

Trend Study 13A-11-04

Study site name: North Beaver Mesa.

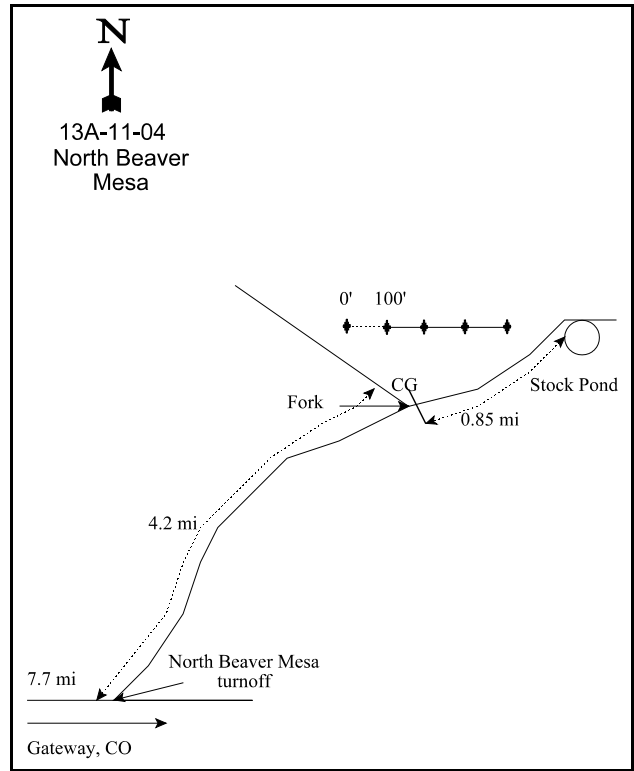
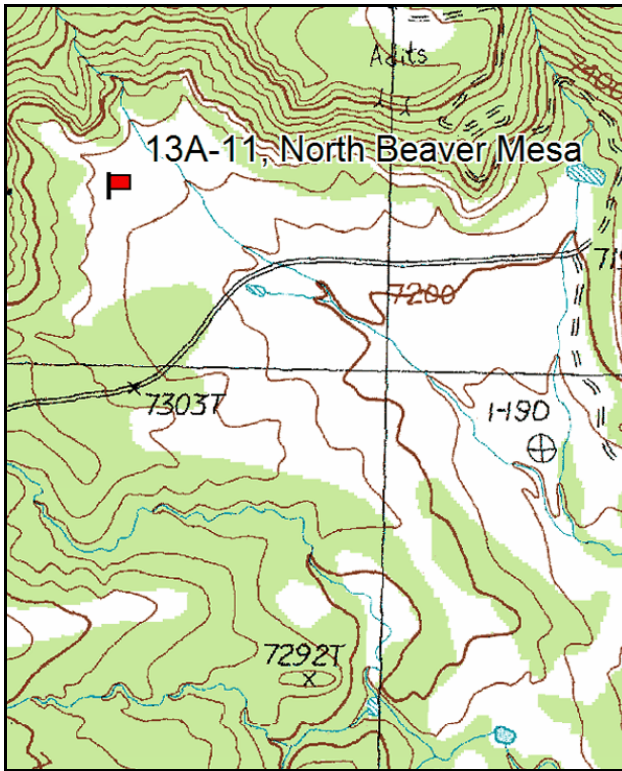
Vegetation type: Big Sagebrush.

Compass bearing: frequency baseline 133 degrees magnetic.

Frequency belt placement: line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft), line 4 (71ft).

LOCATION DESCRIPTION

From the intersection of the LaSal Mountain Loop and Gateway roads, travel east towards Gateway, Colorado for 7.7 miles to the North Beaver Mesa turnoff. Turn left and go 4.2 miles to the Polar Mesa/Fisher Valley Road. Continue straight through this fork, over a cattleguard and 0.85 miles to a stockpond at the head of a large sagebrush valley. The transect is located to the west (300 yards away @ 290°M) towards an alcove. It is marked by 1-foot tall fence posts. The 0-foot baseline stake is furthest away and is tagged #7842.



Map Name: Fisher Valley

Diagrammatic Sketch

Township 25S, Range 25E, Section 10

GPS: NAD 27, UTM 12S 4279393 N, 661326 E

DISCUSSION

North Beaver Mesa - Trend Study No. 13A-11

The North Beaver Mesa study is an area on the northeast side of the LaSal Mountains that receives a considerable amount of winter elk use. Pellet group data from 1999 estimated 46 deer (114 ddu/ha), 155 elk (383 elk days use/ha), and 17 cow days use/acre (42 cdu/ha) on the site. Pellet group data from 2004 estimated 3 deer (7 ddu/ha), 102 elk (251 edu/ha), and 7 cow days use/acre (18 cdu/ha). The deer use the area mostly as a transition range in the spring and fall, depending on the severity of the winter. The Beaver allotment is grazed by cattle in the spring and fall. In 1962, 1,000 acres within the allotment was chained or contour trenched and seeded. A roller-chopper was used to retreat other parts of the allotment in 1985 and 1987, but did not include this area. The study is located in the upper part of a large sagebrush valley, where the only evidence of vegetative treatments is the partially filled-in contoured trenches and presence of seeded species (crested wheatgrass, intermediate wheatgrass, smooth brome, and alfalfa).

The study has a southeast aspect on a slope of less than 5% and an elevation of 7,300 feet. In contrast, to the east and west of the contour trenches, there are some natural gullies, especially further down in the valley. The trenches unquestionably help to slow down water and soil movement. These water and soil catchments also support the greatest grass cover. The reddish-brown, sandy loam soil appears to be moderately deep (effective rooting depth of 15 inches). The soil is neutral to slightly alkaline (7.4 pH) with a phosphorous content of 8.9 ppm. Values below 10 ppm may limit normal plant growth and development. Livestock or wildlife have a heavy impact on this soil for trails and trampling have led to broken soil cover and soil movement.

The key browse on this site is Wyoming big sagebrush and on average makes up 81% of the browse cover, with a density of 5,900 plants per acre in 2004. Differences in density from 8,200 plants/acre to 5,900 in 2004 is mostly due to several young plants within the population in 1999. Almost half of the population was classified as young in 1987, declining to 18% by 1994, 22% in 1999, and to less than 1% in 2004. The percentage of seedlings to the population in 1987 was fairly good at 7%, increasing to 38% in 1994. It has since decreased again down to 6% in 1999 and finally to 0% in 2004. The density of mature plants has continually increased from 3,333 plants/acre in 1987, 4,300 in 1994, 4,840 in 1999, and finally to 5,160 in 2004. Hedging is light to moderate on most plants.

Pinyon-juniper and oak clumps dominate the surrounding slopes. Except for a few seedlings, they are not very abundant in the sagebrush dominated valley bottoms. The point quarter data from 1999 estimated a pinyon density of 42 trees/acre with a average diameter of 1.25 inches and juniper density at 23 trees/acre with an average diameter of 6.75 inches. Point quarter data from 2004 estimated 53 pinyon trees/acre with an average diameter of 2.1 inches, and junipers at 26 trees/acre with an average diameter of 3.2 inches. The available oak and scattered serviceberry have been highlined. White-stemmed rubber rabbitbrush is especially prevalent in the middle of the valley, with some plants showing moderate use. Other browse species are uncommon.

For elk range, the grass component is especially important with 85% of the grass cover coming from crested wheatgrass. Perennial grasses cover is 35% of the total vegetation on this site. Forb diversity is good with as many as 25 species sampled in 1994. However, only 15 species were sampled in 1999 and 2004 and they only provide a little over 4% total cover. The common hairy goldaster was the most abundant forb in 1994 and 1999, making up more than 50% of the forb cover, but provided only 8% of the forb cover in 2004. There are randomly scattered patches of alfalfa which were seldom picked up in the sampling design.

1994 TREND ASSESSMENT

The trend for soil is slightly improved, but still only in fair condition. Percent bare ground has gone down to a

relative 26% with litter cover decreasing slightly. Soils would be in much better condition if the herbaceous cover could be increased. This could occur with some rest from heavy early summer use. Browse trend is slightly up even with the slight decrease noted in the population estimate. Much of the change is from the much larger sample size used in 1994. The population shows the characteristics of an expanding population with low rates of decadency and very high biotic potential. The trend for the perennial herbaceous understory is slightly down with depressed nested frequency values. The Desirable Components Index rated this site as excellent with a score of 77 due to moderate perennial grasses, several young shrubs, and low decadence of key browse.

TREND ASSESSMENT

soil - slightly up (4)

browse - slightly up (4)

herbaceous understory - slightly down (2)

winter range condition (DC Index) - 77 (excellent) Wyoming sagebrush type

1999 TREND ASSESSMENT

The trend for soil is basically unchanged and stable. Percent bare ground had gone down from the high in 1987 of 37% to 30% in 1994, with no change in 1999. Soils would be in much better condition if the herbaceous cover could be increased. This could occur with some type of management system of rest and deferment from heavy and continuous early summer use. Browse trend is slightly up with increases in the sagebrush population, which on average makes up 85% of the browse cover. The population shows the characteristics of an expanding population with relatively low rates of decadency, and variable yet characteristically good biotic potential. The trend for the herbaceous understory is stable with increases for grasses but some losses for the forbs. The slight decrease in forb nested frequency is more than compensated for by the increase in grasses. The Desirable Components Index rated this site as excellent with a score of 86 due to high perennial grass cover, several young shrubs, and low decadence of key browse.

TREND ASSESSMENT

soil - stable (3)

browse - slightly up (4)

herbaceous understory - stable (3)

winter range condition (DC Index) - 86 (excellent) Wyoming sagebrush type

2004 TREND ASSESSMENT

Trend for soil is stable. Percent bare ground has not changed since 1994 at about 30%, but large patches of bare ground are found between shrubs. Due to slight slope erosion has been kept to a minimum. Trend for key browse species Wyoming big sagebrush is stable. Density of mature plants has continually increased since 1994. Seedling and young recruitment was less than 1% in 2004, which in past years has been fairly high. Trend for the herbaceous understory is slightly down with a significant loss of perennial grasses and forbs as indicated by the sum of nested frequency and sum of quadrat values. Grass and forb percent cover was also slightly lower from previous years. The Desirable Components Index rated this site as still excellent even with a lower score of 66. This lower value was due to some losses to the perennial component (grasses and forbs), few young shrubs, and a slight decrease in sagebrush cover.

TREND ASSESSMENT

soil - stable (3)

browse - stable (3)

herbaceous understory - slightly down (2)

winter range condition (DC Index) - 66 (excellent) Wyoming sagebrush type

HERBACEOUS TRENDS --
Management unit 13A, Study no: 11

| Type | Species | Nested Frequency | | | | Average Cover % | | |
|-----------------------------|------------------------------------|------------------|------------------|------------------|------------------|-----------------|-------|-------|
| | | '87 | '94 | '99 | '04 | '94 | '99 | '04 |
| G | <i>Agropyron cristatum</i> | _b 258 | _a 232 | _b 291 | _b 259 | 7.13 | 12.09 | 11.28 |
| G | <i>Agropyron intermedium</i> | _a 41 | _b 67 | _b 70 | _a 34 | 1.58 | 1.15 | 1.12 |
| G | <i>Bouteloua gracilis</i> | 5 | 8 | 5 | 3 | .33 | .30 | .15 |
| G | <i>Bromus inermis</i> | 24 | 13 | 14 | 16 | .36 | .24 | .25 |
| G | <i>Bromus tectorum</i> (a) | - | 42 | 36 | 37 | 1.66 | .52 | .26 |
| G | <i>Sporobolus cryptandrus</i> | - | 10 | 4 | - | .08 | .01 | - |
| G | <i>Stipa comata</i> | - | 6 | 4 | 4 | .01 | .18 | .18 |
| G | <i>Vulpia octoflora</i> (a) | - | 2 | - | - | .00 | - | - |
| Total for Annual Grasses | | 0 | 44 | 36 | 37 | 1.66 | 0.52 | 0.26 |
| Total for Perennial Grasses | | 328 | 336 | 388 | 316 | 9.50 | 13.98 | 13.00 |
| Total for Grasses | | 328 | 380 | 424 | 353 | 11.16 | 14.51 | 13.26 |
| F | <i>Alyssum</i> spp. (a) | - | 3 | - | - | .00 | - | - |
| F | <i>Arabis</i> spp. | - | 1 | - | - | .00 | - | - |
| F | <i>Artemisia ludoviciana</i> | - | 9 | 3 | - | .18 | .03 | - |
| F | <i>Astragalus convallarius</i> | 8 | 16 | 12 | 22 | .36 | .07 | .88 |
| F | <i>Aster</i> spp. | - | - | 5 | - | - | .01 | - |
| F | <i>Astragalus</i> spp. | 8 | 7 | 6 | 10 | .02 | .01 | .08 |
| F | <i>Castilleja linariaefolia</i> | - | - | 2 | - | - | .00 | - |
| F | <i>Calochortus nuttallii</i> | 1 | - | - | - | - | - | - |
| F | <i>Chenopodium album</i> (a) | - | - | - | 3 | - | - | .01 |
| F | <i>Collinsia parviflora</i> (a) | - | _b 13 | _a - | _a - | .02 | - | - |
| F | Cruciferae | _b 28 | _a - | _a - | _a - | - | - | - |
| F | <i>Delphinium nuttallianum</i> | 1 | - | - | - | - | - | - |
| F | <i>Draba reptans</i> (a) | - | 4 | 1 | 2 | .01 | .00 | .03 |
| F | <i>Eriogonum cernuum</i> (a) | - | 2 | - | - | .00 | - | - |
| F | <i>Erigeron pumilus</i> | _b 25 | _{ab} 14 | _b 18 | _a - | .06 | .19 | .03 |
| F | <i>Eriogonum racemosum</i> | 27 | 47 | 39 | 34 | .30 | .69 | .66 |
| F | <i>Euphorbia</i> spp. | 1 | - | - | - | - | - | - |
| F | <i>Fritillaria atropurpurea</i> | _a - | _b 10 | _a - | _a - | .02 | - | - |
| F | <i>Gayophytum ramosissimum</i> (a) | - | 3 | - | - | .01 | - | - |
| F | <i>Heterotheca villosa</i> | _c 214 | _b 102 | _b 78 | _a 26 | 2.76 | 2.44 | .28 |
| F | <i>Lactuca serriola</i> | 4 | - | - | - | - | - | - |
| F | <i>Lepidium densiflorum</i> (a) | - | 3 | - | - | .00 | - | - |
| F | <i>Lesquerella ludoviciana</i> | 3 | 2 | 3 | 1 | .01 | .00 | .00 |
| F | <i>Lithospermum ruderales</i> | _a - | _b 14 | _a - | _a - | .20 | - | - |

| Type | Species | Nested Frequency | | | | Average Cover % | | |
|---------------------------|------------------------------------|------------------|-----------------|-----------------|-----------------|-----------------|------|------|
| | | '87 | '94 | '99 | '04 | '94 | '99 | '04 |
| F | <i>Machaeranthera canescens</i> | 15 | 26 | 16 | 5 | .05 | .31 | .04 |
| F | <i>Medicago sativa</i> | - | 10 | 4 | 10 | .42 | .18 | .69 |
| F | <i>Microsteris gracilis</i> (a) | _a - | _b 16 | _b 17 | _c 50 | .04 | .03 | .27 |
| F | <i>Oenothera coronopifolia</i> | _c 39 | _b 11 | _a - | _a - | .03 | - | - |
| F | <i>Oxybaphus linearis</i> | - | 1 | - | - | .00 | - | - |
| F | <i>Petradoria pumila</i> | 1 | - | - | - | - | - | - |
| F | <i>Phlox longifolia</i> | 9 | 4 | 6 | 2 | .01 | .03 | .01 |
| F | <i>Polygonum douglasii</i> (a) | _a - | _a 1 | _a 8 | _b 31 | .00 | .01 | .15 |
| F | <i>Ranunculus testiculatus</i> (a) | - | - | - | 4 | - | - | .01 |
| F | <i>Senecio multilobatus</i> | 3 | - | - | - | - | - | - |
| F | <i>Sphaeralcea coccinea</i> | 11 | 12 | 13 | 5 | .05 | .14 | .18 |
| F | <i>Tragopogon dubius</i> | _b 17 | _{ab} 4 | _a - | _a - | .01 | - | - |
| F | <i>Trifolium</i> spp. | 4 | - | - | - | - | - | - |
| F | Unknown forb-perennial | _b 11 | _a - | _a - | _a - | - | - | - |
| Total for Annual Forbs | | 0 | 45 | 26 | 90 | 0.11 | 0.05 | 0.47 |
| Total for Perennial Forbs | | 430 | 290 | 205 | 115 | 4.54 | 4.13 | 2.87 |
| Total for Forbs | | 430 | 335 | 231 | 205 | 4.65 | 4.19 | 3.34 |

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

BROWSE TRENDS --

Management unit 13A, Study no: 11

| Type | Species | Strip Frequency | | | Average Cover % | | |
|------------------|-----------------------------------|-----------------|-----|-----|-----------------|-------|-------|
| | | '94 | '99 | '04 | '94 | '99 | '04 |
| B | Amelanchier utahensis | 5 | 3 | 0 | .15 | .03 | - |
| B | Artemisia frigida | 2 | 4 | 1 | .00 | - | - |
| B | Artemisia tridentata wyomingensis | 77 | 96 | 93 | 23.59 | 19.26 | 14.63 |
| B | Atriplex canescens | 2 | 2 | 1 | - | .15 | .15 |
| B | Atriplex confertifolia | 0 | 0 | 1 | - | - | - |
| B | Ceratoides lanata | 0 | 0 | 1 | - | - | - |
| B | Chrysothamnus nauseosus | 8 | 6 | 3 | .49 | .24 | .18 |
| B | Eriogonum microthecum | 11 | 14 | 13 | .21 | .25 | .36 |
| B | Gutierrezia sarothrae | 30 | 14 | 26 | 1.81 | .57 | 2.15 |
| B | Opuntia spp. | 8 | 6 | 14 | .11 | .09 | .21 |
| B | Pinus edulis | 0 | 4 | 5 | .53 | 2.07 | 1.85 |
| B | Quercus gambelii | 0 | 0 | 1 | .85 | - | .85 |
| B | Symphoricarpos oreophilus | 0 | 0 | 2 | - | - | - |
| Total for Browse | | 143 | 149 | 161 | 27.76 | 22.68 | 20.40 |

CANOPY COVER, LINE INTERCEPT --

Management unit 13A, Study no: 11

| Species | Percent Cover | |
|-----------------------------------|---------------|-------|
| | '99 | '04 |
| Artemisia tridentata wyomingensis | - | 20.91 |
| Chrysothamnus nauseosus | - | .61 |
| Eriogonum microthecum | - | .28 |
| Gutierrezia sarothrae | - | 2.11 |
| Opuntia spp. | - | .50 |
| Pinus edulis | .80 | 2.73 |
| Quercus gambelii | .40 | .60 |

KEY BROWSE ANNUAL LEADER GROWTH --
Management unit 13A, Study no: 11

| Species | Average leader growth (in) |
|-----------------------------------|----------------------------|
| | '04 |
| Artemisia tridentata wyomingensis | 1.8 |
| Ceratoides lanata | 3.5 |

POINT-QUARTER TREE DATA --
Management unit 13A, Study no: 11

| Species | Trees per Acre | | Average diameter (in) | |
|-----------------------|----------------|-----|-----------------------|-----|
| | '99 | '04 | '99 | '04 |
| Juniperus osteosperma | 23 | 26 | 6.8 | 3.2 |
| Pinus edulis | 42 | 53 | 1.3 | 2.1 |

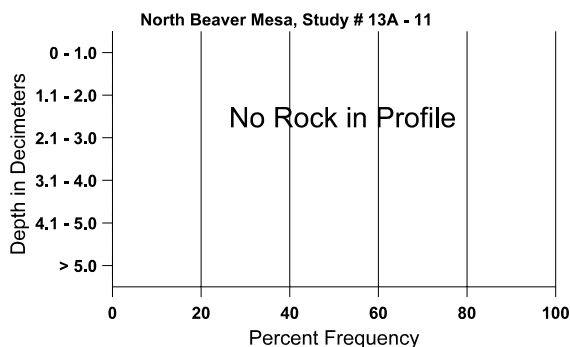
BASIC COVER --
Management unit 13A, Study no: 11

| Cover Type | Average Cover % | | | |
|-------------|-----------------|-------|-------|-------|
| | '87 | '94 | '99 | '04 |
| Vegetation | 15.75 | 40.55 | 40.91 | 38.89 |
| Rock | 0 | .15 | .15 | .15 |
| Pavement | 0 | .42 | .11 | .02 |
| Litter | 43.50 | 41.52 | 40.15 | 43.83 |
| Cryptogams | 3.50 | 1.58 | 3.35 | 2.40 |
| Bare Ground | 37.25 | 30.21 | 29.78 | 30.00 |

SOIL ANALYSIS DATA --
Management unit 13A, Study no: 11, Study Name: North Beaver Mesa

| Effective rooting depth (in) | Temp °F (depth) | pH | %sand | %silt | %clay | %OM | PPM P | PPM K | ds/m |
|------------------------------|-----------------|-----|-------|-------|-------|-----|-------|-------|------|
| 15.1 | 61.0 (13.9) | 7.4 | 70.9 | 11.8 | 17.3 | 1.6 | 8.9 | 92.8 | 0.4 |

Stoniness Index



PELLET GROUP DATA --

Management unit 13A, Study no: 11

| Type | Quadrat Frequency | | | Days use per acre (ha) | |
|--------|-------------------|-----|-----|------------------------|-----------|
| | '94 | '99 | '04 | '99 | '04 |
| Rabbit | 19 | 5 | 17 | - | - |
| Horse | - | 1 | - | 1 (2) | - |
| Elk | 55 | 52 | 51 | 155 (383) | 102 (251) |
| Deer | 26 | 20 | 12 | 46 (114) | 3 (7) |
| Cattle | - | 5 | - | 17 (42) | 7 (18) |

BROWSE CHARACTERISTICS --

Management unit 13A, Study no: 11

| | | 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) |
| Amelanchier utahensis | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 100 | - | 60 | 40 | - | - | 0 | 20 | - | - | 0 | 15/11 |
| 99 | 60 | - | 60 | - | - | - | 0 | 0 | - | - | 0 | 36/34 |
| 04 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | 17/15 |
| Artemisia frigida | | | | | | | | | | | | |
| 87 | 600 | 66 | 600 | - | - | - | 0 | 11 | - | - | 0 | -/- |
| 94 | 100 | - | - | 100 | - | - | 0 | 0 | - | - | 0 | 8/9 |
| 99 | 100 | - | - | 100 | - | - | 0 | 0 | - | - | 0 | 10/5 |
| 04 | 20 | - | - | 20 | - | - | 0 | 0 | - | - | 0 | 14/10 |
| Artemisia tridentata wyomingensis | | | | | | | | | | | | |
| 87 | 10332 | 733 | 5066 | 3333 | 1933 | - | 38 | 4 | 19 | .38 | 2 | 19/22 |
| 94 | 6140 | 2340 | 1120 | 4300 | 720 | 420 | 31 | 4 | 12 | 4 | 11 | 16/28 |
| 99 | 8200 | 460 | 1840 | 4840 | 1520 | 660 | 52 | 10 | 19 | 5 | 5 | 24/36 |
| 04 | 5900 | - | 40 | 5160 | 700 | 1160 | 45 | 19 | 12 | 6 | 6 | 18/26 |
| Atriplex canescens | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 60 | - | 20 | 40 | - | - | 67 | 0 | - | - | 0 | 16/19 |
| 99 | 80 | - | 60 | 20 | - | - | 25 | 0 | - | - | 0 | 20/15 |
| 04 | 20 | - | - | 20 | - | - | 0 | 100 | - | - | 0 | 21/16 |
| Atriplex confertifolia | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 99 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 04 | 20 | - | - | 20 | - | - | 0 | 100 | - | - | 0 | 16/12 |

| | | 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>Ceratoides lanata</i> | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 99 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 04 | 20 | - | - | 20 | - | - | 0 | 100 | - | - | 0 | 14/4 |
| <i>Chrysothamnus nauseosus</i> | | | | | | | | | | | | |
| 87 | 332 | - | 66 | 200 | 66 | - | 20 | 20 | 20 | - | 40 | 34/25 |
| 94 | 240 | 20 | 60 | 160 | 20 | - | 0 | 0 | 8 | - | 17 | 29/26 |
| 99 | 200 | - | 80 | 80 | 40 | - | 0 | 0 | 20 | - | 0 | 20/32 |
| 04 | 100 | - | - | 80 | 20 | - | 0 | 0 | 20 | - | 0 | 20/20 |
| <i>Eriogonum microthecum</i> | | | | | | | | | | | | |
| 87 | 600 | - | 600 | - | - | - | 0 | 0 | 0 | - | 0 | -/- |
| 94 | 620 | 60 | 140 | 480 | - | - | 13 | 0 | 0 | - | 0 | 11/8 |
| 99 | 540 | - | 80 | 420 | 40 | - | 7 | 19 | 7 | - | 0 | 7/6 |
| 04 | 380 | - | - | 360 | 20 | - | 11 | 37 | 5 | 5 | 5 | 10/8 |
| <i>Gutierrezia sarothrae</i> | | | | | | | | | | | | |
| 87 | 666 | - | 600 | 66 | - | - | 0 | 0 | 0 | - | 0 | 6/5 |
| 94 | 1820 | 400 | 140 | 1660 | 20 | 20 | 0 | 0 | 1 | 1 | 1 | 10/11 |
| 99 | 1200 | - | 160 | 1040 | - | - | 50 | 0 | 0 | - | 0 | 8/8 |
| 04 | 1540 | - | - | 1540 | - | - | 0 | 0 | 0 | - | 0 | 10/12 |
| <i>Opuntia spp.</i> | | | | | | | | | | | | |
| 87 | 266 | 66 | - | 266 | - | - | 0 | 0 | - | - | 50 | 4/14 |
| 94 | 280 | - | - | 280 | - | - | 0 | 0 | - | - | 0 | 4/9 |
| 99 | 160 | - | 60 | 100 | - | - | 0 | 0 | - | - | 0 | 5/13 |
| 04 | 460 | - | - | 460 | - | - | 0 | 0 | - | - | 0 | 5/15 |
| <i>Pinus edulis</i> | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 99 | 80 | 20 | 60 | 20 | - | - | 0 | 0 | - | - | 0 | -/- |
| 04 | 100 | - | 80 | 20 | - | - | 0 | 0 | - | - | 0 | -/- |
| <i>Quercus gambelii</i> | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | 0 | - | 0 | -/- |
| 94 | 0 | - | - | - | - | - | 0 | 0 | 0 | - | 0 | -/- |
| 99 | 0 | - | - | - | - | - | 0 | 0 | 0 | - | 0 | -/- |
| 04 | 180 | - | 100 | 40 | 40 | 60 | 22 | 0 | 22 | 22 | 22 | 29/28 |

| | | 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>Symphoricarpos oreophilus</i> | | | | | | | | | | | | |
| 87 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 94 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 99 | 0 | - | - | - | - | - | 0 | 0 | - | - | 0 | -/- |
| 04 | 40 | - | 20 | 20 | - | - | 0 | 0 | - | - | 0 | 13/17 |