'04	'09	'94	'99	'04	'09
G	Agropyron cristatum	-	-	2	-	-	-	.15	-	-
G	Agropyron intermedium	7	1	4	-	5	.00	.01	.00	.04
G	Agropyron smithii	a-	a1	a-	b37	b35	.03	-	.43	.20
G	Agropyron spicatum	61	60	84	70	51	1.59	1.99	2.61	.95
G	Bromus inermis	32	26	38	35	43	.46	.91	.79	.97
G	Carex sp.	-	1	2	1	-	.00	.03	.00	-
G	Elymus salina	a79	ab78	bc127	abc93	c129	1.92	3.73	3.65	4.42
G	Oryzopsis hymenoides	-	13	2	5	1	.59	.38	.18	.03
G	Poa fendleriana	d173	c134	b77	a31	b76	4.10	2.00	.86	1.21
G	Sitanion hystrix	-	5	7	-	-	.01	.06	-	-
G	Stipa comata	-	-	4	8	2	-	.03	.12	.00
G	Stipa pinetorum	a60	b63	b53	b55	ab53	.89	.92	1.34	.70
Total for Annual Grasses		0	0	0	0	0	0	0	0	0
Total for Perennial Grasses		412	382	400	335	395	9.63	10.23	10.01	8.55
Total for Grasses		412	382	400	335	395	9.63	10.23	10.01	8.55
F	Androsace septentrionalis (a)	-	a-	a3	b15	a-	-	.00	.54	-
F	Antennaria parvifolia	b25	b12	b10	a-	b32	.29	.36	-	.50
F	Arabis sp.	b12	a-	a-	a-	a-	-	-	-	-
F	Arenaria sp.	-	-	-	1	-	-	-	.00	-
F	Aster sp.	b43	ab23	ab26	a-	a6	.09	.31	-	.03
F	Astragalus calycosus	-	1	6	-	-	.00	.22	-	-
F	Astragalus convallarius	-	6	-	3	5	.01	-	.01	.06
F	Astragalus miser	-	-	-	8	3	-	-	.42	.03
F	Astragalus tenellus	c25	b12	a-	a-	-	.22	-	-	-
F	Calochortus nuttallii	7	-	-	-	1	-	-	-	.00
F	Castilleja linariaefolia	ab11	ab7	b17	ab5	a1	.16	.35	.02	.00
F	Cirsium sp.	6	3	2	-	-	.03	.15	-	-
F	Comandra pallida	34	28	41	20	23	.13	.44	.15	.16
F	Crepis acuminata	4	-	-	2	-	-	-	.03	-
F	Erigeron eatonii	b52	a2	a8	a-	a3	.00	.01	-	.00
F	Erigeron pumilus	-	-	-	-	3	-	-	-	.00
F	Eriogonum alatum	-	1	2	3	7	.01	.03	.03	.22
F	Eriogonum racemosum	-	-	-	-	1	-	-	-	.00
F	Eriogonum umbellatum	a17	ab41	ab43	ab24	b45	.77	1.75	.60	1.37
F	Hedysarum boreale	3	-	6	-	-	-	.09	-	-
F	Hymenoxys acaulis	10	5	4	1	8	.06	.06	.00	.09
F	Ipomopsis aggregata	-	-	6	-	-	-	.04	-	-
F	Lesquerella sp.	ab7	a2	a4	b12	a-	.01	.03	.26	-
F	Lupinus sp.	b50	a-	a-	a-	a-	-	-	-	-
F	Machaeranthera canescens	ab10	a7	c40	abc24	bc33	.06	.83	.54	.17
F	Machaeranthera grindelioides	-	4	-	12	17	.06	-	.27	.28
F	Orthocarpus sp. (a)	-	-	2	-	-	-	.15	-	-
F	Pedicularis centranthera	a-	a-	b12	c24	a-	-	.15	.21	-

T y P e	Species	Nested Frequency					Average Cover %			
		'88	'94	'99	'04	'09	'94	'99	'04	'09
F	Penstemon caespitosus	131	143	126	91	98	3.50	4.37	1.35	2.20
F	Penstemon sp.	b41	a6	a-	a-	a-	.06	-	-	-
F	Penstemon watsonii	ab4	a-	ab7	b13	b19	-	.03	.25	.26
F	Phlox austromontana	b116	a80	a63	a63	ab86	1.06	.97	1.24	1.27
F	Potentilla gracilis	a-	b16	b26	b12	b19	.06	.16	.06	.13
F	Schoenrambe linifolia	-	-	-	-	1	-	-	-	.00
F	Senecio multilobatus	b15	a1	ab6	ab4	a2	.00	.07	.03	.00
F	Taraxacum officinale	4	-	-	-	-	-	-	-	-
F	Unknown forb-perennial	b7	a-	a-	a-	a-	-	-	-	-
F	Zigadenus paniculatus	1	-	-	-	-	-	-	-	-
Total for Annual Forbs		0	0	5	15	0	0	0.15	0.54	0
Total for Perennial Forbs		635	400	455	322	413	6.63	10.46	5.52	6.84
Total for Forbs		635	400	460	337	413	6.63	10.61	6.06	6.84

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

BROWSE TRENDS--

Management unit 16C, Study no: 19

T y P e	Species	Strip Frequency				Average Cover %			
		'94	'99	'04	'09	'94	'99	'04	'09
B	Amelanchier utahensis	27	22	22	25	3.47	2.79	3.03	3.08
B	Artemisia nova	12	8	5	16	.51	.94	.03	1.45
B	Artemisia tridentata vaseyana	76	65	71	71	10.94	9.55	7.03	7.08
B	Cercocarpus ledifolius	7	8	10	9	1.38	.03	.33	.68
B	Cercocarpus montanus	14	16	16	16	1.13	3.36	2.85	3.34
B	Chrysothamnus depressus	26	27	41	49	1.24	.66	1.54	1.18
B	Chrysothamnus nauseosus	14	1	0	9	.13	.00	-	.03
B	Chrysothamnus viscidiflorus	10	16	3	5	.69	.55	.03	.01
B	Eriogonum microthecum	0	0	0	1	-	.03	-	.00
B	Gutierrezia sarothrae	6	22	44	23	.06	1.13	1.85	.50
B	Juniperus osteosperma	0	0	0	2	-	-	-	.15
B	Opuntia sp.	0	0	2	0	.03	-	.00	-
B	Pinus edulis	0	1	2	1	.03	.15	.41	.38
B	Purshia tridentata	1	3	1	3	.15	.30	.00	.06
B	Sambucus cerulea	0	0	0	0	-	-	.03	-
B	Symphoricarpos oreophilus	20	30	27	30	1.39	5.60	3.23	2.92
B	Tetradymia canescens	15	10	11	14	.09	.01	.03	.03
Total for Browse		228	229	255	274	21.28	25.14	20.44	20.93

CANOPY COVER, LINE INTERCEPT--

Management unit 16C, Study no: 19

Species	Percent Cover		
	'99	'04	'09
<i>Amelanchier utahensis</i>	-	5.33	3.20
<i>Artemisia nova</i>	-	.31	.93
<i>Artemisia tridentata vaseyana</i>	-	8.39	8.76
<i>Cercocarpus ledifolius</i>	1.60	.56	.45
<i>Cercocarpus montanus</i>	-	2.66	3.53
<i>Chrysothamnus depressus</i>	-	1.53	1.01
<i>Chrysothamnus nauseosus</i>	-	-	.40
<i>Gutierrezia sarothrae</i>	-	1.51	.25
<i>Pinus edulis</i>	-	.26	.10
<i>Purshia tridentata</i>	-	.18	.21
<i>Symphoricarpos oreophilus</i>	-	4.81	3.91
<i>Tetradymia canescens</i>	-	.15	-

KEY BROWSE ANNUAL LEADER GROWTH--

Management unit 16C, Study no: 19

Species	Average leader growth (in)	
	'04	'09
<i>Amelanchier utahensis</i>	5.0	3.2
<i>Artemisia tridentata vaseyana</i>	2.3	1.1
<i>Cercocarpus ledifolius</i>	6.8	3.2
<i>Cercocarpus montanus</i>	8.3	3.2
<i>Purshia tridentata</i>	6.8	-

BASIC COVER--

Management unit 16C, Study no: 19

Cover Type	Average Cover %				
	'88	'94	'99	'04	'09
Vegetation	9.00	34.87	40.61	35.56	36.46
Rock	0	3.90	6.11	5.07	3.29
Pavement	2.25	1.14	3.62	2.82	4.72
Litter	59.00	38.39	37.47	38.21	39.77
Cryptogams	1.00	.27	.31	.48	.04
Bare Ground	28.75	28.70	23.38	38.52	27.11

SOIL ANALYSIS DATA --

Management unit 16C, Study no: 19, Study Name: Trial Mountain Enclosure

Effective rooting depth (in)	pH	clay loam			%OM	PPM P	PPM K	ds/m
		%sand	%silt	%clay				
13.9	7.6	38.7	27.4	33.8	3	2.9	131.2	0.5

PELLET GROUP DATA--

Management unit 16C, Study no: 19

Type	Quadrat Frequency			
	'94	'99	'04	'09
Rabbit	16	10	9	29
Elk	12	20	30	48
Deer	17	7	6	4
Cattle	1	1	4	10

Days use per acre (ha)		
'99	'04	'09
-	-	-
44 (109)	53 (131)	54 (134)
15 (37)	2 (5)	-
8 (20)	12 (29)	49 (120)

BROWSE CHARACTERISTICS--

Management unit 16C, Study no: 19

Year	Plants per Acre (excluding seedlings)	Age class distribution			Seedling (plants/acre)	Utilization		% poor vigor	Average Height Crown (in)
		% Young	% Mature	% Decadent		% moderate	% heavy		
<i>Amelanchier utahensis</i>									
88	399	83	0	17	133	67	0	17	-/-
94	960	48	48	4	20	10	4	4	27/29
99	760	24	66	11	20	42	21	11	38/44
04	580	21	72	7	-	31	59	0	27/32
09	820	41	56	2	140	46	32	12	33/37
<i>Artemisia nova</i>									
88	0	0	0	0	-	0	0	0	-/-
94	540	0	44	56	-	19	4	22	11/20
99	420	10	81	10	-	57	0	10	9/19
04	340	29	71	0	-	0	0	0	10/38
09	1680	33	62	5	-	30	0	4	9/16
<i>Artemisia tridentata vaseyana</i>									
88	4531	10	40	50	733	43	4	0	22/28
94	3380	13	61	26	-	3	1	7	19/26
99	3040	27	57	16	440	24	9	7	22/27
04	3880	29	49	22	380	52	19	9	16/25
09	4260	23	53	25	820	32	25	13	16/25
<i>Ceratoides lanata</i>									
88	265	25	25	50	-	0	0	0	3/3
94	0	0	0	0	-	0	0	0	-/-
99	0	0	0	0	-	0	0	0	-/-
04	0	0	0	0	-	0	0	0	-/-
09	0	0	0	0	-	0	0	0	-/-
<i>Cercocarpus ledifolius</i>									
88	0	0	0	0	-	0	0	0	-/-
94	140	29	71	0	-	43	0	0	20/21
99	180	78	22	0	-	56	0	0	26/27
04	200	40	60	0	-	20	60	0	17/16
09	180	22	56	22	-	22	56	11	44/52

		Age class distribution					Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)	
<i>Cercocarpus montanus</i>										
88	0	0	0	0	-	0	0	0	-/-	
94	380	26	68	5	-	21	37	5	24/29	
99	680	12	88	0	-	41	59	0	22/32	
04	620	13	81	6	-	3	97	3	30/30	
09	720	33	67	0	-	6	94	0	25/34	
<i>Chrysothamnus depressus</i>										
88	3598	6	85	9	-	30	2	0	4/9	
94	2120	3	96	1	-	25	0	.94	3/7	
99	1360	0	99	1	60	19	68	1	2/7	
04	4400	0	99	1	-	23	63	.45	5/9	
09	4120	2	88	9	20	1	.48	16	3/8	
<i>Chrysothamnus nauseosus</i>										
88	0	0	0	0	-	0	0	0	-/-	
94	460	4	87	9	-	4	0	9	6/9	
99	40	100	0	0	-	0	0	0	10/15	
04	0	0	0	0	-	0	0	0	8/11	
09	500	8	84	8	-	48	20	0	5/8	
<i>Chrysothamnus viscidiflorus</i>										
88	533	0	100	0	-	0	0	0	6/7	
94	300	0	87	13	-	0	13	13	5/9	
99	940	9	91	0	20	2	0	0	6/7	
04	80	0	100	0	-	0	0	0	6/9	
09	160	13	88	0	-	13	0	0	6/8	
<i>Cowania mexicana stansburiana</i>										
88	0	0	0	-	-	0	0	0	-/-	
94	0	0	0	-	-	0	0	0	-/-	
99	0	0	0	-	-	0	0	0	-/-	
04	0	0	0	-	-	0	0	0	32/40	
09	0	0	0	-	-	0	0	0	-/-	
<i>Eriogonum microthecum</i>										
88	0	0	0	-	-	0	0	0	-/-	
94	0	0	0	-	-	0	0	0	-/-	
99	0	0	0	-	-	0	0	0	-/-	
04	0	0	0	-	-	0	0	0	-/-	
09	20	100	0	-	-	0	0	0	-/-	
<i>Gutierrezia sarothrae</i>										
88	0	0	0	0	-	0	0	0	-/-	
94	160	0	100	0	-	0	0	0	5/6	
99	1240	11	89	0	20	0	0	0	6/8	
04	5280	28	72	0	20	0	0	0	7/8	
09	1580	1	96	3	-	0	0	4	6/6	

Year	Plants per Acre (excluding seedlings)	Age class distribution			Seedling (plants/acre)	Utilization		% poor vigor	Average Height Crown (in)
		% Young	% Mature	% Decadent		% moderate	% heavy		
Juniperus osteosperma									
88	66	0	100	-	-	0	0	0	69/72
94	0	0	0	-	-	0	0	0	-/-
99	0	0	0	-	-	0	0	0	-/-
04	0	0	0	-	-	0	0	0	-/-
09	60	100	0	-	-	0	0	0	-/-
Leptodactylon pungens									
88	0	0	0	-	-	0	0	0	-/-
94	0	0	0	-	-	0	0	0	-/-
99	0	0	0	-	-	0	0	0	5/4
04	0	0	0	-	-	0	0	0	-/-
09	0	0	0	-	-	0	0	0	-/-
Mahonia repens									
88	0	0	0	-	-	0	0	0	-/-
94	0	0	0	-	-	0	0	0	-/-
99	0	0	0	-	-	0	0	0	-/-
04	0	0	0	-	-	0	0	0	-/-
09	0	0	0	-	-	0	0	0	0/9
Opuntia sp.									
88	0	0	0	-	-	0	0	0	-/-
94	0	0	0	-	-	0	0	0	-/-
99	0	0	0	-	-	0	0	0	-/-
04	40	50	50	-	-	0	0	0	4/12
09	0	0	0	-	-	0	0	0	-/-
Pinus edulis									
88	0	0	0	-	66	0	0	0	-/-
94	0	0	0	-	-	0	0	0	-/-
99	20	100	0	-	60	0	0	0	-/-
04	40	100	0	-	-	0	0	0	-/-
09	20	100	0	-	-	0	0	0	-/-
Purshia tridentata									
88	0	0	0	-	-	0	0	0	-/-
94	20	0	100	-	-	0	0	0	9/32
99	80	25	75	-	-	0	75	0	7/15
04	80	0	100	-	-	0	0	0	14/44
09	160	25	75	-	-	63	0	0	12/35
Sambucus cerulea									
88	0	0	0	-	-	0	0	0	-/-
94	0	0	0	-	-	0	0	0	24/33
99	0	0	0	-	-	0	0	0	32/31
04	0	0	0	-	-	0	0	0	-/-
09	0	0	0	-	-	0	0	0	34/33

		Age class distribution					Utilization		
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)
<i>Symphoricarpos oreophilus</i>									
88	0	0	0	0	66	0	0	0	-/-
94	760	34	66	0	-	3	0	0	13/25
99	1220	25	72	3	60	7	0	0	14/28
04	920	9	89	2	-	20	0	0	10/22
09	2440	11	87	2	20	38	18	.81	13/23
<i>Tetradymia canescens</i>									
88	199	33	67	0	-	33	0	0	12/7
94	440	14	68	18	-	23	14	0	5/8
99	360	0	72	28	-	56	0	11	6/9
04	320	13	81	6	-	13	6	6	9/10
09	380	16	42	42	380	16	26	26	6/7