

# Wildlife Habitat Improvement of the Parkinson Ranch, Milnesand, New Mexico

---



**Landowner Incentive Program, New Mexico Department of Game and Fish**

Parkinson Ranch

In cooperation with

Natural Heritage New Mexico Division, Museum of Southwestern Biology

University of New Mexico

2009

## **Contents**

Introduction .....	6
Parkinson Ranch History .....	6
Study Area.....	11
Climate .....	11
Range Habitat Improvement .....	14
Infrastructure Improvements .....	14
Landcover Improvements.....	16
Monitoring Support and Livestock Rotation Management .....	16
Vegetation Monitoring.....	17
Introduction .....	17
Methods.....	17
Sandhill Grazing Area .....	17
Mesquite Treatment Area.....	19
Data Management .....	20
Results.....	21
Sandhill Grazing Area .....	21
Mesquite Treatment Area.....	24
Discussion.....	24
Landcover Mapping .....	26
Background .....	26
Methods.....	27
Field Observations .....	27
Map Unit Classification .....	27
Ancillary GIS Layers .....	28
Results.....	28
Map Unit Classification .....	28
Analysis of Vegetation and Soils .....	33
Final Products.....	33
Discussion.....	33
Zoology.....	38
Introduction .....	38

Methods.....	38
Results.....	43
BTPD.....	43
LPCH.....	43
LOSH.....	44
Discussion.....	44
BTPD.....	44
LPCH.....	44
LOSH.....	44
NHNM Recommendations.....	45
Literature Cited.....	45
Appendix A. Monitoring Transect GPS Locations.....	48
Appendix B. Vegetation Monitoring Data.....	51
Table B1. Raw floristic data by quadrat at the Sandhills Grazing Area (SGA). .....	51
Table B2. Raw biomass (grams) by vegetation type (herbaceous or woody) per clipping quadrat at the Sandhills Grazing Area (SGA). .....	217
Table B3. Raw percent basal cover data based on transect line point intercept at the Sandhills Grazing Area (SGA). .....	223
Table B4. Raw floristic data by quadrat at the Mesquite Treatment Area (MTA). .....	233
Table B5. Raw percent basal cover data based on transect line point intercept at the Mesquite Treatment Area (MTA). .....	258
Table B6. Raw percent mesquite defoliation and percent cover of ground cover elements at the Mesquite Treatment Area (MTA). Includes location information (angle and distance) for the mesquite quadrats. ....	262
Table B7. Raw ground cover line intercept of species and ground cover elements at the Mesquite Treatment Area (MTA). .....	270
Appendix C. List of plant species recorded between 2007 and 2009 for the Landowner Incentive Program: Wildlife Habitat Improvement of the Parkinson Ranch, Milnesand, New Mexico. ....	298
Table C1. Plant species arranged by life form and alphabetically by scientific name followed by the common name and plant family; NHNM Acronym refers to the Natural Heritage New Mexico database code for species; PLANT symbol is database code for the USDA PLANTS database; Distribution is coded by sampling location where GC=grazing control; GR=grazing rotational; GY=grazing year-round; MT=mesquite treatment; Map=vegetation map. Whether a voucher collection was made for the species is indicated in the last column. ....	298

Table C2. Plant species arranged by life form and alphabetically by common name followed by the scientific name and plant family; NHNM Acronym refers to the Natural Heritage New Mexico database code for species; PLANT symbol is database code for the USDA PLANTS database; Distribution is coded by sampling location where GC=grazing control; GR=grazing rotational; GY=grazing year-round; MT=mesquite treatment; Map=vegetation map. Whether a voucher collection was made for the species is indicated in the last column.....	309
Appendix D. NRCS Nontechnical Descriptions of Soil Map Units on the Parkinson Ranch, New Mexico	319
Appendix E. NRCS Soil Taxonomic Classification for the Parkinson Ranch, New Mexico .....	328
Appendix F. NRCS Soil Component Legend for the Parkinson Ranch, New Mexico .....	329
Appendix G. NRCS Rangeland Productivity of Soils on the Parkinson Ranch, New Mexico .....	333
Appendix H – Land Cover Map Unit Descriptions.....	349
Native Grasslands.....	349
Short-grass Prairie Herbaceous Vegetation.....	349
Mixed Mid-Grass and Short-Grass/Shin-oak Grassland.....	350
Native Shrublands.....	350
Old Fields.....	352
Treated.....	353

## Table of Figures

Figure 1. Parkinson family, owners of the Parkinson Ranch. left to right: Barbra Parkinson Teel, Elton Parkinson, Ruby Parkinson, Austin Phillips, Wiley Teel (Project Manager), Vivian Parkinson, and Jerry Parkinson. ....	7
Figure 2. Study area: Parkinson Ranch, New Mexico.....	8
Figure 3. Changes in landuse on the Parkinson Ranch, NM between 1949 and 2005. ....	10
Figure 4. Average monthly temperature for Crossroads and Portales, New Mexico.....	12
Figure 5. Average monthly precipitation for Crossroads and Portales, New Mexico.....	13
Figure 6. Stock tank at Parkinson Ranch.....	15
Figure 7. Infrastructure and range improvements. ....	15
Figure 8. Vegetation monitoring within the Mesquite Treatment Area (MTA) and Sandhill Grazing Area (SGA). ....	18
Figure 9. Average canopy cover by life form elements at the Sandhill Grazing Area in 2007 and 2009 (n=15 per treatment).....	22
Figure 10. Average basal cover by life form and ground cover elements at the Sandhill Grazing Area in 2007 and 2009 (n = 15 per treatment). ....	22
Figure 11. Average standing biomass canopy cover by life form elements at the Sandhill Grazing Area in 2007 and 2009 (n=15 per treatment). ....	23



Figure 12. Total species richness by life form elements at the Sandhill Grazing Area in 2007 and 2009 (n=15 per treatment) .....	23
Figure 13. The effect of herbicide treatment on mesquite at the Mesquite Treatment Area: a) whole plant defoliation measured just after treatment in 2008 and again the fall of 2009 (n=30); b) canopy cover estimated from quadrats under mesquite shrubs before treatment into 2008 and after treatment in the fall of 2009 (n=30).....	24
Figure 14. Canopy cover by year and life form at Mesquite Treatment Area: a) data from quadrats under mesquite shrubs (n=30); b) data from quadrats in the inter-shrub spaces (n=30). .....	25
Figure 15. Average basal cover of ground cover elements at the Mesquite Treatment Area in 2009 (n=15).....	26
Figure 16. Map of Parkinson land cover. ....	32
Figure 17. NRCS soils of the Parkinson Ranch, NM. See Appendix D for details on the soil map units....	35
Figure 18. NRCS soil texture for the Parkinson Ranch, NM. ....	36
Figure 19. Distribution by percentage of surface soil texture classes on the Parkinson Ranch, NM. ....	37
Figure 20. NRCS eroded soils on the Parkinson Ranch, NM. ....	37
Figure 21. Black-tail prairie dog activity observed on the Parkinson Ranch between 2008 and 2009.....	40
Figure 22. Lesser prairie-chicken activity observed on the Parkinson Ranch between 2008 and 2009....	41
Figure 23. Loggerhead shrike activity observed on the Parkinson Ranch, New Mexico, between 2008 and 2009. ....	42

## Table Tables

Table 1. Precipitation distribution by major season at Portales (297008) during the project sampling period. The departures (Dept.) are the differences from the long-term average at the station between 1905 and 2009. ....	22
Table 2. Mean and standard deviations for standing biomass (lbs per acre) by life form elements at the Sandhill Grazing Area in 2009 (n=15 per treatment).....	23
Table 3. Land cover map units for the Parkinson Ranch, New Mexico.....	29

# ***Wildlife Habitat Improvement of the Parkinson Ranch, Milnesand, New Mexico***

Final Report<sup>1</sup>

Wiley Teel<sup>2</sup>, Esteban Muldavin<sup>3</sup>, Kristine Johnson, Teri Neville, Yvonne Chauvin, and Paul Neville<sup>4</sup>

February 2010

---

## **Introduction**

The Landowner Incentive Program (LIP) is a U.S. Fish and Wildlife Service program that provides funds to the New Mexico Department of Game and Fish to enter into agreements with private landowners for the purpose of protecting and restoring habitats on private lands to benefit federally listed, proposed or candidate species or other species determined to be at-risk. Elton Parkinson, a landowner in Roosevelt County, was awarded a contract to improve wildlife habitat in the native prairie and sandhill ecosystems of his Parkinson Ranch (hereinafter referred to as the “ranch”). Mr. Parkinson entered into a cooperative agreement with Natural Heritage New Mexico to conduct biological inventories, monitoring, and analyses of invasive species treatments and infrastructure improvements for managing wildlife.

A number of improvements were made to the ranch, including the removal of approximately 267 ha (660 ac) of honey mesquite (*Prosopis glandulosa*) from the dominant Great Plains Shortgrass Prairie vegetation community, implementation of deferred-grazing regimes to provide residual grass cover and improved habitat for the lesser prairie-chicken (*Tympanuchus pallidicinctus*), and new infrastructure to avoid conflicts with seasonal habitat use by the lesser prairie-chicken.

## **Parkinson Ranch History**

T.E. Parkinson, known as Elton, and his wife Ruby are both descendants from some of the earliest homesteaders of Milnesand, New Mexico (Figure 1). Over the years they have increased their lands to piece together what is known today as the Parkinson Ranch (Figure 2). Prior to the federal government opening up the Milnesand area to homesteading, the ranch was part of the extensive D-Z Ranch. Elton’s grandfather, Thomas Parkinson, homesteaded approximately 160 acres in Section 26, T8, R35 in 1915. Much of the area had been previously homesteaded, and the condition of the acquired properties

---

<sup>1</sup> Final report submitted in fulfillment of Landowner Incentive Program Cooperative Agreement #07-516-0000-I5T104.

<sup>2</sup> Wiley Teel, Project Leader, Parkinson Ranch, Milnesand, New Mexico.

<sup>3</sup> Esteban Muldavin, Senior Ecologist; Kristine Johnson, Zoologist; Teri Neville, GIS Coordinator; Yvonne Chauvin, Botanist of the Natural Heritage New Mexico, Museum of Southwestern Biology, Department of Biology, University of New Mexico.

<sup>4</sup> Paul Neville, Remote Sensing Specialist, Earth Data Analysis Center, University of New Mexico.



FIGURE 1. PARKINSON FAMILY, OWNERS OF THE PARKINSON RANCH. LEFT TO RIGHT: BARBRA PARKINSON TEEL, ELTON PARKINSON, RUBY PARKINSON, AUSTIN PHILLIPS, WILEY TEEL (PROJECT MANAGER), VIVIAN PARKINSON, AND JERRY PARKINSON.

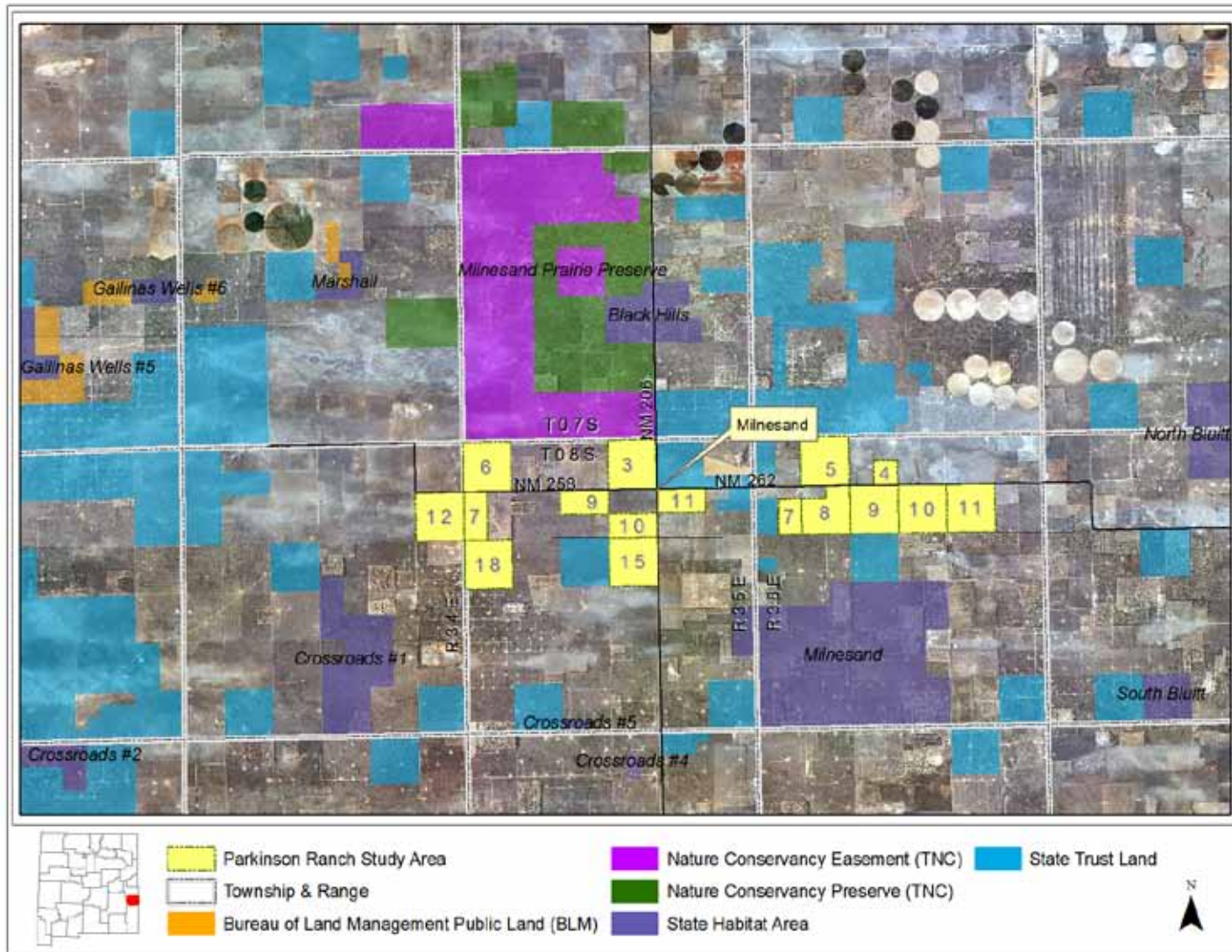


FIGURE 2. STUDY AREA: PARKINSON RANCH, NEW MEXICO.

varied greatly. Homesteaders were required to improve the land and many began with small orchards and gardens to provide food for themselves while clearing more extensive areas to provide forage for farm animals. The remnants of a small orchard, as well as an air field can be found within the Parkinson Ranch today.

The original landscape of the Milnesand area was covered by undulating sandsheets and dunal landforms dominated by either sand shinnery oak (*Quercus havardii*) with mid- and tall-grasses of little bluestem (*Schizachorium scoparium*) and sand bluestem (*Andropogon hallii*) or shinnery oak associated with shortgrasses such as hairy grama (*Bouteloua hirsuta*). Some native animals commonly found in these landscapes were the lesser prairie-chicken (hereafter referred to as LPCH), scaled quail (*Callipepla squamata*), northern bobwhite (*Colinus virginianus*) and pronghorn antelope (*Antilocapra americana*). Although common now, the mule deer (*Odocoileus hemionus*) began to show up in the area in the 1960s. While much of this landscape was covered in sandsheets, depressions comprised of loamy soils, directly overlying the Ogallala Formation, were and are the preferred lands of the early homesteaders and ranchers. These lands, commonly referred to as "tight lands" by the locals, were dominated by shortgrasses such as buffalo grass (*Buchloe dactoides*) and grama grasses (*Bouteloua* spp.), the preferred forage for cattle. They are also home to the black-tailed prairie dog (*Cynomys ludoviciana*).

The process of clearing the land, which began with the earliest homesteaders and continues to this day, has left its imprint, resulting in the diverse landscape evident today. All sandhill landscapes within the Milnesand area that lack shin-oak have been modified by tilling, cropping, or grazing for over 100 years (Elton Parkinson, pers. comm.). In areas where shin-oak has been removed, the landscape was probably subjected to a variety of manipulations and invasive recruitment over time, including: grubbing (manual and mechanical removal of vegetation), cropping (agriculture such as corn, cotton, or orchards), seeding of native or non-native grasses, reseeding of native or non-native grasses, grazing, leaving fallow, enlistment into the federal Conservation Reserve Program (CRP) and its associated treatments, invasion of mesquite, subsequent chemical treatment of mesquite, shin-oak chemical treatment, and then returning to any or all of the above.

Cycles of drought and summer rains have an equally profound effect on the landscape. While Milnesand has been experiencing drought conditions for a number of years, a rain event in the summer (June-August) can produce sufficient ground cover to stabilize the sandsheets and produce sufficient forage for cattle. Long-term effects of drought and over-stocking on water-deficient landscapes could propel the community into another dust bowl if it were not for the U.S. Department of Agriculture (USDA) programs beginning with the Soil Bank up to the present-day CRP, which has been embraced by the local community. Most of the Milnesand community still consists of descendants that suffered the deleterious effects of the 1930s Dust Bowl, and there exists a collective memory of that event among them.

In an attempt to track some of the land use changes over time within the ranch, Natural Heritage New Mexico (NHNM) and Earth Data Analysis Center (EDAC) scanned and georectified aerial photos from



1949 and 1964 (Figure 3). Our primary objective was to identify the undisturbed natural landscapes from the earliest time possible and track modifications of the landscape. As early as 1949, 1016 ha

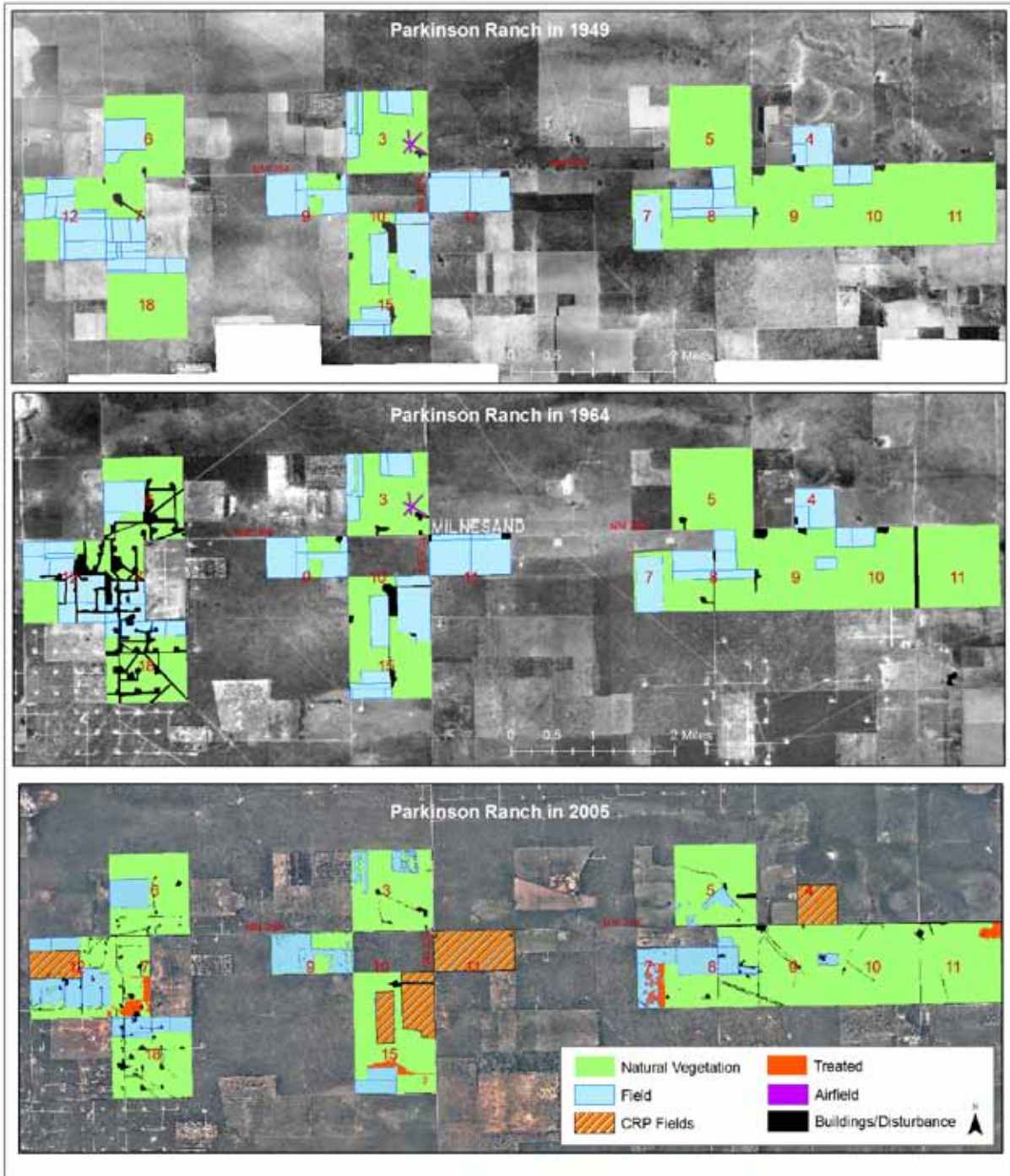


FIGURE 3. CHANGES IN LANDUSE ON THE PARKINSON RANCH, NM BETWEEN 1949 AND 2005.

(2510 ac, 30% of the ranch) had already been converted to fields. By 1964, oil exploration occurred on Sections 6, 7, 12, and 18 of T8S, R35E, with no identifiable conversion of additional lands into fields. By 1964 34% of the Parkinson Ranch had been converted from natural vegetation. By 2005, with higher-resolution imagery and discussions with E. Parkinson, we determined which of the fields were in the CRP, but no records exist as to when individual fields were converted or if they had been planted with native or non-native seeds (see Land Cover Mapping for further discussion on landcover). Additionally, we were able to identify areas through field surveys where chemical treatments had occurred to control both shin-oak and honey mesquite (*Prosopis glandulosa*).

## **Study Area**

The Parkinson Ranch nearly surrounds the town of Milnesand at the crossroads of State Highways 262 and 206, east of the Pecos River and approximately 37 mi south of Portales (Figure 2). The study area portion of the ranch covers approximately 3222 ha (7961 ac) and lies within Township 8 South, Range 35 and 36 East covering approximately 12 sections. The ranch lies within the Llano Estacado portion of the Great Plains physiographic unit (Lotspeich and Everhart 1962). The deep, well-drained sandhills of this area were derived from the ancestral Pecos River reworked by wind and deposited within the Portales Valley (McLemore 1998). Blowout cells throughout the sandhills expose the llano soils of the Ogallala Formation. Privately owned lands, followed by New Mexico State Lands, occupy the greatest percentage of the land surrounding the ranch. However, contiguous and in close proximity to the ranch are areas specifically managed for lesser prairie-chicken habitat, including The Nature Conservancy's Milnesand Prairie Preserve to the north, the Conservancy's recent purchase of the Ainsworth Ranch to the south and west, and scattered State Habitat Areas (managed by the New Mexico Department of Game and Fish), the largest being the Milnesand Lesser Prairie-chicken Area to the south.

## **Climate**

For describing climatic patterns there were two weather station records available. Crossroads, NM (-103.34028, 33.51333, 4138 ft) was the closest climate station with a long-term record (1929-2001) and is located approximately 8 mi (12.9 km) south of the ranch. But its closure in 2001, the station at Portales (-103.35194, 34.17417, 4010 ft), approximately 37 mi (59.5 km) to the north was used to identify more recent trends (1905-2009).

Crossroads had moderately high temperatures during the summer (June through August) with an average maximum temperature of 90°F (32.2°C) and an average low of 60°F (15.56°C) (Figure 4). July tended to be the warmest month. Winter average high was 56°F (13.33°C) and an average low of 25°F (-3.89°C). January is typically the coldest month.

With respect to precipitation, Lotspeich and Everhart (1962) reported that 70-80% of total precipitation falls between May and October across the Llano Estacado. This pattern holds for Portales (75%) but for Crossroads it was only 54%. Overall, average annual precipitation at Crossroads was 15.6 in. (39.62 cm) while that at Portales was 16.9 in (42.9 cm). At Crossroads the highest single-day event was in July of 1991 with 4.46 in. (11.3 cm) and the largest annual total of 41.0 in. (104.4 cm) in 1941. As was typical



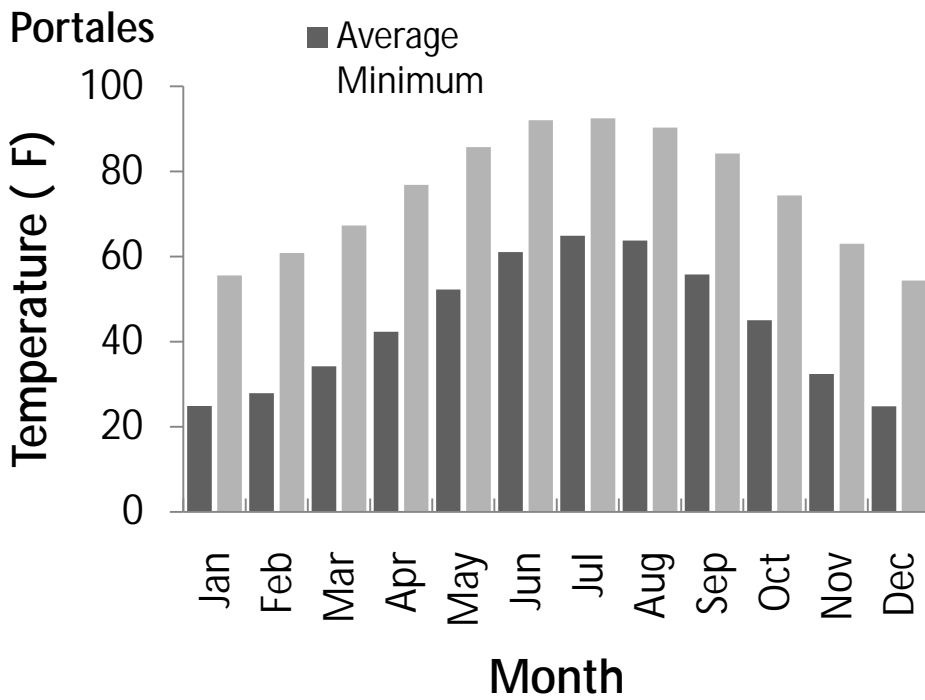
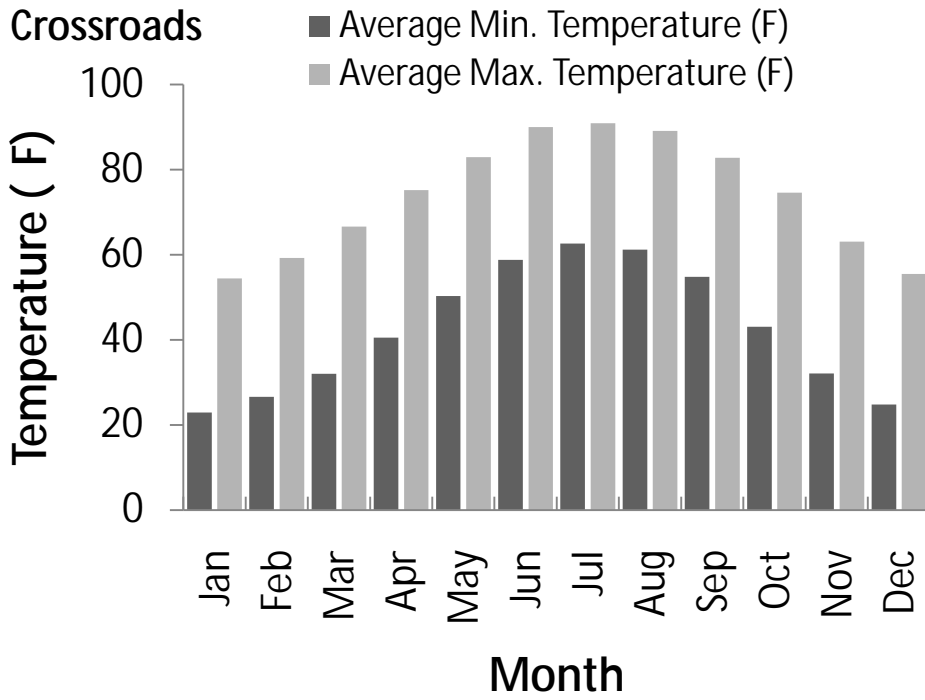


FIGURE 4. AVERAGE MONTHLY TEMPERATURE FOR CROSSROADS AND PORTALES, NEW MEXICO.

for the region, lowest annual precipitation was in 1956 with 7.57 in. (19.23 cm). However, in 2003 Portales recorded only 7.66 in. (19.46 cm). Crossroads was not operating at this time, but we assume Milnesand suffered an equally dry year.

Lotspeich and Everhart (1962) report rainfall varies widely across the Llano from year-to-year, and this was evident over the three years of the study (Figure 5; Table XX). In the first year of sampling, the previous winter precipitation was nearly twice the norm at Portales, while the summer was normal. In the following two years precipitation was below normal, particularly in the summer of 2008. In addition, in 2007 summer precipitation peaked in early summer while in 2008 and 2009 it peaked in July. In all years, precipitation dropped off was below average in August. Rainfall is not only highly variable across the region but also within the ranch. Many small thunderstorms with accumulations of a few inches can occur on portions of the ranch while other areas are left dry.

Wind speeds can exceed 60 mph with the greatest speeds occurring in the spring. Winds diminish in the late summer and increase again toward winter. Numerous and high winds, combined with low precipitation and moderately high temperatures, increase rates of evaporation. Total evaporation at Portales from April through September is generally 63.39 in (161.01 cm) (Lotspeich and Everhart 1962).

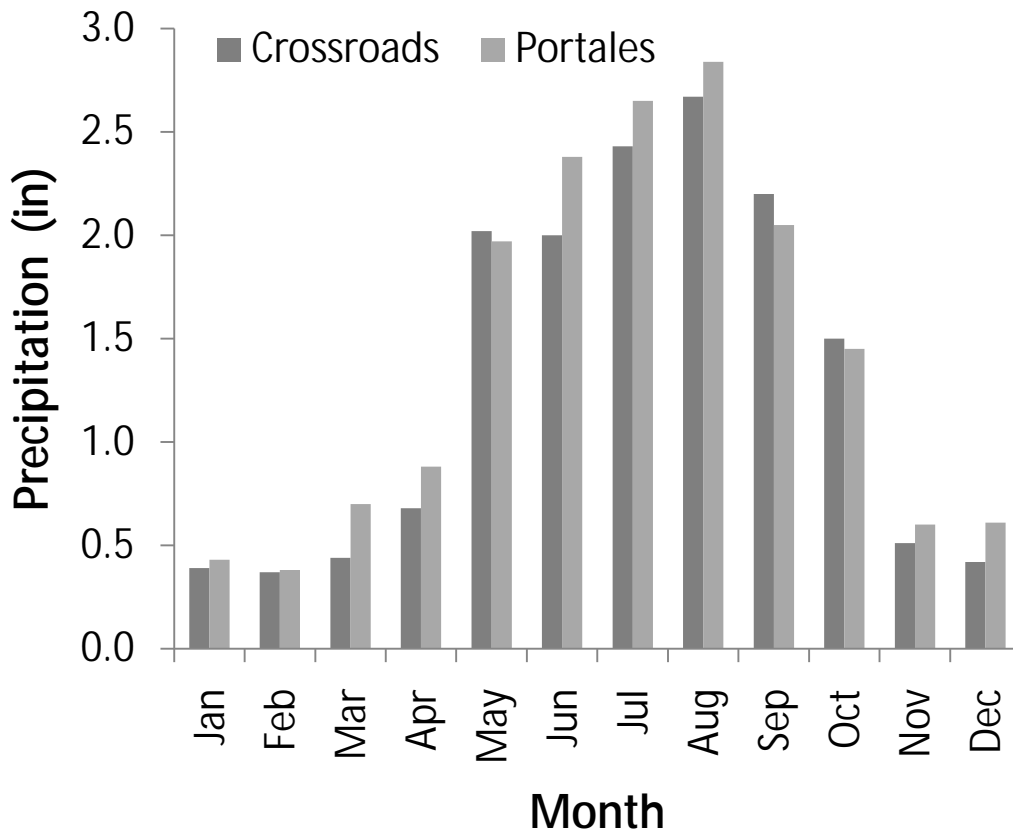


FIGURE 5. AVERAGE MONTHLY PRECIPITATION FOR CROSSROADS AND PORTALES, NEW MEXICO.

## **Range Habitat Improvement**

Prior to initiating habitat improvements, Parkinson Ranch contracted with Don Clifton to complete a cultural survey that detected no significant cultural artifacts. The ranch had specific habitat improvement goals, which included:

1. Developing a deferred-grazing strategy and supporting infrastructure within lesser prairie-chicken habitat near an established lek (Section 10, T8S R36E);
2. Installing a livestock tank and pipeline to divert grazing pressures from lesser prairie-chicken habitat;
3. Removing honey mesquite from native pastures, thereby improving black-tailed prairie dog and grassland bird habitat;
4. Supporting monitoring efforts of NHHM by rotating grazing and installing temporary fencing within mesquite-treated and untreated areas.

## **Infrastructure Improvements**

A mile of four-wire fence was erected within Section 10, T8S R36E just north of an established lek (Figure 6, see Zoology Section – LEKCK1). The fence is at the transition of shin-oak shrublands with either shortgrass or mid- and tall-grasses containing scattered dunelands. For livestock management purposes, the fence forces the cattle to graze principally on the preferred shortgrass forage north of the fence, thereby relieving grazing pressures to the south in prime lesser prairie-chicken habitat. Of particular significance to habitat conservation for the LPCH is the abundance of high-quality nesting and foraging habitat adjacent to the lek which extends in all directions, totaling approximately 730 ha (1803 ac, Neville et al. 2005). Grazing within this southern portion of the section has been deferred throughout the year with the exception of July and November. Although the original agreement called for June and July deferment, NMDGF approved the modified grazing periods. In addition, the ranch attached plastic flags to the top and third barbed wires along the length of the new fence in accordance with Sutton fence marking guidelines ([www.suttoncenter.org/fence\\_marking.html](http://www.suttoncenter.org/fence_marking.html)) to reduce LPCH fence collisions. Wolfe et al. (2007) determined approximately 33% of deaths in LPCH populations were attributable to collisions with fences and that mortality was higher for hens than for cocks. However, the study was based on Oklahoma studies and not the more open pastures found more commonly in Milnesand (pers. comm., Don Wolfe). By early 2009, the ranch noticed some of the flags had been chewed off. A 0.5-mi (08km) length of pipeline and a steel stock tank were installed and built within Section 9, T8S R35E at the center part of the ranch (Figure 6). The tank and pipeline help divert livestock pressures away from prairie-chicken habitat toward an area of old fields and pastures (Figure 7).

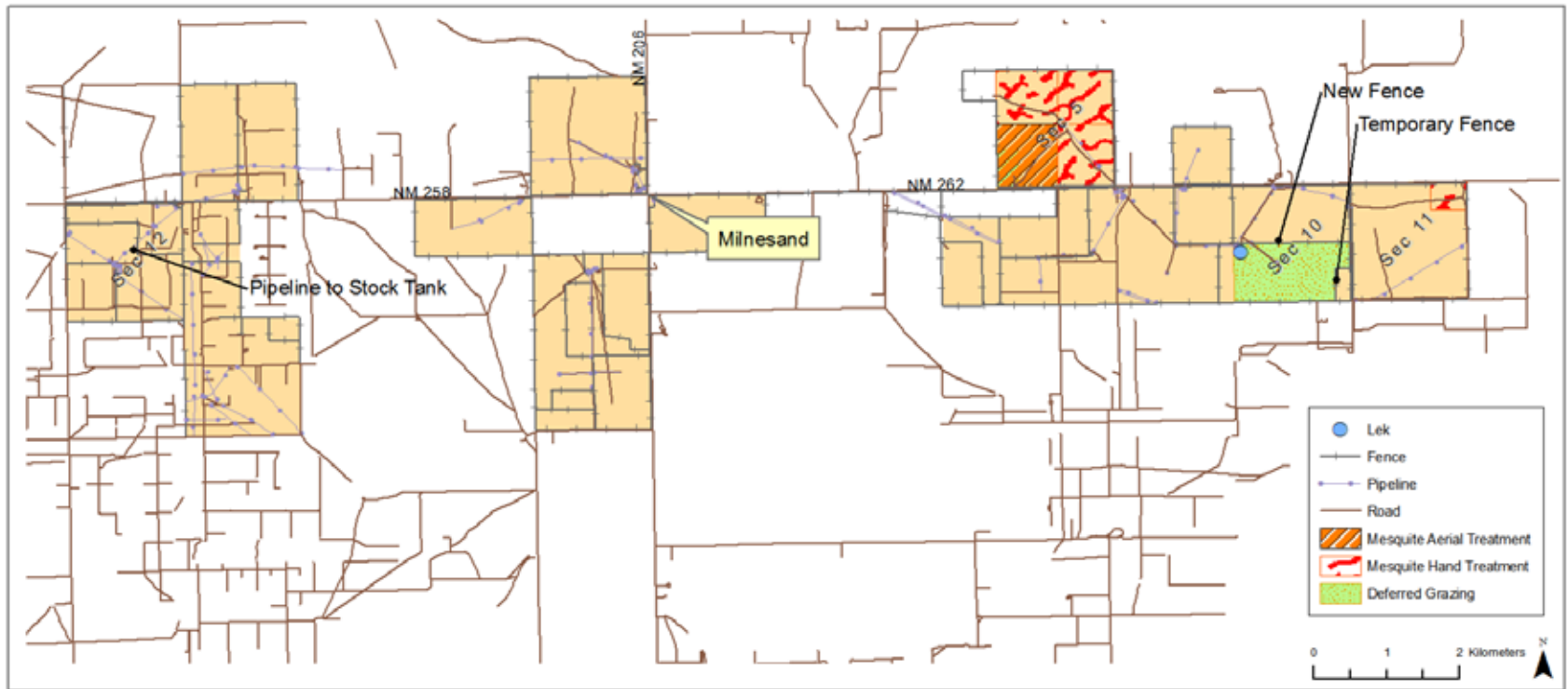


FIGURE 7. INFRASTRUCTURE AND RANGE IMPROVEMENTS.



FIGURE 6. STOCK TANK AT PARKINSON RANCH.

## **Landcover Improvements**

Shrub encroachment, particularly from mesquite, has increased in semi-arid grasslands of the southwestern United States. The increased shrub cover has led to declines in species diversity, water availability, grazing capacity, and soil organic matter (Laliberte et al. 2004). In June 2008, the ranch met with a representative of Dow AgroSciences and a local dust-cropper, Dink Miller, to discuss the proposed mesquite-treatment sites and weather conditions for greatest treatment success. We identified three densities of mesquite encroachment following Natural Resources Conservation Service (NRCS) guidelines: light, medium, and heavy.

The heavy mesquite areas (64.8 ha, 160 ac) were aerially sprayed on June 25, 2008, and two weeks later a follow-up application only along the NM 262 within Section 5 was again sprayed (Figure 6). The remaining light- and medium-mesquite areas were spot treated by the ranch using four-wheeler equipped with sprayers ( $\pm 202$  ha,  $\pm 500$  ac) beginning June 21, 2008 and periodically thereafter when soil temperature and mesquite plant conditions were appropriate. By mid-June 2009, the conditions were again appropriate to resume hand application within heavy, medium, and light areas of Sections 5 and the east edge of Section 11. The ranch wanted to obtain a higher kill rate than the 60% expected by "experts," so they continued with targeted hand spraying in late June and early July, using the chemicals Reclaim and Remedy. Although the mesquite appeared to be dead, re-growth at the base of the plants made it difficult to distinguish dead from live plants when spraying.

Although not a goal of the project, the ranch became concerned in 2009 about the large, standing, dead mesquite brush left from chemical treatments within Section 5. Some dead canopy had been removed by cattle by this time. They experimented with a steel-track bulldozer within a small test strip dragging a railroad rail to knock down the dead mesquite. Since NHNM had not yet completed their project, they decided to complete the bulldozing after the last 2009 monitoring.

## **Monitoring Support and Livestock Rotation Management**

NHNM personnel visited on several occasions throughout the study. The ranch provided logistical support, housing, and direction on target animal locations within and near the Parkinson Ranch.

A two-wire temporary electric fence was installed within the deferred grazing area (Sec. 10, T8S R34E) to provide a "control" in support of NHNM monitoring covering 8 ha (20 ac). Cattle have not grazed within this site since the initiation of the contract in May 2006. Within the southern half of Section 10 (162 ha, 400 ac), deferred grazing was practiced between July 1 and July 31, 2008 and 27 cows, 2 bulls and 20 calves under 400 lbs were brought on. From November 1-30, 2008, the ranch again brought cattle into the deferred grazing section: 43 cows and 2 bulls. From July 1-31, 2009, 47 cows and 31 calves were again grazing in the deferred portion of Section 10 and for the month of November, 2009, 47 cows and 23 calves grazed. Approximately 47 cows and 31 calves open grazed between Sections 7, 8, 9 and the N/2 of Section 10 T8S R34E throughout the study period. The year-round pasture within Section 10 was grazed approximately 3 months/year in this open grazing system.

An additional temporary fence was constructed within Sec. 5, T8S R36E for a period of 4 months, July-October 2008. The cattle had been removed for aerial spraying of mesquite and subsequent monitoring by NHNM for the first growing season after spraying. After the first frost in October the fence was taken down and the cattle (26 cows and 1 bull) have continued to graze in this section, as specified in the terms of the LIP agreement.

## **Vegetation Monitoring**

### **Introduction**

Vegetation monitoring systems were installed to detect changes in vegetation composition and structure in response to the mesquite-herbicide treatment the Mesquite Treatment Area (MTA) and the rotational grazing practices in mixed shin-oak and grass pasture in the deferred-grazing pasture referred to here as the Sandhill Grazing Area (SGA) (Figure 8). An initial field reconnaissance was conducted in August 2007 to identify and mark the survey areas for vegetation monitoring using field maps and sampling strategies that were developed for the two areas. Field surveys were conducted August 6-10, 2007 for the SGA and July 16-17, 2008 for the MTA. Both sites were re-read October 22-24, 2009.

### **Methods**

#### **Sandhill Grazing Area**

Sampling transects were established in the SGA in 2008 to measure canopy cover, basal cover, and standing biomass of vegetation by species (Figure 8). Twenty-four 50-m-long transects were arranged in three experimental groups: Grazing Control (GC), Grazing Year-Round (GY), and Grazing Rotational (GR). The GC transects provided the control group where grazing was eliminated for the duration of the project using an electric fence. The GR group was grazed for two months out of the year (July 1-31, 2008 and November 1-30, 2008) and deferred the remainder. The GY group was available for year-round, unstructured grazing.

Each transect is permanently monumented with a two-foot iron rebar with 12 to 18 inches extending above ground. GPS coordinates were recorded for the beginning and end of the individual transects (Appendix A). Aluminum tags mark both the 0-m and 50-m rebar and are attached at ground level with metal wires. Digital photos were taken from the 0 m end of each transect, looking towards the 50 m end (see report DVD).

Within each treatment group a random-systematic design of transect placement was implemented (randomized starting point with systematic placement of transect and quadrats thereafter). The GC group comprised two sets of four lines each in the southeast corner of the pasture (E/2 SE/4 SE/4 of Section 10, T8S R36E). These transects were oriented from north to south and are 50 m apart end to end, and the two sets of four are 100 m apart from east to west. The 0 m start position was established at the south-end rebar of each transect and subsequent quadrats were read on the west side of the line (see below).

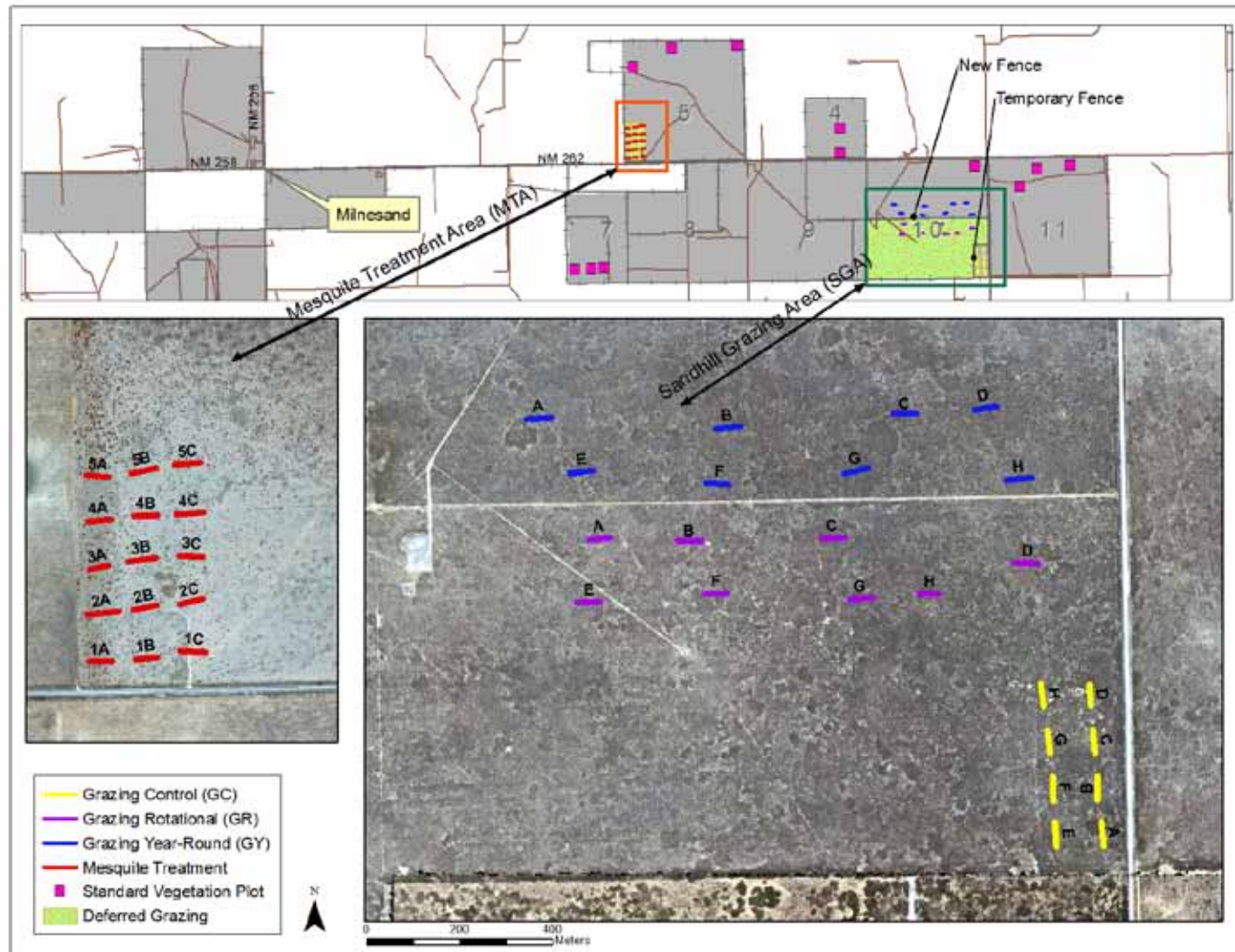


FIGURE 8. VEGETATION MONITORING WITHIN THE MESQUITE TREATMENT AREA (MTA) AND SANDHILL GRAZING AREA (SGA).



For the GR and GY groups, a set of 16 points was established using the GIS where points were randomly selected within a grid of 16 (280 m x 140 m) polygons with eight points on either side of the new E-W fence built for the project to separate the rotational from the year-round grazing areas. These random points were used as the starting point for eight 50-m-long transects. GR was on the south side of the fence and GY was on the north side. The 0-m position for each line was at the west-end rebar and quadrats were read on the north side of each line.

The sampling quadrat frames were one meter by one meter and composed of half-inch PVC plastic tubes. Quadrats were placed every 10 m along the transect, for a total of five quadrats per line. To avoid problems from trampling at the beginning of a transect, the sampling began at the two-meter mark extending forward to the three-meter mark with subsequent readings at 12 m, 22 m, 32 m, & 42 m. For each quadrat, plant height, percent canopy cover of individual species, and total canopy cover were recorded. The quadrat frames were divided into 100 10-cm x 10-cm (decimeter) squares to aid in percent canopy cover measurements. The modal height (+/- 0.5 cm) for each species was determined by measuring representative individuals (excluding inflorescences on grasses).

Biomass was collected by placing five 20-cm x 50-cm quadrats along the transect at every 10 m, starting at 4 m and clipping all vegetation within the quadrat. GR and GY quadrats were placed on the north side of the transect and GC quadrats were placed on the west side of the transects. Shrubs and herbaceous biomass (forbs and grasses) were separated and placed in paper bags for transport. In the lab, they were oven dried to constant weight at 60°C, the weight of the biomass and bag recorded, and the material disposed of.

To detect long-term changes in grass cover, a point-intercept method was used to determine basal area by species per transect (SGA in 2007 and 2009 and only 2009 in the Mesquite Treatment). One hundred points along each transect were sampled using a random systematic sampling design. The first point sampled along the transect was determined using a random number between 0 and 100 cm from the transect start, with subsequent point data collected every meter. For example, if 52 and 64 were chosen, the first sample would be at .52 m, the second at .64 m, and the third at 1.52 along the 50-m transect. This was repeated until 100 point-intercept elements were recorded. The collection of points along each 50-m transect was repeated (using a new random number and discarding any number within 10 cm of the first number) to obtain a total of 100 points. For sampling points falling within 10 cm of a rebar marker, the point was taken at 10 cm +/- X, where X was the random number. At each point, a pin flag was dropped perpendicular to the surface and the type of ground-cover element determined. The intercept points were recorded by plant species, or by land-cover type: soil, gravel, litter, or dung (dung and litter were later grouped for analysis). A total of 2,400 points were acquired, at 800 per treatment type.

### **Mesquite Treatment Area**

Sampling transects were established in the MTA in the fall of 2007 and read in 2008 and 2009. A total of 26 cows and 1 bull grazed in this area from November 1, 2008 - January 10, 2009 with the remaining time deferred. To monitor the effects of mesquite treatment, we used a combination of line-transect and quadrat sampling to measure overall vegetation response and the direct success rate of mesquite die-off as measured by defoliation. Fifteen 50-m-long transects arranged in five sets (Lines 1-5) of three transects each (A, B, & C) were established in the MTA within the W/2 SW/4 SW/4 of Section 5, T8S R36E (Figure 8). The three 50-m transects within each set ran east to west and were established 50 m apart end to end. Lines were permanently monumented with iron rebar at each end and tagged at the

0-m and 50-m ends with the start on the east end. The rebar was pounded down to ground level. GPS coordinates were recorded for the beginning and end of the individual transects (Appendix A).

On each line, we partitioned the quadrat sampling into two subsets: two quadrats were located directly under randomly chosen mesquite shrubs offset from the lines, and two quadrats were sampled along the line in the inter-shrub spaces. For the direct mesquite sampling, at each rebar the nearest mesquite greater than 2 m in diameter was selected. The distance from the rebar to canopy edge was measured with a tape, and a rigid ruler was then used to measure from the canopy edge to the center of the mesquite so as to leave the interior of the mesquite undisturbed. The azimuth ( $\pm 2^\circ$ ) was taken with a compass from the rebar to the mesquite center. At each mesquite, a 1-m quadrat frame was inserted 0.5 m into the interior of the mesquite from canopy edge. Floristic measurements included percent cover of individual species, total canopy cover, total herbaceous canopy cover, and ground cover. Since the mesquite was sprayed just prior to our first reading in 2008, canopy cover for the mesquite prior to spraying was estimated based on remaining dead foliage and the extent of the branch systems covering the quadrat. In addition, the percent defoliation of the entire plant was estimated as a measure of die-off. In 2009, the canopy cover of only the live mesquite was measured in the quadrats, and percent defoliation was again estimated for the entire plant.

In the inter-shrub spaces, two 1-m quadrat frames were placed at the 10-m and 40-m marks along the north side of the transects. If the quadrat fell inside a mesquite, it was offset by meter increments in either direction until it lay entirely in a shrub inter-space. The same measurements were conducted as for in-shrub quadrats with the exception of percent defoliation.

To determine basal area of herbaceous cover, line intercept readings were conducted along the transects beginning at the zero end. We recorded the beginning and ending ground cover of a patch to the nearest cm consisting of three ground-cover components:

1. Basal herbaceous cover (mostly grass clumps from edge to edge; gaps less than 15 cm are ignored or if the gap is on an elevated grass hummock and not a true inter-grass space);
2. Bare interspaces; and
3. Shrubs from the beginning to the end of the canopies (including grasses or forbs under the canopy). We recorded the shrub species, grass species (or stated as unidentified) and forbs as unidentified. Grass clumps had to be at least 1 cm in length to be recorded.

In 2009, an additional set of 1,500 point-intercept samples were acquired for the MTA group of transects to measure basal cover following the method used in SGA experimental area (see above).

### **Data Management**

Data from paper field sheets and PDAs (personal digital assistants) were entered into NHNM's monitoring database (MS Access) and quality controlled following our standard manual read-back process and automated error-detecting routines. The base data is provided as an excel spreadsheet on the report DVD and in Appendix B.

Voucher specimens collected for all unknown species were identified by the NHNM Ecology Group senior botanist and the specimens deposited in the University of New Mexico, Museum of Southwestern Biology Herbarium. A complete list of all species encountered in the sampling along with their field/database codes is provided in Appendix C.

## Results

### Sandhill Grazing Area

We report here the baseline data for detecting long-term trends of vegetation composition and structure as affected by two grazing strategies—year-round open pasture grazing versus seasonal rotation/partial deferred, with a fully deferred pasture as a control for climatic and non-grazing related impacts. Given that grazing effects under moderate grazing pressure can take years to become evident, the goal here was to ensure that a statistically robust monitoring system was in place that could detect subtle changes among treatments through time. Our repeated measurements of quadrat-based canopy cover along with measurements of standing biomass were expected to provide the most sensitive measurements of changes from year to year (or even season to season). While gross shifts in canopy cover can sometimes reflect long-term change, basal cover of grasses—the area of real estate occupied by the plants—is likely to be more sensitive to long-term changes due to grazing strategy.

Overall, and as expected, we did not detect any statistically significant differences in composition or structure among treatments between 2007 and 2009, but there were overall differences between years among some vegetation elements (Figure 9). For example, canopy cover of shin-oak declined between 2007 and 2008. This may be related to the below normal precipitation in 2008 and 2009, particularly during the previous winters (see Table 1). Hence, the shrubs may not have put on as much foliage over the growing season due to depleted deep soil moisture that is typically replenished by winter precipitation. In addition, time of sampling may also have been a factor since the transects in 2007 were measured at the peak of the growing season in early August, while in 2009 they were read in the fall, near the end of growing season. As a result, these deciduous oaks may have begun to shed leaves, reducing canopy cover measurements. This is suggested by the increase in litter covering the surface in 2009 (Figure 10). Grass cover also declined a small amount between 2007 and 2009, but this was not statistically significant. This was corroborated by the nearly equal basal cover of grass across years (Figure 10).

While there were overall cover differences between grasses and shrubs, standing biomass at the end of 2009 was nearly identical (Figure 11; Table 2). Once again, among shrubs the weights may reflect depressed moisture conditions and time of sampling. For the grasses (combined with a small amount of forbs), biomass may approximate normal values given that summer precipitation ended up near normal.

With respect to species richness, the only shift that occurred between 2007 and 2009 was among forbs, and species composition among treatments is nearly identical (Figure 12). Over time, if the different grazing regimes have an effect, we would expect a shift among treatments in both richness and composition.

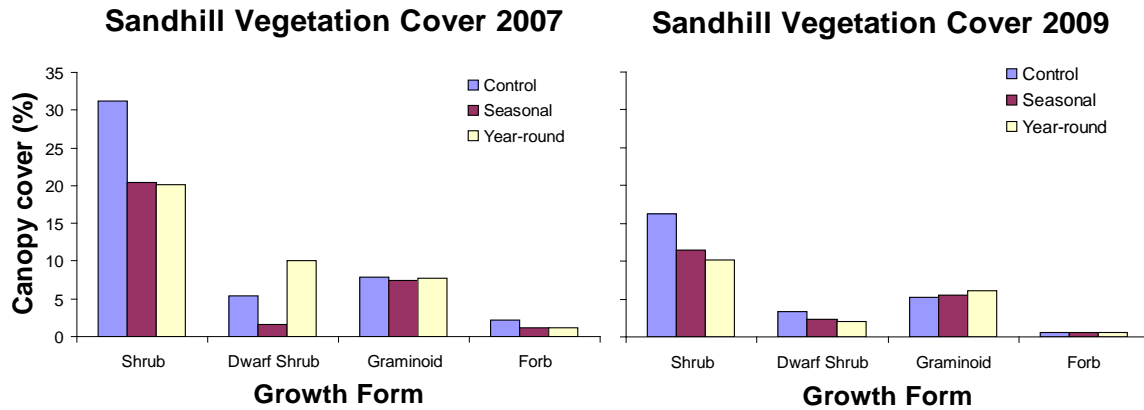


FIGURE 9. AVERAGE CANOPY COVER BY LIFE FORM ELEMENTS AT THE SANDHILL GRAZING AREA IN 2007 AND 2009 (N=15 PER TREATMENT).

TABLE 1. PRECIPITATION DISTRIBUTION BY MAJOR SEASON AT PORTALES (297008) DURING THE PROJECT SAMPLING PERIOD. THE DEPARTURES (DEPT.) ARE THE DIFFERENCES FROM THE LONG-TERM AVERAGE AT THE STATION BETWEEN 1905 AND 2009.

Winter			Summer			Total Water Year	
Year	Precip. (in)	Depart.	Year	Precip. (in)	Depart.	Precip. (in)	Depart.
2006-07	8.24	4.07	2007	12.53	-0.24	20.77	3.83
2007-08	1.54	-2.63	2008	9.6	-3.17	11.14	-5.8
2008-09	2.85	-1.32	2009	12.46	-0.31	15.31	-1.63
Long-term Average	4.17	-	-	12.77	-	16.94	-

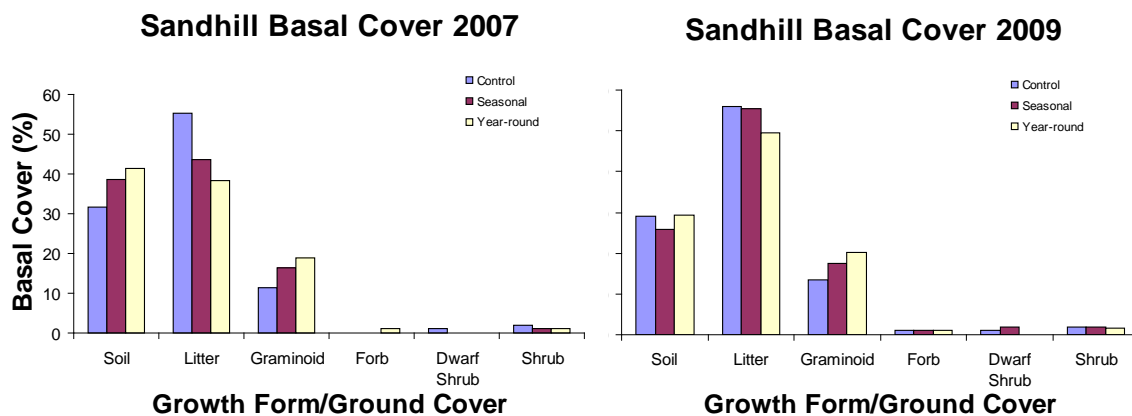


FIGURE 10. AVERAGE BASAL COVER BY LIFE FORM AND GROUND COVER ELEMENTS AT THE SANDHILL GRAZING AREA IN 2007 AND 2009 (N = 15 PER TREATMENT).

FIGURE 11. AVERAGE STANDING BIOMASS CANOPY COVER BY LIFE FORM ELEMENTS AT THE SANDHILL GRAZING AREA IN 2007 AND 2009 (N=15 PER TREATMENT).

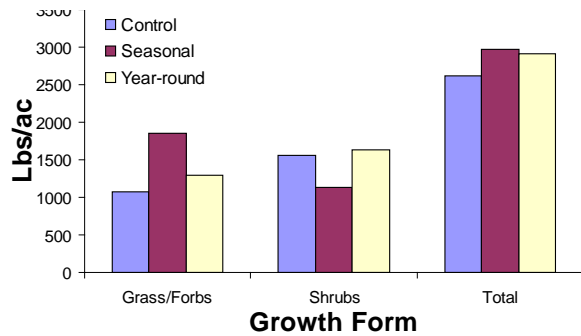


TABLE 2. MEAN AND STANDARD DEVIATIONS FOR STANDING BIOMASS (LBS PER ACRE) BY LIFE FORM ELEMENTS AT THE SANDHILL GRAZING AREA IN 2009 (N=15 PER TREATMENT).

Treatment	Grass/ Forbs	S.D.	Shrubs	S.D.	Total	S.D.
Control	1066	±655	1552	±874	2619	±963
Seasonal	1847	±995	1128	±754	2975	±1197
Year-round	1289	±540	1630	±1212	2919	±1200
Average	1401	±788	1437	±974	2837	±1001

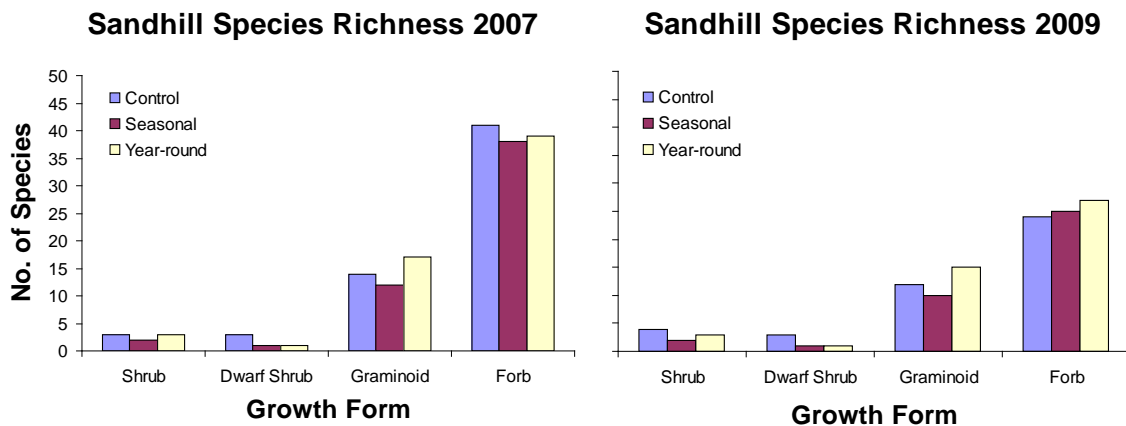


FIGURE 12. TOTAL SPECIES RICHNESS BY LIFE FORM ELEMENTS AT THE SANDHILL GRAZING AREA IN 2007 AND 2009 (N=15 PER TREATMENT).

## Mesquite Treatment Area

The focus in the Mesquite Treatment Area (MT) was to determine the near-term effects of the mesquite eradication by spraying, and to install a long-term monitoring system to detect long-term changes in vegetation composition post treatment. Accordingly, the mesquite treatment as measured by percent whole plant defoliation was nearly 100% effective by 2009 (Figure 13a). Quadrat-based, in plant canopy cover of mesquite similarly declined from 80% before treatment to close to 0% after (Figure 13b). Under the shrubs, there were no significant differences in vegetation composition between before and after treatment (Figure 14a). The same pattern occurred in the inter-shrub spaces (Figure 14b). There was some indication of grass cover decline in 2009, but because there was no control, whether this is was a grazing and/or climatic effect could not be determined. Beginning in 2009, we installed basal-cover measurements, as was done in the Sandhill Grazing Area, to help detect future long-term trends (Figure 15).

## Discussion

The vegetation-monitoring program and associated baseline data presented here provide the foundation for detecting both short- and long-term vegetation responses to grazing practices and mesquite eradication. With the system now installed, periodic monitoring can proceed in a cost-effective way to provide information for adaptive management that both enhances wildlife habitat and supports a sustainable livestock operation. For example, on the SGA study site, we would recommend monitoring on a periodic basis (every three to five years) to detect changes in shrub cover and height, grass basal cover, and key components of lesser prairie chickens habitat, while at the same continue biomass sampling to provide simultaneous information on available forage for livestock. Similarly, in the mesquite treatment, continued post-treatment monitoring area of grass basal cover and species composition along with detection of new mesquite establishments will help guide grazing practices and provide a sense of the long-term efficacy of mesquite treatments for enhancing rangeland resources.

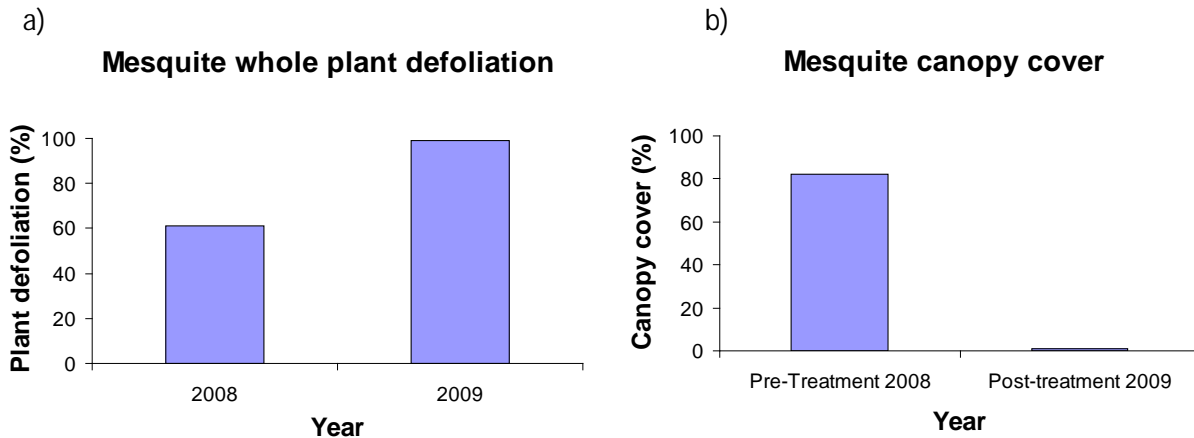


FIGURE 13. THE EFFECT OF HERBICIDE TREATMENT ON MESQUITE AT THE MESQUITE TREATMENT AREA: A) WHOLE PLANT DEFOLIATION MEASURED JUST AFTER TREATMENT IN 2008 AND AGAIN THE FALL OF 2009 (N=30); B) CANOPY COVER ESTIMATED FROM QUADRATS UNDER MESQUITE SHRUBS BEFORE TREATMENT INTO 2008 AND AFTER TREATMENT IN THE FALL OF 2009 (N=30).

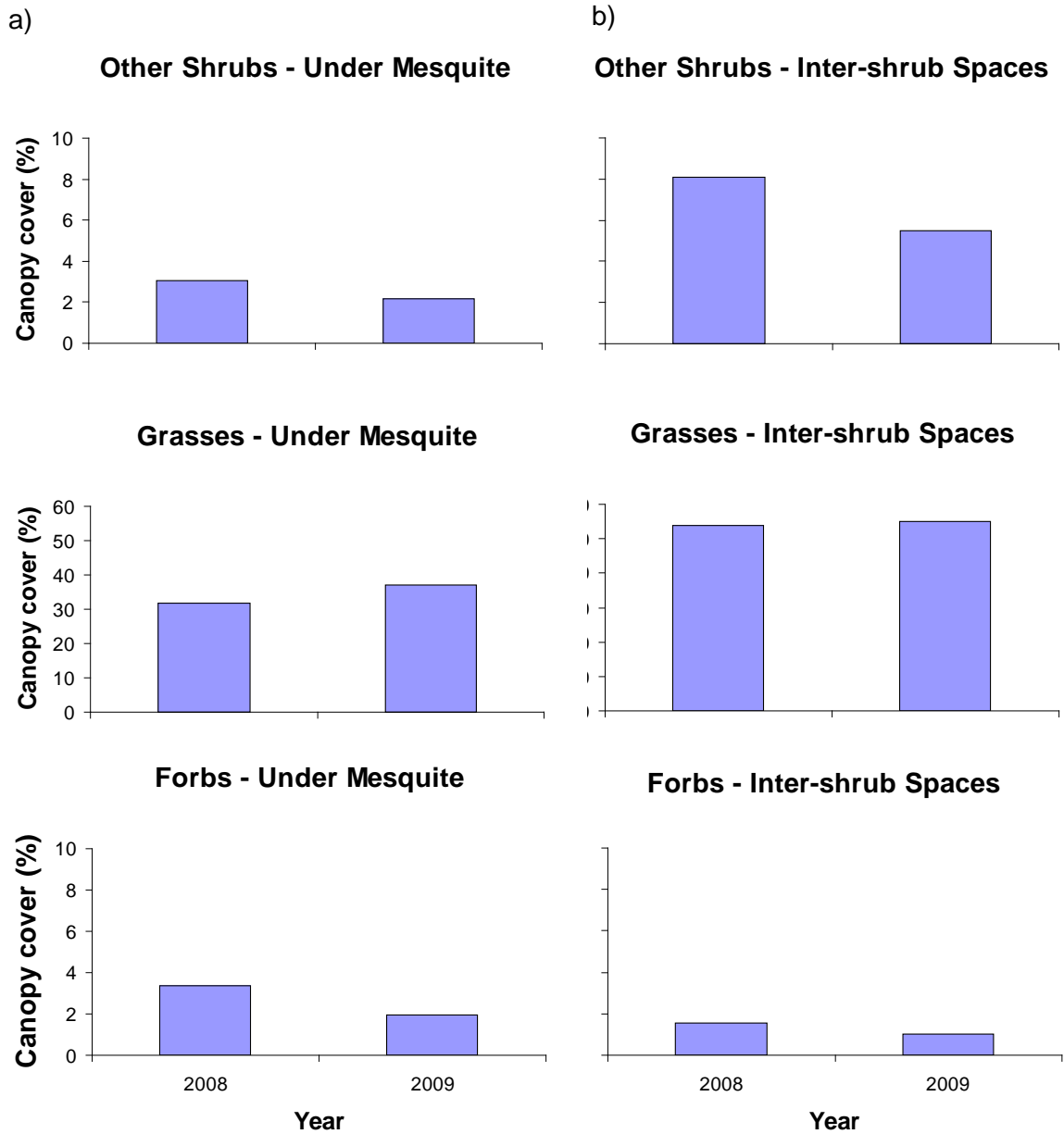


FIGURE 14. CANOPY COVER BY YEAR AND LIFE FORM AT MESQUITE TREATMENT AREA: A) DATA FROM QUADRATS UNDER MESQUITE SHRUBS (N=30); B) DATA FROM QUADRATS IN THE INTER-SHRUB SPACES (N=30).



### Mesquite Inter-shrub Basal Cover 2009

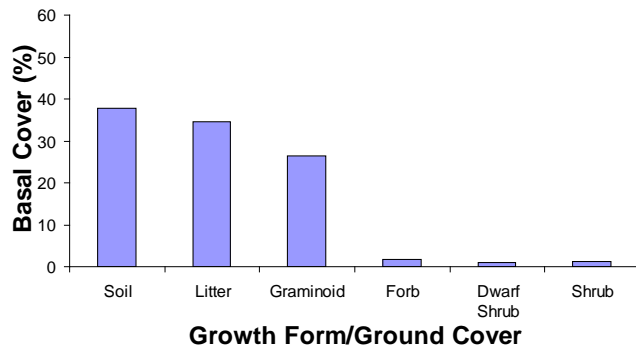


FIGURE 15. AVERAGE BASAL COVER OF GROUND COVER ELEMENTS AT THE MESQUITE TREATMENT AREA IN 2009 (N=15).

## Landcover Mapping

### Background

Vegetation maps that cover the Parkinson Ranch include the state SWReGAP landcover map (USGS National Gap Analysis Program 2005) and a lesser prairie-chicken habitat map by Neville et al. (2005). Both used Landsat Enhanced Thematic Mapper Plus (ETM+) having a spatial resolution of 30m (98 ft) and based on the U.S. National Vegetation Classification System (US-NVCS) of Vegetation Alliances (Grossman et al. 1998). The USGS map uses a “coarse filter” or broad classification approach of the Terrestrial Ecological Systems Classification (Comer et al. 2003). This system “groups plant community types that tend to co-occur within landscapes with similar ecological processes, substrates and/or environmental gradients” (Comer et al. 2003). This coarse-filter approach groups one or more NVC alliances or associations, but is not necessarily hierarchical (Lowry et al. 2005). The USGS map identifies four map units on the ranch, they are: Western Great Plains Sandhill Shrubland, Western Great Plains Shortgrass Prairie, Apacherian-Chihuahuan Mesquite Upland Scrub, and Inter-Mountain Basins Semi-Desert Shrub Steppe. The sandhill shrubland unit includes the *Quercus havardii* Shrubland Alliance, the shortgrass prairie unit includes several plant associations of the *Bouteloua gracilis* Herbaceous Alliance, and the mesquite and inter-mountain basins shrub units include mesquite alliances and sand sagebrush alliances.

Neville et al. (2005) identified 20 map units within the ranch, eight of which are characterized by plant associations and landforms linked to LPCH habitat preferences. Their map units are generally at the alliance level of the dominant plant in the upper strata associated with lower strata groupings and modified by landform; e.g., Shin-Oak/Mixed Mid-Grass and Tall-Grass Duneland. In this example, the duneland is the landform with a dominant plant cover of shin-oak co-occurring with mid- and tall-grasses such as little bluestem and sand bluestem, common in the northern sandhill ecosystems. The mid- and tall-grasses are not specified since the species may differ, and the map unit well represents the fluctuating dominance and mix of these grasses with shin-oak.

Under the New Mexico Statewide Orthophotography Project (Bohannon-Huston, Inc. 2005), natural color photography was acquired with a spatial resolution of 1 m and orthorectified having a scale of 1:12,000. We selected this dataset along with field-collected data to develop a new map under this project that would have greater spatial resolution than the previous maps and increase the differentiation of landcover types associated with ranching activities over time.

## **Methods**

### **Field Observations**

Due to the extensive work we had done in the region (Neville et al. 2005 and Neville et al. 2007), we had previously developed map-unit descriptions and classification metrics for natural vegetation types represented on the ranch. We printed large-format field maps of the natural color 2005 orthophotography at 1:1,000 scale with Universal Transverse Mercator (UTM) coordinates and an overlay of polygons generated using Definiens eCognition object-oriented software (<http://earth.definiens.com/>). We visited the areas represented by the polygons and assigned a map unit to each one. Where needed, we redrew polygon boundaries directly onto the hard-copy maps. Additionally, we collected plot data at 24 sites July 22-24, 2008 and entered the data into the NHHM ecology database.

### **Map Unit Classification**

We built upon the Neville et al. (2005) classification and added additional map units based on our field work at the ranch and our observations of land-use changes over time for landscapes that were previously shin-oak shrublands and dunelands. We had conversations with Elton Parkinson and Wiley Teel to verify which fields had been planted under the Conservation Reserve Program (CRP) and whether the seed was non-native or native. Since the NVC does not address the detail of human-manipulated environments that we were interested in, we developed provisional map units based on dominant species and life form<sup>5</sup>. (Plants can be classified as trees, shrubs, herbs [forbs and grasses], etc.) combined with a manmade modifier; e.g., treated or old field. Using this type of classification helps us understand changes to the sandhills ecosystem caused by ranching and farming activities and analyze these landscapes over time.

---

<sup>5</sup> Plants can be classified as trees, shrubs, herbs [forbs and grasses], etc.

## **Ancillary GIS Layers**

The ranch and NHHM cooperated on developing GIS layers representing roads, fences, wells, pipelines, and various infrastructure elements. Although we had relatively high-spatial-resolution imagery, it is difficult to distinguish roads from pipelines and impossible to identify details such as type of pipe fittings (valves) of interest to the ranch. We exchanged and corrected a series of digital maps between the ranch and NHHM to increase the accuracy of infrastructure layers toward developing a map atlas of the ranch. We used the ArcGIS 9.3 PLTS extension to create the map series and output the results in Adobe Acrobat format for review by the ranch. Corrections were made to the maps by the ranch and then updated digitally by NHHM.

Soils were extracted from the Soil Survey Geographic (SSURGO) Database (Soil Survey Staff, Natural Resources Conservation Service, U.S. Department of Agriculture) to analyze land cover in the context of the NRCS soil map units. We selected map units included in the ranch and output NRCS reports: soil map units with non-technical descriptions (Appendix D), soil taxonomy (Appendix E), soil map-unit component legend (Appendix F), and rangeland productivity (Appendix G). Land cover and soils were overlain in a GIS and analyzed in MS Excel pivot tables.

## **Results**

### **Map Unit Classification**

We created 28 map units (26 vegetated) covering 3,222 ha (7961 ac, Table 3, Figure 16, Appendix H). The final map includes treatments and modifications prior to this project; we did not update the map for mesquite removal in Sections 5 and 11 of T8S R36E. Approximately 68% of the ranch remains as native shrubland or prairie (2190 ha, 5412 ac). Of the native landscape, five map units are dominated by either shin-oak or have shin-oak as a co-dominant or consistent component of native prairie (1266 ha, 3128 ac). These shin-oak shrublands and prairies overlay undulating sandsheets with few, scattered dunelands. The largest continuous sandhill ecosystem within the ranch covers the majority of the eastern sections south of NM Highway 262<sup>6</sup>. The Inter-Mountain Basins Semi-Desert Shrub Steppe is represented by a Sand Sagebrush-dominated shrubland with an understory of blue grama (75 ha, 186 ac). This shrubland occurs only on the west half of Sections 10 and 15 of T8S R35E and is a remnant of a previously more extensive shrubland extant prior to cropping. The shortgrass prairies consist of four map units and are typically dominated by blue grama (849 ha, 2098 ac). Again, the largest continuous shortgrass prairies lie at the eastern sections of the ranch (Sec. 5, 8, 9, 10, and 11 of T8S R36E). The grasslands occupy the inter-dune plains and swales of fine sandy loams with subsoils that originated in calcareous alluvial and lacustrine sediments (Lenfesty 1980).

The remaining vegetated classes have been disturbed and are described as either "manmade," "old field," or "treated" in the map-unit name. Those designated as old field have at some time been plowed and are currently dominated by either native or non-native plants (872 ha, 2155 ac). Old fields are predominantly in the two western portions, but also occur in the eastern half of Sec 7, T8S R36E and the

---

<sup>6</sup> E/4 SE/4 Sec 7, T8S R36E; S/2 Sec 8, T8S R36E; S/2 and NE/4 Sec 9, T8S R36E; S/2 and S/2 N/2 Sec 10, T8S R36E; S/2 and S/2 N/2 Sec 11, T8S R36E.

north half of Section 8, T8S R36E. Treated map units are those that have had shin-oak removed by chemical treatment, yet have not been plowed and have an intact landform (57 ha, 141 ac). Shin-oak no longer exists within the polygon or only remnants remain. Within the ranch, some dunelands and rolling sandy plains have been treated for shin-oak.

The remaining map units are either barren or sparsely vegetated areas that are the result of manmade disturbances, as well as planted trees and grasses maintained as yards. Buildings and roads are also included in this category (102 ha, 253 ac).

TABLE 3. LAND COVER MAP UNITS FOR THE PARKINSON RANCH, NEW MEXICO.

Map Unit Category	Vegetation Map Unit	Hectares	Acres
<b>Native Grasslands</b>		<b>849</b>	<b>2,098</b>
	Blue Grama-Buffer Grass Grassland	292	721
	• <i>Bouteloua gracilis</i> - <i>Buchloe dactyloides</i>		
	• <i>Bouteloua gracilis</i> - <i>Bouteloua eriopoda</i>		
	• <i>Bouteloua gracilis</i> - <i>Montyp</i>		
	Blue Grama-Buffer Grass/Dog Town Grassland	28	69
	• <i>Bouteloua gracilis</i> - <i>Buchloe dactyloides</i>		
	• <i>Bouteloua eriopoda</i> - <i>Muhlenbergia torreyi</i>		
	Mixed Mid-Grass and Short-Grass/Shin-oak Grassland	511	1263
	• <i>Bouteloua gracilis</i> / <i>Quercus havardii</i>		
	• <i>Bouteloua hirsuta</i> / <i>Quercus havardii</i>		
	Short-Grass/Honey Mesquite-Catclaw Mimosa Grassland	18	45
	• <i>Buchloe dactyloides</i> / <i>Prosopis glandulosa</i> - <i>Mimosa aculeaticarpa</i> var. <i>biuncifera</i>		
<b>Native Shrublands</b>		<b>1,341</b>	<b>3,314</b>
	Honey Mesquite-Catclaw Mimosa-Shin-oak/Short-Grass Shrubland	86	213
	• <i>Prosopis glandulosa</i> - <i>Mimosa aculeaticarpa</i> var. <i>biuncifera</i> - <i>Quercus havardii</i> / <i>Bouteloua gracilis</i>		
	• <i>Prosopis glandulosa</i> / <i>Bouteloua gracilis</i>		

Map Unit Category	Vegetation Map Unit	Hectares	Acres
	Sand Sagebrush/Blue Grama Shrubland	75	186
	• <i>Artemesia filifolia/Bouteloua gracilis</i>		
	Shin-oak Duneland	100	248
	• <i>Quercus havardii/Schizachyrium scoparium</i>		
	• <i>Quercus havardii/Sparse</i>		
	Shin-oak/Mixed Mid-Grass and Short Grass Shrubland	452	1118
	• <i>Quercus havardii/Bouteloua hirsuta</i>		
	• <i>Quercus havardii/Digitaria pubiflora</i>		
	Shin-oak/Mixed Mid-Grass and Tall Grass Shrubland	553	1366
	• <i>Quercus havardii/Schizachyrium scoparium</i>		
	• <i>Quercus havardii/Sporobolus spp.</i>		
	• <i>Quercus havardii/Andropogon hallii</i>		
	Shin-oak-Sand Sagebrush Shrubland	74	182
	• <i>Quercus havardii-Artemesia filifolia</i>		
<b>Old Fields</b>		<b>872</b>	<b>2,155</b>
	Black Grama-Silver Beardgrass Old Field Grassland	49	120
	• <i>Bouteloua eriopoda-Bothrichloa laguroides</i>		
	Blue Grama-Silver Beardgrass Old Field Grassland	58	145
	• <i>Bouteloua gracilis-Bothrichloa laguroides</i>		
	Hairy Grama-Silver Beardgrass Old Field Grassland	133	330
	• <i>Bouteloua hirsuta-Bothrichloa laguroides</i>		
	Little Bluestem-Hairy Grama Old Field Grassland	157	388
	• <i>Schizachyrium scoparium-Bouteloua hirsuta</i>		
	Lovegrass Old Field Grassland	136	337
	• <i>Eragrostis spp.</i>		

Map Unit Category	Vegetation Map Unit	Hectares	Acres
	Sideoats Grama Old Field Grassland	246	607
	• <i>Bouteloua curtipendula</i>		
	Switchgrass Old Field Grassland	85	211
	• <i>Panicum virgatum</i>		
	Shin-oak Old Field Duneland	7	18
	• <i>Schizachyrium scoparium/Quercus havardii</i>		
<b>Shin-oak Treatments</b>		<b>57</b>	<b>141</b>
	Short-Grass/Honey Mesquite-Catclaw Mimosa Treated Grassland	8	21
	• <i>Buchloe dactyloides/Prosopis glandulosa-Mimosa aculeaticarpa</i> var. <i>biuncifera</i>		
	Honey Mesquite-Shin-Oak/Short-Grass Treated Shrubland	2	4
	• <i>Prosopis glandulosa-Quercus havardii/Bouteloua gracilis</i>		
	Shin-oak/Lovegrass Treated Shrubland	23	57
	• <i>Quercus havardii/Eragrostis</i> spp.		
	Shin-oak/Lovegrass Treated Duneland	24	59
	• <i>Quercus havardii/Aristida purpurea</i>		
	• <i>Quercus havardii/Eragrostis</i> spp.		
<b>Other</b>		<b>102</b>	<b>253</b>
	Barren/Sparsely Vegetated/Manmade Disturbance	55	137
	Manmade Vegetated (Grass)	2	6
	Manmade Vegetated (Trees)	3	8
	Buildings	1	2
	Roads	40	100
<b>Total Land Cover</b>		<b>3,222</b>	<b>7,961</b>

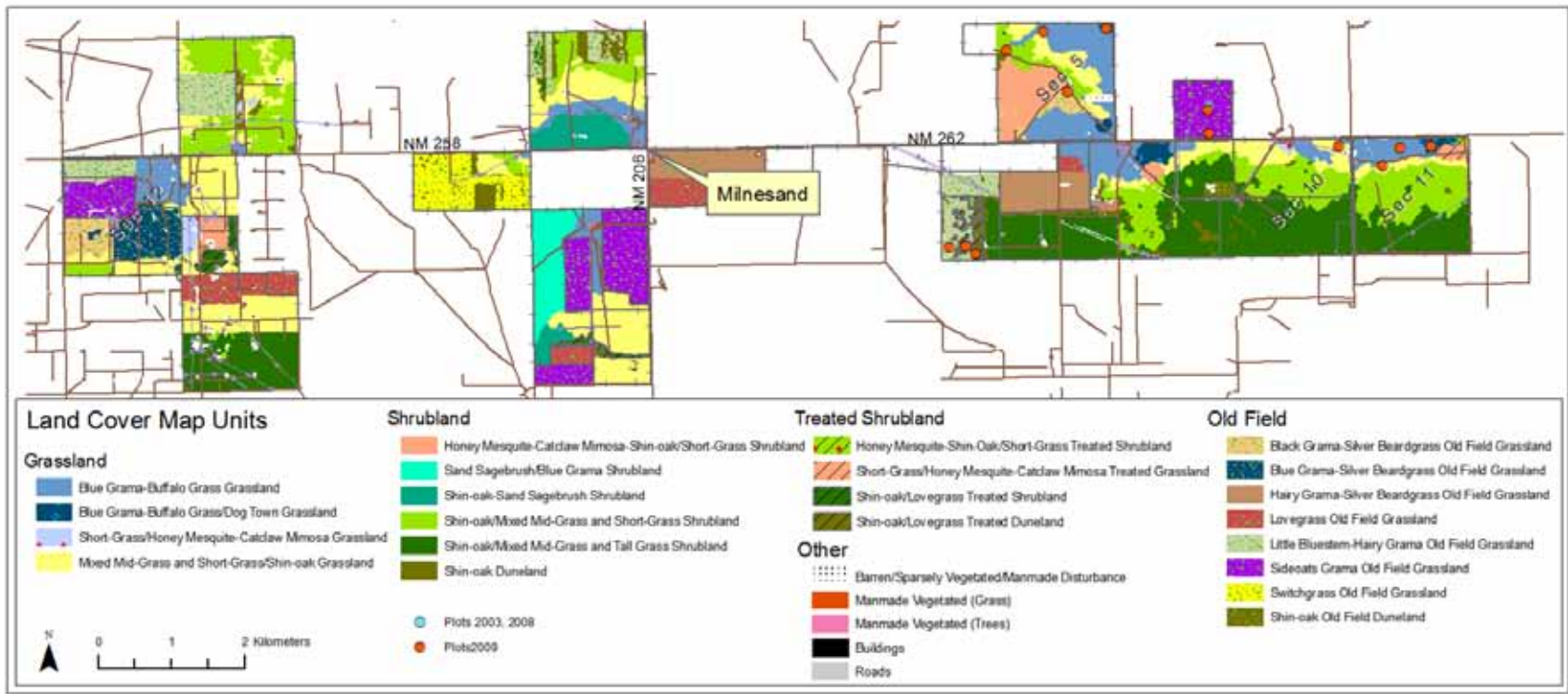


FIGURE 16. MAP OF PARKINSON LAND COVER.



## **Analysis of Vegetation and Soils**

There are 20 soil map units identified by the NRCS within the ranch (Figure 17), which we have grouped by soil texture: fine sand, fine sandy loam, loam, loamy fine sand, and severely eroded (Figure 18). Severely eroded soils can have any of the soil textures mentioned but typically have shallow soils in the uppermost soil horizon to the extent that the plow layer consists essentially of material from underlying horizons (Soil Survey Division Staff 1993). Loamy fine sand and fine sand cover 64% of the ranch (Figure 19). Loamy fine sands are 67% grasslands with a variety of plant-cover types from Mixed Mid-Grass and Short-Grass/Shin-oak Grassland (7.3%) to Blue Grama-Buffalo Grass Grassland (3.3%) and fields (11%). Fine sands have shin-oak within the plant community 94% of the time with the remaining cover types either sand sagebrush or old fields. Soils classified by the NRCS as “severely eroded” cover 22% of the ranch. Of this 57% falls within old fields, 37% within areas with shin-oak as a component, and 6% within blue grama grasslands Figure 20<sup>7</sup>. The majority of eroded landscapes are located within the two westernmost areas of the ranch.

## **Final Products**

Digital and hard-copy maps at various scales were developed under this portion of the project that represent: (1) baseline land cover (2008); (2) historical manmade activities on the landscape such as cropping and CRP; (3) a collection of imagery (1949, 1964, and 2005); (4) infrastructure representing roads, fences, active pipelines, valves, tanks, and wells; and (5) soils.

## **Discussion**

The largest, continuous sandhill ecosystem within the ranch is approximately 680 ha (1682 ac) and contains two active leks. While several sections to the south of Section 11 have been converted from native sandhill, for nearly 8 km (5 mi) south of Sections 8, 9 and 10, landscapes remain native sandhill with approximately 8000 ha (19,768 ac) of lesser prairie-chicken habitat. Portions of the blue grama-dominated grasslands within the ranch and contiguous lands are either currently occupied by black-tailed prairie dogs or have been in the recent past (28 ha, 70 ac). These grasslands are part of an extensive grassland to the north covering approximately 1500 ha (3706 ac). The ranch is geographically situated to maintain suitable habitat for both the lesser prairie-chicken and black-tailed prairie dog and provides an important linkage to New Mexico Department of Game and Fish and The Nature Conservancy protected areas.

Within the old field category we found both non-native plants and locally occurring natives as dominant cover types. Grasslands dominated by sideoats grama (Sideoats Grama Old Field Grassland), which although a native grass, do not occur naturally in these landscapes and are confirmed by the ranch as enlisted in the CRP. The Lovegrass Old Field Grassland within Sec. 11 is enlisted in the CRP. The map units Black Grama-Silver Beardgrass Old Field Grassland, Blue Grama-Silver Beardgrass Old Field Grassland, and Hairy Grama-Silver Beardgrass Old Field Grassland are all locally native plants and probably became reestablished from the nearby seedbeds and/or were present within the old fields.

---

<sup>7</sup> SW/4 W/2 Sec 7, T8S R35E; W/2 and NW/4 and SE/4 Sec 6, T8S R35E; N/4 Sec 18, T8S R35E; N/2 Sec 9, T8S R35E; S/2 Sec 15, T8S R35E; W/2 W/2 and NE/4 NW/4 and NW/4 NE/4 Sec 3, T8S R35E; E/2 Sec 7, T8S R36E; N/2 SE/4 Sec 4, T8S R36E.

Since the statewide, widespread silver beardgrass is quick to establish in disturbed or overgrazed sites, its near co-dominance is probably not due to intentional seeding since its value to cattle is only fair (Loflin 2006). A large field, formerly a shin-oak shrubland in the central portion of the ranch where the new pipeline and tank were built, has a high cover of native grasses such as little bluestem and sand bluestem, but also a very high cover of switchgrass (*Panicum virgatum*). Although all are native to the area, we believe this field was reseeded with native grasses, with the addition of switchgrass, to possibly increase essential forage for quail. The map units Little Bluestem-Hairy Grama Old Field Grassland and Shin-oak Old Field Duneland occur in the eastern section of the ranch and are both examples of mechanical and chemical removal of shin-oak and use of lands as fields versus expanding forage for cattle. The native grasses that co-dominate probably are due to reestablishment of the native grasses over time.



FIGURE 17. NRCS SOILS OF THE PARKINSON RANCH, NM. SEE APPENDIX D FOR DETAILS ON THE SOIL MAP UNITS.



FIGURE 18. NRCS SOIL TEXTURE FOR THE PARKINSON RANCH, NM.

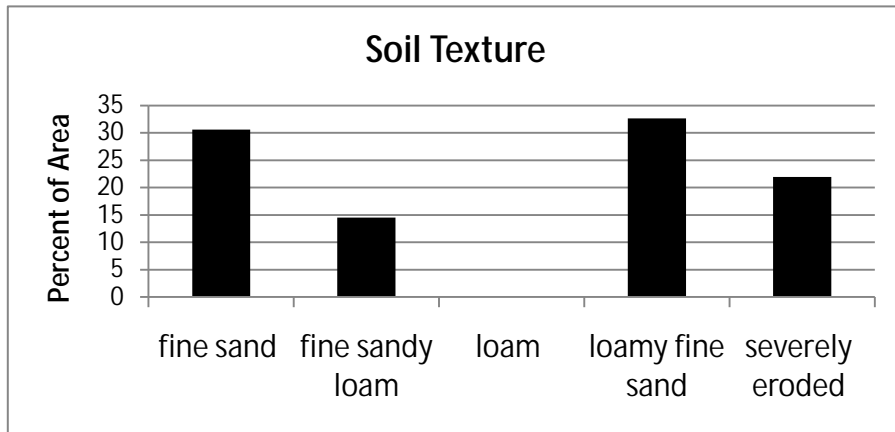


FIGURE 19. DISTRIBUTION BY PERCENTAGE OF SURFACE SOIL TEXTURE CLASSES ON THE PARKINSON RANCH, NM.

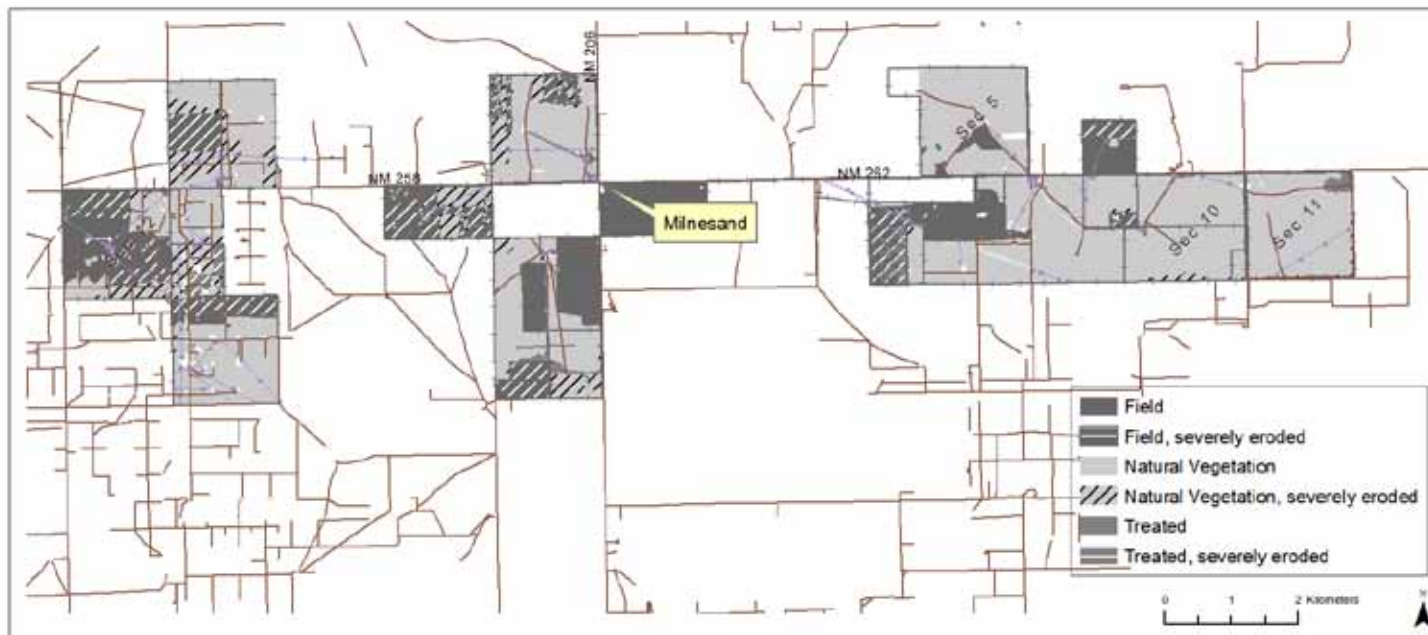


FIGURE 20. NRCS ERODED SOILS ON THE PARKINSON RANCH, NM.

# Zoology

## Introduction

The U.S. Fish and Wildlife Service (USFWS) Landowner Incentive Program (LIP) provides federal funding for habitat restoration on private lands, to benefit federally listed, proposed, or candidate species; species identified by state Comprehensive Wildlife Conservation Strategies; or state listed species. Grant funds are provided to the states through their state game and fish departments. Three animal species that qualify for support under the New Mexico LIP program occur on the Parkinson Ranch in habitats potentially affected by the habitat improvements conducted for this project.

The black-tailed prairie dog (BTPD, *Cynomys ludovicianus*) is a highly social ground squirrel that lives in large, dense colonies in grassland habitats. BTPD burrowing and foraging activities create characteristic ground disturbance extensive enough to be visible on satellite imagery and aerial photography (Johnson et al. 2003, 2006a). This disturbance can persist for years after a colony is extirpated. A 12-month finding on a petition to list the species under the Endangered Species Act concluded that listing the black-tailed prairie dog as either threatened or endangered is not warranted at this time (USFWS 2009a). BTPD are threatened by plague, poisoning, hunting, and habitat loss to development.

The lesser prairie-chicken (LPCH, *Tympanuchus pallidicinctus*) is a grouse that occurs in eastern New Mexico in sand shinnery habitats. The LPCH is a candidate for listing under the Endangered Species Act (ESA), with a listing priority of 2 (USFWS 2009b). Threats to LPCH include conversion of native shrubland to cropland, herbicide-based conversion of shrubland to grassland, excessive livestock grazing, and drought (Hagan and Giesen 2005).

The loggerhead shrike (LOSH, *Lanius ludovicianus*) is an open-country bird that feeds on a variety of vertebrate and invertebrate prey. Its breeding habitat includes grasslands and pasture lands with fence rows and isolated trees or shrubs. LOSH populations have declined across the continent in recent decades. The species as a whole is a USFWS species of conservation concern and a former Category 2 species, and it has conservation status in at least 26 states, although not in New Mexico (USFWS 2000). Threats include habitat loss and pesticide contamination (Reuven 1996).

## Methods

In 2008, K. Johnson and J. Smith conducted field surveys at Parkinson Ranch for LPCH, LOSH, and BTPD. Prior to going into the field, we identified potential prairie dog disturbance using digital aerial photography. Town areas were digitized from 2005 digital orthophotos (Johnson et al. 2003, 2006a). Polygons detected in that survey are numbered individually. In some cases several polygons that comprise a single town are numbered differently due to different ownership and/or management of each polygon (Figure 21).

In the late afternoon of 3 April 2008, we visited eight known BTPD towns with Wiley Teel and scanned each town site visually and with binoculars for active prairie dogs. If no BTPD was visible, we examined

burrows for evidence of recent activity. On 4 April we returned to six of the towns visited the day before and visited two additional towns, giving a total of 12 towns surveyed on or near the Parkinson Ranch property (Figure 21). On 6 April 2009, we noted status of three of the towns surveyed in 2008.

During our BTPD surveys on 3 April, Wiley Teel also pointed out known LPCH lek locations. At each site we visited, we took GPS coordinates and counted any LPCH we saw. On 4 April we visited the most consistently active leks before dawn and surveyed for LPCH until about 8:40 am. We parked within sight of each lek (20-75 m away) and, using the vehicle as a blind, counted LPCH at each lek. We listened for LPCH along the major ranch roads and attempted to drive and walk to each lek we heard. For leks that were on neighboring private property, we either walked to the lek and surveyed or estimated the location by listening to gobbling birds. At 7 pm on 4 April we visited a lek at a windmill on private land adjacent to the Parkinson property. On 5 April we surveyed additional lek sites along the south boundary of the Parkinson Ranch and additional areas suggested by Wiley (Figure 22). On 7 April 2009 between 6:00 am and 7:30 am, K. Johnson and T. Neville re-surveyed the two traditional leks on the Parkinson property that were active in 2008.

On the afternoon of 4 April 2008, we conducted roadside surveys for LOSH. We drove the four main roads in the cardinal directions from the Milnesand Store, the length of the Parkinson Ranch property (Figure 23). We surveyed all roadside fences, power lines, and telephone lines for perched LOSH. We recorded GPS coordinates for each LOSH we saw. We also noted a shrike we saw about five miles north of the ranch on NM 206.

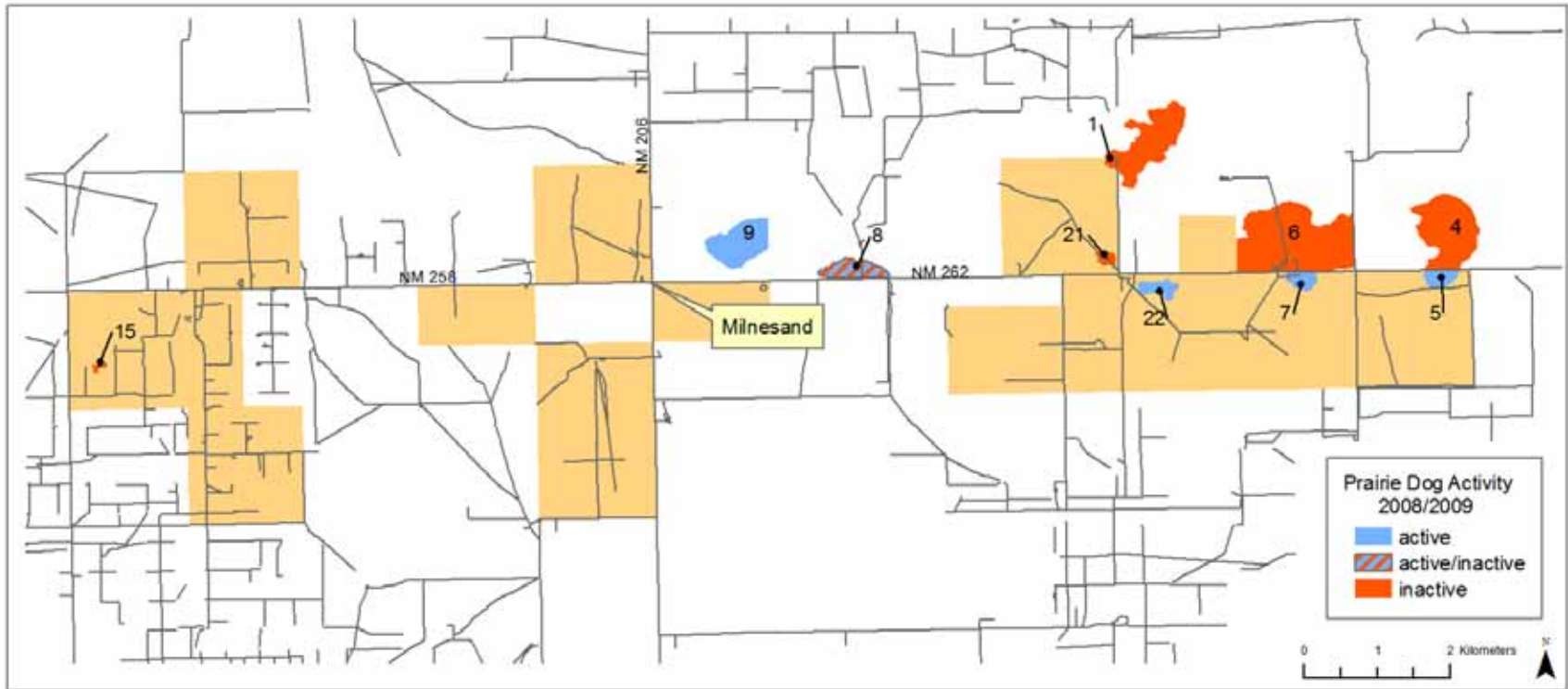


FIGURE 21. BLACK-TAIL PRAIRIE DOG ACTIVITY OBSERVED ON THE PARKINSON RANCH BETWEEN 2008 AND 2009.



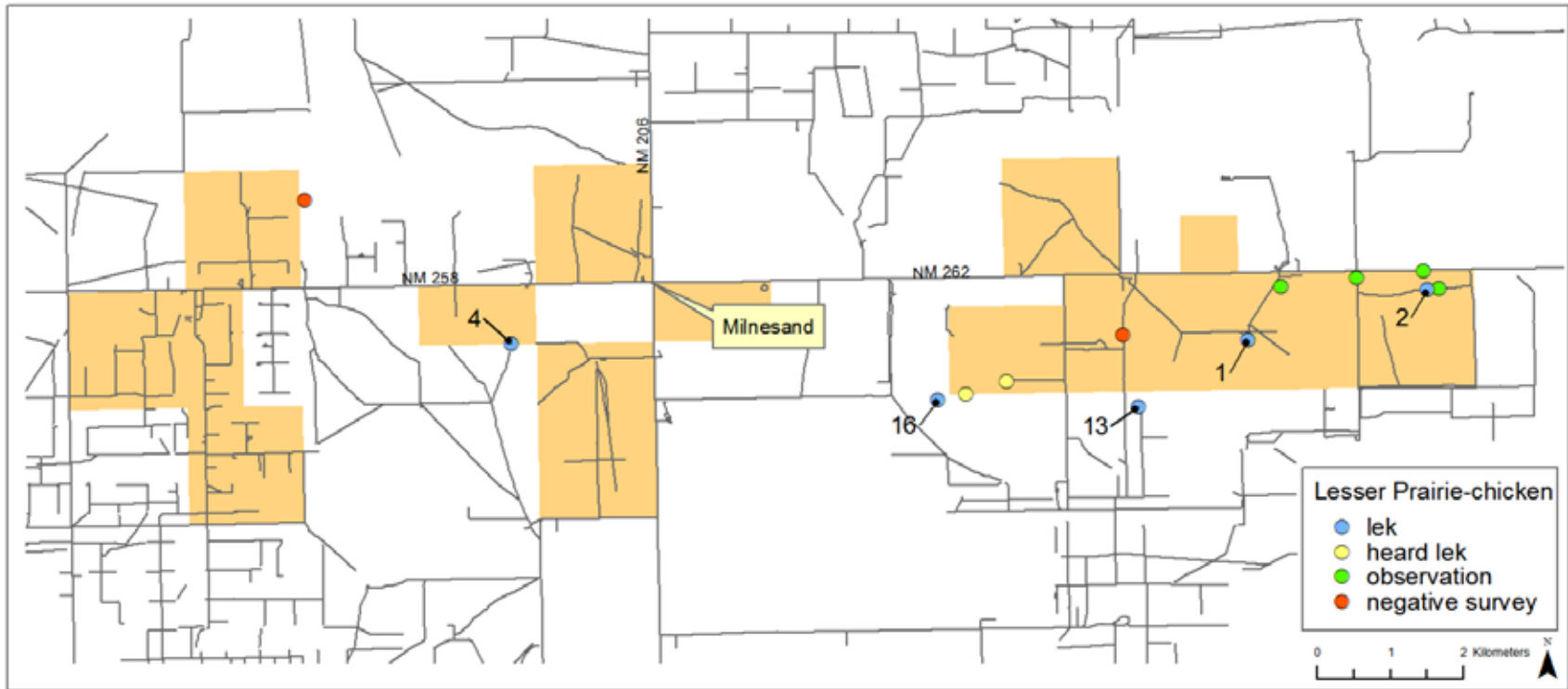


FIGURE 22. LESSER PRAIRIE-CHICKEN ACTIVITY OBSERVED ON THE PARKINSON RANCH BETWEEN 2008 AND 2009.

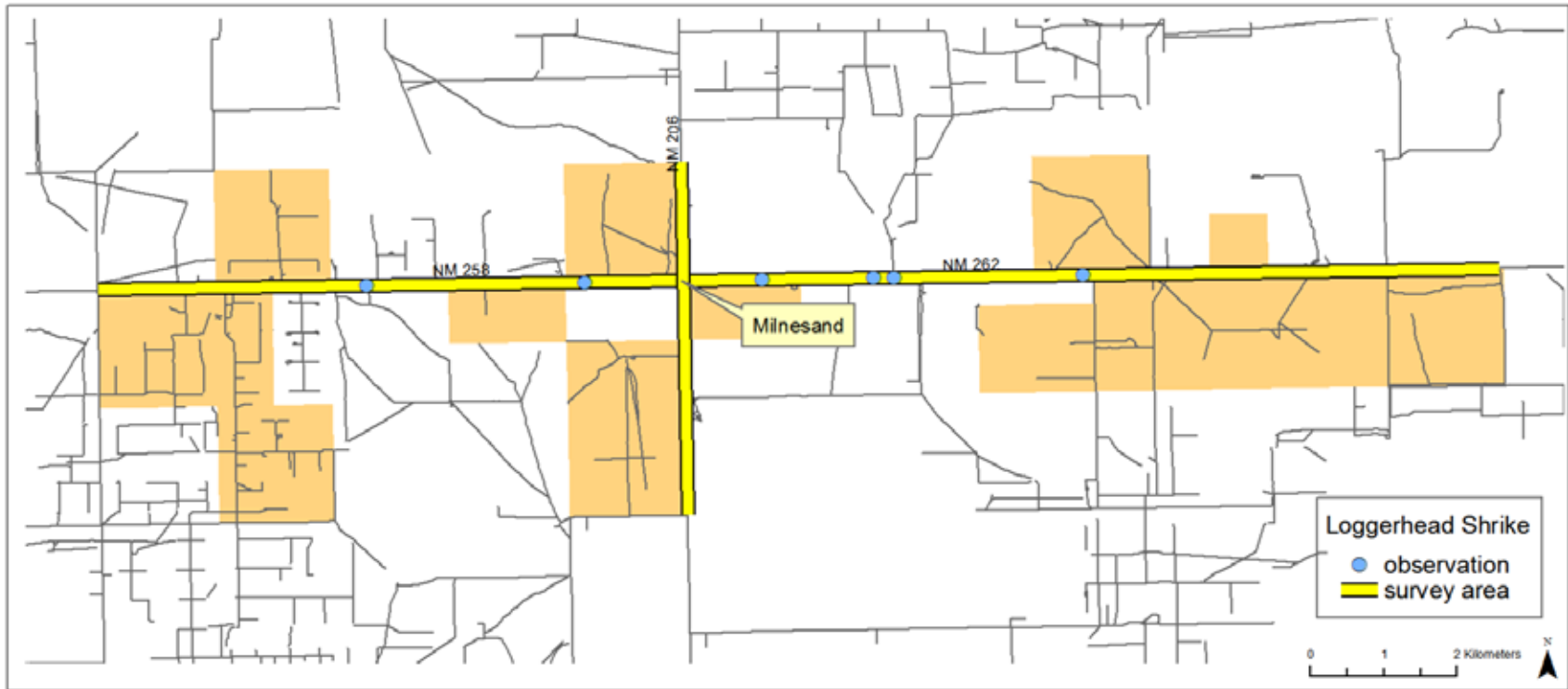


FIGURE 23. LOGGERHEAD SHRIKE ACTIVITY OBSERVED ON THE PARKINSON RANCH, NEW MEXICO, BETWEEN 2008 AND 2009.

## **Results**

### **BTPD**

In 2008, we surveyed 10 polygons comprising eight BTPD towns (Figure 21) and found four towns active (Polygons 5, 7, 8, 9, and 22). Most resident BTPD had disappeared from Town 5 in April 2007, presumably due to plague (W. Teel pers. comm.), leaving only two BTPD in 2008. Town 7 likewise lost nearly all its BTPD due to plague, leaving only 1 BTPD in 2008. Town 8 had not been poisoned but most of the colony had disappeared over the past year, leaving only six prairie dogs evident during our survey (W. Teel pers. comm.). Town 9 was not on the Parkinson property, but we observed burrows and BTPD from the road. Town 22 had 10-15 BTPD on 3 April and four BTPD on 4 April.

Polygon 6, across the road from polygon 7 and off Parkinson property, had been poisoned. BTPD not poisoned were probably finished off by plague (W. Teel pers. comm.), but the presence of one BTPD across the road in polygon 7 suggests potential for re-colonization. They could be considered parts of one town, but only the portion off the Parkinson Ranch (polygon 7) had been poisoned. Polygons 4 and 5 could be considered parts of the same town but were separated by a road, and only 5 was active. Polygon 1 was a formerly large town extirpated around April 2007, probably by plague (W. Teel pers. comm.). We were unable to survey most of town 1 because only the southwest corner was on the ranch, but Wiley Teel confirmed that the rest was inactive. The remaining polygons (4, 15, and 21) had old burrows. The area of former towns surveyed that had been extirpated by the time of the 2009 surveys was 282.8 ha, of which 18 (town 8) had been active in 2008.

In 2009 we noted the status of three of the towns surveyed in 2008: 8, 21, and 22. Town 21 was still inactive. Town 22, the most active town in 2008, was still active, but Town 8, active in 2008, appeared to be inactive in 2009. However, the number of BTPD counted in 2008 was so small that we could have missed seeing animals that were present but underground.

In summary, six former BTPD colonies in this survey were either completely extirpated or decimated by 2009, likely by plague. One of these (6) had been poisoned prior to the arrival of plague. At least two colonies (15, 21) had apparently died out more than two years ago, and we have no information on the cause of their demise. Four towns (1, 5, 7, and 8) had lost most of their BTPD as recently as 2007, likely due to plague (W. Teel pers. comm.). We observed more than six BTPD in only one colony (22), where we saw 10-15 animals.

### **LPCH**

In 2008, we detected six groups of displaying LPCH on the Parkinson Ranch property (Figure 22). Only two of these were relatively large, historical leks (leks 1 and 2). Four of these groups comprised small numbers of males. Three groups (two of which were displaying) were seen in the evening but not the next day. One group of four flew into the site, two males displayed briefly, then they scattered. We heard no male displaying at any of these four sites again and therefore classified these groups as transient male groups. We counted a maximum of 12 males and 3 females (total of 15) at lek 1 in 2008. We counted 14 males and 2 females (total of 16) at lek 2.

We found five active leks near the Parkinson property on adjacent private lands in 2008. The three we surveyed (leks 13, 16, and 4) had 13, 16, and 4 LPCH in attendance, respectively. We estimated that the

other two were 1 km and 2 km south of the Parkinson property line, and we did not walk to them. Checks of two other sites on the ranch that were suggested by Wiley were negative.

In 2009, we only checked the two, large traditional leks on the Parkinson Ranch. At lek 1 we saw only six males in two hours of surveying, from 5:00-7:00 h. At lek 2 there were only four males at 7:10 when we began our survey. At 7:20 they flushed and did not return. In summary, between 2008 and 2009, the number of LPCH at lek 1 declined from 15 to six, a loss of 60%. Lek 2 declined from 16 to 4, a loss of 75%.

### **LOSH**

We surveyed 24 km of LOSH habitat along roads adjacent to the Parkinson Ranch (Figure 23). We detected six LOSH along this route, and one additional LOCH outside this route about five miles north of the ranch. All shrikes were perched on wires alongside the road. We detected approximately 0.25 LOSH per linear km of roadside surveyed on the route, a surprisingly high number considering the short survey distance.

## **Discussion**

### **BTPD**

We found 282.8 ha of formerly occupied, extirpated BTPD towns, and we found no evidence that these losses had been balanced by new colonization. Prairie dogs have high reproductive rates and are capable of re-colonizing formerly-occupied areas. However, as long as plague is present in the area, restoration of this population will occur slowly at best. Hunting and poisoning could also impact colonization.

### **LPCH**

Our 2009 surveys suggest that the sizes of the two large, traditional LPCH leks on the Parkinson Ranch declined by 60% and 75% between 2008 and 2009. Although LIP management actions were conducted in 2008, we do not believe that these activities were responsible for the LPCH declines. LPCH populations declined in the wider Milnesand area. Surveys on the Nature Conservancy's (TNC) prairie chicken reserve (former Creamer Ranch) showed declines of 50% between spring 2008 and spring 2009 surveys, with similar declines for fall surveys in the same two years (Tish McDaniel, TNC, pers. comm.). Surveys by NMDGF in the area detected a 47% decline from 2008 to 2009. Declines noted by NMDGF were probably due to a very dry 2008 season (Figure 5, Table 1), exacerbated by a hailstorm on 5 May 2008 (Grant Beauprez, NMDGF, pers. comm.).

We assume that declines of the two Parkinson Ranch leks occurred due to weather or other impacts on the Milnesand-area LPCH population. The effects of habitat management on such a small area may be difficult to detect, since LPCH commonly nest one, two or more km from the lek where they mate (Johnson et al. 2004, 2006b; Hagan and Giesen 2005). Birds attending leks 1 and 2 could nest off the Parkinson Ranch, and birds nesting on the ranch could attend other leks in the area. Thus, the scale of impacts on LPCH populations in the Milnesand area, such as weather or predator populations, is likely larger than the size of the Parkinson Ranch.

### **LOSH**

Roadside surveys indicated that LOSH occur on the Parkinson Ranch in fair numbers. Because LOSH need grassland habitats and are impacted by pesticides (Reuven 1996), size and health of the LOSH population around Milnesand are likely related to the health of grassland habitat. Population monitoring

and studies of reproductive success are needed before conclusions can be made regarding the stability of the LOSH population in the area.

## **NHNM Recommendations**

1. Grazing deferment is best done in July and August since leaving residual grass cover for nesting LPCH is one of the principal reasons for managed grazing. Since it was grazed in November 2008, after the growing season, less residual cover would be available for LPCH nesting.
2. Continue a relationship with others in the region that are monitoring lek activity, such as The Nature Conservancy or the New Mexico Department of Game and Fish to continue the LPCH monitoring work begun here under this project.
3. Additionally, both the black-tailed prairie dog and loggerhead shrike are species of interest in the state and occupy niches within the Parkinson Ranch. Furthering the work begun under this project would contribute to maintaining good stewardship practices of these native wildlife.
4. Using the installed vegetation monitoring system, periodic monitoring can proceed in a cost-effective way to provide information for adaptive management that both enhances habitat for LPCH and supports a sustainable livestock operation. Yearly monitoring of cover and/or biomass by major life form elements such as grasses versus shrubs would contribute to our understanding of the year-to-year interactions of wildlife populations and livestock management. For monitoring for long-term changes in habitat structure and composition, we would recommend full sampling at three to five year intervals to detect changes in basal cover and species-specific abundance. Also key to understanding these interactions, is continuing to keep high-quality livestock use records coupled with the maintenance of a fully grazing-differed pasture over time as a control for climate effects. The monitoring data coupled with good management data offers an exceptional opportunity to understand the subtleties of management for sustainability of wildlife and a way of life.

## **Literature Cited**

Bohannon-Huston, Inc. 2005. New Mexico Statewide Orthophotography Project.

Grossman, D. H., D. Faber-Langendoen, A. S. Weakley, M. Anderson, P. Bourgeron, R. Crawford, K. Goodin, S. Landaal, K. Metzler, K. D. Patterson, M. Pyne, M. Reid, and L. Sneddon. 1998. International classification of ecological communities: terrestrial vegetation of the United States. Volume 1. The National Vegetation Classification System: development, status, and applications. The Nature Conservancy, Arlington, Virginia, USA.

Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and I. Teague. 2003. *Ecological Systems of the United States: A Working Classification of the U.S. Terrestrial Systems*. NatureServe, Arlington, Virginia. 83 p.

- Hagen, Christian A. and Kenneth M. Giesen. 2005. Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved 16 November 2009 from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/364doi:10.2173/bna.364>
- Johnson, K., T. Neville, and L. Pierce. 2003. Remote sensing survey of black-tailed prairie dog towns in the historical New Mexico range. NHNM Publication No. 03-GTR-248. Natural Heritage NM, Museum of Southwestern Biology, Albuquerque, NM.
- Johnson, K., B.H. Smith, G. Sadoti, T.B. Neville, and P. Neville. 2004. Habitat use and nest site selection in nesting lesser prairie-chickens. *Southwestern Naturalist* 49:334-343.
- Johnson, K., T. Neville, and A. Kirk. 2006a. Monitoring black-tailed prairie dog towns in southeastern New Mexico using remote sensing. NHNM Publication No. 06GTR-296. Natural Heritage NM, Museum of Southwestern Biology, Albuquerque, NM.
- Johnson, K., T.B. Neville, and P. Neville. 2006b. GIS habitat analyses for lesser prairie-chickens in southeastern New Mexico. *BMC Ecology* 6. Unpaginated.
- Laliberte, A.S., A. Rango, K.M. Havstad, J.F. Paris, R.F. Beck, R. McNeely, and A.L. Gonzales. 2004. Object-oriented image analysis for mapping shrub encroachment from 1937 to 2003 in southern New Mexico. *Remote Sensing of Environment*. Volume 93, Issues 1-2, 198-210 pp.
- Lenfesty, C. 1980. *Soil Survey of Chaves County, New Mexico Northern Part*. United States Department of Agriculture, Soil Conservation Service, in cooperation with the United States Department of the Interior, Bureau of Land Management and the New Mexico Agricultural Experiment Station, 224 p.
- Loflin, S. 2006. *Grasses of the Texas Hill Country: a field guide*. Texas A&M University Press. 195 p.
- Lotspeich, F.B. and M.E. Everhart. 1962. Climate and vegetation as soil forming factors on the Llano Estacado. *Journal of Range Management*, Vol. 15, No. 3 (May, 1962), pp. 134-141.
- Lowry, J. H, Jr., R. D. Ramsey, K. Boykin, D. Bradford, P. Comer, S. Falzarano, W. Kepner, J. Kirby, L. Langs, J. Prior-Magee, G. Manis, L. O'Brien, T. Sajwaj, K. A. Thomas, W. Rieth, S. Schrader, D. Schrupp, K. Schulz, B. Thompson, C. Velasquez, C. Wallace, E. Waller and B. Wolk. 2005. *Southwest Regional Gap Analysis Project: Final Report on Land Cover Mapping Methods*, RS/GIS Laboratory, Utah State University, Logan, Utah.
- McLemore, V.T. 1998. Oasis: *New Mexico Geology* 20(4):106-108.
- Neville, P., T. Neville, and K. Johnson. 2005. Lesser prairie-chicken habitat map for portions of Eastern New Mexico. Publication No. 05-GTR-285. Natural Heritage New Mexico, Museum of Southwestern Biology, University of New Mexico. 77 p.

- Neville, P., T. Neville, and K. Johnson. 2007. Map of a portion of potential sand dune lizard habitat in southeastern New Mexico. Natural Heritage New Mexico Publ. No. 07-GTR-318. Natural Heritage New Mexico, Museum of Southwestern Biology, University of New Mexico. 71 p.
- Robel, R.J., J.N. Briggs, A.D. Dayton and L.C. Hulbert. 1970. Relationships between visual obstruction measurements and weight of grassland vegetation. *Journal of Range Management*, Vol. 23(4): 295-297.
- Soil Survey Division Staff. 1993. *Soil survey manual*. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. Available online at <http://soils.usda.gov/technical/manual/> accessed 2009-12-18.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Roosevelt County, New Mexico. Available online at <http://soildatamart.nrcs.usda.gov> accessed 2009-12-11.
- US Fish and Wildlife Service. 2000. Loggerhead Shrike Status Assessment. Prepared by Lori Pruitt, Bloomington, IN. Accessed online 16 November 2009 at: [http://www.fws.gov/midwest/eco\\_serv/soc/birds/LOSH/LOSHA\\_entire.pdf](http://www.fws.gov/midwest/eco_serv/soc/birds/LOSH/LOSHA_entire.pdf)
- US Fish and Wildlife Service. 2009a. Endangered and threatened wildlife and plants: 12-month finding on a petition to list the black-tailed prairie dog as threatened or endangered. Federal Register 74 (231):63343-63366. Accessed 9 December 2009 at <http://www.fws.gov/mountain-prairie/species/mammals/btprairiedog/74FR63343.pdf>
- US Fish and Wildlife Service. 2009b. Candidate Notice of Review. Federal Register 74(215)57804- Accessed 16 November 2009 at <http://www.fws.gov/policy/library/2009/E9-26841.pdf>
- USGS National Gap Analysis Program. 2005. Southwest Regional GAP Analysis Project – Land Cover Descriptions. RS/GIS Laboratory, College of Natural Resources, Utah State University.
- Yosef, Reuven. 1996. Loggerhead Shrike (*Lanius ludovicianus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved 16 November 2009 from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/231doi:10.2173/bna.231>

## Appendix A. Monitoring Transect GPS Locations

Treatment Type	Treatment Description	Treatment Area	Stake Label	Easting	Northing
MT	Mesquite Treatment	Mesquite Treatment Area	MT1AE	658819	3723968
			MT1AW	658768	3723961
			MT1BE	658916	3723977
			MT1BW	658868	3723969
			MT1CE	659016	3723982
			MT1CW	658965	3723988
			MT2AE	658829	3724070
			MT2AW	658762	3724062
			MT2BE	658906	3724080
			MT2BW	658863	3724075
			MT2CE	659016	3724096
			MT2CW	658964	3724090
			MT3AE	658815	3724169
			MT3AW	658767	3724159
			MT3BE	658913	3724182
			MT3BW	658864	3724173
			MT3CE	659012	3724192
			MT3CW	658964	3724188
			MT4AE	658815	3724267
			MT4AW	658763	3724263
			MT4BE	658914	3724276
			MT4BW	658863	3724275
			MT4CE	659012	3724285
			MT4CW	658960	3724279
			MT5AE	658808	3724357
			MT5AW	658760	3724362
			MT5BE	658908	3724374
			MT5BW	658858	3724371
MT5CE	659009	3724393			
MT5CW	658959	3724385			
GC	Grazing Control	Sandhill Grazing Area	07GC001A-N	663548	3722462
			07GC001A-S	663554	3722414
			07GC001B-N	663536	3722567



Treatment Type	Treatment Description	Treatment Area	Stake Label	Easting	Northing
			07GC001B-S	663544	3722517
			07GC001C-N	663531	3722665
			07GC001C-S	663537	3722613
			07GC001D-N	663522	3722768
			07GC001D-S	663528	3722717
			07GC001E-N	663447	3722466
			07GC001E-S	663450	3722418
			07GC001F-N	663440	3722569
			07GC001F-S	663444	3722519
			07GC001G-N	663431	3722667
			07GC001G-S	663438	3722616
			07GC001H-N	663421	3722765
			07GC001H-S	663426	3722716
GR	Grazing Rotation	Sandhill Grazing Area	07GR001A-E	662492	3723083
			07GR001A-W	662443	3723078
			07GR001B-E	662685	3723074
			07GR001B-W	662635	3723074
			07GR001C-E	662993	3723082
			07GR001C-W	662944	3723079
			07GR001D-E	663415	3723025
			07GR001D-W	663366	3723026
			07GR001E-E	662471	3722945
			07GR001E-W	662422	3722944

Treatment Type	Treatment Description	Treatment Area	Stake Label	Easting	Northing
			07GR001F-E	662741	3722960
			07GR001F-W	662693	3722959
			07GR001G-E	663062	3722954
			07GR001G-W	663004	3722948
			07GR001H-E	663196	3722960
			07GR001H-W	663154	3722961
GY	Grazing Year Round	Sandhill Grazing Area	07GY001A-E	662366	3723341
			07GY001A-W	662323	3723335
			07GY001B-E	662774	3723321
			07GY001B-W	662723	3723313
			07GY001C-E	663148	3723347
			07GY001C-W	663099	3723347
			07GY001D-E	663320	3723363
			07GY001D-W	663273	3723355
			07GY001E-E	662460	3723225
			07GY001E-W	662409	3723221
			07GY001F-E	662749	3723197
			07GY001F-W	662699	3723195
			07GY001G-E	663043	3723232
			07GY001G-W	662991	3723223
			07GY001H-E	663393	3723209
			07GY001H-W	663343	3723208

## Appendix B. Vegetation Monitoring Data

**Table B1. Raw floristic data by quadrat at the Sandhills Grazing Area (SGA).**

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	A	2	2007	AMBPSI	AMPS	0.1	13	Ambrosia psilostachya	4	
07GC001	GC	A	2	2007	ARIPUR	ARPU9	2	22	Aristida purpurea	3	
07GC001	GC	A	2	2007	BOUHIR	BOHI2	5	16	Bouteloua hirsuta	3	
07GC001	GC	A	2	2007	CENSPI	CESP4	2	16	Cenchrus spinifex	3	
07GC001	GC	A	2	2007	CHAGLY	CHGL13	0.1	5	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	A	2	2007	CHECYC	CHCY	0.5	32	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	A	2	2007	CYPRET	CYRE14	1	16	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	A	2	2007	DIGPUB	DIPU9	5	25	Digitaria pubiflora	3	
07GC001	GC	A	2	2007	ERASEC	ERSE	2	22	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	A	2	2007	ERIANN	ERAN4	0.5	55	Eriogonum annuum	4	
07GC001	GC	A	2	2007	HELPETP	HEPEP	4	28	Helianthus petiolaris ssp. petiolaris	4	HELPET
07GC001	GC	A	2	2007	PASSETS	PASES	0.5	7	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	2	2007	PLAWRI4	PLWR	2	18	Plantago wrightiana	4	F24
07GC001	GC	A	2	2007	QUEHAV	QUHA3	40	40	Quercus havardii	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	A	2	2007	SCHSCO	SCSC	28	30	Schizachyrium scoparium	3	
07GC001	GC	A	2	2007	SPOCRY	SPCR	7	30	Sporobolus cryptandrus	3	
07GC001	GC	A	12	2007	ANDHAL	ANHA	26	110	Andropogon hallii	3	
07GC001	GC	A	12	2007	APHRAM	APRA	3	20	Aphanostephus ramosissimus	4	
07GC001	GC	A	12	2007	ARIPUR	ARPU9	15	20	Aristida purpurea	3	
07GC001	GC	A	12	2007	CALSER	CASE12	3	33	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	A	12	2007	COMERE	COER	2	30	Commelina erecta	4	
07GC001	GC	A	12	2007	CRYCIN	CRCI3	0.1	8	Cryptantha cinerea	4	
07GC001	GC	A	12	2007	DIGPUB	DIPU9	2	25	Digitaria pubiflora	3	
07GC001	GC	A	12	2007	HELPEP	HEPEP	5	50	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	A	12	2007	MIRLIN	MILI3	0.5	40	Mirabilis linearis	4	07GC001- F36
07GC001	GC	A	12	2007	PASSETS	PASES	1	16	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	12	2007	PLAWRI4	PLWR	0.1	10	Plantago wrightiana	4	F24
07GC001	GC	A	12	2007	QUEHAV	QUHA3	32	45	Quercus havardii	2	
07GC001	GC	A	12	2007	SPOCRY	SPCR	4	20	Sporobolus cryptandrus	3	
07GC001	GC	A	22	2007	ANDHAL	ANHA	30	55	Andropogon hallii	3	
07GC001	GC	A	22	2007	APHRAM	APRA	0.1	28	Aphanostephus ramosissimus	4	
07GC001	GC	A	22	2007	CHAGLY	CHGL13	0.5	5	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	A	22	2007	CHECYC	CHCY	0.1	15	Chenopodium	4	07GC001- F28

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cycloides		
07GC001	GC	A	22	2007	CYCATR	CYAT	0.1	7	Cycloloma atriplicifolium	4	
07GC001	GC	A	22	2007	PASSETS	PASES	4	18	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	22	2007	QUEHAV	QUHA3	28	30	Quercus havardii	2	
07GC001	GC	A	22	2007	SCHSCO	SCSC	35	40	Schizachyrium scoparium	3	
07GC001	GC	A	22	2007	SPOCRY	SPCR	6	20	Sporobolus cryptandrus	3	
07GC001	GC	A	32	2007	ANDHAL	ANHA	8	38	Andropogon hallii	3	
07GC001	GC	A	32	2007	ARIPUR	ARPU9	5	20	Aristida purpurea	3	
07GC001	GC	A	32	2007	ARTDRA	ARDR4	2	40	Artemisia dracunculus	4	
07GC001	GC	A	32	2007	BOUHIR	BOHI2	10	20	Bouteloua hirsuta	3	
07GC001	GC	A	32	2007	DIGPUB	DIPU9	1	20	Digitaria pubiflora	3	
07GC001	GC	A	32	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	A	32	2007	HELPEP	HEPEP	2	40	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	A	32	2007	HETSUB	HESU3	0.5	25	Heterotheca subaxillaris	4	
07GC001	GC	A	32	2007	PASSETS	PASES	2	18	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	32	2007	QUEHAV	QUHA3	40	40	Quercus havardii	2	
07GC001	GC	A	32	2007	SCHSCO	SCSC	15	32	Schizachyrium scoparium	3	
07GC001	GC	A	32	2007	SPOCRY	SPCR	2	15	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	A	32	2007	YUCGLA	YUGL	6	70	Yucca glauca	2	
07GC001	GC	A	42	2007	AMBPSI	AMPS	1	25	Ambrosia psilostachya	4	
07GC001	GC	A	42	2007	BOUCUR	BOCU	0.5	25	Bouteloua curtipendula	3	
07GC001	GC	A	42	2007	CHAGLY	CHGL13	2	3	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	A	42	2007	CRYCIN	CRCI3	2	26	Cryptantha cinerea	4	
07GC001	GC	A	42	2007	CYCATR	CYAT	0.5	13	Cycloloma atriplicifolium	4	
07GC001	GC	A	42	2007	HELPEP	HEPEP	3	45	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	A	42	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GC001	GC	A	42	2007	PASSETS	PASES	2	45	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	42	2007	QUEHAV	QUHA3	70	45	Quercus havardii	2	
07GC001	GC	A	42	2007	SCHSCO	SCSC	20	50	Schizachyrium scoparium	3	
07GC001	GC	A	42	2007	SPOCRY	SPCR	3	45	Sporobolus cryptandrus	3	
07GC001	GC	B	2	2007	BOUHIR	BOHI2	8	22	Bouteloua hirsuta	3	
07GC001	GC	B	2	2007	CHECYC	CHCY	0.1	7	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	B	2	2007	COMERE	COER	1.5	20	Commelina erecta	4	
07GC001	GC	B	2	2007	CRYCIN	CRCI3	0.5	9	Cryptantha cinerea	4	
07GC001	GC	B	2	2007	HESCOMC	HECOC8	15	20	Hesperostipa comata ssp. comata	3	07GC001- G18
07GC001	GC	B	2	2007	OPUPHA	OPPH	0.1	2	Opuntia phaeacantha	2.5	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	B	2	2007	PASSETS	PASES	1.5	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	2	2007	QUEHAV	QUHA3	60	45	Quercus havardii	2	
07GC001	GC	B	2	2007	SCHSCO	SCSC	20	30	Schizachyrium scoparium	3	
07GC001	GC	B	2	2007	UNIDFS		0.1	2	unidentified forb - seedling	4	
07GC001	GC	B	12	2007	ARIPUR	ARPU9	6	25	Aristida purpurea	3	
07GC001	GC	B	12	2007	BOUCUR	BOCU	3	25	Bouteloua curtipendula	3	
07GC001	GC	B	12	2007	BOUHIR	BOHI2	1	22	Bouteloua hirsuta	3	
07GC001	GC	B	12	2007	COMERE	COER	0.1	18	Commelina erecta	4	
07GC001	GC	B	12	2007	PASSETS	PASES	1	30	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	12	2007	QUEHAV	QUHA3	40	30	Quercus havardii	2	
07GC001	GC	B	12	2007	SCHSCO	SCSC	30	28	Schizachyrium scoparium	3	
07GC001	GC	B	12	2007	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	B	22	2007	BOUCUR	BOCU	3	30	Bouteloua curtipendula	3	
07GC001	GC	B	22	2007	BOUHIR	BOHI2	3	22	Bouteloua hirsuta	3	
07GC001	GC	B	22	2007	CALSER	CASE12	2	43	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	B	22	2007	CHECYC	CHCY	0.1	13	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	B	22	2007	EVOSER	EVSE	1.5	11	Evolvulus sericeus	4	07GC001- F34
07GC001	GC	B	22	2007	HELPETP	HEPEP	0.1	38	Helianthus petiolaris ssp.	4	HELPET

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									petiolaris		
07GC001	GC	B	22	2007	HETSUB	HESU3	0.1	16	Heterotheca subaxillaris	4	
07GC001	GC	B	22	2007	MIRLIN	MILI3	0.1	37	Mirabilis linearis	4	07GC001- F36
07GC001	GC	B	22	2007	QUEHAV	QUHA3	48	40	Quercus havardii	2	
07GC001	GC	B	22	2007	SCHSCO	SCSC	22	48	Schizachyrium scoparium	3	
07GC001	GC	B	32	2007	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GC001	GC	B	32	2007	BOUHIR	BOHI2	4	16	Bouteloua hirsuta	3	
07GC001	GC	B	32	2007	CHAMIS	CHMI8	2	22	Chamaesyce missurica	4	07GC001- F32
07GC001	GC	B	32	2007	CHECYC	CHCY	1	32	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	B	32	2007	CYCATR	CYAT	0.1	17	Cycloloma atriplicifolium	4	
07GC001	GC	B	32	2007	HELPEP	HEPEP	6	50	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	B	32	2007	HETSUB	HESU3	1	40	Heterotheca subaxillaris	4	
07GC001	GC	B	32	2007	MUNSQU	MUSQ3	8	10	Munroa squarrosa	3	
07GC001	GC	B	32	2007	PASSETS	PASES	0.1	5	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	32	2007	PLAWRI4	PLWR	0.1	5	Plantago wrightiana	4	F24
07GC001	GC	B	32	2007	QUEHAV	QUHA3	50	40	Quercus havardii	2	
07GC001	GC	B	32	2007	SCHSCO	SCSC	5	36	Schizachyrium scoparium	3	
07GC001	GC	B	32	2007	XANTEXD	XATED2	0.5	18	Xanthisma texanum ssp. drummondii	4	
07GC001	GC	B	42	2007	AMBPSI	AMPS	0.1	17	Ambrosia	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									psilostachya		
07GC001	GC	B	42	2007	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GC001	GC	B	42	2007	BOUHIR	BOHI2	2	7	Bouteloua hirsuta	3	
07GC001	GC	B	42	2007	CALSER	CASE12	3	26	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	B	42	2007	CHAMIS	CHMI8	1	32	Chamaesyce missurica	4	07GC001- F32
07GC001	GC	B	42	2007	COMERE	COER	1	15	Commelina erecta	4	
07GC001	GC	B	42	2007	CROTEX	CRTE4	2	36	Croton texensis	4	
07GC001	GC	B	42	2007	CRYCIN	CRCI3	0.1	16	Cryptantha cinerea	4	
07GC001	GC	B	42	2007	CYCATR	CYAT	0.5	40	Cycloloma atriplicifolium	4	
07GC001	GC	B	42	2007	ERIANN	ERAN4	0.1	53	Eriogonum annuum	4	
07GC001	GC	B	42	2007	HELPETP	HEPEP	0.5	54	Helianthus petiolaris ssp. petiolaris	4	HELPET
07GC001	GC	B	42	2007	HETSUB	HESU3	1	38	Heterotheca subaxillaris	4	07GC001- F8
07GC001	GC	B	42	2007	LINRIGR	LIRIR	2	32	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	B	42	2007	PALSPH	PASP	0.1	21	Palafoxia sphacelata	4	
07GC001	GC	B	42	2007	PASSETS	PASES	3	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	42	2007	QUEHAV	QUHA3	7	25	Quercus havardii	2	
07GC001	GC	B	42	2007	SCHSCO	SCSC	40	40	Schizachyrium scoparium	3	
07GC001	GC	C	2	2007	ANDHAL	ANHA	1.5	30	Andropogon hallii	3	
07GC001	GC	C	2	2007	BOUCUR	BOCU	1	12	Bouteloua curtipendula	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	C	2	2007	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GC001	GC	C	2	2007	CALSER	CASE12	6	22	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	C	2	2007	CHAGLY	CHGL13	0.5	3	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	C	2	2007	CHAMIS	CHMI8	0.5	13	Chamaesyce missurica	4	07GC001- F32
07GC001	GC	C	2	2007	CYPRET	CYRE14	0.1	12	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	C	2	2007	ERASEC	ERSE	0.1	24	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	C	2	2007	FROGRA	FRGR3	0.1	11	Froelichia gracilis	4	
07GC001	GC	C	2	2007	GUTSAR	GUSA2	8	40	Gutierrezia sarrothrae	2.5	
07GC001	GC	C	2	2007	HETSUB	HESU3	0.5	16	Heterotheca subaxillaris	4	
07GC001	GC	C	2	2007	LECMUC	LEMU3	0.1	8	Lechea mucronata	4	07GC001- F27
07GC001	GC	C	2	2007	MIMQUAO	MIQUO	0.1	3	Mimosa quadrivalvis var. occidentalis	4	07GC001-S1
07GC001	GC	C	2	2007	PALSPH	PASP	0.1	18	Palafoxia sphacelata	4	
07GC001	GC	C	2	2007	PASSETS	PASES	5	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	2	2007	QUEHAV	QUHA3	30	45	Quercus havardii	2	
07GC001	GC	C	2	2007	SCHSCO	SCSC	15	32	Schizachyrium scoparium	3	
07GC001	GC	C	2	2007	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GC001	GC	C	12	2007	ANDHAL	ANHA	9	45	Andropogon hallii	3	
07GC001	GC	C	12	2007	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	C	12	2007	CALSER	CASE12	1	20	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	C	12	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	C	12	2007	CHAMIS	CHMI8	0.5	17	Chamaesyce missurica	4	07GC001- F32
07GC001	GC	C	12	2007	CYCATR	CYAT	0.1	4	Cycloloma atriplicifolium	4	
07GC001	GC	C	12	2007	CYPRET	CYRE14	0.1	30	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	C	12	2007	DALPUR	DAPU5	1	10	Dalea purpurea	4	07GC001- F38
07GC001	GC	C	12	2007	ERASEC	ERSE	2	25	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	C	12	2007	FROGRA	FRGR3	0.1	5	Froelichia gracilis	4	
07GC001	GC	C	12	2007	LECMUC	LEMU3	0.1	8	Lechea mucronata	4	07GC001- F27
07GC001	GC	C	12	2007	MELLEU	MELE2	8	22	Melampodium leucanthum	4	
07GC001	GC	C	12	2007	MIRLIN	MILI3	0.1	50	Mirabilis linearis	4	07GC001- F36
07GC001	GC	C	12	2007	PARJAM	PAJA	2	6	Paronychia jamesii	4	
07GC001	GC	C	12	2007	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	12	2007	QUEHAV	QUHA3	11	40	Quercus havardii	2	
07GC001	GC	C	12	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GC001	GC	C	12	2007	SPOCRY	SPCR	1	18	Sporobolus cryptandrus	3	
07GC001	GC	C	22	2007	AMBPSI	AMPS	0.1	35	Ambrosia psilostachya	4	
07GC001	GC	C	22	2007	ARIPUR	ARPU9	1	22	Aristida purpurea	3	
07GC001	GC	C	22	2007	BOUHIR	BOHI2	0.5	12	Bouteloua hirsuta	3	
07GC001	GC	C	22	2007	CALSER	CASE12	5	21	Calylophus	4	07GC001- F19

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									serrulatus		
07GC001	GC	C	22	2007	CHAMIS	CHMI8	0.5	28	Chamaesyce missurica	4	07GC001- F32
07GC001	GC	C	22	2007	CHECYC	CHCY	0.1	8	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	C	22	2007	CYCATR	CYAT	0.1	3	Cycloloma atriplicifolium	4	
07GC001	GC	C	22	2007	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	22	2007	QUEHAV	QUHA3	50	42	Quercus havardii	2	
07GC001	GC	C	22	2007	SCHSCO	SCSC	40	30	Schizachyrium scoparium	3	
07GC001	GC	C	22	2007	THEMEG	THME	0.1	50	Thelesperma megapotamicum	4	
07GC001	GC	C	22	2007	XANSPI2	MAPI	18	0.5	Xanthisma spinulosum	4	
07GC001	GC	C	32	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GC001	GC	C	32	2007	ANDHAL	ANHA	10	60	Andropogon hallii	3	
07GC001	GC	C	32	2007	CALSER	CASE12	3	30	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	C	32	2007	CHECYC	CHCY	0.1	14	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	C	32	2007	CYCATR	CYAT	0.1	6	Cycloloma atriplicifolium	4	
07GC001	GC	C	32	2007	ERASEC	ERSE	1	16	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	C	32	2007	LINRIGR	LIRIR	1	36	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	C	32	2007	MIRLIN	MILI3	0.5	28	Mirabilis linearis	4	07GC001- F36
07GC001	GC	C	32	2007	PALSPH	PASP	0.1	8	Palafoxia sphacelata	4	
07GC001	GC	C	32	2007	QUEHAV	QUHA3	30	42	Quercus havardii	2	
07GC001	GC	C	32	2007	SCHSCO	SCSC	20	38	Schizachyrium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									scoparium		
07GC001	GC	C	32	2007	SPOCRY	SPCR	0.5	22	Sporobolus cryptandrus	3	
07GC001	GC	C	32	2007	XANSPI2	MAPI	0.5	20	Xanthisma spinulosum	4	
07GC001	GC	C	32	2007	YUCGLA	YUGL	8	75	Yucca glauca	2	
07GC001	GC	C	42	2007	AMBPSI	AMPS	2	35	Ambrosia psilostachya	4	
07GC001	GC	C	42	2007	ANDHAL	ANHA	4	60	Andropogon hallii	3	
07GC001	GC	C	42	2007	BOUHIR	BOHI2	0.5	7	Bouteloua hirsuta	3	
07GC001	GC	C	42	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	C	42	2007	CRYCIN	CRCI3	1	8	Cryptantha cinerea	4	
07GC001	GC	C	42	2007	HELPETP	HEPEP	1	50	Helianthus petiolaris ssp. petiolaris	4	HELPET
07GC001	GC	C	42	2007	HETVIL	HEVI4	2	37	Heterotheca villosa	4	07GC001- F37
07GC001	GC	C	42	2007	PASSETS	PASES	3	30	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	42	2007	QUEHAV	QUHA3	55	50	Quercus havardii	2	
07GC001	GC	C	42	2007	SCHSCO	SCSC	2	30	Schizachyrium scoparium	3	
07GC001	GC	C	42	2007	SPOCRY	SPCR	1	40	Sporobolus cryptandrus	3	
07GC001	GC	C	42	2007	THEMEG	THME	2	65	Thelesperma megapotamicum	4	
07GC001	GC	D	2	2007	AMBPSI	AMPS	2.5	34	Ambrosia psilostachya	4	
07GC001	GC	D	2	2007	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GC001	GC	D	2	2007	CALSER	CASE12	6	24	Calylophus serrulatus	4	07GC001- F19

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	D	2	2007	CHAFEN	CHFE3	0.5	2	Chamaesyce fendleri	4	
07GC001	GC	D	2	2007	CHAGLY	CHGL13	2.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	D	2	2007	ERASEC	ERSE	3	16	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	D	2	2007	ERIANN	ERAN4	0.5	100	Eriogonum annuum	4	
07GC001	GC	D	2	2007	FROGRA	FRGR3	0.1	3	Froelichia gracilis	4	
07GC001	GC	D	2	2007	LECMUC	LEMU3	0.5	17	Lechea mucronata	4	07GC001- F27
07GC001	GC	D	2	2007	PASSETS	PASES	0.5	8	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	2	2007	QUEHAV	QUHA3	25	55	Quercus havardii	2	
07GC001	GC	D	2	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GC001	GC	D	12	2007	AMBPSI	AMPS	1	32	Ambrosia psilostachya	4	
07GC001	GC	D	12	2007	ANDHAL	ANHA	8	70	Andropogon hallii	3	
07GC001	GC	D	12	2007	BOUHIR	BOHI2	2	12	Bouteloua hirsuta	3	
07GC001	GC	D	12	2007	CALSER	CASE12	1	30	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	D	12	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	D	12	2007	ERASEC	ERSE	7	27	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	D	12	2007	ERIANN	ERAN4	0.1	45	Eriogonum annuum	4	
07GC001	GC	D	12	2007	LINRIGR	LIRIR	2	50	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	D	12	2007	LITMUL	LIMU3	0.5	18	Lithospermum multiflorum	4	
07GC001	GC	D	12	2007	PALSPH	PASP	0.1	12	Palafoxia	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									sphacelata		
07GC001	GC	D	12	2007	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	12	2007	QUEHAV	QUHA3	30	40	Quercus havardii	2	
07GC001	GC	D	12	2007	SCHSCO	SCSC	15	35	Schizachyrium scoparium	3	
07GC001	GC	D	12	2007	THEMEG	THME	0.5	50	Thelesperma megapotamicum	4	
07GC001	GC	D	22	2007	ANDHAL	ANHA	10	75	Andropogon hallii	3	
07GC001	GC	D	22	2007	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GC001	GC	D	22	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	D	22	2007	COMERE	COER	3	14	Commelina erecta	4	
07GC001	GC	D	22	2007	DALVILV	DAVIV	0.5	20	Dalea villosa var. villosa	4	07GC001-F40
07GC001	GC	D	22	2007	ERASEC	ERSE	3	22	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	D	22	2007	FROGRA	FRGR3	0.1	4	Froelichia gracilis	4	
07GC001	GC	D	22	2007	LECMUC	LEMU3	0.1	5	Lechea mucronata	4	07GC001- F27
07GC001	GC	D	22	2007	LINRIGR	LIRIR	2	52	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	D	22	2007	PALSPH	PASP	0.1	11	Palafoxia sphacelata	4	
07GC001	GC	D	22	2007	PARJAM	PAJA	8	15	Paronychia jamesii	4	
07GC001	GC	D	22	2007	PASSETS	PASES	15	22	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	22	2007	QUEHAV	QUHA3	25	45	Quercus havardii	2	
07GC001	GC	D	22	2007	SCHSCO	SCSC	20	35	Schizachyrium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									scoparium		
07GC001	GC	D	22	2007	THEMEG	THME	3	24	Thelesperma megapotamicum	4	
07GC001	GC	D	32	2007	AMBPSI	AMPS	3	40	Ambrosia psilostachya	4	
07GC001	GC	D	32	2007	ANDHAL	ANHA	10	60	Andropogon hallii	3	
07GC001	GC	D	32	2007	ARTDRA	ARDR4	0.1	8	Artemisia dracunculus	4	
07GC001	GC	D	32	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	D	32	2007	COMERE	COER	0.1	12	Commelina erecta	4	
07GC001	GC	D	32	2007	HELPETP	HEPEP	2.5	35	Helianthus petiolaris ssp. petiolaris	4	HELPET
07GC001	GC	D	32	2007	LITMUL	LIMU3	0.5	17	Lithospermum multiflorum	4	
07GC001	GC	D	32	2007	QUEHAV	QUHA3	40	35	Quercus havardii	2	
07GC001	GC	D	32	2007	SCHSCO	SCSC	10	32	Schizachyrium scoparium	3	
07GC001	GC	D	32	2007	THEMEG	THME	0.5	70	Thelesperma megapotamicum	4	
07GC001	GC	D	42	2007	AMBPSI	AMPS	1	35	Ambrosia psilostachya	4	
07GC001	GC	D	42	2007	ANDHAL	ANHA	7	80	Andropogon hallii	3	
07GC001	GC	D	42	2007	CYPRET	CYRE14	0.1	55	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	D	42	2007	LINRIGR	LIRIR	1	37	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	D	42	2007	PASSETS	PASES	2	16	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	42	2007	PENSTE	PENST	0.5	5	Penstemon spp.	4	07GC001-F42
07GC001	GC	D	42	2007	POLJAM	POJA3	0.1	18	Polanisia jamesii	4	F41



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	D	42	2007	QUEHAV	QUHA3	17	35	Quercus havardii	2	
07GC001	GC	D	42	2007	SCHSCO	SCSC	28	30	Schizachyrium scoparium	3	
07GC001	GC	E	2	2007	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GC001	GC	E	2	2007	BOUHIR	BOHI2	2	18	Bouteloua hirsuta	3	
07GC001	GC	E	2	2007	CALSER	CASE12	1.5	33	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	E	2	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	E	2	2007	COMERE	COER	0.5	7	Commelina erecta	4	
07GC001	GC	E	2	2007	CYCATR	CYAT	0.1	18	Cycloloma atriplicifolium	4	
07GC001	GC	E	2	2007	CYPRET	CYRE14	1	40	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	E	2	2007	DIGPUB	DIPU9	3	23	Digitaria pubiflora	3	
07GC001	GC	E	2	2007	FROGRA	FRGR3	0.1	36	Froelichia gracilis	4	
07GC001	GC	E	2	2007	GUTSAR	GUSA2	5	45	Gutierrezia sarothrae	2.5	
07GC001	GC	E	2	2007	PALSPH	PASP	0.1	22	Palafoxia sphacelata	4	
07GC001	GC	E	2	2007	PASSETS	PASES	4	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	2	2007	QUEHAV	QUHA3	42	40	Quercus havardii	2	
07GC001	GC	E	2	2007	SCHSCO	SCSC	6	45	Schizachyrium scoparium	3	
07GC001	GC	E	2	2007	SPOCRY	SPCR	0.1	22	Sporobolus cryptandrus	3	
07GC001	GC	E	12	2007	ARIPUR	ARPU9	10	20	Aristida purpurea	3	
07GC001	GC	E	12	2007	COMERE	COER	0.5	30	Commelina	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									erecta		
07GC001	GC	E	12	2007	CROTEX	CRTE4	1.5	32	Croton texensis	4	
07GC001	GC	E	12	2007	CYCATR	CYAT	0.5	6	Cycloloma atriplicifolium	4	
07GC001	GC	E	12	2007	CYPRET	CYRE14	2	8	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	E	12	2007	ERIANN	ERAN4	1.5	35	Eriogonum annuum	4	
07GC001	GC	E	12	2007	HELPEP	HEPEP	4	38	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	E	12	2007	MUNSQU	MUSQ3	6	6	Munroa squarrosa	3	
07GC001	GC	E	12	2007	PASSETS	PASES	20	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	12	2007	QUEHAV	QUHA3	35	36	Quercus havardii	2	
07GC001	GC	E	12	2007	SPOCRY	SPCR	5	15	Sporobolus cryptandrus	3	
07GC001	GC	E	22	2007	AMBPSI	AMPS	0.5	42	Ambrosia psilostachya	4	
07GC001	GC	E	22	2007	ARIPUR	ARPU9	0.1	22	Aristida purpurea	3	
07GC001	GC	E	22	2007	BOUHIR	BOHI2	15	20	Bouteloua hirsuta	3	
07GC001	GC	E	22	2007	CALSER	CASE12	1.5	24	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	E	22	2007	CRYCIN	CRCI3	0.1	3	Cryptantha cinerea	4	
07GC001	GC	E	22	2007	ERASEC	ERSE	0.5	26	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	E	22	2007	HELPEP	HEPEP	1	22	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	E	22	2007	LITMUL	LIMU3	0.5	10	Lithospermum multiflorum	4	
07GC001	GC	E	22	2007	MIRLIN	MILI3	0.1	7	Mirabilis linearis	4	07GC001- F36

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	E	22	2007	PALSPH	PASP	0.1	13	Palafoxia sphacelata	4	
07GC001	GC	E	22	2007	PASSETS	PASES	6	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	22	2007	QUEHAV	QUHA3	30	38	Quercus havardii	2	
07GC001	GC	E	22	2007	SCHSCO	SCSC	28	30	Schizachyrium scoparium	3	
07GC001	GC	E	22	2007	SPOCRY	SPCR	2	22	Sporobolus cryptandrus	3	
07GC001	GC	E	22	2007	THEMEG	THME	0.1	12	Thelesperma megapotamicum	4	
07GC001	GC	E	32	2007	AMBPSI	AMPS	1.5	20	Ambrosia psilostachya	4	
07GC001	GC	E	32	2007	ARIPUR	ARPU9	0.1	15	Aristida purpurea	3	
07GC001	GC	E	32	2007	BOUCUR	BOCU	0.5	20	Bouteloua curtipendula	3	
07GC001	GC	E	32	2007	BOUHIR	BOHI2	8	12	Bouteloua hirsuta	3	
07GC001	GC	E	32	2007	COMERE	COER	0.1	6	Commelina erecta	4	
07GC001	GC	E	32	2007	DIMWIS	DIWI2	0.1	27	Dimorphocarpa wislizeni	4	
07GC001	GC	E	32	2007	ERIANN	ERAN4	0.1	25	Eriogonum annuum	4	
07GC001	GC	E	32	2007	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	32	2007	QUEHAV	QUHA3	40	40	Quercus havardii	2	
07GC001	GC	E	32	2007	SCHSCO	SCSC	15	40	Schizachyrium scoparium	3	
07GC001	GC	E	32	2007	SPOCRY	SPCR	0.5	30	Sporobolus cryptandrus	3	
07GC001	GC	E	32	2007	THEMEG	THME	0.1	10	Thelesperma megapotamicum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	E	32	2007	TOWEXS	TOEX2	0.5	4	Townsendia exscapa	4	F4 on data sheet, but specimen F45 on plot sheet
07GC001	GC	E	42	2007	AMBPSI	AMPS	1	22	Ambrosia psilostachya	4	
07GC001	GC	E	42	2007	ANDHAL	ANHA	6	30	Andropogon hallii	3	
07GC001	GC	E	42	2007	ARIPUR	ARPU9	15	26	Aristida purpurea	3	
07GC001	GC	E	42	2007	CHAFEN	CHFE3	0.1	2	Chamaesyce fendleri	4	
07GC001	GC	E	42	2007	CYCATR	CYAT	0.1	5	Cycloloma atriplicifolium	4	
07GC001	GC	E	42	2007	CYPRET	CYRE14	1	12	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	E	42	2007	PARJAM	PAJA	0.1	12	Paronychia jamesii	4	
07GC001	GC	E	42	2007	PASSETS	PASES	0.5	6	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	42	2007	QUEHAV	QUHA3	15	34	Quercus havardii	2	
07GC001	GC	E	42	2007	SCHSCO	SCSC	30	35	Schizachyrium scoparium	3	
07GC001	GC	E	42	2007	THEMEG	THME	1.5	30	Thelesperma megapotamicum	4	
07GC001	GC	F	2	2007	AMBPSI	AMPS	0.1	3	Ambrosia psilostachya	4	
07GC001	GC	F	2	2007	ANDHAL	ANHA	0.5	40	Andropogon hallii	3	
07GC001	GC	F	2	2007	BOUHIR	BOHI2	5	12	Bouteloua hirsuta	3	
07GC001	GC	F	2	2007	CALSER	CASE12	3	17	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	F	2	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	F	2	2007	COMERE	COER	0.1	12	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	F	2	2007	CRYCIN	CRCI3	0.1	23	Cryptantha cinerea	4	
07GC001	GC	F	2	2007	GUTSAR	GUSA2	4	25	Gutierrezia sarothrae	2.5	
07GC001	GC	F	2	2007	HELPEP	HEPEP	0.1	9	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	F	2	2007	LITMUL	LIMU3	0.1	15	Lithospermum multiflorum	4	
07GC001	GC	F	2	2007	PASSETS	PASES	0.1	2	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	2	2007	QUEHAV	QUHA3	3	25	Quercus havardii	2	
07GC001	GC	F	2	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GC001	GC	F	12	2007	AMBPSI	AMPS	0.1	15	Ambrosia psilostachya	4	
07GC001	GC	F	12	2007	ANDHAL	ANHA	1	40	Andropogon hallii	3	
07GC001	GC	F	12	2007	ARIPUR	ARPU9	0.5	18	Aristida purpurea	3	
07GC001	GC	F	12	2007	BOUHIR	BOHI2	5	18	Bouteloua hirsuta	3	
07GC001	GC	F	12	2007	COMERE	COER	1.5	20	Commelina erecta	4	
07GC001	GC	F	12	2007	CYPRET	CYRE14	0.5	0	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	F	12	2007	GUTSAR	GUSA2	3	25	Gutierrezia sarothrae	2.5	
07GC001	GC	F	12	2007	HYMFLAC	HYFLC	1	50	Hymenopappus flavescens var. canotomentosus	4	07GC001- F7
07GC001	GC	F	12	2007	LITMUL	LIMU3	0.5	16	Lithospermum multiflorum	4	
07GC001	GC	F	12	2007	PASSETS	PASES	2	22	Paspalum setaceum var. stramineum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	F	12	2007	QUEHAV	QUHA3	15	40	Quercus havardii	2	
07GC001	GC	F	12	2007	SCHSCO	SCSC	40	35	Schizachyrium scoparium	3	
07GC001	GC	F	12	2007	SPOCRY	SPCR	6	22	Sporobolus cryptandrus	3	
07GC001	GC	F	12	2007	XANSPI2	MAPI	1.5	15	Xanthisma spinulosum	4	
07GC001	GC	F	22	2007	ANDHAL	ANHA	7	45	Andropogon hallii	3	
07GC001	GC	F	22	2007	ARIPUR	ARPU9	5	15	Aristida purpurea	3	
07GC001	GC	F	22	2007	BOUHIR	BOHI2	8	8	Bouteloua hirsuta	3	
07GC001	GC	F	22	2007	CALSER	CASE12	1	16	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	F	22	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	F	22	2007	CRYCIN	CRCI3	0.5	8	Cryptantha cinerea	4	
07GC001	GC	F	22	2007	HETVIL	HEVI4	0.1	6	Heterotheca villosa	4	07GC001- F37
07GC001	GC	F	22	2007	PARJAM	PAJA	4	7	Paronychia jamesii	4	
07GC001	GC	F	22	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	22	2007	QUEHAV	QUHA3	2	27	Quercus havardii	2	
07GC001	GC	F	22	2007	SCHSCO	SCSC	20	20	Schizachyrium scoparium	3	
07GC001	GC	F	22	2007	SPOCRY	SPCR	4	30	Sporobolus cryptandrus	3	
07GC001	GC	F	32	2007	BOUHIR	BOHI2	8	15	Bouteloua hirsuta	3	
07GC001	GC	F	32	2007	CALSER	CASE12	1	20	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	F	32	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce	4	07GC001- F14

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									glyptosperma		
07GC001	GC	F	32	2007	COMERE	COER	3	24	Commelina erecta	4	
07GC001	GC	F	32	2007	CYPRET	CYRE14	0.5	12	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	F	32	2007	EVOSER	EVSE	2.5	14	Evolvulus sericeus	4	07GC001- F34
07GC001	GC	F	32	2007	LINRIGR	LIRIR	3	40	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	F	32	2007	LITMUL	LIMU3	1	15	Lithospermum multiflorum	4	
07GC001	GC	F	32	2007	PALSPH	PASP	0.1	5	Palafoxia sphacelata	4	
07GC001	GC	F	32	2007	PASSETS	PASES	8	18	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	32	2007	PLAWRI4	PLWR	0.1	12	Plantago wrightiana	4	F24
07GC001	GC	F	32	2007	QUEHAV	QUHA3	15	45	Quercus havardii	2	
07GC001	GC	F	32	2007	SCHSCO	SCSC	40	32	Schizachyrium scoparium	3	
07GC001	GC	F	32	2007	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	F	42	2007	ANDHAL	ANHA	2	60	Andropogon hallii	3	
07GC001	GC	F	42	2007	ARIPUR	ARPU9	1	15	Aristida purpurea	3	
07GC001	GC	F	42	2007	BOUCUR	BOCU	3	25	Bouteloua curtipendula	3	
07GC001	GC	F	42	2007	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GC001	GC	F	42	2007	BRIEUPC	BREUC2	8	58	Brickellia eupatorioides var. chlorolepis	2.5	07GC001-S5
07GC001	GC	F	42	2007	CALSER	CASE12	3	35	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	F	42	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce	4	07GC001- F14

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									glyptosperma		
07GC001	GC	F	42	2007	COMERE	COER	0.1	5	Commelina erecta	4	
07GC001	GC	F	42	2007	DIGPUB	DIPU9	18	25	Digitaria pubiflora	3	
07GC001	GC	F	42	2007	EVOSE	EVSE	1	20	Evolvulus sericeus	4	07GC001- F34
07GC001	GC	F	42	2007	HETVIL	HEVI4	0.5	14	Heterotheca villosa	4	07GC001- F37
07GC001	GC	F	42	2007	LORPUL	CHPU4	0.5	60	Lorandersonia pulchella	2	07GC001-S4
07GC001	GC	F	42	2007	PALSPH	PASP	0.1	22	Palafoxia sphacelata	4	
07GC001	GC	F	42	2007	PASSETS	PASES	2	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	42	2007	QUEHAV	QUHA3	40	45	Quercus havardii	2	
07GC001	GC	F	42	2007	SCHSCO	SCSC	10	28	Schizachyrium scoparium	3	
07GC001	GC	G	2	2007	AMBPSI	AMPS	6	45	Ambrosia psilostachya	4	
07GC001	GC	G	2	2007	ARIPUR	ARPU9	12	25	Aristida purpurea	3	
07GC001	GC	G	2	2007	BOUHIR	BOHI2	1	15	Bouteloua hirsuta	3	
07GC001	GC	G	2	2007	CHECYC	CHCY	0.1	20	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	G	2	2007	CRYCIN	CRCI3	0.5	28	Cryptantha cinerea	4	
07GC001	GC	G	2	2007	ERASEC	ERSE	2	25	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	G	2	2007	PALSPH	PASP	0.1	17	Palafoxia sphacelata	4	
07GC001	GC	G	2	2007	PASSMI	PASM	4	25	Pascopyrum smithii	3	
07GC001	GC	G	2	2007	QUEHAV	QUHA3	50	45	Quercus havardii	2	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	G	2	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GC001	GC	G	12	2007	BOUHIR	BOHI2	8	18	Bouteloua hirsuta	3	
07GC001	GC	G	12	2007	CHAGLY	CHGL13	5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	G	12	2007	CRYCIN	CRCI3	1	30	Cryptantha cinerea	4	
07GC001	GC	G	12	2007	CYCATR	CYAT	1	12	Cycloloma atriplicifolium	4	
07GC001	GC	G	12	2007	ERIANN	ERAN4	1.5	55	Eriogonum annuum	4	
07GC001	GC	G	12	2007	HETSUB	HESU3	3	28	Heterotheca subaxillaris	4	
07GC001	GC	G	12	2007	LITMUL	LIMU3	0.5	16	Lithospermum multiflorum	4	
07GC001	GC	G	12	2007	MUNSQU	MUSQ3	0.1	6	Munroa squarrosa	3	
07GC001	GC	G	12	2007	PASSETS	PASES	10	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	12	2007	QUEHAV	QUHA3	30	42	Quercus havardii	2	
07GC001	GC	G	12	2007	SCHSCO	SCSC	12	38	Schizachyrium scoparium	3	
07GC001	GC	G	12	2007	SPOCRY	SPCR	1	22	Sporobolus cryptandrus	3	
07GC001	GC	G	12	2007	THEMEG	THME	0.5	12	Thelesperma megapotamicum	4	
07GC001	GC	G	22	2007	AMBPSI	AMPS	1.5	35	Ambrosia psilostachya	4	
07GC001	GC	G	22	2007	BOUHIR	BOHI2	0.5	5	Bouteloua hirsuta	3	
07GC001	GC	G	22	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	G	22	2007	COMERE	COER	0.1	10	Commelina erecta	4	
07GC001	GC	G	22	2007	CRYCIN	CRCI3	1.5	8	Cryptantha	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cinerea		
07GC001	GC	G	22	2007	CYPRET	CYRE14	0.5	10	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	G	22	2007	ERASEC	ERSE	2	16	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	G	22	2007	PALSPH	PASP	0.1	10	Palafoxia sphacelata	4	
07GC001	GC	G	22	2007	PASSETS	PASES	3	22	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	22	2007	QUEHAV	QUHA3	40	45	Quercus havardii	2	
07GC001	GC	G	22	2007	SCHSCO	SCSC	20	30	Schizachyrium scoparium	3	
07GC001	GC	G	22	2007	SPOCRY	SPCR	0.5	40	Sporobolus cryptandrus	3	
07GC001	GC	G	22	2007	UNIDFS		0.1	6	unidentified forb - seedling	4	
07GC001	GC	G	22	2007	XANSPI2	MAPI	3	18	Xanthisma spinulosum	4	
07GC001	GC	G	32	2007	AMBPSI	AMPS	1.5	35	Ambrosia psilostachya	4	
07GC001	GC	G	32	2007	ARIPUR	ARPU9	6	28	Aristida purpurea	3	
07GC001	GC	G	32	2007	BOUHIR	BOHI2	3	10	Bouteloua hirsuta	3	
07GC001	GC	G	32	2007	COMERE	COER	3	26	Commelina erecta	4	
07GC001	GC	G	32	2007	CRYCIN	CRCI3	0.5	20	Cryptantha cinerea	4	
07GC001	GC	G	32	2007	DIGPUB	DIPU9	1	22	Digitaria pubiflora	3	
07GC001	GC	G	32	2007	ERASEC	ERSE	0.5	22	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	G	32	2007	ERIANN	ERAN4	0.1	30	Eriogonum annuum	4	
07GC001	GC	G	32	2007	PASSETS	PASES	5	25	Paspalum setaceum var.	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GC001	GC	G	32	2007	QUEHAV	QUHA3	40	42	Quercus havardii	2	
07GC001	GC	G	32	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GC001	GC	G	42	2007	AMBPSI	AMPS	0.5	23	Ambrosia psilostachya	4	
07GC001	GC	G	42	2007	ARIPUR	ARPU9	2	0	Aristida purpurea	3	
07GC001	GC	G	42	2007	BOUHIR	BOHI2	6	15	Bouteloua hirsuta	3	
07GC001	GC	G	42	2007	CALSER	CASE12	1	20	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	G	42	2007	CHAGLY	CHGL13	1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	G	42	2007	CRYCIN	CRCI3	1	27	Cryptantha cinerea	4	
07GC001	GC	G	42	2007	DALNANN	DANAN	2	16	Dalea nana var. nana	4	07GC001- F35
07GC001	GC	G	42	2007	DIGPUB	DIPU9	1	25	Digitaria pubiflora	3	
07GC001	GC	G	42	2007	ERASEC	ERSE	2	27	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	G	42	2007	ERIANN	ERAN4	0.1	0	Eriogonum annuum	4	
07GC001	GC	G	42	2007	MIRLIN	MILI3	0.1	18	Mirabilis linearis	4	07GC001- F36
07GC001	GC	G	42	2007	PASSETS	PASES	3	13	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	42	2007	QUEHAV	QUHA3	50	45	Quercus havardii	2	
07GC001	GC	G	42	2007	SCHSCO	SCSC	12	43	Schizachyrium scoparium	3	
07GC001	GC	H	2	2007	AMBPSI	AMPS	2	30	Ambrosia psilostachya	4	
07GC001	GC	H	2	2007	ARIPUR	ARPU9	3	15	Aristida purpurea	3	
07GC001	GC	H	2	2007	CHAGLY	CHGL13	0.1	3	Chamaesyce	4	07GC001- F14

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									glyptosperma		
07GC001	GC	H	2	2007	CHECYC	CHCY	2	55	Chenopodium cycloides	4	07GC001- F28
07GC001	GC	H	2	2007	COMERE	COER	0.1	8	Commelina erecta	4	
07GC001	GC	H	2	2007	CRYCIN	CRCI3	1	30	Cryptantha cinerea	4	
07GC001	GC	H	2	2007	DIGPUB	DIPU9	0.5	20	Digitaria pubiflora	3	
07GC001	GC	H	2	2007	GAUVIL	GAVI2	1	60	Gaura villosa	4	
07GC001	GC	H	2	2007	HELPEP	HEPEP	3	60	Helianthus petiolaris ssp. petiolaris	4	HELPEP
07GC001	GC	H	2	2007	HETVIL	HEVI4	3	27	Heterotheca villosa	4	07GC001- F37
07GC001	GC	H	2	2007	LITMUL	LIMU3	0.1	5	Lithospermum multiflorum	4	
07GC001	GC	H	2	2007	MIMQUAO	MIQUO	1	8	Mimosa quadrivalvis var. occidentalis	4	MIMRUP
07GC001	GC	H	2	2007	QUEHAV	QUHA3	35	50	Quercus havardii	2	
07GC001	GC	H	2	2007	SCHSCO	SCSC	20	40	Schizachyrium scoparium	3	
07GC001	GC	H	2	2007	SPOCRY	SPCR	2	35	Sporobolus cryptandrus	3	
07GC001	GC	H	2	2007	XANSPI2	MAPI	0.5	22	Xanthisma spinulosum	4	
07GC001	GC	H	12	2007	AMBPSI	AMPS	3	40	Ambrosia psilostachya	4	
07GC001	GC	H	12	2007	ANDHAL	ANHA	15	48	Andropogon hallii	3	
07GC001	GC	H	12	2007	BOUHIR	BOHI2	1	12	Bouteloua hirsuta	3	
07GC001	GC	H	12	2007	CALSER	CASE12	4	22	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	H	12	2007	CHAGLY	CHGL13	1	2	Chamaesyce glyptosperma	4	07GC001- F14

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	H	12	2007	CYCATR	CYAT	2	12	Cycloloma atriplicifolium	4	
07GC001	GC	H	12	2007	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	H	12	2007	HELPETP	HEPEP	2	60	Helianthus petiolaris ssp. petiolaris	4	HELPET
07GC001	GC	H	12	2007	HETVIL	HEVI4	4	28	Heterotheca villosa	4	07GC001- F37
07GC001	GC	H	12	2007	PALSPH	PASP	0.1	28	Palafoxia sphacelata	4	
07GC001	GC	H	12	2007	PASSETS	PASES	2	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	12	2007	QUEHAV	QUHA3	10	30	Quercus havardii	2	
07GC001	GC	H	12	2007	SCHSCO	SCSC	25	30	Schizachyrium scoparium	3	
07GC001	GC	H	12	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GC001	GC	H	12	2007	XANSPI2	MAPI	0.1	24	Xanthisma spinulosum	4	
07GC001	GC	H	22	2007	ANDHAL	ANHA	60	3	Andropogon hallii	3	
07GC001	GC	H	22	2007	BOUHIR	BOHI2	20	8	Bouteloua hirsuta	3	
07GC001	GC	H	22	2007	CHAGLY	CHGL13	2	0.5	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	H	22	2007	COMERE	COER	28	0.1	Commelina erecta	4	
07GC001	GC	H	22	2007	CRYCIN	CRCI3	15	1.5	Cryptantha cinerea	4	
07GC001	GC	H	22	2007	CYPRET	CYRE14	7	0.1	Cyperus retroflexus	3	07GC001- G14
07GC001	GC	H	22	2007	EVOSER	EVSE	14	1	Evolvulus sericeus	4	07GC001- F34
07GC001	GC	H	22	2007	HETVIL	HEVI4	20	3	Heterotheca villosa	4	07GC001- F37

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	H	22	2007	LINRIGR	LIRIR	30	0.5	Linum rigidum var. rigidum	4	07GC001- F16
07GC001	GC	H	22	2007	PALSPH	PASP	15	0.1	Palafoxia sphacelata	4	
07GC001	GC	H	22	2007	PARJAM	PAJA	10	1	Paronychia jamesii	4	
07GC001	GC	H	22	2007	PASSETS	PASES	22	3	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	22	2007	POMJAM	POJA5	15	0.5	Pomaria jamesii	4	F43
07GC001	GC	H	22	2007	QUEHAV	QUHA3	45	20	Quercus havardii	2	
07GC001	GC	H	22	2007	SCHSCO	SCSC	36	30	Schizachyrium scoparium	3	
07GC001	GC	H	32	2007	AMBPSI	AMPS	1	30	Ambrosia psilostachya	4	
07GC001	GC	H	32	2007	ANDHAL	ANHA	2	60	Andropogon hallii	3	
07GC001	GC	H	32	2007	BOUCUR	BOCU	1	30	Bouteloua curtipendula	3	
07GC001	GC	H	32	2007	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GC001	GC	H	32	2007	CHAFEN	CHFE3	2	3	Chamaesyce fendleri	4	
07GC001	GC	H	32	2007	CHAGLY	CHGL13	1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	H	32	2007	COMERE	COER	0.1	13	Commelina erecta	4	
07GC001	GC	H	32	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	07GC001- G10
07GC001	GC	H	32	2007	FROGRA	FRGR3	0.1	26	Froelichia gracilis	4	
07GC001	GC	H	32	2007	HETVIL	HEVI4	0.5	30	Heterotheca villosa	4	07GC001- F37
07GC001	GC	H	32	2007	LECMUC	LEMU3	0.1	10	Lechea mucronata	4	07GC001- F27
07GC001	GC	H	32	2007	PALSPH	PASP	0.5	16	Palafoxia sphacelata	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	H	32	2007	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	32	2007	QUEHAV	QUHA3	27	45	Quercus havardii	2	
07GC001	GC	H	32	2007	SCHSCO	SCSC	30	40	Schizachyrium scoparium	3	
07GC001	GC	H	42	2007	AMBPSI	AMPS	25	0.5	Ambrosia psilostachya	4	
07GC001	GC	H	42	2007	BOUCUR	BOCU	15	6	Bouteloua curtipendula	3	
07GC001	GC	H	42	2007	BOUHIR	BOHI2	20	6	Bouteloua hirsuta	3	
07GC001	GC	H	42	2007	CALSER	CASE12	30	3	Calylophus serrulatus	4	07GC001- F19
07GC001	GC	H	42	2007	CHAGLY	CHGL13	3	0.1	Chamaesyce glyptosperma	4	07GC001- F14
07GC001	GC	H	42	2007	CRYCIN	CRCI3	20	2.5	Cryptantha cinerea	4	
07GC001	GC	H	42	2007	ERIANN	ERAN4	45	0.5	Eriogonum annuum	4	
07GC001	GC	H	42	2007	OPUPHA	OPPH	10	1	Opuntia phaeacantha	2.5	
07GC001	GC	H	42	2007	PASSETS	PASES	18	4	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	42	2007	QUEHAV	QUHA3	35	30	Quercus havardii	2	
07GC001	GC	H	42	2007	SCHSCO	SCSC	35	20	Schizachyrium scoparium	3	
07GC001	GC	H	42	2007	XANSPI2	MAPI	10	0.1	Xanthisma spinulosum	4	
07GR001	GR	A	2	2007	ANDHAL	ANHA	6	50	Andropogon hallii	3	
07GR001	GR	A	2	2007	ARIPUR	ARPU9	5	16	Aristida purpurea	3	
07GR001	GR	A	2	2007	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	A	2	2007	CALSER	CASE12	1	25	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	A	2	2007	COMERE	COER	0.1	14	Commelina erecta	4	
07GR001	GR	A	2	2007	DALPUR	DAPU5	0.1	3	Dalea purpurea	4	07GC001- F38
07GR001	GR	A	2	2007	ERASEC	ERSE	0.1	25	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	A	2	2007	FROGRA	FRGR3	0.1	4	Froelichia gracilis	4	
07GR001	GR	A	2	2007	LECMUC	LEMU3	0.1	6	Lechea mucronata	4	07GC001- F27
07GR001	GR	A	2	2007	LINRIGR	LIRIR	2	45	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	A	2	2007	PARJAM	PAJA	2	11	Paronychia jamesii	4	
07GR001	GR	A	2	2007	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	2	2007	QUEHAV	QUHA3	22	35	Quercus havardii	2	
07GR001	GR	A	2	2007	SCHSCO	SCSC	18	35	Schizachyrium scoparium	3	
07GR001	GR	A	2	2007	SPOCRY	SPCR	1	50	Sporobolus cryptandrus	3	
07GR001	GR	A	2	2007	THEMEG	THME	1	48	Thelesperma megapotamicum	4	
07GR001	GR	A	2	2007	XANSPI2	MAPI	0.5	25	Xanthisma spinulosum	4	
07GR001	GR	A	12	2007	AMBPSI	AMPS	1	40	Ambrosia psilostachya	4	
07GR001	GR	A	12	2007	ANDHAL	ANHA	1.5	40	Andropogon hallii	3	
07GR001	GR	A	12	2007	BOUHIR	BOHI2	5	15	Bouteloua hirsuta	3	
07GR001	GR	A	12	2007	CHECYC	CHCY	0.1	40	Chenopodium cycloides	4	07GC001- F28
07GR001	GR	A	12	2007	CRYCIN	CRCI3	0.5	14	Cryptantha cinerea	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	A	12	2007	GUTSAR	GUSA2	0.1	20	Gutierrezia sarothrae	2.5	
07GR001	GR	A	12	2007	KRALAN	KRLA	4	20	Krameria lanceolata	4	
07GR001	GR	A	12	2007	PASSETS	PASES	5	12	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	12	2007	QUEHAV	QUHA3	40	35	Quercus havardii	2	
07GR001	GR	A	12	2007	SCHSCO	SCSC	25	35	Schizachyrium scoparium	3	
07GR001	GR	A	12	2007	SPOCRY	SPCR	10	20	Sporobolus cryptandrus	3	
07GR001	GR	A	12	2007	THEMEG	THME	1	35	Thelesperma megapotamicum	4	
07GR001	GR	A	22	2007	AMBPSI	AMPS	3	25	Ambrosia psilostachya	4	
07GR001	GR	A	22	2007	BOUCUR	BOCU	1	20	Bouteloua curtipendula	3	
07GR001	GR	A	22	2007	BOUHIR	BOHI2	2	22	Bouteloua hirsuta	3	
07GR001	GR	A	22	2007	CALSER	CASE12	1	22	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	A	22	2007	CHAFEN	CHFE3	2	5	Chamaesyce fendleri	4	
07GR001	GR	A	22	2007	COMERE	COER	0.1	7	Commelina erecta	4	
07GR001	GR	A	22	2007	CYPRET	CYRE14	1	14	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	A	22	2007	DIGPUB	DIPU9	6	24	Digitaria pubiflora	3	
07GR001	GR	A	22	2007	ERASEC	ERSE	0.5	20	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	A	22	2007	LINRIGR	LIRIR	1	48	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	A	22	2007	PASSETS	PASES	0.5	8	Paspalum setaceum var. stramineum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	A	22	2007	QUEHAV	QUHA3	40	30	Quercus havardii	2	
07GR001	GR	A	22	2007	SCHSCO	SCSC	25	35	Schizachyrium scoparium	3	
07GR001	GR	A	22	2007	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	A	32	2007	ANDHAL	ANHA	20	55	Andropogon hallii	3	
07GR001	GR	A	32	2007	BOUHIR	BOHI2	2	25	Bouteloua hirsuta	3	
07GR001	GR	A	32	2007	CALSER	CASE12	5	26	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	A	32	2007	CYPRET	CYRE14	1	12	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	A	32	2007	DIGPUB	DIPU9	4	28	Digitaria pubiflora	3	
07GR001	GR	A	32	2007	LINRIGR	LIRIR	2	65	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	A	32	2007	PARJAM	PAJA	0.5	7	Paronychia jamesii	4	
07GR001	GR	A	32	2007	PASSETS	PASES	4	14	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	32	2007	QUEHAV	QUHA3	20	30	Quercus havardii	2	
07GR001	GR	A	32	2007	SCHSCO	SCSC	20	36	Schizachyrium scoparium	3	
07GR001	GR	A	32	2007	XANTEXD	XATED2	0.5	15	Xanthisma texanum ssp. drummondii	4	
07GR001	GR	A	42	2007	AMBPSI	AMPS	0.5	30	Ambrosia psilostachya	4	
07GR001	GR	A	42	2007	ANDHAL	ANHA	0.5	70	Andropogon hallii	3	
07GR001	GR	A	42	2007	ARIPUR	ARPU9	1	15	Aristida purpurea	3	
07GR001	GR	A	42	2007	BOUCUR	BOCU	1	30	Bouteloua curtipendula	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	A	42	2007	BOUHIR	BOHI2	3	13	Bouteloua hirsuta	3	
07GR001	GR	A	42	2007	CALSER	CASE12	1	30	Calylophus serrulatus	4	07GR001- F19
07GR001	GR	A	42	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	A	42	2007	COMERE	COER	0.1	10	Commelina erecta	4	
07GR001	GR	A	42	2007	DIGPUB	DIPU9	3	25	Digitaria pubiflora	3	
07GR001	GR	A	42	2007	ERASEC	ERSE	2	25	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	A	42	2007	ERIANN	ERAN4	0.5	100	Eriogonum annuum	4	
07GR001	GR	A	42	2007	EVOSER	EVSE	0.1	20	Evolvulus sericeus	4	07GR001- F34
07GR001	GR	A	42	2007	LECMUC	LEMU3	1	50	Lechea mucronata	4	07GC001- F27
07GR001	GR	A	42	2007	LINRIGR	LIRIR	2	55	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	A	42	2007	MIRLIN	MILI3	0.5	35	Mirabilis linearis	4	07GC001- F36
07GR001	GR	A	42	2007	PASSETS	PASES	3	25	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	42	2007	PSOTEN	PSTE5	5	55	Psoralidium tenuiflorum	4	
07GR001	GR	A	42	2007	QUEHAV	QUHA3	35	40	Quercus havardii	2	
07GR001	GR	A	42	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GR001	GR	A	42	2007	THEMEG	THME	1	72	Thelesperma megapotamicum	4	
07GR001	GR	A	42	2007	XANSPI2	MAPI	2	25	Xanthisma spinulosum	4	
07GR001	GR	B	2	2007	AMBPSI	AMPS	3	30	Ambrosia psilostachya	4	
07GR001	GR	B	2	2007	ANDHAL	ANHA	8	40	Andropogon hallii	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	B	2	2007	BOUHIR	BOHI2	5	15	Bouteloua hirsuta	3	
07GR001	GR	B	2	2007	PARJAM	PAJA	2.5	9	Paronychia jamesii	4	
07GR001	GR	B	2	2007	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	2	2007	POMJAM	POJA5	1.5	47	Pomaria jamesii	4	
07GR001	GR	B	2	2007	QUEHAV	QUHA3	30	40	Quercus havardii	2	
07GR001	GR	B	2	2007	SCHSCO	SCSC	20	45	Schizachyrium scoparium	3	
07GR001	GR	B	2	2007	SPOCRY	SPCR	1.5	25	Sporobolus cryptandrus	3	
07GR001	GR	B	2	2007	XANSPI2	MAPI	0.5	14	Xanthisma spinulosum	4	
07GR001	GR	B	2	2007	YUCGLA	YUGL	2	52	Yucca glauca	2	
07GR001	GR	B	12	2007	AMBPSI	AMPS	0.1	25	Ambrosia psilostachya	4	
07GR001	GR	B	12	2007	ANDHAL	ANHA	12	70	Andropogon hallii	3	
07GR001	GR	B	12	2007	BOUHIR	BOHI2	2	11	Bouteloua hirsuta	3	
07GR001	GR	B	12	2007	CALSER	CASE12	0.5	22	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	B	12	2007	CHAGLY	CHGL13	0.1	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	B	12	2007	COMERE	COER	0.1	20	Commelina erecta	4	
07GR001	GR	B	12	2007	EVOZER	EVSE	0.1	15	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	B	12	2007	POMJAM	POJA5	1	25	Pomaria jamesii	4	
07GR001	GR	B	12	2007	QUEHAV	QUHA3	20	55	Quercus havardii	2	
07GR001	GR	B	12	2007	SCHSCO	SCSC	22	35	Schizachyrium scoparium	3	
07GR001	GR	B	12	2007	SPOCRY	SPCR	0.5	20	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	B	22	2007	ANDHAL	ANHA	15	45	Andropogon hallii	3	
07GR001	GR	B	22	2007	BOUHIR	BOHI2	8	20	Bouteloua hirsuta	3	
07GR001	GR	B	22	2007	CRYCIN	CRCI3	0.5	14	Cryptantha cinerea	4	
07GR001	GR	B	22	2007	CYPRET	CYRE14	0.1	8	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	B	22	2007	DIGPUB	DIPU9	2	20	Digitaria pubiflora	3	
07GR001	GR	B	22	2007	GUTSAR	GUSA2	3	34	Gutierrezia sarothrae	2.5	
07GR001	GR	B	22	2007	PASSETS	PASES	0.5	16	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	22	2007	QUEHAV	QUHA3	40	50	Quercus havardii	2	
07GR001	GR	B	22	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GR001	GR	B	22	2007	SPOCRY	SPCR	0.5	16	Sporobolus cryptandrus	3	
07GR001	GR	B	22	2007	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GR001	GR	B	32	2007	AMBPSI	AMPS	1	25	Ambrosia psilostachya	4	
07GR001	GR	B	32	2007	ANDHAL	ANHA	5	60	Andropogon hallii	3	
07GR001	GR	B	32	2007	BOUCUR	BOCU	0.5	20	Bouteloua curtipendula	3	
07GR001	GR	B	32	2007	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GR001	GR	B	32	2007	CHAGLY	CHGL13	1	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	B	32	2007	COMERE	COER	0.5	18	Commelina erecta	4	
07GR001	GR	B	32	2007	DALPUR	DAPU5	1	30	Dalea purpurea	4	07GC001- F38
07GR001	GR	B	32	2007	DIGPUB	DIPU9	15	20	Digitaria pubiflora	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	B	32	2007	ERASEC	ERSE	0.5	20	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	B	32	2007	PASSETS	PASES	2	28	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	32	2007	QUEHAV	QUHA3	20	50	Quercus havardii	2	
07GR001	GR	B	32	2007	SCHSCO	SCSC	15	40	Schizachyrium scoparium	3	
07GR001	GR	B	32	2007	SPOCRY	SPCR	2	50	Sporobolus cryptandrus	3	
07GR001	GR	B	32	2007	XANSPI2	MAPI	0.1	30	Xanthisma spinulosum	4	
07GR001	GR	B	32	2007	YUCGLA	YUGL	0.1	60	Yucca glauca	2	
07GR001	GR	B	42	2007	ANDHAL	ANHA	0.5	40	Andropogon hallii	3	
07GR001	GR	B	42	2007	BOUCUR	BOCU	4	25	Bouteloua curtipendula	3	
07GR001	GR	B	42	2007	BOUHIR	BOHI2	3	14	Bouteloua hirsuta	3	
07GR001	GR	B	42	2007	CALSER	CASE12	1.5	22	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	B	42	2007	CHAGLY	CHGL13	1.5	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	B	42	2007	CRYCIN	CRCI3	1	25	Cryptantha cinerea	4	
07GR001	GR	B	42	2007	CYCATR	CYAT	0.1	7	Cycloloma atriplicifolium	4	
07GR001	GR	B	42	2007	PASSETS	PASES	2.5	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	42	2007	QUEHAV	QUHA3	20	38	Quercus havardii	2	
07GR001	GR	B	42	2007	SCHSCO	SCSC	15	30	Schizachyrium scoparium	3	
07GR001	GR	B	42	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GR001	GR	B	42	2007	THEMEG	THME	0.1	35	Thelesperma	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									megapotamicum		
07GR001	GR	B	42	2007	XANSPI2	MAPI	0.1	36	Xanthisma spinulosum	4	
07GR001	GR	C	2	2007	ANDHAL	ANHA	5	60	Andropogon hallii	3	
07GR001	GR	C	2	2007	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GR001	GR	C	2	2007	CALSER	CASE12	1	28	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	C	2	2007	COMERE	COER	0.1	12	Commelina erecta	4	
07GR001	GR	C	2	2007	DIGPUB	DIPU9	2	20	Digitaria pubiflora	3	
07GR001	GR	C	2	2007	ERASEC	ERSE	2	40	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	C	2	2007	ERIANN	ERAN4	0.5	45	Eriogonum annuum	4	
07GR001	GR	C	2	2007	PALSPH	PASP	0.5	33	Palafoxia sphacelata	4	
07GR001	GR	C	2	2007	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	2	2007	QUEHAV	QUHA3	15	45	Quercus havardii	2	
07GR001	GR	C	2	2007	SCHSCO	SCSC	20	45	Schizachyrium scoparium	3	
07GR001	GR	C	2	2007	XANSPI2	MAPI	0.1	16	Xanthisma spinulosum	4	
07GR001	GR	C	12	2007	ANDHAL	ANHA	15	60	Andropogon hallii	3	
07GR001	GR	C	12	2007	ARIPUR	ARPU9	8	25	Aristida purpurea	3	
07GR001	GR	C	12	2007	BOUHIR	BOHI2	10	15	Bouteloua hirsuta	3	
07GR001	GR	C	12	2007	CHAFEN	CHFE3	0.1	2	Chamaesyce fendleri	4	
07GR001	GR	C	12	2007	CRYCIN	CRCI3	0.1	5	Cryptantha cinerea	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	C	12	2007	DIGPUB	DIPU9	0.1	15	Digitaria pubiflora	3	
07GR001	GR	C	12	2007	DIMWIS	DIWI2	0.1	30	Dimorphocarpa wislizeni	4	
07GR001	GR	C	12	2007	ERIANN	ERAN4	0.1	23	Eriogonum annuum	4	
07GR001	GR	C	12	2007	MUNSQU	MUSQ3	0.1	3	Munroa squarrosa	3	
07GR001	GR	C	12	2007	PALSPH	PASP	0.5	18	Palafoxia sphacelata	4	
07GR001	GR	C	12	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	12	2007	PSITAG	PSTA	0.5	12	Psilostrophe tagetina	4	
07GR001	GR	C	12	2007	QUEHAV	QUHA3	20	35	Quercus havardii	2	
07GR001	GR	C	12	2007	SCHSCO	SCSC	15	35	Schizachyrium scoparium	3	
07GR001	GR	C	12	2007	SPOCRY	SPCR	5	25	Sporobolus cryptandrus	3	
07GR001	GR	C	12	2007	THEMEG	THME	2	80	Thelesperma megapotamicum	4	
07GR001	GR	C	22	2007	ANDHAL	ANHA	5	80	Andropogon hallii	3	
07GR001	GR	C	22	2007	BOUHIR	BOHI2	2	15	Bouteloua hirsuta	3	
07GR001	GR	C	22	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	C	22	2007	COMERE	COER	1	28	Commelina erecta	4	
07GR001	GR	C	22	2007	PSOTEN	PSTE5	6	50	Psoralidium tenuiflorum	4	
07GR001	GR	C	22	2007	QUEHAV	QUHA3	3	45	Quercus havardii	2	
07GR001	GR	C	22	2007	SCHSCO	SCSC	35	35	Schizachyrium scoparium	3	
07GR001	GR	C	22	2007	THEMEG	THME	2	70	Thelesperma	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									megapotamicum		
07GR001	GR	C	32	2007	ANDHAL	ANHA	5	60	Andropogon hallii	3	
07GR001	GR	C	32	2007	BOUCUR	BOCU	5	24	Bouteloua curtipendula	3	
07GR001	GR	C	32	2007	BOUHIR	BOHI2	10	18	Bouteloua hirsuta	3	
07GR001	GR	C	32	2007	CALSER	CASE12	5	32	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	C	32	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	C	32	2007	COMERE	COER	3	35	Commelina erecta	4	
07GR001	GR	C	32	2007	CRYCIN	CRCI3	1	22	Cryptantha cinerea	4	
07GR001	GR	C	32	2007	CYPRET	CYRE14	0.5	10	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	C	32	2007	ERIANN	ERAN4	0.5	62	Eriogonum annuum	4	
07GR001	GR	C	32	2007	EVOSER	EVSE	1	18	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	C	32	2007	LINRIGR	LIRIR	0.5	46	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	C	32	2007	PALSPH	PASP	0.1	24	Palafoxia sphacelata	4	
07GR001	GR	C	32	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GR001	GR	C	32	2007	PASSETS	PASES	2	22	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	32	2007	QUEHAV	QUHA3	40	38	Quercus havardii	2	
07GR001	GR	C	32	2007	SCHSCO	SCSC	15	40	Schizachyrium scoparium	3	
07GR001	GR	C	32	2007	SPOCRY	SPCR	1.5	20	Sporobolus cryptandrus	3	
07GR001	GR	C	32	2007	XANSPI2	MAPI	2.5	35	Xanthisma spinulosum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	C	42	2007	ANDHAL	ANHA	1	70	Andropogon hallii	3	
07GR001	GR	C	42	2007	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GR001	GR	C	42	2007	BOUHIR	BOHI2	3	10	Bouteloua hirsuta	3	
07GR001	GR	C	42	2007	COMERE	COER	0.5	30	Commelina erecta	4	
07GR001	GR	C	42	2007	DALNANN	DANAN	1.5	12	Dalea nana var. nana	4	07GC001- F35
07GR001	GR	C	42	2007	ERASES	ERSE2	1	20	Eragrostis sessilispica	3	
07GR001	GR	C	42	2007	LIAPUN	LIPU	5	50	Liatris punctata	4	
07GR001	GR	C	42	2007	PARJAM	PAJA	1	10	Paronychia jamesii	4	
07GR001	GR	C	42	2007	QUEHAV	QUHA3	15	40	Quercus havardii	2	
07GR001	GR	C	42	2007	SCHSCO	SCSC	30	24	Schizachyrium scoparium	3	
07GR001	GR	C	42	2007	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GR001	GR	C	42	2007	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GR001	GR	D	2	2007	AMBPSI	AMPS	0.1	8	Ambrosia psilostachya	4	
07GR001	GR	D	2	2007	BOUHIR	BOHI2	2	14	Bouteloua hirsuta	3	
07GR001	GR	D	2	2007	CHAFEN	CHFE3	0.5	4	Chamaesyce fendleri	4	
07GR001	GR	D	2	2007	COMERE	COER	2	24	Commelina erecta	4	
07GR001	GR	D	2	2007	ERIANN	ERAN4	0.1	25	Eriogonum annuum	4	
07GR001	GR	D	2	2007	EVOSER	EVSE	1	16	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	D	2	2007	HETVIL	HEVI4	4	35	Heterotheca villosa	4	07GC001- F37
07GR001	GR	D	2	2007	LECMUC	LEMU3	0.1	13	Lechea	4	07GC001- F27

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									mucronata		
07GR001	GR	D	2	2007	LINRIGR	LIRIR	3	28	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	D	2	2007	LITMUL	LIMU3	1	20	Lithospermum multiflorum	4	
07GR001	GR	D	2	2007	PASSETS	PASES	5	25	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	2	2007	POMJAM	POJA5	1	10	Pomaria jamesii	4	
07GR001	GR	D	2	2007	QUEHAV	QUHA3	30	40	Quercus havardii	2	
07GR001	GR	D	2	2007	SCHSCO	SCSC	30	35	Schizachyrium scoparium	3	
07GR001	GR	D	2	2007	XANSPI2	MAPI	0.1	16	Xanthisma spinulosum	4	
07GR001	GR	D	12	2007	ANDHAL	ANHA	1	50	Andropogon hallii	3	
07GR001	GR	D	12	2007	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GR001	GR	D	12	2007	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GR001	GR	D	12	2007	CHAFEN	CHFE3	0.5	3	Chamaesyce fendleri	4	
07GR001	GR	D	12	2007	CHAGLY	CHGL13	0.5	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	D	12	2007	CRYCIN	CRCI3	0.1	32	Cryptantha cinerea	4	
07GR001	GR	D	12	2007	DALNANN	DANAN	5	15	Dalea nana var. nana	4	07GC001- F35
07GR001	GR	D	12	2007	HETVIL	HEVI4	2	35	Heterotheca villosa	4	07GC001- F37
07GR001	GR	D	12	2007	LECMUC	LEMU3	2	27	Lechea mucronata	4	07GC001- F27
07GR001	GR	D	12	2007	LINRIGR	LIRIR	1	35	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	D	12	2007	PARJAM	PAJA	0.5	5	Paronychia jamesii	4	
07GR001	GR	D	12	2007	PASSETS	PASES	2	15	Paspalum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									setaceum var. stramineum		
07GR001	GR	D	12	2007	QUEHAV	QUHA3	25	40	Quercus havardii	2	
07GR001	GR	D	12	2007	SCHSCO	SCSC	35	30	Schizachyrium scoparium	3	
07GR001	GR	D	12	2007	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GR001	GR	D	12	2007	XANSPI2	MAPI	0.5	22	Xanthisma spinulosum	4	
07GR001	GR	D	22	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GR001	GR	D	22	2007	ANDHAL	ANHA	15	50	Andropogon hallii	3	
07GR001	GR	D	22	2007	APHRAM	APRA	0.1	12	Aphanostephus ramosissimus	4	
07GR001	GR	D	22	2007	ARIPUR	ARPU9	10	24	Aristida purpurea	3	
07GR001	GR	D	22	2007	BOUHIR	BOHI2	20	20	Bouteloua hirsuta	3	
07GR001	GR	D	22	2007	CALSER	CASE12	0.1	5	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	D	22	2007	CHAGLY	CHGL13	1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	D	22	2007	COMERE	COER	0.1	5	Commelina erecta	4	
07GR001	GR	D	22	2007	DALPUR	DAPU5	0.1	20	Dalea purpurea	4	07GC001- F38
07GR001	GR	D	22	2007	ERASEC	ERSE	0.5	14	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	D	22	2007	ERIANN	ERAN4	0.5	40	Eriogonum annuum	4	
07GR001	GR	D	22	2007	HETVIL	HEVI4	6	28	Heterotheca villosa	4	07GC001- F37
07GR001	GR	D	22	2007	HYMFLAC	HYFLC	1	12	Hymenopappus flavescens var. canotomentosus	4	07GC001- F7
07GR001	GR	D	22	2007	LECMUC	LEMU3	8	40	Lechea mucronata	4	07GC001- F27

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	D	22	2007	LINRIGR	LIRIR	3	55	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	D	22	2007	PARJAM	PAJA	1	7	Paronychia jamesii	4	
07GR001	GR	D	22	2007	QUEHAV	QUHA3	20	36	Quercus havardii	2	
07GR001	GR	D	22	2007	SCHSCO	SCSC	8	25	Schizachyrium scoparium	3	
07GR001	GR	D	22	2007	THEMEG	THME	0.5	85	Thelesperma megapotamicum	4	
07GR001	GR	D	32	2007	AMBPSI	AMPS	0.5	29	Ambrosia psilostachya	4	
07GR001	GR	D	32	2007	BOUHIR	BOHI2	1	12	Bouteloua hirsuta	3	
07GR001	GR	D	32	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	D	32	2007	COMERE	COER	1	20	Commelina erecta	4	
07GR001	GR	D	32	2007	CRYCIN	CRCI3	0.1	20	Cryptantha cinerea	4	
07GR001	GR	D	32	2007	DIMWIS	DIWI2	0.1	12	Dimorphocarpa wislizeni	4	
07GR001	GR	D	32	2007	ERASEC	ERSE	4	18	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	D	32	2007	ERIANN	ERAN4	0.1	25	Eriogonum annuum	4	
07GR001	GR	D	32	2007	EVOSER	EVSE	0.1	25	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	D	32	2007	LECMUC	LEMU3	7	35	Lechea mucronata	4	07GC001- F27
07GR001	GR	D	32	2007	LINRIGR	LIRIR	1	47	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	D	32	2007	LITMUL	LIMU3	0.5	20	Lithospermum multiflorum	4	
07GR001	GR	D	32	2007	PARJAM	PAJA	0.5	14	Paronychia jamesii	4	
07GR001	GR	D	32	2007	PASSETS	PASES	1	15	Paspalum setaceum var.	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GR001	GR	D	32	2007	QUEHAV	QUHA3	35	35	Quercus havardii	2	
07GR001	GR	D	32	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GR001	GR	D	32	2007	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	D	32	2007	XANTEXD	XATED2	0.5	33	Xanthisma texanum ssp. drummondii	4	
07GR001	GR	D	42	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GR001	GR	D	42	2007	ARIPUR	ARPU9	6	20	Aristida purpurea	3	
07GR001	GR	D	42	2007	BOUHIR	BOHI2	5	15	Bouteloua hirsuta	3	
07GR001	GR	D	42	2007	CALSER	CASE12	0.1	20	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	D	42	2007	CHAFEN	CHFE3	2	3	Chamaesyce fendleri	4	
07GR001	GR	D	42	2007	CHAGLY	CHGL13	1.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	D	42	2007	COMERE	COER	0.1	12	Commelina erecta	4	
07GR001	GR	D	42	2007	CRYCIN	CRCI3	0.5	12	Cryptantha cinerea	4	
07GR001	GR	D	42	2007	CYPRET	CYRE14	0.1	8	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	D	42	2007	ERASEC	ERSE	10	18	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	D	42	2007	LECMUC	LEMU3	0.5	5	Lechea mucronata	4	07GC001- F27
07GR001	GR	D	42	2007	LINRIGR	LIRIR	1.5	54	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	D	42	2007	LITMUL	LIMU3	0.1	8	Lithospermum multiflorum	4	
07GR001	GR	D	42	2007	PARJAM	PAJA	1	10	Paronychia jamesii	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	D	42	2007	PASSETS	PASES	5	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	42	2007	QUEHAV	QUHA3	25	40	Quercus havardii	2	
07GR001	GR	D	42	2007	SCHSCO	SCSC	35	30	Schizachyrium scoparium	3	
07GR001	GR	D	42	2007	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GR001	GR	D	42	2007	XANSPI2	MAPI	1.5	25	Xanthisma spinulosum	4	
07GR001	GR	E	2	2007	ANDHAL	ANHA	8	70	Andropogon hallii	3	
07GR001	GR	E	2	2007	BOUHIR	BOHI2	2	15	Bouteloua hirsuta	3	
07GR001	GR	E	2	2007	CALSER	CASE12	1	25	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	E	2	2007	CHAMIS	CHMI8	0.1	20	Chamaesyce missurica	4	07GC001- F32
07GR001	GR	E	2	2007	CHECYC	CHCY	0.1	15	Chenopodium cycloides	4	07GC001- F28
07GR001	GR	E	2	2007	CRYCIN	CRCI3	0.1	25	Cryptantha cinerea	4	
07GR001	GR	E	2	2007	EVOSER	EVSE	1	15	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	E	2	2007	HETSUB	HESU3	1.5	33	Heterotheca subaxillaris	4	
07GR001	GR	E	2	2007	LINRIGR	LIRIR	3	55	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	E	2	2007	PASSETS	PASES	10	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	2	2007	QUEHAV	QUHA3	45	40	Quercus havardii	2	
07GR001	GR	E	2	2007	SCHSCO	SCSC	2	15	Schizachyrium scoparium	3	
07GR001	GR	E	2	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	E	2	2007	THEMEG	THME	0.1	27	Thelesperma megapotamicum	4	
07GR001	GR	E	2	2007	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	E	12	2007	AMBPSI	AMPS	2.5	34	Ambrosia psilostachya	4	
07GR001	GR	E	12	2007	ANDHAL	ANHA	1	28	Andropogon hallii	3	
07GR001	GR	E	12	2007	BOUHIR	BOHI2	10	14	Bouteloua hirsuta	3	
07GR001	GR	E	12	2007	CALSER	CASE12	6	20	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	E	12	2007	CHAMIS	CHMI8	0.1	15	Chamaesyce missurica	4	07GC001- F32
07GR001	GR	E	12	2007	COMERE	COER	0.5	14	Commelina erecta	4	
07GR001	GR	E	12	2007	CRYCIN	CRCI3	0.5	24	Cryptantha cinerea	4	
07GR001	GR	E	12	2007	DIGPUB	DIPU9	1	25	Digitaria pubiflora	3	
07GR001	GR	E	12	2007	ERIANN	ERAN4	0.1	30	Eriogonum annuum	4	
07GR001	GR	E	12	2007	EVOSER	EVSE	0.1	20	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	E	12	2007	HETVIL	HEVI4	0.1	20	Heterotheca villosa	4	07GC001- F37
07GR001	GR	E	12	2007	LINRIGR	LIRIR	1	33	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	E	12	2007	PASSETS	PASES	12	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	12	2007	QUEHAV	QUHA3	30	48	Quercus havardii	2	
07GR001	GR	E	12	2007	SCHSCO	SCSC	15	28	Schizachyrium scoparium	3	
07GR001	GR	E	12	2007	SPOCRY	SPCR	3	22	Sporobolus cryptandrus	3	
07GR001	GR	E	12	2007	THEMEG	THME	2	48	Thelesperma	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									megapotamicum		
07GR001	GR	E	12	2007	XANSPI2	MAPI	1	25	Xanthisma spinulosum	4	
07GR001	GR	E	22	2007	BOUCUR	BOCU	2	25	Bouteloua curtipendula	3	
07GR001	GR	E	22	2007	BOUHIR	BOHI2	4	15	Bouteloua hirsuta	3	
07GR001	GR	E	22	2007	CALSER	CASE12	0.5	27	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	E	22	2007	COMERE	COER	1	15	Commelina erecta	4	
07GR001	GR	E	22	2007	CYPRET	CYRE14	0.5	30	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	E	22	2007	DIGPUB	DIPU9	5	30	Digitaria pubiflora	3	
07GR001	GR	E	22	2007	ERASEC	ERSE	3	15	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	E	22	2007	LINRIGR	LIRIR	1	40	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	E	22	2007	LITMUL	LIMU3	0.1	18	Lithospermum multiflorum	4	
07GR001	GR	E	22	2007	PASSETS	PASES	5	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	22	2007	QUEHAV	QUHA3	40	35	Quercus havardii	2	
07GR001	GR	E	22	2007	SCHSCO	SCSC	45	35	Schizachyrium scoparium	3	
07GR001	GR	E	22	2007	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GR001	GR	E	22	2007	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GR001	GR	E	22	2007	XANSPI2	MAPI	0.5	20	Xanthisma spinulosum	4	
07GR001	GR	E	32	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GR001	GR	E	32	2007	ANDHAL	ANHA	2	38	Andropogon hallii	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	E	32	2007	ARIPUR	ARPU9	1	22	Aristida purpurea	3	
07GR001	GR	E	32	2007	BOUHIR	BOHI2	10	24	Bouteloua hirsuta	3	
07GR001	GR	E	32	2007	CALSER	CASE12	5	25	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	E	32	2007	CHAGLY	CHGL13	1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	E	32	2007	CHAMIS	CHMI8	0.5	7	Chamaesyce missurica	4	07GC001- F32
07GR001	GR	E	32	2007	COMERE	COER	1.5	14	Commelina erecta	4	
07GR001	GR	E	32	2007	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	E	32	2007	DIGPUB	DIPU9	2	30	Digitaria pubiflora	3	
07GR001	GR	E	32	2007	ERIANN	ERAN4	0.1	65	Eriogonum annuum	4	
07GR001	GR	E	32	2007	HETVIL	HEVI4	0.1	23	Heterotheca villosa	4	07GC001- F37
07GR001	GR	E	32	2007	PARJAM	PAJA	2	9	Paronychia jamesii	4	
07GR001	GR	E	32	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	32	2007	POMJAM	POJA5	0.1	9	Pomaria jamesii	4	
07GR001	GR	E	32	2007	PSITAG	PSTA	0.5	7	Psilostrophe tagetina	4	
07GR001	GR	E	32	2007	QUEHAV	QUHA3	25	45	Quercus havardii	2	
07GR001	GR	E	32	2007	SCHSCO	SCSC	30	20	Schizachyrium scoparium	3	
07GR001	GR	E	32	2007	SPOCRY	SPCR	2	28	Sporobolus cryptandrus	3	
07GR001	GR	E	42	2007	ANDHAL	ANHA	3	70	Andropogon hallii	3	
07GR001	GR	E	42	2007	BOUCUR	BOCU	3	20	Bouteloua curtipendula	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	E	42	2007	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GR001	GR	E	42	2007	CALSER	CASE12	2	30	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	E	42	2007	CHAFEN	CHFE3	1	3	Chamaesyce fendleri	4	
07GR001	GR	E	42	2007	CYCATR	CYAT	0.5	20	Cycloloma atropicifolium	4	
07GR001	GR	E	42	2007	CYPRET	CYRE14	0.1	40	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	E	42	2007	ERIANN	ERAN4	0.1	22	Eriogonum annuum	4	
07GR001	GR	E	42	2007	LINRIGR	LIRIR	1	70	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	E	42	2007	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	42	2007	QUEHAV	QUHA3	35	40	Quercus havardii	2	
07GR001	GR	E	42	2007	SCHSCO	SCSC	12	25	Schizachyrium scoparium	3	
07GR001	GR	E	42	2007	SPOCRY	SPCR	0.5	30	Sporobolus cryptandrus	3	
07GR001	GR	E	42	2007	XANSPI2	MAPI	1.5	30	Xanthisma spinulosum	4	
07GR001	GR	E	42	2007	YUCGLA	YUGL	0.1	54	Yucca glauca	2	
07GR001	GR	F	2	2007	AMBPSI	AMPS	1	15	Ambrosia psilostachya	4	
07GR001	GR	F	2	2007	ANDHAL	ANHA	4	48	Andropogon hallii	3	
07GR001	GR	F	2	2007	BOUHIR	BOHI2	8	15	Bouteloua hirsuta	3	
07GR001	GR	F	2	2007	CALSER	CASE12	6	28	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	F	2	2007	CHAGLY	CHGL13	1.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	F	2	2007	LINRIGR	LIRIR	1	25	Linum rigidum var. rigidum	4	07GC001- F16

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	F	2	2007	PASSETS	PASES	6	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	2	2007	QUEHAV	QUHA3	12	35	Quercus havardii	2	
07GR001	GR	F	2	2007	SCHSCO	SCSC	30	25	Schizachyrium scoparium	3	
07GR001	GR	F	2	2007	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GR001	GR	F	2	2007	YUCGLA	YUGL	6	50	Yucca glauca	2	
07GR001	GR	F	12	2007	AMBPSI	AMPS	0.5	17	Ambrosia psilostachya	4	
07GR001	GR	F	12	2007	ANDHAL	ANHA	5	70	Andropogon hallii	3	
07GR001	GR	F	12	2007	ARIPUR	ARPU9	0.5	20	Aristida purpurea	3	
07GR001	GR	F	12	2007	BOUHIR	BOHI2	4	13	Bouteloua hirsuta	3	
07GR001	GR	F	12	2007	CALSER	CASE12	1	30	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	F	12	2007	CHAFEN	CHFE3	3	3	Chamaesyce fendleri	4	
07GR001	GR	F	12	2007	CHAGLY	CHGL13	0.1	4	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	F	12	2007	COMERE	COER	1	35	Commelina erecta	4	
07GR001	GR	F	12	2007	CYPRET	CYRE14	0.1	40	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	F	12	2007	DIGPUB	DIPU9	1	7	Digitaria pubiflora	3	
07GR001	GR	F	12	2007	ERASEC	ERSE	1	30	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	F	12	2007	LINRIGR	LIRIR	0.5	45	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	F	12	2007	PASSETS	PASES	6	16	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	12	2007	QUEHAV	QUHA3	23	50	Quercus	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									havardii		
07GR001	GR	F	12	2007	SCHSCO	SCSC	18	35	Schizachyrium scoparium	3	
07GR001	GR	F	22	2007	AMBPSI	AMPS	0.5	40	Ambrosia psilostachya	4	
07GR001	GR	F	22	2007	BOUHIR	BOHI2	2.5	10	Bouteloua hirsuta	3	
07GR001	GR	F	22	2007	CHAFEN	CHFE3	0.5	2	Chamaesyce fendleri	4	
07GR001	GR	F	22	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	F	22	2007	CYPRET	CYRE14	0.1	7	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	F	22	2007	DIGPUB	DIPU9	2	35	Digitaria pubiflora	3	
07GR001	GR	F	22	2007	EVOSER	EVSE	1.5	20	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	F	22	2007	HETVIL	HEVI4	0.5	25	Heterotheca villosa	4	07GC001- F37
07GR001	GR	F	22	2007	LINRIGR	LIRIR	1	33	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	F	22	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GR001	GR	F	22	2007	PASSETS	PASES	3	18	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	22	2007	PSOTEN	PSTE5	0.5	38	Psoralidium tenuiflorum	4	
07GR001	GR	F	22	2007	QUEHAV	QUHA3	25	38	Quercus havardii	2	
07GR001	GR	F	22	2007	SCHSCO	SCSC	35	24	Schizachyrium scoparium	3	
07GR001	GR	F	22	2007	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	F	32	2007	AMBPSI	AMPS	0.1	16	Ambrosia psilostachya	4	
07GR001	GR	F	32	2007	ANDHAL	ANHA	7	60	Andropogon hallii	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	F	32	2007	ARIPUR	ARPU9	1	15	Aristida purpurea	3	
07GR001	GR	F	32	2007	BOUHIR	BOHI2	4	8	Bouteloua hirsuta	3	
07GR001	GR	F	32	2007	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	F	32	2007	CHAGLY	CHGL13	0.1	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	F	32	2007	COMERE	COER	0.1	15	Commelina erecta	4	
07GR001	GR	F	32	2007	DALPUR	DAPU5	0.1	8	Dalea purpurea	4	07GC001- F38
07GR001	GR	F	32	2007	DIGPUB	DIPU9	2	13	Digitaria pubiflora	3	
07GR001	GR	F	32	2007	ERASEC	ERSE	2	12	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	F	32	2007	ERIANN	ERAN4	0.1	15	Eriogonum annuum	4	
07GR001	GR	F	32	2007	LECMUC	LEMU3	0.1	6	Lechea mucronata	4	07GC001- F27
07GR001	GR	F	32	2007	LINRIGR	LIRIR	0.5	45	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	F	32	2007	QUEHAV	QUHA3	12	35	Quercus havardii	2	
07GR001	GR	F	32	2007	SCHSCO	SCSC	25	30	Schizachyrium scoparium	3	
07GR001	GR	F	32	2007	XANSPI2	MAPI	0.1	18	Xanthisma spinulosum	4	
07GR001	GR	F	42	2007	AMBPSI	AMPS	1.5	25	Ambrosia psilostachya	4	
07GR001	GR	F	42	2007	ANDHAL	ANHA	20	60	Andropogon hallii	3	
07GR001	GR	F	42	2007	BOUHIR	BOHI2	5	15	Bouteloua hirsuta	3	
07GR001	GR	F	42	2007	CALSER	CASE12	6	20	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	F	42	2007	EVOSER	EVSE	2	18	Evolvulus sericeus	4	07GC001- F34
07GR001	GR	F	42	2007	HETVIL	HEVI4	0.5	12	Heterotheca	4	07GC001- F37

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									villosa		
07GR001	GR	F	42	2007	LITMUL	LIMU3	0.5	12	Lithospermum multiflorum	4	
07GR001	GR	F	42	2007	PARJAM	PAJA	0.5	7	Paronychia jamesii	4	
07GR001	GR	F	42	2007	PASSETS	PASES	2	25	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	42	2007	QUEHAV	QUHA3	40	38	Quercus havardii	2	
07GR001	GR	F	42	2007	SCHSCO	SCSC	15	35	Schizachyrium scoparium	3	
07GR001	GR	F	42	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GR001	GR	F	42	2007	XANSPI2	MAPI	1	22	Xanthisma spinulosum	4	
07GR001	GR	G	2	2007	AMBPSI	AMPS	0.1	20	Ambrosia psilostachya	4	
07GR001	GR	G	2	2007	ANDHAL	ANHA	1	56	Andropogon hallii	3	
07GR001	GR	G	2	2007	ARIPUR	ARPU9	1	15	Aristida purpurea	3	
07GR001	GR	G	2	2007	BOUHIR	BOHI2	2	20	Bouteloua hirsuta	3	
07GR001	GR	G	2	2007	CALSER	CASE12	2	28	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	G	2	2007	CHAGLY	CHGL13	1	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	G	2	2007	COMERE	COER	0.5	26	Commelina erecta	4	
07GR001	GR	G	2	2007	CRYCIN	CRCI3	0.1	4	Cryptantha cinerea	4	
07GR001	GR	G	2	2007	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	G	2	2007	DIGPUB	DIPU9	2	18	Digitaria pubiflora	3	
07GR001	GR	G	2	2007	ERIANN	ERAN4	0.1	56	Eriogonum annuum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	G	2	2007	HETSUB	HESU3	0.5	36	Heterotheca subaxillaris	4	
07GR001	GR	G	2	2007	LECMUC	LEMU3	2	12	Lechea mucronata	4	07GC001- F27
07GR001	GR	G	2	2007	PASSETS	PASES	10	17	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	2	2007	QUEHAV	QUHA3	10	26	Quercus havardii	2	
07GR001	GR	G	2	2007	SCHSCO	SCSC	40	32	Schizachyrium scoparium	3	
07GR001	GR	G	2	2007	SPOCRY	SPCR	2.5	16	Sporobolus cryptandrus	3	
07GR001	GR	G	2	2007	XANSPI2	MAPI	0.1	24	Xanthisma spinulosum	4	
07GR001	GR	G	2	2007	XANTEXD	XATED2	0.5	20	Xanthisma texanum ssp. drummondii	4	
07GR001	GR	G	12	2007	BOUCUR	BOCU	0.1	30	Bouteloua curtipendula	3	
07GR001	GR	G	12	2007	BOUHIR	BOHI2	17	12	Bouteloua hirsuta	3	
07GR001	GR	G	12	2007	CALSER	CASE12	0.1	25	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	G	12	2007	CHAGLY	CHGL13	0.1	4	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	G	12	2007	COMERE	COER	0.5	30	Commelina erecta	4	
07GR001	GR	G	12	2007	DALNANN	DANAN	0.1	4	Dalea nana var. nana	4	07GC001- F35
07GR001	GR	G	12	2007	DIGPUB	DIPU9	1	3	Digitaria pubiflora	3	
07GR001	GR	G	12	2007	ERIANN	ERAN4	1	60	Eriogonum annuum	4	
07GR001	GR	G	12	2007	HETSUB	HESU3	0.1	15	Heterotheca subaxillaris	4	
07GR001	GR	G	12	2007	LECMUC	LEMU3	0.5	5	Lechea mucronata	4	07GC001- F27



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	G	12	2007	LINRIGR	LIRIR	1	45	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	G	12	2007	MELLEU	MELE2	1	15	Melampodium leucanthum	4	
07GR001	GR	G	12	2007	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	12	2007	QUEHAV	QUHA3	10	40	Quercus havardii	2	
07GR001	GR	G	12	2007	SCHSCO	SCSC	25	38	Schizachyrium scoparium	3	
07GR001	GR	G	12	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GR001	GR	G	12	2007	YUCGLA	YUGL	2	50	Yucca glauca	2	
07GR001	GR	G	22	2007	ANDHAL	ANHA	10	40	Andropogon hallii	3	
07GR001	GR	G	22	2007	BOUCUR	BOCU	5	22	Bouteloua curtipendula	3	
07GR001	GR	G	22	2007	COMERE	COER	2.5	32	Commelina erecta	4	
07GR001	GR	G	22	2007	ERASEC	ERSE	2	25	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	G	22	2007	LINRIGR	LIRIR	1	35	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	G	22	2007	LITMUL	LIMU3	1	15	Lithospermum multiflorum	4	
07GR001	GR	G	22	2007	PARJAM	PAJA	4	15	Paronychia jamesii	4	
07GR001	GR	G	22	2007	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	22	2007	QUEHAV	QUHA3	25	35	Quercus havardii	2	
07GR001	GR	G	22	2007	SCHSCO	SCSC	40	30	Schizachyrium scoparium	3	
07GR001	GR	G	22	2007	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GR001	GR	G	22	2007	THEMEG	THME	0.1	15	Thelesperma	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									megapotamicum		
07GR001	GR	G	32	2007	AMBPSI	AMPS	0.1	30	Ambrosia psilostachya	4	
07GR001	GR	G	32	2007	ANDHAL	ANHA	3	70	Andropogon hallii	3	
07GR001	GR	G	32	2007	BOUHIR	BOHI2	1	12	Bouteloua hirsuta	3	
07GR001	GR	G	32	2007	CALSER	CASE12	1	35	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	G	32	2007	CHAFEN	CHFE3	2	3	Chamaesyce fendleri	4	
07GR001	GR	G	32	2007	CYCATR	CYAT	0.1	4	Cycloloma atriplicifolium	4	
07GR001	GR	G	32	2007	CYPRET	CYRE14	0.1	20	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	G	32	2007	DALPUR	DAPU5	1	35	Dalea purpurea	4	07GC001- F38
07GR001	GR	G	32	2007	DIGPUB	DIPU9	0.5	25	Digitaria pubiflora	3	
07GR001	GR	G	32	2007	ERIANN	ERAN4	0.1	36	Eriogonum annuum	4	
07GR001	GR	G	32	2007	GAUVIL	GAVI2	3	55	Gaura villosa	4	
07GR001	GR	G	32	2007	HETVIL	HEVI4	0.5	27	Heterotheca villosa	4	07GC001- F37
07GR001	GR	G	32	2007	LECMUC	LEMU3	0.5	35	Lechea mucronata	4	07GC001- F27
07GR001	GR	G	32	2007	LINRIGR	LIRIR	0.5	35	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	G	32	2007	LOESQU	LOSQ	0.1	5	Loeflingia squarrosa	4	
07GR001	GR	G	32	2007	PALSPH	PASP	0.1	22	Palafoxia sphacelata	4	
07GR001	GR	G	32	2007	PARJAM	PAJA	1	13	Paronychia jamesii	4	
07GR001	GR	G	32	2007	PASSETS	PASES	2	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	32	2007	QUEHAV	QUHA3	7	40	Quercus havardii	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	G	32	2007	SCHSCO	SCSC	45	35	Schizachyrium scoparium	3	
07GR001	GR	G	32	2007	THEMEG	THME	1	55	Thelesperma megapotamicum	4	
07GR001	GR	G	32	2007	YUCGLA	YUGL	12	75	Yucca glauca	2	
07GR001	GR	G	42	2007	ANDHAL	ANHA	6	50	Andropogon hallii	3	
07GR001	GR	G	42	2007	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GR001	GR	G	42	2007	CHAFEN	CHFE3	3	2	Chamaesyce fendleri	4	
07GR001	GR	G	42	2007	COMERE	COER	0.5	16	Commelina erecta	4	
07GR001	GR	G	42	2007	CONCAN	COCA5	0.1	29	Conyza canadensis	4	
07GR001	GR	G	42	2007	CYPRET	CYRE14	0.5	20	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	G	42	2007	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	G	42	2007	ERIANN	ERAN4	0.5	33	Eriogonum annuum	4	
07GR001	GR	G	42	2007	HETVIL	HEVI4	6	20	Heterotheca villosa	4	07GC001- F37
07GR001	GR	G	42	2007	LECMUC	LEMU3	1	10	Lechea mucronata	4	07GC001- F27
07GR001	GR	G	42	2007	LINRIGR	LIRIR	0.1	18	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	G	42	2007	PARJAM	PAJA	2.5	6	Paronychia jamesii	4	
07GR001	GR	G	42	2007	PASSETS	PASES	1.5	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	42	2007	PSOTEN	PSTE5	5	70	Psoralidium tenuiflorum	4	
07GR001	GR	G	42	2007	QUEHAV	QUHA3	12	28	Quercus havardii	2	
07GR001	GR	G	42	2007	SCHSCO	SCSC	40	26	Schizachyrium scoparium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	G	42	2007	THEMEG	THME	0.5	15	Thelesperma megapotamicum	4	
07GR001	GR	G	42	2007	XANSPI2	MAPI	1.5	20	Xanthisma spinulosum	4	
07GR001	GR	H	2	2007	AMBPSI	AMPS	0.1	11	Ambrosia psilostachya	4	
07GR001	GR	H	2	2007	BOUHIR	BOHI2	2	15	Bouteloua hirsuta	3	
07GR001	GR	H	2	2007	CHAGLY	CHGL13	0.5	3	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	H	2	2007	COMUMBP	COUMP	2	12	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	2	2007	COMERE	COER	0.1	10	Commelina erecta	4	
07GR001	GR	H	2	2007	ERASEC	ERSE	0.5	20	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	H	2	2007	ERIANN	ERAN4	0.1	14	Eriogonum annuum	4	
07GR001	GR	H	2	2007	FROGRA	FRGR3	0.1	4	Froelichia gracilis	4	
07GR001	GR	H	2	2007	HETVIL	HEVI4	0.5	25	Heterotheca villosa	4	07GC001- F37
07GR001	GR	H	2	2007	LECMUC	LEMU3	0.5	15	Lechea mucronata	4	07GC001- F27
07GR001	GR	H	2	2007	LINRIGR	LIRIR	0.5	40	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	H	2	2007	PARJAM	PAJA	0.5	6	Paronychia jamesii	4	
07GR001	GR	H	2	2007	PASSETS	PASES	1	16	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	2	2007	QUEHAV	QUHA3	20	30	Quercus havidii	2	
07GR001	GR	H	2	2007	SCHSCO	SCSC	45	30	Schizachyrium scoparium	3	
07GR001	GR	H	12	2007	ANDHAL	ANHA	6	40	Andropogon hallii	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	H	12	2007	BOUHIR	BOHI2	10	10	Bouteloua hirsuta	3	
07GR001	GR	H	12	2007	CALSER	CASE12	0.5	32	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	H	12	2007	CHAFEN	CHFE3	0.1	3	Chamaesyce fendleri	4	
07GR001	GR	H	12	2007	COMUMBP	COUMP	1.5	14	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	12	2007	COMERE	COER	0.1	7	Commelina erecta	4	
07GR001	GR	H	12	2007	CRYCIN	CRCI3	0.1	5	Cryptantha cinerea	4	
07GR001	GR	H	12	2007	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	H	12	2007	DALPUR	DAPU5	0.1	12	Dalea purpurea	4	07GC001- F38
07GR001	GR	H	12	2007	DIMWIS	DIWI2	0.1	20	Dimorphocarpa wislizeni	4	
07GR001	GR	H	12	2007	ERASEC	ERSE	3	18	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	H	12	2007	ERIANN	ERAN4	0.1	18	Eriogonum annuum	4	
07GR001	GR	H	12	2007	LECMUC	LEMU3	3	30	Lechea mucronata	4	07GC001- F27
07GR001	GR	H	12	2007	LINRIGR	LIRIR	1.5	45	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	H	12	2007	PALSPH	PASP	0.1	12	Palafoxia sphacelata	4	
07GR001	GR	H	12	2007	PASSETS	PASES	2	14	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	12	2007	QUEHAV	QUHA3	18	45	Quercus havardii	2	
07GR001	GR	H	12	2007	SCHSCO	SCSC	40	40	Schizachyrium scoparium	3	
07GR001	GR	H	12	2007	THEMEG	THME	1	36	Thelesperma megapotamicum	4	
07GR001	GR	H	22	2007	ANDHAL	ANHA	15	60	Andropogon	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hallii		
07GR001	GR	H	22	2007	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GR001	GR	H	22	2007	CALSER	CASE12	0.5	25	Calylophus serrulatus	4	07GC001- F19
07GR001	GR	H	22	2007	COMERE	COER	0.1	5	Commelina erecta	4	
07GR001	GR	H	22	2007	CRYCIN	CRCI3	0.1	20	Cryptantha cinerea	4	
07GR001	GR	H	22	2007	CYPRET	CYRE14	0.1	30	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	H	22	2007	DALPUR	DAPU5	0.1	5	Dalea purpurea	4	07GC001- F38
07GR001	GR	H	22	2007	ERASEC	ERSE	1	15	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	H	22	2007	ERIANN	ERAN4	0.5	55	Eriogonum annuum	4	
07GR001	GR	H	22	2007	HETVIL	HEVI4	0.1	14	Heterotheca villosa	4	07GC001- F37
07GR001	GR	H	22	2007	LECMUC	LEMU3	12	55	Lechea mucronata	4	07GC001- F27
07GR001	GR	H	22	2007	LINRIGR	LIRIR	0.1	10	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	H	22	2007	PARJAM	PAJA	1.5	10	Paronychia jamesii	4	
07GR001	GR	H	22	2007	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	22	2007	PSOTEN	PSTE5	2	60	Psoralidium tenuiflorum	4	
07GR001	GR	H	22	2007	QUEHAV	QUHA3	12	40	Quercus havardii	2	
07GR001	GR	H	22	2007	SCHSCO	SCSC	40	35	Schizachyrium scoparium	3	
07GR001	GR	H	32	2007	AMBPSI	AMPS	0.1	7	Ambrosia psilostachya	4	
07GR001	GR	H	32	2007	ANDHAL	ANHA	5	38	Andropogon hallii	3	
07GR001	GR	H	32	2007	BOUHIR	BOHI2	8	10	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hirsuta		
07GR001	GR	H	32	2007	CHAFEN	CHFE3	0.1	6	Chamaesyce fendleri	4	
07GR001	GR	H	32	2007	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	H	32	2007	COMUMBP	COUMP	2	12	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	32	2007	COMERE	COER	0.1	5	Commelina erecta	4	
07GR001	GR	H	32	2007	CRYCIN	CRCI3	1	10	Cryptantha cinerea	4	
07GR001	GR	H	32	2007	CYPRET	CYRE14	0.5	8	Cyperus retroflexus	3	07GC001- G14
07GR001	GR	H	32	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	
07GR001	GR	H	32	2007	ERASES	ERSE2	4	20	Eragrostis sessilispica	3	
07GR001	GR	H	32	2007	ERIANN	ERAN4	1	35	Eriogonum annuum	4	
07GR001	GR	H	32	2007	HETVIL	HEVI4	0.1	23	Heterotheca villosa	4	07GC001- F37
07GR001	GR	H	32	2007	LECMUC	LEMU3	20	22	Lechea mucronata	4	07GC001- F27
07GR001	GR	H	32	2007	LINRIGR	LIRIR	1	35	Linum rigidum var. rigidum	4	07GC001- F16
07GR001	GR	H	32	2007	PALSPH	PASP	0.1	14	Palafoxia sphacelata	4	
07GR001	GR	H	32	2007	PASSETS	PASES	4	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	32	2007	QUEHAV	QUHA3	2	25	Quercus havardii	2	
07GR001	GR	H	32	2007	SCHSCO	SCSC	35	25	Schizachyrium scoparium	3	
07GR001	GR	H	42	2007	AMBPSI	AMPS	0.1	10	Ambrosia psilostachya	4	
07GR001	GR	H	42	2007	BOUHIR	BOHI2	8	12	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hirsuta		
07GR001	GR	H	42	2007	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	07GC001- F14
07GR001	GR	H	42	2007	COMUMP	COUMP	2	10	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	42	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	07GC001- G10
07GR001	GR	H	42	2007	ERIANN	ERAN4	0.1	40	Eriogonum annuum	4	
07GR001	GR	H	42	2007	LECMUC	LEMU3	3	10	Lechea mucronata	4	07GC001- F27
07GR001	GR	H	42	2007	LITMUL	LIMU3	0.1	15	Lithospermum multiflorum	4	
07GR001	GR	H	42	2007	PARJAM	PAJA	1.5	12	Paronychia jamesii	4	
07GR001	GR	H	42	2007	PASSETS	PASES	6	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	42	2007	PSOTEN	PSTE5	0.5	30	Psoralidium tenuiflorum	4	
07GR001	GR	H	42	2007	QUEHAV	QUHA3	1	30	Quercus havardii	2	
07GR001	GR	H	42	2007	SCHSCO	SCSC	25	40	Schizachyrium scoparium	3	
07GR001	GR	H	42	2007	XANSPI2	MAPI	0.5	23	Xanthisma spinulosum	4	
07GR001	GR	H	42	2007	XANTEXD	XATED2	1	25	Xanthisma texanum ssp. drummondii	4	
07GY001	GY	A	2	2007	ANDHAL	ANHA	6	55	Andropogon hallii	3	
07GY001	GY	A	2	2007	ARIPURL	ARPUL	1	10	Aristida purpurea var. longiseta	3	
07GY001	GY	A	2	2007	BOUHIR	BOHI2	20	10	Bouteloua hirsuta	3	
07GY001	GY	A	2	2007	CHAGLY	CHGL13	0.5	3	Chamaesyce	4	07GC001- F14



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									glyptosperma		
07GY001	GY	A	2	2007	CYPRET	CYRE14	0.5	25	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	A	2	2007	DALNANN	DANAN	0.1	8	Dalea nana var. nana	4	07GC001- F35
07GY001	GY	A	2	2007	DALPUR	DAPU5	0.1	10	Dalea purpurea	4	07GC001- F38
07GY001	GY	A	2	2007	ERASEC	ERSE	0.5	16	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	A	2	2007	ERIANN	ERAN4	0.1	22	Eriogonum annuum	4	
07GY001	GY	A	2	2007	FROGRA	FRGR3	0.1	20	Froelichia gracilis	4	
07GY001	GY	A	2	2007	LINRIGR	LIRIR	0.1	16	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	A	2	2007	PARJAM	PAJA	0.5	7	Paronychia jamesii	4	
07GY001	GY	A	2	2007	PASSETS	PASES	4	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	2	2007	QUEHAV	QUHA3	3	37	Quercus havardii	2	
07GY001	GY	A	2	2007	SCHSCO	SCSC	25	30	Schizachyrium scoparium	3	
07GY001	GY	A	2	2007	THEMEG	THME	0.5	50	Thelesperma megapotamicum	4	
07GY001	GY	A	2	2007	XANSPI2	MAPI	0.5	15	Xanthisma spinulosum	4	
07GY001	GY	A	12	2007	AMBPSI	AMPS	2	25	Ambrosia psilostachya	4	
07GY001	GY	A	12	2007	ANDHAL	ANHA	20	50	Andropogon hallii	3	
07GY001	GY	A	12	2007	ARIPUR	ARPU9	2	8	Aristida purpurea	3	
07GY001	GY	A	12	2007	BOUHIR	BOHI2	18	10	Bouteloua hirsuta	3	
07GY001	GY	A	12	2007	CALSER	CASE12	4	30	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	A	12	2007	CHAGLY	CHGL13	0.5	1	Chamaesyce	4	07GC001- F14

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									glyptosperma		
07GY001	GY	A	12	2007	COMERE	COER	0.1	10	Commelina erecta	4	
07GY001	GY	A	12	2007	CRYCIN	CRCI3	2	22	Cryptantha cinerea	4	
07GY001	GY	A	12	2007	DALPUR	DAPU5	5	40	Dalea purpurea	4	07GC001- F38
07GY001	GY	A	12	2007	DIGPUB	DIPU9	0.5	14	Digitaria pubiflora	3	
07GY001	GY	A	12	2007	ERIANN	ERAN4	1	62	Eriogonum annuum	4	
07GY001	GY	A	12	2007	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	12	2007	QUEHAV	QUHA3	6	44	Quercus havardii	2	
07GY001	GY	A	12	2007	SCHSCO	SCSC	25	16	Schizachyrium scoparium	3	
07GY001	GY	A	12	2007	THEMEG	THME	0.5	8	Thelesperma megapotamicum	4	
07GY001	GY	A	12	2007	XANSPI2	MAPI	0.5	10	Xanthisma spinulosum	4	
07GY001	GY	A	22	2007	AMBPSI	AMPS	0.1	15	Ambrosia psilostachya	4	
07GY001	GY	A	22	2007	ANDHAL	ANHA	4	42	Andropogon hallii	3	
07GY001	GY	A	22	2007	APHRAM	APRA	2	12	Aphanostephus ramosissimus	4	
07GY001	GY	A	22	2007	ARIPUR	ARPU9	8	18	Aristida purpurea	3	
07GY001	GY	A	22	2007	BOUCUR	BOCU	8	12	Bouteloua curtipendula	3	
07GY001	GY	A	22	2007	BOUHIR	BOHI2	20	15	Bouteloua hirsuta	3	
07GY001	GY	A	22	2007	COMERE	COER	2	24	Commelina erecta	4	
07GY001	GY	A	22	2007	CRYCIN	CRCI3	2	15	Cryptantha cinerea	4	
07GY001	GY	A	22	2007	DIGPUB	DIPU9	10	20	Digitaria	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									pubiflora		
07GY001	GY	A	22	2007	ERIANN	ERAN4	1	62	Eriogonum annuum	4	
07GY001	GY	A	22	2007	HETVIL	HEVI4	0.5	14	Heterotheca villosa	4	07GC001- F37
07GY001	GY	A	22	2007	PASSETS	PASES	8	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	22	2007	PLAWRI4	PLWR	0.5	12	Plantago wrightiana	4	07GC001- F24
07GY001	GY	A	22	2007	QUEHAV	QUHA3	8	50	Quercus havardii	2	
07GY001	GY	A	22	2007	SCHSCO	SCSC	15	22	Schizachyrium scoparium	3	
07GY001	GY	A	32	2007	AMBPSI	AMPS	0.5	30	Ambrosia psilostachya	4	
07GY001	GY	A	32	2007	ARIPUR	ARPU9	1	17	Aristida purpurea	3	
07GY001	GY	A	32	2007	BOUHIR	BOHI2	12	10	Bouteloua hirsuta	3	
07GY001	GY	A	32	2007	CALSER	CASE12	0.5	25	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	A	32	2007	CENSPI	CESP4	1	10	Cenchrus spinifex	3	
07GY001	GY	A	32	2007	DALNANN	DANAN	0.1	5	Dalea nana var. nana	4	07GC001- F35
07GY001	GY	A	32	2007	DIGPUB	DIPU9	45	20	Digitaria pubiflora	3	
07GY001	GY	A	32	2007	ERASEC	ERSE	1	12	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	A	32	2007	ERIANN	ERAN4	0.1	15	Eriogonum annuum	4	
07GY001	GY	A	32	2007	HETVIL	HEVI4	0.5	12	Heterotheca villosa	4	07GC001- F37
07GY001	GY	A	32	2007	LINRIGR	LIRIR	0.5	15	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	A	32	2007	PASSETS	PASES	6	24	Paspalum setaceum var.	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GY001	GY	A	32	2007	PLAWRI4	PLWR	0.1	12	Plantago wrightiana	4	07GC001- F24
07GY001	GY	A	32	2007	QUEHAV	QUHA3	0.1	15	Quercus havardii	2	
07GY001	GY	A	32	2007	SCHSCO	SCSC	8	20	Schizachyrium scoparium	3	
07GY001	GY	A	32	2007	SPOCRY	SPCR	0.5	18	Sporobolus cryptandrus	3	
07GY001	GY	A	32	2007	THEMEG	THME	1	50	Thelesperma megapotamicum	4	
07GY001	GY	A	32	2007	XANSPI2	MAPI	1	17	Xanthisma spinulosum	4	
07GY001	GY	A	32	2007	YUCGLA	YUGL	0.1	70	Yucca glauca	2	
07GY001	GY	A	42	2007	AMBPSI	AMPS	3	38	Ambrosia psilostachya	4	
07GY001	GY	A	42	2007	ARIPURL	ARPUL	20	18	Aristida purpurea var. longiseta	3	
07GY001	GY	A	42	2007	BOUCUR	BOCU	1.5	25	Bouteloua curtipendula	3	
07GY001	GY	A	42	2007	BOUHIR	BOHI2	10	12	Bouteloua hirsuta	3	
07GY001	GY	A	42	2007	CENSPI	CESP4	2	28	Cenchrus spinifex	3	07GC001- G4
07GY001	GY	A	42	2007	CRYCIN	CRCI3	2	25	Cryptantha cinerea	4	
07GY001	GY	A	42	2007	CYPRET	CYRE14	0.5	10	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	A	42	2007	EVOSER	EVSE	5	16	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	A	42	2007	FROGRA	FRGR3	0.5	10	Froelichia gracilis	4	
07GY001	GY	A	42	2007	HETVIL	HEVI4	3	22	Heterotheca villosa	4	07GC001- F37
07GY001	GY	A	42	2007	LYCSET	LYSE3	1	12	Lycurus setosus	3	
07GY001	GY	A	42	2007	PARJAM	PAJA	5	10	Paronychia jamesii	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	A	42	2007	PASSETS	PASES	12	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	42	2007	PLAWRI4	PLWR	1	16	Plantago wrightiana	4	07GC001- F24
07GY001	GY	A	42	2007	QUEHAV	QUHA3	10	50	Quercus havardii	2	
07GY001	GY	A	42	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GY001	GY	A	42	2007	SPOCRY	SPCR	6	30	Sporobolus cryptandrus	3	
07GY001	GY	A	42	2007	THEMEG	THME	6	25	Thelesperma megapotamicum	4	
07GY001	GY	A	42	2007	XANTEXD	XATED2	0.1	22	Xanthisma texanum ssp. drummondii	4	
07GY001	GY	B	2	2007	AMBPSI	AMPS	2	30	Ambrosia psilostachya	4	
07GY001	GY	B	2	2007	ANDHAL	ANHA	8	70	Andropogon hallii	3	
07GY001	GY	B	2	2007	ARIPUR	ARPU9	2	20	Aristida purpurea	3	
07GY001	GY	B	2	2007	BOUCUR	BOCU	1	20	Bouteloua curtipendula	3	
07GY001	GY	B	2	2007	BOUHIR	BOHI2	6	12	Bouteloua hirsuta	3	
07GY001	GY	B	2	2007	COMERE	COER	2	30	Commelina erecta	4	
07GY001	GY	B	2	2007	CRYCIN	CRCI3	0.5	25	Cryptantha cinerea	4	
07GY001	GY	B	2	2007	ERIANN	ERAN4	0.1	55	Eriogonum annuum	4	
07GY001	GY	B	2	2007	GAUVIL	GAVI2	0.5	36	Gaura villosa	4	
07GY001	GY	B	2	2007	LINRIGR	LIRIR	0.1	40	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	B	2	2007	PASSETS	PASES	0.6	25	Paspalum setaceum var. stramineum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	B	2	2007	POMJAM	POJA5	0.5	26	Pomaria jamesii	4	
07GY001	GY	B	2	2007	QUEHAV	QUHA3	30	70	Quercus havardii	2	
07GY001	GY	B	2	2007	SCHSCO	SCSC	18	35	Schizachyrium scoparium	3	
07GY001	GY	B	2	2007	SPOCRY	SPCR	2	40	Sporobolus cryptandrus	3	
07GY001	GY	B	2	2007	THEMEG	THME	0.5	73	Thelesperma megapotamicum	4	
07GY001	GY	B	2	2007	XANSPI2	MAPI	0.1	10	Xanthisma spinulosum	4	
07GY001	GY	B	12	2007	APHRAM	APRA	2	12	Aphanostephus ramosissimus	4	
07GY001	GY	B	12	2007	ARIPUR	ARPU9	1	14	Aristida purpurea	3	
07GY001	GY	B	12	2007	BOUCUR	BOCU	0.5	20	Bouteloua curtipendula	3	
07GY001	GY	B	12	2007	BOUHIR	BOHI2	15	14	Bouteloua hirsuta	3	
07GY001	GY	B	12	2007	CHAFEN	CHFE3	1.5	15	Chamaesyce fendleri	4	
07GY001	GY	B	12	2007	DALNANN	DANAN	0.5	10	Dalea nana var. nana	4	07GC001- F35
07GY001	GY	B	12	2007	ERASEC	ERSE	0.5	22	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	B	12	2007	ERIANN	ERAN4	0.1	36	Eriogonum annuum	4	
07GY001	GY	B	12	2007	PASSETS	PASES	5	16	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	12	2007	PLAPAT	PLPA2	0.1	6	Plantago patagonica	4	07GC001- F24
07GY001	GY	B	12	2007	QUEHAV	QUHA3	2	54	Quercus havardii	2	
07GY001	GY	B	12	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GY001	GY	B	12	2007	SPOCRY	SPCR	8	18	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	B	12	2007	THEMEG	THME	0.5	58	Thelesperma megapotamicum	4	
07GY001	GY	B	22	2007	AMBPSI	AMPS	3	35	Ambrosia psilostachya	4	
07GY001	GY	B	22	2007	ANDHAL	ANHA	2	55	Andropogon hallii	3	
07GY001	GY	B	22	2007	APHRAM	APRA	0.1	8	Aphanostephus ramosissimus	4	
07GY001	GY	B	22	2007	BOUCUR	BOCU	1	20	Bouteloua curtipendula	3	
07GY001	GY	B	22	2007	BOUHIR	BOHI2	6	10	Bouteloua hirsuta	3	
07GY001	GY	B	22	2007	CALSER	CASE12	0.1	17	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	B	22	2007	ERIANN	ERAN4	0.1	48	Eriogonum annuum	4	
07GY001	GY	B	22	2007	GAUVIL	GAVI2	0.1	15	Gaura villosa	4	
07GY001	GY	B	22	2007	LINRIGR	LIRIR	0.1	34	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	B	22	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	22	2007	QUEHAV	QUHA3	25	40	Quercus havardii	2	
07GY001	GY	B	22	2007	SCHSCO	SCSC	35	35	Schizachyrium scoparium	3	
07GY001	GY	B	32	2007	AMBPSI	AMPS	3	38	Ambrosia psilostachya	4	
07GY001	GY	B	32	2007	ANDHAL	ANHA	5	50	Andropogon hallii	3	
07GY001	GY	B	32	2007	ARIPUR	ARPU9	1	14	Aristida purpurea	3	
07GY001	GY	B	32	2007	BOUHIR	BOHI2	6	15	Bouteloua hirsuta	3	
07GY001	GY	B	32	2007	CALSER	CASE12	3	30	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	B	32	2007	COMERE	COER	1	20	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	B	32	2007	CRYCIN	CRCI3	1	20	Cryptantha cinerea	4	
07GY001	GY	B	32	2007	ERASEC	ERSE	3	16	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	B	32	2007	HETVIL	HEVI4	1	12	Heterotheca villosa	4	07GC001- F37
07GY001	GY	B	32	2007	LINRIGR	LIRIR	0.1	15	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	B	32	2007	LITMUL	LIMU3	1	16	Lithospermum multiflorum	4	
07GY001	GY	B	32	2007	MELLEU	MELE2	2.5	20	Melampodium leucanthum	4	
07GY001	GY	B	32	2007	PASSETS	PASES	8	24	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	32	2007	PLAPAT	PLPA2	0.1	8	Plantago patagonica	4	07GC001- F24
07GY001	GY	B	32	2007	SCHSCO	SCSC	15	30	Schizachyrium scoparium	3	
07GY001	GY	B	32	2007	SPOCRY	SPCR	0.1	20	Sporobolus cryptandrus	3	
07GY001	GY	B	32	2007	YUCGLA	YUGL	30	60	Yucca glauca	2	
07GY001	GY	B	42	2007	ANDHAL	ANHA	2	50	Andropogon hallii	3	
07GY001	GY	B	42	2007	ARIPURL	ARPUL	2	12	Aristida purpurea var. longiseta	3	
07GY001	GY	B	42	2007	BOUCUR	BOCU	1	18	Bouteloua curtipendula	3	
07GY001	GY	B	42	2007	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GY001	GY	B	42	2007	CHAGLY	CHGL13	0.5	3	Chamaesyce glyptosperma	4	07GC001- F14
07GY001	GY	B	42	2007	COMERE	COER	1	30	Commelina erecta	4	
07GY001	GY	B	42	2007	DALPUR	DAPU5	0.1	18	Dalea purpurea	4	07GC001- F38
07GY001	GY	B	42	2007	ERIANN	ERAN4	0.1	35	Eriogonum annuum	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	B	42	2007	FROGRA	FRGR3	0.1	20	Froelichia gracilis	4	
07GY001	GY	B	42	2007	HETVIL	HEVI4	1	24	Heterotheca villosa	4	07GC001- F37
07GY001	GY	B	42	2007	LINRIGR	LIRIR	0.1	20	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	B	42	2007	PARJAM	PAJA	6	12	Paronychia jamesii	4	
07GY001	GY	B	42	2007	PASSETS	PASES	3	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	42	2007	QUEHAV	QUHA3	7	40	Quercus havardii	2	
07GY001	GY	B	42	2007	SCHSCO	SCSC	28	35	Schizachyrium scoparium	3	
07GY001	GY	C	2	2007	AMBPSI	AMPS	0.1	14	Ambrosia psilostachya	4	
07GY001	GY	C	2	2007	ARIPUR	ARPU9	12	18	Aristida purpurea	3	
07GY001	GY	C	2	2007	BOUCUR	BOCU	1	25	Bouteloua curtipendula	3	
07GY001	GY	C	2	2007	CALSER	CASE12	0.1	18	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	C	2	2007	CHAGLY	CHGL13	1	5	Chamaesyce glyptosperma	4	07GC001- F14
07GY001	GY	C	2	2007	CHECYC	CHCY	0.1	18	Chenopodium cycloides	4	07GC001- F28
07GY001	GY	C	2	2007	COMERE	COER	1	22	Commelina erecta	4	
07GY001	GY	C	2	2007	CYPRET	CYRE14	0.5	12	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	C	2	2007	ERASEC	ERSE	0.5	12	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	C	2	2007	ERIANN	ERAN4	1.5	45	Eriogonum annuum	4	
07GY001	GY	C	2	2007	HETVIL	HEVI4	1	35	Heterotheca villosa	4	07GC001- F37
07GY001	GY	C	2	2007	PASSETS	PASES	3	20	Paspalum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									setaceum var. stramineum		
07GY001	GY	C	2	2007	PSITAG	PSTA	0.1	3	Psilostrophe tagetina	4	
07GY001	GY	C	2	2007	QUEHAV	QUHA3	20	30	Quercus havardii	2	
07GY001	GY	C	2	2007	SCHSCO	SCSC	40	28	Schizachyrium scoparium	3	
07GY001	GY	C	2	2007	SPOCRY	SPCR	1.5	20	Sporobolus cryptandrus	3	
07GY001	GY	C	2	2007	XANSPI2	MAPI	0.1	14	Xanthisma spinulosum	4	
07GY001	GY	C	2	2007	XANTEXD	XATED2	0.1	16	Xanthisma texanum ssp. drummondii	4	
07GY001	GY	C	12	2007	AMBPSI	AMPS	0.1	11	Ambrosia psilostachya	4	
07GY001	GY	C	12	2007	ANDHAL	ANHA	2	70	Andropogon hallii	3	
07GY001	GY	C	12	2007	APHRAM	APRA	0.5	12	Aphanostephus ramosissimus	4	
07GY001	GY	C	12	2007	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GY001	GY	C	12	2007	ARIPURL	ARPUL	1	15	Aristida purpurea var. longiseta	3	
07GY001	GY	C	12	2007	ASCPUM	ASPU	0.1	12	Asclepias pumila	4	change ASCMAC to ASCPUM-YC
07GY001	GY	C	12	2007	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GY001	GY	C	12	2007	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GY001	GY	C	12	2007	COMDIA	CODI4	0.5	23	Commelina dianthifolia	4	
07GY001	GY	C	12	2007	ERASEC	ERSE	1	30	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	C	12	2007	ERASES	ERSE2	0.1	20	Eragrostis sessilispica	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	C	12	2007	HESCOMC	HECOC8	1	35	Hesperostipa comata ssp. comata	3	07GC001- G18
07GY001	GY	C	12	2007	PASSETS	PASES	0.5	11	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	12	2007	QUEHAV	QUHA3	15	40	Quercus havardii	2	
07GY001	GY	C	12	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GY001	GY	C	12	2007	XANSPI2	MAPI	1	35	Xanthisma spinulosum	4	
07GY001	GY	C	22	2007	AMBPSI	AMPS	1.5	30	Ambrosia psilostachya	4	
07GY001	GY	C	22	2007	APHRAM	APRA	0.5	8	Aphanostephus ramosissimus	4	
07GY001	GY	C	22	2007	ARIPUR	ARPU9	2	12	Aristida purpurea	3	
07GY001	GY	C	22	2007	BOTLAGT	BOLAT	3	24	Bothriochloa laguroides ssp. torreyana	3	
07GY001	GY	C	22	2007	BOUCUR	BOCU	2	20	Bouteloua curtipendula	3	
07GY001	GY	C	22	2007	BOUHIR	BOHI2	18	12	Bouteloua hirsuta	3	
07GY001	GY	C	22	2007	COMERE	COER	0.1	5	Commelina erecta	4	
07GY001	GY	C	22	2007	CRYCIN	CRCI3	1	28	Cryptantha cinerea	4	
07GY001	GY	C	22	2007	DIMWIS	DIWI2	0.1	26	Dimorphocarpa wislizeni	4	
07GY001	GY	C	22	2007	ERASES	ERSE2	3	16	Eragrostis sessilispica	3	
07GY001	GY	C	22	2007	ERIANN	ERAN4	0.5	62	Eriogonum annuum	4	
07GY001	GY	C	22	2007	HESCOMC	HECOC8	2	20	Hesperostipa comata ssp. comata	3	07GC001- G18

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	C	22	2007	HETVIL	HEVI4	1	34	Heterotheca villosa	4	07GC001- F37
07GY001	GY	C	22	2007	PARJAM	PAJA	1	10	Paronychia jamesii	4	
07GY001	GY	C	22	2007	PASSETS	PASES	10	22	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	22	2007	PLAWRI4	PLWR	0.5	14	Plantago wrightiana	4	07GC001- F24
07GY001	GY	C	22	2007	PSITAG	PSTA	0.1	5	Psilostrophe tagetina	4	
07GY001	GY	C	22	2007	QUEHAV	QUHA3	25	30	Quercus havardii	2	
07GY001	GY	C	22	2007	SCHSCO	SCSC	20	28	Schizachyrium scoparium	3	
07GY001	GY	C	22	2007	SPOCRY	SPCR	2	18	Sporobolus cryptandrus	3	
07GY001	GY	C	22	2007	THEMEG	THME	1	20	Thelesperma megapotamicum	4	
07GY001	GY	C	22	2007	YUCGLA	YUGL	3	50	Yucca glauca	2	
07GY001	GY	C	32	2007	AMBPSI	AMPS	1	35	Ambrosia psilostachya	4	
07GY001	GY	C	32	2007	ARIPUR	ARPU9	2	15	Aristida purpurea	3	
07GY001	GY	C	32	2007	ARIPURL	ARPUL	2	8	Aristida purpurea var. longiseta	3	
07GY001	GY	C	32	2007	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GY001	GY	C	32	2007	BOUHIR	BOHI2	8	10	Bouteloua hirsuta	3	
07GY001	GY	C	32	2007	CALSER	CASE12	1	30	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	C	32	2007	CHAFEN	CHFE3	0.5	3	Chamaesyce fendleri	4	
07GY001	GY	C	32	2007	COMDIA	CODI4	0.5	17	Commelina dianthifolia	4	
07GY001	GY	C	32	2007	ERASEC	ERSE	1	12	Eragrostis	3	07GC001- G10

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									secundiflora		
07GY001	GY	C	32	2007	ERIANN	ERAN4	0.5	45	Eriogonum annuum	4	
07GY001	GY	C	32	2007	LINRIGR	LIRIR	0.5	33	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	C	32	2007	PALSPH	PASP	0.1	20	Palafoxia sphacelata	4	
07GY001	GY	C	32	2007	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	32	2007	QUEHAV	QUHA3	12	35	Quercus havidii	2	
07GY001	GY	C	32	2007	SCHSCO	SCSC	28	40	Schizachyrium scoparium	3	
07GY001	GY	C	32	2007	THEMEG	THME	0.5	70	Thelesperma megapotamicum	4	
07GY001	GY	C	42	2007	AMBPSI	AMPS	4	30	Ambrosia psilostachya	4	
07GY001	GY	C	42	2007	ARIPUR	ARPU9	8	10	Aristida purpurea	3	
07GY001	GY	C	42	2007	BOUCUR	BOCU	3	20	Bouteloua curtipendula	3	
07GY001	GY	C	42	2007	BOUHIR	BOHI2	15	15	Bouteloua hirsuta	3	
07GY001	GY	C	42	2007	COMERE	COER	0.5	8	Commelina erecta	4	
07GY001	GY	C	42	2007	CRYCIN	CRCI3	2	12	Cryptantha cinerea	4	
07GY001	GY	C	42	2007	CYPRET	CYRE14	0.1	9	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	C	42	2007	DALNANN	DANAN	1	6	Dalea nana var. nana	4	07GC001- F35
07GY001	GY	C	42	2007	DALPUR	DAPU5	0.1	6	Dalea purpurea	4	07GC001- F38
07GY001	GY	C	42	2007	ERASEC	ERSE	5	20	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	C	42	2007	EVOSER	EVSE	0.5	20	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	C	42	2007	HETVIL	HEVI4	0.1	10	Heterotheca	4	07GC001- F37

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									villosa		
07GY001	GY	C	42	2007	LINRIGR	LIRIR	1	35	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	C	42	2007	PALSPH	PASP	1	18	Palafoxia sphacelata	4	
07GY001	GY	C	42	2007	PASSETS	PASES	2	14	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	42	2007	QUEHAV	QUHA3	15	42	Quercus havardii	2	
07GY001	GY	C	42	2007	SCHSCO	SCSC	10	15	Schizachyrium scoparium	3	
07GY001	GY	C	42	2007	THEMEG	THME	1.5	40	Thelesperma megapotamicum	4	
07GY001	GY	D	2	2007	AMBPSI	AMPS	0.5	24	Ambrosia psilostachya	4	
07GY001	GY	D	2	2007	BOUCUR	BOCU	7	15	Bouteloua curtipendula	3	
07GY001	GY	D	2	2007	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GY001	GY	D	2	2007	COMERE	COER	0.5	20	Commelina erecta	4	
07GY001	GY	D	2	2007	ERIANN	ERAN4	0.1	16	Eriogonum annuum	4	
07GY001	GY	D	2	2007	EVOSER	EVSE	1	20	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	D	2	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GY001	GY	D	2	2007	PASSETS	PASES	10	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	2	2007	PLAWRI4	PLWR	0.1	15	Plantago wrightiana	4	07GC001- F24
07GY001	GY	D	2	2007	QUEHAV	QUHA3	13	45	Quercus havardii	2	
07GY001	GY	D	2	2007	SCHSCO	SCSC	30	40	Schizachyrium scoparium	3	
07GY001	GY	D	2	2007	SPOCRY	SPCR	2	40	Sporobolus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cryptandrus		
07GY001	GY	D	2	2007	YUCGLA	YUGL	35	60	Yucca glauca	2	
07GY001	GY	D	12	2007	AMBPSI	AMPS	0.5	16	Ambrosia psilostachya	4	
07GY001	GY	D	12	2007	APHRAM	APRA	2	12	Aphanostephus ramosissimus	4	
07GY001	GY	D	12	2007	ARIPUR	ARPU9	0.5	15	Aristida purpurea	3	
07GY001	GY	D	12	2007	BOUCUR	BOCU	0.5	18	Bouteloua curtipendula	3	
07GY001	GY	D	12	2007	BOUHIR	BOHI2	10	10	Bouteloua hirsuta	3	
07GY001	GY	D	12	2007	CALSER	CASE12	0.5	15	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	D	12	2007	CHAFEN	CHFE3	0.1	2	Chamaesyce fendleri	4	
07GY001	GY	D	12	2007	COMERE	COER	0.1	7	Commelina erecta	4	
07GY001	GY	D	12	2007	CRYCIN	CRCI3	1.5	15	Cryptantha cinerea	4	
07GY001	GY	D	12	2007	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	D	12	2007	ERASEC	ERSE	6	18	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	D	12	2007	HETVIL	HEVI4	5	14	Heterotheca villosa	4	07GC001- F37
07GY001	GY	D	12	2007	LECMUC	LEMU3	0.1	10	Lechea mucronata	4	07GC001- F27
07GY001	GY	D	12	2007	PARJAM	PAJA	0.1	8	Paronychia jamesii	4	
07GY001	GY	D	12	2007	PASSETS	PASES	20	18	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	12	2007	PLAWRI4	PLWR	0.5	15	Plantago wrightiana	4	07GC001- F24
07GY001	GY	D	12	2007	QUEHAV	QUHA3	1.5	12	Quercus havardii	2	
07GY001	GY	D	12	2007	SCHSCO	SCSC	30	22	Schizachyrium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									scoparium		
07GY001	GY	D	12	2007	THEMEG	THME	1	60	Thelesperma megapotamicum	4	
07GY001	GY	D	12	2007	XANSPI2	MAPI	0.1	14	Xanthisma spinulosum	4	
07GY001	GY	D	12	2007	XANTEXD	XATED2	0.5	15	Xanthisma texanum ssp. drummondii	4	
07GY001	GY	D	22	2007	APHRAM	APRA	0.5	12	Aphanostephus ramosissimus	4	
07GY001	GY	D	22	2007	ARIPUR	ARPU9	1	10	Aristida purpurea	3	
07GY001	GY	D	22	2007	BOUHIR	BOHI2	10	7	Bouteloua hirsuta	3	
07GY001	GY	D	22	2007	COMDIA	CODI4	0.5	30	Commelina dianthifolia	4	
07GY001	GY	D	22	2007	CRYCIN	CRCI3	3	28	Cryptantha cinerea	4	
07GY001	GY	D	22	2007	ERASEC	ERSE	3	20	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	D	22	2007	ERASES	ERSE2	1	20	Eragrostis sessilispica	3	
07GY001	GY	D	22	2007	ERIANN	ERAN4	0.1	65	Eriogonum annuum	4	
07GY001	GY	D	22	2007	LECMUC	LEMU3	0.1	10	Lechea mucronata	4	07GC001- F27
07GY001	GY	D	22	2007	LINRIGR	LIRIR	0.5	40	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	D	22	2007	PASSETS	PASES	6	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	22	2007	SCHSCO	SCSC	20	25	Schizachyrium scoparium	3	
07GY001	GY	D	22	2007	SPOCRY	SPCR	2	40	Sporobolus cryptandrus	3	
07GY001	GY	D	22	2007	THEMEG	THME	2	70	Thelesperma megapotamicum	4	
07GY001	GY	D	32	2007	APHRAM	APRA	0.1	6	Aphanostephus	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									ramosissimus		
07GY001	GY	D	32	2007	BOUHIR	BOHI2	10	10	Bouteloua hirsuta	3	
07GY001	GY	D	32	2007	CALSER	CASE12	2	20	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	D	32	2007	COMERE	COER	0.1	10	Commelina erecta	4	
07GY001	GY	D	32	2007	CRYCIN	CRCI3	2	20	Cryptantha cinerea	4	
07GY001	GY	D	32	2007	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	D	32	2007	DIGPUB	DIPU9	8	18	Digitaria pubiflora	3	
07GY001	GY	D	32	2007	ERASEC	ERSE	2	14	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	D	32	2007	ERASES	ERSE2	2	15	Eragrostis sessilispica	3	
07GY001	GY	D	32	2007	EVOSER	EVSE	2	12	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	D	32	2007	LINRIGR	LIRIR	0.1	30	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	D	32	2007	PASSETS	PASES	8	18	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	32	2007	PLAWRI4	PLWR	0.1	8	Plantago wrightiana	4	07GC001- F24
07GY001	GY	D	32	2007	SCHSCO	SCSC	20	30	Schizachyrium scoparium	3	
07GY001	GY	D	32	2007	SPOCRY	SPCR	2	25	Sporobolus cryptandrus	3	
07GY001	GY	D	32	2007	THEMEG	THME	1	68	Thelesperma megapotamicum	4	
07GY001	GY	D	42	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GY001	GY	D	42	2007	ANDHAL	ANHA	4	65	Andropogon hallii	3	
07GY001	GY	D	42	2007	ARIPUR	ARPU9	0.5	20	Aristida purpurea	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	D	42	2007	BOUCUR	BOCU	0.5	20	Bouteloua curtipendula	3	
07GY001	GY	D	42	2007	BOUHIR	BOHI2	6	9	Bouteloua hirsuta	3	
07GY001	GY	D	42	2007	COMDIA	CODI4	0.5	10	Commelina dianthifolia	4	
07GY001	GY	D	42	2007	DIGPUB	DIPU9	3	16	Digitaria pubiflora	3	
07GY001	GY	D	42	2007	ERIBELB	ERBEB	0.1	10	Erigeron bellidiastrum var. bellidiastrum	4	07GR001- F3
07GY001	GY	D	42	2007	FROGRA	FRGR3	0.1	3	Froelichia gracilis	4	
07GY001	GY	D	42	2007	PASSETS	PASES	3	14	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	42	2007	QUEHAV	QUHA3	3	65	Quercus havardii	2	
07GY001	GY	D	42	2007	SCHSCO	SCSC	25	35	Schizachyrium scoparium	3	
07GY001	GY	D	42	2007	SPOCRY	SPCR	1	35	Sporobolus cryptandrus	3	
07GY001	GY	D	42	2007	THEMEG	THME	1	70	Thelesperma megapotamicum	4	
07GY001	GY	E	2	2007	AMBPSI	AMPS	2	18	Ambrosia psilostachya	4	
07GY001	GY	E	2	2007	ARIPUR	ARPU9	15	20	Aristida purpurea	3	
07GY001	GY	E	2	2007	BOUHIR	BOHI2	0.5	15	Bouteloua hirsuta	3	
07GY001	GY	E	2	2007	COMERE	COER	2	20	Commelina erecta	4	
07GY001	GY	E	2	2007	CRYCIN	CRCI3	1.5	15	Cryptantha cinerea	4	
07GY001	GY	E	2	2007	CYCATR	CYAT	0.1	5	Cycloloma atropicifolium	4	
07GY001	GY	E	2	2007	ERIANN	ERAN4	0.1	42	Eriogonum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									annuum		
07GY001	GY	E	2	2007	EVOSE	EVSE	4	20	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	E	2	2007	HETVIL	HEVI4	2	24	Heterotheca villosa	4	07GC001- F37
07GY001	GY	E	2	2007	PARJAM	PAJA	8	6	Paronychia jamesii	4	
07GY001	GY	E	2	2007	PASSETS	PASES	5	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	2	2007	QUEHAV	QUHA3	20	35	Quercus havardii	2	
07GY001	GY	E	2	2007	SCHSCO	SCSC	30	28	Schizachyrium scoparium	3	
07GY001	GY	E	2	2007	THEMEG	THME	1	85	Thelesperma megapotamicum	4	
07GY001	GY	E	2	2007	XANSPI2	MAPI	2	30	Xanthisma spinulosum	4	
07GY001	GY	E	12	2007	ARIPUR	ARPU9	3	20	Aristida purpurea	3	
07GY001	GY	E	12	2007	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GY001	GY	E	12	2007	CALSER	CASE12	0.5	12	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	E	12	2007	CRYCIN	CRCI3	0.5	22	Cryptantha cinerea	4	
07GY001	GY	E	12	2007	GAUVIL	GAVI2	0.1	30	Gaura villosa	4	
07GY001	GY	E	12	2007	HETVIL	HEVI4	2	30	Heterotheca villosa	4	07GC001- F37
07GY001	GY	E	12	2007	LINRIGR	LIRIR	0.5	35	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	E	12	2007	PASSETS	PASES	0.5	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	12	2007	QUEHAV	QUHA3	15	75	Quercus havardii	2	
07GY001	GY	E	12	2007	SCHSCO	SCSC	35	30	Schizachyrium scoparium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	E	22	2007	ANDHAL	ANHA	30	55	Andropogon hallii	3	
07GY001	GY	E	22	2007	ARIPUR	ARPU9	10	25	Aristida purpurea	3	
07GY001	GY	E	22	2007	BOUHIR	BOHI2	0.5	6	Bouteloua hirsuta	3	
07GY001	GY	E	22	2007	QUEHAV	QUHA3	5	45	Quercus havardii	2	
07GY001	GY	E	22	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GY001	GY	E	22	2007	SPOCRY	SPCR	0.5	15	Sporobolus cryptandrus	3	
07GY001	GY	E	22	2007	THEMEG	THME	2	64	Thelesperma megapotamicum	4	
07GY001	GY	E	32	2007	AMBPSI	AMPS	0.5	16	Ambrosia psilostachya	4	
07GY001	GY	E	32	2007	ARIPUR	ARPU9	5	25	Aristida purpurea	3	
07GY001	GY	E	32	2007	BOUCUR	BOCU	10	30	Bouteloua curtipendula	3	
07GY001	GY	E	32	2007	BOUHIR	BOHI2	10	16	Bouteloua hirsuta	3	
07GY001	GY	E	32	2007	ERIANN	ERAN4	0.5	54	Eriogonum annuum	4	
07GY001	GY	E	32	2007	QUEHAV	QUHA3	60	35	Quercus havardii	2	
07GY001	GY	E	32	2007	SCHSCO	SCSC	20	35	Schizachyrium scoparium	3	
07GY001	GY	E	32	2007	THEMEG	THME	0.1	25	Thelesperma megapotamicum	4	
07GY001	GY	E	32	2007	XANSPI2	MAPI	0.1	18	Xanthisma spinulosum	4	
07GY001	GY	E	32	2007	YUCGLA	YUGL	8	60	Yucca glauca	2	
07GY001	GY	E	42	2007	AMBPSI	AMPS	0.5	22	Ambrosia psilostachya	4	
07GY001	GY	E	42	2007	ARIPUR	ARPU9	8	20	Aristida purpurea	3	
07GY001	GY	E	42	2007	BOUCUR	BOCU	2	20	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									curtipendula		
07GY001	GY	E	42	2007	BOUHIR	BOHI2	3	15	Bouteloua hirsuta	3	
07GY001	GY	E	42	2007	CHECYC	CHCY	0.1	30	Chenopodium cycloides	4	07GC001- F28
07GY001	GY	E	42	2007	CROTEX	CRTE4	1	32	Croton texensis	4	
07GY001	GY	E	42	2007	CYPRET	CYRE14	0.1	30	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	E	42	2007	ERIANN	ERAN4	0.5	60	Eriogonum annuum	4	
07GY001	GY	E	42	2007	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	42	2007	QUEHAV	QUHA3	60	50	Quercus havardii	2	
07GY001	GY	E	42	2007	SCHSCO	SCSC	12	35	Schizachyrium scoparium	3	
07GY001	GY	E	42	2007	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GY001	GY	E	42	2007	THEMEG	THME	1	90	Thelesperma megapotamicum	4	
07GY001	GY	F	2	2007	ASCENG	ASEN	1	52	Asclepias engelmanniana	4	07GY001- F1
07GY001	GY	F	2	2007	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GY001	GY	F	2	2007	CALSER	CASE12	2	37	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	F	2	2007	CHAFEN	CHFE3	1	4	Chamaesyce fendleri	4	
07GY001	GY	F	2	2007	DALPUR	DAPU5	0.5	15	Dalea purpurea	4	07GC001- F38
07GY001	GY	F	2	2007	ERASES	ERSE2	1	15	Eragrostis sessilispica	3	
07GY001	GY	F	2	2007	HETVIL	HEVI4	0.5	24	Heterotheca villosa	4	07GC001- F37
07GY001	GY	F	2	2007	LINRIGR	LIRIR	0.1	33	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	F	2	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	F	2	2007	PASSETS	PASES	2	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	2	2007	SCHSCO	SCSC	40	20	Schizachyrium scoparium	3	
07GY001	GY	F	2	2007	SPOCRY	SPCR	2	10	Sporobolus cryptandrus	3	
07GY001	GY	F	2	2007	XANSPI2	MAPI	1	30	Xanthisma spinulosum	4	
07GY001	GY	F	12	2007	AMBPSI	AMPS	0.1	9	Ambrosia psilostachya	4	
07GY001	GY	F	12	2007	ANDHAL	ANHA	1	35	Andropogon hallii	3	
07GY001	GY	F	12	2007	APHRAM	APRA	0.5	13	Aphanostephus ramosissimus	4	
07GY001	GY	F	12	2007	BOUCUR	BOCU	3	18	Bouteloua curtipendula	3	
07GY001	GY	F	12	2007	BOUHIR	BOHI2	4	14	Bouteloua hirsuta	3	
07GY001	GY	F	12	2007	CALSER	CASE12	3	25	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	F	12	2007	COMERE	COER	0.5	9	Commelina erecta	4	
07GY001	GY	F	12	2007	CRYCIN	CRCI3	0.5	9	Cryptantha cinerea	4	
07GY001	GY	F	12	2007	HESCOMC	HECOC8	1	35	Hesperostipa comata ssp. comata	3	07GC001- G18
07GY001	GY	F	12	2007	PASSETS	PASES	5	25	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	12	2007	QUEHAV	QUHA3	25	45	Quercus havardii	2	
07GY001	GY	F	12	2007	SCHSCO	SCSC	50	30	Schizachyrium scoparium	3	
07GY001	GY	F	12	2007	SPOCRY	SPCR	1	32	Sporobolus cryptandrus	3	
07GY001	GY	F	12	2007	XANSPI2	MAPI	0.1	18	Xanthisma	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									spinulosum		
07GY001	GY	F	22	2007	AMBPSI	AMPS	3	35	Ambrosia psilostachya	4	
07GY001	GY	F	22	2007	BOUCUR	BOCU	1	25	Bouteloua curtipendula	3	
07GY001	GY	F	22	2007	BOUHIR	BOHI2	8	10	Bouteloua hirsuta	3	
07GY001	GY	F	22	2007	COMERE	COER	0.1	15	Commelina erecta	4	
07GY001	GY	F	22	2007	ERASEC	ERSE	1	25	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	F	22	2007	ERIBELB	ERBEB	0.1	18	Erigeron bellidiastrum var. bellidiastrum	4	07GR001- F3
07GY001	GY	F	22	2007	PASSETS	PASES	3	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	22	2007	POMJAM	POJA5	0.5	17	Pomaria jamesii	4	
07GY001	GY	F	22	2007	QUEHAV	QUHA3	20	40	Quercus havardii	2	
07GY001	GY	F	22	2007	SCHSCO	SCSC	50	30	Schizachyrium scoparium	3	
07GY001	GY	F	22	2007	SPOCRY	SPCR	0.1	30	Sporobolus cryptandrus	3	
07GY001	GY	F	22	2007	XANSPI2	MAPI	0.1	18	Xanthisma spinulosum	4	
07GY001	GY	F	22	2007	YUCGLA	YUGL	35	60	Yucca glauca	2	
07GY001	GY	F	32	2007	AMBPSI	AMPS	0.5	10	Ambrosia psilostachya	4	
07GY001	GY	F	32	2007	APHRAM	APRA	0.5	15	Aphanostephus ramosissimus	4	
07GY001	GY	F	32	2007	BOUHIR	BOHI2	15	12	Bouteloua hirsuta	3	
07GY001	GY	F	32	2007	CALSER	CASE12	8	40	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	F	32	2007	CENSPI	CESP4	1	18	Cenchrus spinifex	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	F	32	2007	COMERE	COER	0.5	8	Commelina erecta	4	
07GY001	GY	F	32	2007	DIGPUB	DIPU9	3	30	Digitaria pubiflora	3	
07GY001	GY	F	32	2007	GUTSAR	GUSA2	10	40	Gutierrezia sarrothrae	2.5	
07GY001	GY	F	32	2007	LINRIGR	LIRIR	0.5	40	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	F	32	2007	PARJAM	PAJA	0.5	5	Paronychia jamesii	4	
07GY001	GY	F	32	2007	PSITAG	PSTA	0.5	6	Psilostrophe tagetina	4	
07GY001	GY	F	32	2007	QUEHAV	QUHA3	30	50	Quercus havardii	2	
07GY001	GY	F	32	2007	SCHSCO	SCSC	30	30	Schizachyrium scoparium	3	
07GY001	GY	F	32	2007	THEMEG	THME	1	66	Thelesperma megapotamicum	4	
07GY001	GY	F	32	2007	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GY001	GY	F	42	2007	AMBPSI	AMPS	1	30	Ambrosia psilostachya	4	
07GY001	GY	F	42	2007	BOUCUR	BOCU	0.5	20	Bouteloua curtipendula	3	
07GY001	GY	F	42	2007	BOUHIR	BOHI2	5	12	Bouteloua hirsuta	3	
07GY001	GY	F	42	2007	COMERE	COER	0.1	8	Commelina erecta	4	
07GY001	GY	F	42	2007	ERIANN	ERAN4	0.1	37	Eriogonum annuum	4	
07GY001	GY	F	42	2007	LIAPUN	LIPU	3	35	Liatris punctata	4	
07GY001	GY	F	42	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GY001	GY	F	42	2007	POMJAM	POJA5	0.5	12	Pomaria jamesii	4	
07GY001	GY	F	42	2007	QUEHAV	QUHA3	20	50	Quercus havardii	2	
07GY001	GY	F	42	2007	SCHSCO	SCSC	35	25	Schizachyrium scoparium	3	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	F	42	2007	SPOCRY	SPCR	0.5	30	Sporobolus cryptandrus	3	
07GY001	GY	F	42	2007	THEMEG	THME	1	90	Thelesperma megapotamicum	4	
07GY001	GY	G	2	2007	AMBPSI	AMPS	0.1	8	Ambrosia psilostachya	4	
07GY001	GY	G	2	2007	ANDHAL	ANHA	20	45	Andropogon hallii	3	
07GY001	GY	G	2	2007	APHRAM	APRA	1.5	25	Aphanostephus ramosissimus	4	
07GY001	GY	G	2	2007	ARIPURL	ARPUL	5	14	Aristida purpurea var. longiseta	3	
07GY001	GY	G	2	2007	BOUCUR	BOCU	1	18	Bouteloua curtipendula	3	
07GY001	GY	G	2	2007	BOUHIR	BOHI2	5	12	Bouteloua hirsuta	3	
07GY001	GY	G	2	2007	CALSER	CASE12	10	24	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	G	2	2007	COMERE	COER	0.1	13	Commelina erecta	4	
07GY001	GY	G	2	2007	DIGPUB	DIPU9	4	22	Digitaria pubiflora	3	
07GY001	GY	G	2	2007	ERASEC	ERSE	5	25	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	G	2	2007	ERIBELB	ERBEB	0.5	15	Erigeron bellidiastrum var. bellidiastrum	4	07GR001- F3
07GY001	GY	G	2	2007	ERIANN	ERAN4	1	74	Eriogonum annuum	4	
07GY001	GY	G	2	2007	HYMFLAC	HYFLC	1	11	Hymenopappus flavescens var. canotomentosus	4	07GC001- F7
07GY001	GY	G	2	2007	LINRIGR	LIRIR	2	50	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	G	2	2007	PASSETS	PASES	2	18	Paspalum setaceum var.	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GY001	GY	G	2	2007	PSITAG	PSTA	1.5	10	Psilostrophe tagetina	4	
07GY001	GY	G	2	2007	QUEHAV	QUHA3	20	35	Quercus havardii	2	
07GY001	GY	G	2	2007	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GY001	GY	G	2	2007	SPOCRY	SPCR	2	16	Sporobolus cryptandrus	3	
07GY001	GY	G	2	2007	THEMEG	THME	0.5	22	Thelesperma megapotamicum	4	
07GY001	GY	G	12	2007	AMBPSI	AMPS	0.1	5	Ambrosia psilostachya	4	
07GY001	GY	G	12	2007	APHRAM	APRA	0.5	24	Aphanostephus ramosissimus	4	
07GY001	GY	G	12	2007	BOUCUR	BOCU	1	15	Bouteloua curtipendula	3	
07GY001	GY	G	12	2007	BOUHIR	BOHI2	4	8	Bouteloua hirsuta	3	
07GY001	GY	G	12	2007	COMERE	COER	0.5	25	Commelina erecta	4	
07GY001	GY	G	12	2007	CYPRET	CYRE14	0.1	20	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	G	12	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	G	12	2007	ERIANN	ERAN4	0.1	50	Eriogonum annuum	4	
07GY001	GY	G	12	2007	FROGRA	FRGR3	0.5	45	Froelichia gracilis	4	
07GY001	GY	G	12	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	12	2007	QUEHAV	QUHA3	8	30	Quercus havardii	2	
07GY001	GY	G	12	2007	SCHSCO	SCSC	40	30	Schizachyrium scoparium	3	
07GY001	GY	G	12	2007	SPOCRY	SPCR	0.1	25	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	G	12	2007	THEMEG	THME	0.5	60	Thelesperma megapotamicum	4	
07GY001	GY	G	12	2007	XANSPI2	MAPI	0.5	23	Xanthisma spinulosum	4	
07GY001	GY	G	22	2007	BOUHIR	BOHI2	20	15	Bouteloua hirsuta	3	
07GY001	GY	G	22	2007	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	G	22	2007	CHAERI	CHER2	15	14	Chaetopappa ericoides	4	
07GY001	GY	G	22	2007	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	G	22	2007	CYPRET	CYRE14	0.1	9	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	G	22	2007	DIGPUB	DIPU9	20	18	Digitaria pubiflora	3	
07GY001	GY	G	22	2007	PASSETS	PASES	1.5	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	22	2007	PLAWRI4	PLWR	0.5	10	Plantago wrightiana	4	07GC001- F24
07GY001	GY	G	22	2007	QUEHAV	QUHA3	25	35	Quercus havardii	2	
07GY001	GY	G	22	2007	SCHSCO	SCSC	25	25	Schizachyrium scoparium	3	
07GY001	GY	G	32	2007	AMBPSI	AMPS	0.1	25	Ambrosia psilostachya	4	
07GY001	GY	G	32	2007	APHRAM	APRA	3	15	Aphanostephus ramosissimus	4	
07GY001	GY	G	32	2007	ARIPUR	ARPU9	2	20	Aristida purpurea	3	
07GY001	GY	G	32	2007	BOUCUR	BOCU	2	22	Bouteloua curtipendula	3	
07GY001	GY	G	32	2007	BOUHIR	BOHI2	1	12	Bouteloua hirsuta	3	
07GY001	GY	G	32	2007	CHAERI	CHER2	4	11	Chaetopappa ericoides	4	
07GY001	GY	G	32	2007	COMERE	COER	0.5	18	Commelina	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									erecta		
07GY001	GY	G	32	2007	HETVIL	HEVI4	0.1	12	Heterotheca villosa	4	07GC001- F37
07GY001	GY	G	32	2007	PASSETS	PASES	7	22	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	32	2007	PSITAG	PSTA	0.1	4	Psilostrophe tagetina	4	
07GY001	GY	G	32	2007	QUEHAV	QUHA3	50	45	Quercus havardii	2	
07GY001	GY	G	32	2007	SCHSCO	SCSC	18	28	Schizachyrium scoparium	3	
07GY001	GY	G	32	2007	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GY001	GY	G	32	2007	THEMEG	THME	0.1	40	Thelesperma megapotamicum	4	
07GY001	GY	G	32	2007	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GY001	GY	G	42	2007	AMBPSI	AMPS	4	25	Ambrosia psilostachya	4	
07GY001	GY	G	42	2007	APHRAM	APRA	6	18	Aphanostephus ramosissimus	4	
07GY001	GY	G	42	2007	ARIPUR	ARPU9	5	18	Aristida purpurea	3	
07GY001	GY	G	42	2007	BOUCUR	BOCU	5	15	Bouteloua curtipendula	3	
07GY001	GY	G	42	2007	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GY001	GY	G	42	2007	CHECYC	CHCY	0.1	68	Chenopodium cycloides	4	07GC001- F28
07GY001	GY	G	42	2007	CRYCIN	CRCI3	15	30	Cryptantha cinerea	4	
07GY001	GY	G	42	2007	ERIANN	ERAN4	10	70	Eriogonum annuum	4	
07GY001	GY	G	42	2007	GAUVIL	GAVI2	0.5	10	Gaura villosa	4	
07GY001	GY	G	42	2007	HESCOMC	HECOC8	2	25	Hesperostipa comata ssp. comata	3	07GC001- G18

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	G	42	2007	LITMUL	LIMU3	4	18	Lithospermum multiflorum	4	
07GY001	GY	G	42	2007	MUNSQU	MUSQ3	20	10	Munroa squarrosa	3	
07GY001	GY	G	42	2007	PASSETS	PASES	0.5	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	42	2007	QUEHAV	QUHA3	30	40	Quercus havardii	2	
07GY001	GY	G	42	2007	SCHSCO	SCSC	5	25	Schizachyrium scoparium	3	
07GY001	GY	G	42	2007	SPOCRY	SPCR	1	18	Sporobolus cryptandrus	3	
07GY001	GY	G	42	2007	XANSPI2	MAPI	1	25	Xanthisma spinulosum	4	
07GY001	GY	H	2	2007	AMBPSI	AMPS	0.1	18	Ambrosia psilostachya	4	
07GY001	GY	H	2	2007	APHRAM	APRA	6	20	Aphanostephus ramosissimus	4	
07GY001	GY	H	2	2007	ARIPUR	ARPU9	30	20	Aristida purpurea	3	
07GY001	GY	H	2	2007	BOUHIR	BOHI2	7	12	Bouteloua hirsuta	3	
07GY001	GY	H	2	2007	CALSER	CASE12	1.5	23	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	H	2	2007	CENSPI	CESP4	2	20	Cenchrus spinifex	3	
07GY001	GY	H	2	2007	CHECYC	CHCY	0.1	35	Chenopodium cycloides	4	07GC001- F28
07GY001	GY	H	2	2007	COMERE	COER	2	35	Commelina erecta	4	
07GY001	GY	H	2	2007	CYCATR	CYAT	1	17	Cycloloma atriplicifolium	4	
07GY001	GY	H	2	2007	DIGPUB	DIPU9	2	22	Digitaria pubiflora	3	
07GY001	GY	H	2	2007	ERASEC	ERSE	7	15	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	H	2	2007	ERASES	ERSE2	1	15	Eragrostis	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									sessilispica		
07GY001	GY	H	2	2007	ERIANN	ERAN4	0.5	83	Eriogonum annuum	4	
07GY001	GY	H	2	2007	FROGRA	FRGR3	0.5	27	Froelichia gracilis	4	
07GY001	GY	H	2	2007	LECMUC	LEMU3	0.1	18	Lechea mucronata	4	07GC001- F27
07GY001	GY	H	2	2007	PARJAM	PAJA	0.5	11	Paronychia jamesii	4	
07GY001	GY	H	2	2007	PASSETS	PASES	1	20	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	2	2007	PROGLA	PRGL2	50	125	Prosopis glandulosa	2	
07GY001	GY	H	2	2007	QUEHAV	QUHA3	7	35	Quercus havardii	2	
07GY001	GY	H	2	2007	SCHSCO	SCSC	10	15	Schizachyrium scoparium	3	
07GY001	GY	H	2	2007	XANSPI2	MAPI	1	25	Xanthisma spinulosum	4	
07GY001	GY	H	12	2007	AMBPSI	AMPS	0.5	16	Ambrosia psilostachya	4	
07GY001	GY	H	12	2007	BOUCUR	BOCU	0.5	14	Bouteloua curtipendula	3	
07GY001	GY	H	12	2007	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GY001	GY	H	12	2007	COMERE	COER	0.5	12	Commelina erecta	4	
07GY001	GY	H	12	2007	DIGPUB	DIPU9	0.5	15	Digitaria pubiflora	3	
07GY001	GY	H	12	2007	ERASEC	ERSE	3	14	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	H	12	2007	ERIANN	ERAN4	0.5	45	Eriogonum annuum	4	
07GY001	GY	H	12	2007	PARJAM	PAJA	0.5	8	Paronychia jamesii	4	
07GY001	GY	H	12	2007	PLAWRI4	PLWR	1	10	Plantago wrightiana	4	07GC001- F24

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	H	12	2007	PSITAG	PSTA	0.5	10	Psilostrophe tagetina	4	
07GY001	GY	H	12	2007	QUEHAV	QUHA3	30	35	Quercus havardii	2	
07GY001	GY	H	12	2007	SCHSCO	SCSC	30	25	Schizachyrium scoparium	3	
07GY001	GY	H	12	2007	SPOCRY	SPCR	3	15	Sporobolus cryptandrus	3	
07GY001	GY	H	12	2007	THEMEG	THME	1	75	Thelesperma megapotamicum	4	
07GY001	GY	H	22	2007	AMBPSI	AMPS	0.5	25	Ambrosia psilostachya	4	
07GY001	GY	H	22	2007	ANDHAL	ANHA	10	35	Andropogon hallii	3	
07GY001	GY	H	22	2007	BOUHIR	BOHI2	10	10	Bouteloua hirsuta	3	
07GY001	GY	H	22	2007	CHAFEN	CHFE3	2	8	Chamaesyce fendleri	4	
07GY001	GY	H	22	2007	COMERE	COER	0.5	20	Commelina erecta	4	
07GY001	GY	H	22	2007	EVOSER	EVSE	0.5	8	Evolvulus sericeus	4	07GC001- F34
07GY001	GY	H	22	2007	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	22	2007	PLAWRI4	PLWR	0.1	4	Plantago wrightiana	4	07GC001- F24
07GY001	GY	H	22	2007	QUEHAV	QUHA3	35	30	Quercus havardii	2	
07GY001	GY	H	22	2007	SCHSCO	SCSC	20	22	Schizachyrium scoparium	3	
07GY001	GY	H	22	2007	SPOCRY	SPCR	2	12	Sporobolus cryptandrus	3	
07GY001	GY	H	32	2007	APHRAM	APRA	0.1	20	Aphanostephus ramosissimus	4	
07GY001	GY	H	32	2007	BOUCUR	BOCU	3	15	Bouteloua curtipendula	3	
07GY001	GY	H	32	2007	BOUHIR	BOHI2	2	10	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hirsuta		
07GY001	GY	H	32	2007	CALSER	CASE12	0.5	25	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	H	32	2007	CHAGLY	CHGL13	0.1	4	Chamaesyce glyptosperma	4	07GC001- F14
07GY001	GY	H	32	2007	CYCATR	CYAT	0.1	12	Cycloloma atriplicifolium	4	
07GY001	GY	H	32	2007	CYPRE14	CYRE14	0.1	15	Cyperus retroflexus	3	07GC001- G14
07GY001	GY	H	32	2007	DIGPUB	DIPU9	3	20	Digitaria pubiflora	3	
07GY001	GY	H	32	2007	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	H	32	2007	LIAPUN	LIPU	0.5	35	Liatris punctata	4	
07GY001	GY	H	32	2007	PARJAM	PAJA	2	17	Paronychia jamesii	4	
07GY001	GY	H	32	2007	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	32	2007	QUEHAV	QUHA3	30	35	Quercus havardii	2	
07GY001	GY	H	32	2007	SCHSCO	SCSC	32	25	Schizachyrium scoparium	3	
07GY001	GY	H	32	2007	XANSPI2	MAPI	0.1	25	Xanthisma spinulosum	4	
07GY001	GY	H	42	2007	ANDHAL	ANHA	3	45	Andropogon hallii	3	
07GY001	GY	H	42	2007	APHRAM	APRA	0.5	10	Aphanostephus ramosissimus	4	
07GY001	GY	H	42	2007	BOUHIR	BOHI2	15	15	Bouteloua hirsuta	3	
07GY001	GY	H	42	2007	CALSER	CASE12	1	18	Calylophus serrulatus	4	07GC001- F19
07GY001	GY	H	42	2007	CHAGLY	CHGL13	0.1	5	Chamaesyce glyptosperma	4	07GC001- F14
07GY001	GY	H	42	2007	COMERE	COER	1	15	Commelina erecta	4	
07GY001	GY	H	42	2007	CRYCIN	CRCI3	0.1	1	Cryptantha	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cinerea		
07GY001	GY	H	42	2007	ERASEC	ERSE	2	14	Eragrostis secundiflora	3	07GC001- G10
07GY001	GY	H	42	2007	HETSUB	HESU3	0.5	10	Heterotheca subaxillaris	4	
07GY001	GY	H	42	2007	LINRIGR	LIRIR	0.5	26	Linum rigidum var. rigidum	4	07GC001- F16
07GY001	GY	H	42	2007	PARJAM	PAJA	0.1	2	Paronychia jamesii	4	
07GY001	GY	H	42	2007	PASSETS	PASES	2	16	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	42	2007	PLAWRI4	PLWR	0.1	12	Plantago wrightiana	4	07GC001- F24
07GY001	GY	H	42	2007	QUEHAV	QUHA3	20	35	Quercus havardii	2	
07GY001	GY	H	42	2007	SCHSCO	SCSC	20	20	Schizachyrium scoparium	3	
07GY001	GY	H	42	2007	THEMEG	THME	0.5	16	Thelesperma megapotamicum	4	
07GC001	GC	A	2	2009	AMBPSI	AMPS	0.1	30	Ambrosia psilostachya	4	
07GC001	GC	A	2	2009	ARIPUR	ARPU9	1	18	Aristida purpurea	3	
07GC001	GC	A	2	2009	ASCVIR	ASVI	0.1	20	Asclepias viridiflora	4	
07GC001	GC	A	2	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GC001	GC	A	2	2009	CENSPI	CESP4	12	10	Cenchrus spinifex	3	
07GC001	GC	A	2	2009	DIGPUB	DIPU9	2	12	Digitaria pubiflora	3	
07GC001	GC	A	2	2009	MIRLIN	MILI3	0.1	12	Mirabilis linearis	4	
07GC001	GC	A	2	2009	QUEHAV	QUHA3	28	40	Quercus havardii	2	read quads toward west
07GC001	GC	A	2	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GC001	GC	A	2	2009	SPOCRY	SPCR	2	30	Sporobolus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cryptandrus		
07GC001	GC	A	12	2009	ANDHAL	ANHA	25	40	Andropogon hallii	3	
07GC001	GC	A	12	2009	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GC001	GC	A	12	2009	CALSER	CASE12	0.5	16	Calylophus serrulatus	4	
07GC001	GC	A	12	2009	CENSPI	CESP4	3	8	Cenchrus spinifex	3	
07GC001	GC	A	12	2009	COMERE	COER	0.1	8	Commelina erecta	4	
07GC001	GC	A	12	2009	CRYCIN	CRCI3	0.1	8	Cryptantha cinerea	4	
07GC001	GC	A	12	2009	CYPRET	CYRE14	0.5	12	Cyperus retroflexus	3	
07GC001	GC	A	12	2009	DIGPUB	DIPU9	2	17	Digitaria pubiflora	3	
07GC001	GC	A	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	12	2009	QUEHAV	QUHA3	7	50	Quercus havardii	2	
07GC001	GC	A	12	2009	SCHSCO	SCSC	2	15	Schizachyrium scoparium	3	
07GC001	GC	A	12	2009	SPOCRY	SPCR	3	25	Sporobolus cryptandrus	3	
07GC001	GC	A	22	2009	ANDHAL	ANHA	8	40	Andropogon hallii	3	
07GC001	GC	A	22	2009	QUEHAV	QUHA3	8	35	Quercus havardii	2	
07GC001	GC	A	22	2009	SCHSCO	SCSC	12	25	Schizachyrium scoparium	3	
07GC001	GC	A	22	2009	SPOCRY	SPCR	2	35	Sporobolus cryptandrus	3	
07GC001	GC	A	32	2009	ANDHAL	ANHA	1	35	Andropogon hallii	3	
07GC001	GC	A	32	2009	ARIPUR	ARPU9	3	20	Aristida purpurea	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	A	32	2009	BOUHIR	BOHI2	2	15	Bouteloua hirsuta	3	
07GC001	GC	A	32	2009	DIGPUB	DIPU9	1	15	Digitaria pubiflora	3	
07GC001	GC	A	32	2009	ERASEC	ERSE	1	16	Eragrostis secundiflora	3	
07GC001	GC	A	32	2009	PARJAM	PAJA	0.5	6	Paronychia jamesii	4	
07GC001	GC	A	32	2009	PASSETS	PASES	3	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	32	2009	QUEHAV	QUHA3	30	45	Quercus havardii	2	
07GC001	GC	A	32	2009	SCHSCO	SCSC	14	24	Schizachyrium scoparium	3	
07GC001	GC	A	32	2009	SENSPA	SESP3	1	37	Senecio spartioides	4	
07GC001	GC	A	32	2009	SPOCRY	SPCR	3	30	Sporobolus cryptandrus	3	
07GC001	GC	A	42	2009	CYPRET	CYRE14	0.1	7	Cyperus retroflexus	3	
07GC001	GC	A	42	2009	PARJAM	PAJA	0.1	4	Paronychia jamesii	4	
07GC001	GC	A	42	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	A	42	2009	QUEHAV	QUHA3	52	45	Quercus havardii	2	
07GC001	GC	A	42	2009	SCHSCO	SCSC	8	20	Schizachyrium scoparium	3	
07GC001	GC	A	42	2009	SPOCRY	SPCR	5	40	Sporobolus cryptandrus	3	
07GC001	GC	B	2	2009	ARIPUR	ARPU9	7	15	Aristida purpurea	3	
07GC001	GC	B	2	2009	BOUHIR	BOHI2	3	12	Bouteloua hirsuta	3	
07GC001	GC	B	2	2009	CYLIMB	OPIM	0.1	10	Cylindropuntia imbricata	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	B	2	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	2	2009	QUEHAV	QUHA3	22	30	Quercus havardii	2	read quads toward west
07GC001	GC	B	2	2009	SCHSCO	SCSC	11	25	Schizachyrium scoparium	3	
07GC001	GC	B	12	2009	ARIPUR	ARPU9	4	25	Aristida purpurea	3	
07GC001	GC	B	12	2009	BOUCUR	BOCU	3	20	Bouteloua curtipendula	3	
07GC001	GC	B	12	2009	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GC001	GC	B	12	2009	EVOSER	EVSE	0.1	15	Evolvulus sericeus	4	
07GC001	GC	B	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	12	2009	QUEHAV	QUHA3	15	20	Quercus havardii	2	
07GC001	GC	B	12	2009	SCHSCO	SCSC	20	25	Schizachyrium scoparium	3	
07GC001	GC	B	12	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GC001	GC	B	22	2009	BOUCUR	BOCU	6	18	Bouteloua curtipendula	3	
07GC001	GC	B	22	2009	CALSER	CASE12	2	24	Calylophus serrulatus	4	
07GC001	GC	B	22	2009	EVOSER	EVSE	1	12	Evolvulus sericeus	4	
07GC001	GC	B	22	2009	QUEHAV	QUHA3	23	25	Quercus havardii	2	
07GC001	GC	B	22	2009	SCHSCO	SCSC	36	20	Schizachyrium scoparium	3	
07GC001	GC	B	22	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GC001	GC	B	32	2009	ARIPUR	ARPU9	3	25	Aristida purpurea	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	B	32	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GC001	GC	B	32	2009	PASSETS	PASES	1	7	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	32	2009	QUEHAV	QUHA3	38	35	Quercus havardii	2	
07GC001	GC	B	32	2009	SCHSCO	SCSC	3	25	Schizachyrium scoparium	3	
07GC001	GC	B	32	2009	SPOCRY	SPCR	1	40	Sporobolus cryptandrus	3	
07GC001	GC	B	42	2009	ARIPUR	ARPU9	2	25	Aristida purpurea	3	
07GC001	GC	B	42	2009	BOUHIR	BOHI2	1	7	Bouteloua hirsuta	3	
07GC001	GC	B	42	2009	CALSER	CASE12	1	18	Calylophus serrulatus	4	
07GC001	GC	B	42	2009	CRYCIN	CRCI3	0.1	12	Cryptantha cinerea	4	
07GC001	GC	B	42	2009	EVOSE	EVSE	0.5	15	Evolvulus sericeus	4	
07GC001	GC	B	42	2009	HELPETP	HEPEP	0.1	10	Helianthus petiolaris ssp. petiolaris	4	07GC001- F12
07GC001	GC	B	42	2009	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	B	42	2009	QUEHAV	QUHA3	8	25	Quercus havardii	2	
07GC001	GC	B	42	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GC001	GC	B	42	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	C	2	2009	BOUCUR	BOCU	0.1	6	Bouteloua curtipendula	3	
07GC001	GC	C	2	2009	BOUHIR	BOHI2	1	6	Bouteloua hirsuta	3	
07GC001	GC	C	2	2009	CALSER	CASE12	1	20	Calylophus	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									serrulatus		
07GC001	GC	C	2	2009	COMERE	COER	0.1	8	Commelina erecta	4	
07GC001	GC	C	2	2009	CYPRET	CYRE14	1	15	Cyperus retroflexus	3	
07GC001	GC	C	2	2009	GUTSAR	GUSA2	4	30	Gutierrezia sarrothrae	2.5	
07GC001	GC	C	2	2009	PASSETS	PASES	5	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	2	2009	POMJAM	POJA5	1	12	Pomaria jamesii	4	
07GC001	GC	C	2	2009	QUEHAV	QUHA3	13	33	Quercus havardii	2	read quads toward west
07GC001	GC	C	2	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GC001	GC	C	2	2009	XANSPI2	MAPI	0.1	12	Xanthisma spinulosum	4	
07GC001	GC	C	12	2009	AMBPSI	AMPS	0.5	20	Ambrosia psilostachya	4	
07GC001	GC	C	12	2009	ANDHAL	ANHA	8	30	Andropogon hallii	3	
07GC001	GC	C	12	2009	BOUHIR	BOHI2	0.5	10	Bouteloua hirsuta	3	
07GC001	GC	C	12	2009	CALSER	CASE12	2	15	Calylophus serrulatus	4	
07GC001	GC	C	12	2009	CRYCIN	CRCI3	0.5	20	Cryptantha cinerea	4	
07GC001	GC	C	12	2009	ERASEC	ERSE	1	17	Eragrostis secundiflora	3	
07GC001	GC	C	12	2009	MELLEU	MELE2	4	14	Melampodium leucanthum	4	
07GC001	GC	C	12	2009	PARJAM	PAJA	0.5	5	Paronychia jamesii	4	
07GC001	GC	C	12	2009	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	12	2009	QUEHAV	QUHA3	2	60	Quercus havardii	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	C	12	2009	SCHSCO	SCSC	9	20	Schizachyrium scoparium	3	
07GC001	GC	C	12	2009	SPOCRY	SPCR	0.1	20	Sporobolus cryptandrus	3	
07GC001	GC	C	12	2009	THEMEG	THME	0.1	47	Thelesperma megapotamicum	4	
07GC001	GC	C	22	2009	ANDHAL	ANHA	1	40	Andropogon hallii	3	
07GC001	GC	C	22	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GC001	GC	C	22	2009	CYPRET	CYRE14	0.1	20	Cyperus retroflexus	3	
07GC001	GC	C	22	2009	PASSETS	PASES	0.5	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	22	2009	QUEHAV	QUHA3	16	40	Quercus havardii	2	
07GC001	GC	C	22	2009	SCHSCO	SCSC	16	25	Schizachyrium scoparium	3	
07GC001	GC	C	22	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	C	22	2009	XANSPI2	MAPI	0.5	22	Xanthisma spinulosum	4	
07GC001	GC	C	32	2009	ANDHAL	ANHA	3	50	Andropogon hallii	3	
07GC001	GC	C	32	2009	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	
07GC001	GC	C	32	2009	COMERE	COER	0.5	17	Commelina erecta	4	
07GC001	GC	C	32	2009	LITMUL	LIMU3	0.5	15	Lithospermum multiflorum	4	
07GC001	GC	C	32	2009	MIRLIN	MILI3	0.5	75	Mirabilis linearis	4	change MIRGLA to MIRLIN-YC
07GC001	GC	C	32	2009	QUEHAV	QUHA3	12	40	Quercus havardii	2	
07GC001	GC	C	32	2009	SCHSCO	SCSC	15	25	Schizachyrium scoparium	3	
07GC001	GC	C	32	2009	SPOCRY	SPCR	2	20	Sporobolus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cryptandrus		
07GC001	GC	C	32	2009	XANSPI2	MAPI	1	15	Xanthisma spinulosum	4	
07GC001	GC	C	32	2009	YUCGLA	YUGL	15	60	Yucca glauca	2	
07GC001	GC	C	42	2009	AMBPSI	AMPS	0.5	18	Ambrosia psilostachya	4	
07GC001	GC	C	42	2009	ANDHAL	ANHA	3	35	Andropogon hallii	3	
07GC001	GC	C	42	2009	BOUHIR	BOHI2	2	7	Bouteloua hirsuta	3	
07GC001	GC	C	42	2009	HETVIL	HEVI4	2	20	Heterotheca villosa	4	
07GC001	GC	C	42	2009	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	C	42	2009	QUEHAV	QUHA3	33	45	Quercus havardii	2	
07GC001	GC	C	42	2009	SCHSCO	SCSC	0.5	20	Schizachyrium scoparium	3	
07GC001	GC	C	42	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GC001	GC	C	42	2009	THEMEG	THME	0.5	50	Thelesperma megapotamicum	4	
07GC001	GC	C	42	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GC001	GC	D	2	2009	AMBPSI	AMPS	0.1	25	Ambrosia psilostachya	4	
07GC001	GC	D	2	2009	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GC001	GC	D	2	2009	DALPUR	DAPU5	0.1	5	Dalea purpurea	4	
07GC001	GC	D	2	2009	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	
07GC001	GC	D	2	2009	PARJAM	PAJA	0.5	4	Paronychia jamesii	4	
07GC001	GC	D	2	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	2	2009	QUEHAV	QUHA3	17	45	Quercus	2	read quads



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									havardii		toward west
07GC001	GC	D	2	2009	SCHSCO	SCSC	27	30	Schizachyrium scoparium	3	
07GC001	GC	D	2	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GC001	GC	D	12	2009	AMBPSI	AMPS	0.5	27	Ambrosia psilostachya	4	
07GC001	GC	D	12	2009	ANDHAL	ANHA	6	55	Andropogon hallii	3	
07GC001	GC	D	12	2009	ARIPUR	ARPU9	0.5	15	Aristida purpurea	3	
07GC001	GC	D	12	2009	BOUHIR	BOHI2	0.5	10	Bouteloua hirsuta	3	
07GC001	GC	D	12	2009	CALSER	CASE12	0.5	13	Calylophus serrulatus	4	
07GC001	GC	D	12	2009	COMERE	COER	1	17	Commelina erecta	4	
07GC001	GC	D	12	2009	ERASEC	ERSE	5	20	Eragrostis secundiflora	3	
07GC001	GC	D	12	2009	HETVIL	HEVI4	0.5	23	Heterotheca villosa	4	
07GC001	GC	D	12	2009	LITMUL	LIMU3	0.5	14	Lithospermum multiflorum	4	
07GC001	GC	D	12	2009	PARJAM	PAJA	0.5	5	Paronychia jamesii	4	
07GC001	GC	D	12	2009	QUEHAV	QUHA3	15	25	Quercus havardii	2	
07GC001	GC	D	12	2009	SCHSCO	SCSC	20	25	Schizachyrium scoparium	3	
07GC001	GC	D	12	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GC001	GC	D	22	2009	ANDHAL	ANHA	2	45	Andropogon hallii	3	
07GC001	GC	D	22	2009	BOUHIR	BOHI2	3	10	Bouteloua hirsuta	3	
07GC001	GC	D	22	2009	COMERE	COER	1	8	Commelina erecta	4	
07GC001	GC	D	22	2009	CYPRET	CYRE14	0.5	14	Cyperus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									retroflexus		
07GC001	GC	D	22	2009	DALNANN	DANAN	0.5	9	Dalea nana var. nana	4	
07GC001	GC	D	22	2009	ERASEC	ERSE	1	10	Eragrostis secundiflora	3	
07GC001	GC	D	22	2009	PARJAM	PAJA	2	8	Paronychia jamesii	4	
07GC001	GC	D	22	2009	PASSETS	PASES	5	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	22	2009	PENSTE	PENST	0.1	5	Penstemon spp.	4	07GC001-F42,vegetative
07GC001	GC	D	22	2009	QUEHAV	QUHA3	14	40	Quercus havardii	2	
07GC001	GC	D	22	2009	SCHSCO	SCSC	22	25	Schizachyrium scoparium	3	
07GC001	GC	D	22	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	D	32	2009	AMBPSI	AMPS	0.5	30	Ambrosia psilostachya	4	
07GC001	GC	D	32	2009	ANDHAL	ANHA	2	33	Andropogon hallii	3	
07GC001	GC	D	32	2009	COMERE	COER	0.5	5	Commelina erecta	4	
07GC001	GC	D	32	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	32	2009	QUEHAV	QUHA3	30	35	Quercus havardii	2	
07GC001	GC	D	32	2009	SCHSCO	SCSC	7	25	Schizachyrium scoparium	3	
07GC001	GC	D	32	2009	SPOCRY	SPCR	0.1	30	Sporobolus cryptandrus	3	
07GC001	GC	D	42	2009	AMBPSI	AMPS	0.1	40	Ambrosia psilostachya	4	
07GC001	GC	D	42	2009	ANDHAL	ANHA	3	50	Andropogon hallii	3	
07GC001	GC	D	42	2009	COMERE	COER	0.1	5	Commelina	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									erecta		
07GC001	GC	D	42	2009	DIGPUB	DIPU9	0.1	6	Digitaria pubiflora	3	
07GC001	GC	D	42	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GC001	GC	D	42	2009	PENSTE	PENST	0.5	7	Penstemon spp.	4	07GC001-F42
07GC001	GC	D	42	2009	QUEHAV	QUHA3	14	30	Quercus havardii	2	
07GC001	GC	D	42	2009	SCHSCO	SCSC	18	25	Schizachyrium scoparium	3	
07GC001	GC	E	2	2009	ARIPUR	ARPU9	3	20	Aristida purpurea	3	
07GC001	GC	E	2	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GC001	GC	E	2	2009	CALSER	CASE12	0.1	15	Calylophus serrulatus	4	
07GC001	GC	E	2	2009	CENSPI	CESP4	0.5	8	Cenchrus spinifex	3	
07GC001	GC	E	2	2009	DIGPUB	DIPU9	5	15	Digitaria pubiflora	3	
07GC001	GC	E	2	2009	GUTSAR	GUSA2	4	35	Gutierrezia sarothrae	2.5	
07GC001	GC	E	2	2009	PASSETS	PASES	1	6	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	2	2009	QUEHAV	QUHA3	24	40	Quercus havardii	2	read quads toward west
07GC001	GC	E	2	2009	SCHSCO	SCSC	7	20	Schizachyrium scoparium	3	
07GC001	GC	E	2	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GC001	GC	E	12	2009	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GC001	GC	E	12	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GC001	GC	E	12	2009	CENSPI	CESP4	1	10	Cenchrus spinifex	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	E	12	2009	CHAGLY	CHGL13	0.1	2	Chamaesyce glyptosperma	4	
07GC001	GC	E	12	2009	DIGPUB	DIPU9	1	15	Digitaria pubiflora	3	
07GC001	GC	E	12	2009	FROGRA	FRGR3	0.1	20	Froelichia gracilis	4	
07GC001	GC	E	12	2009	MUNSQU	MUSQ3	0.5	3	Munroa squarrosa	3	
07GC001	GC	E	12	2009	PASSETS	PASES	5	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	12	2009	QUEHAV	QUHA3	17	40	Quercus havardii	2	
07GC001	GC	E	12	2009	SPOCRY	SPCR	2	20	Sporobolus cryptandrus	3	
07GC001	GC	E	22	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GC001	GC	E	22	2009	CALSER	CASE12	0.5	15	Calylophus serrulatus	4	
07GC001	GC	E	22	2009	LITMUL	LIMU3	0.1	15	Lithospermum multiflorum	4	
07GC001	GC	E	22	2009	PASSETS	PASES	1	7	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	22	2009	QUEHAV	QUHA3	15	35	Quercus havardii	2	
07GC001	GC	E	22	2009	SCHSCO	SCSC	18	30	Schizachyrium scoparium	3	
07GC001	GC	E	22	2009	SPOCRY	SPCR	3	20	Sporobolus cryptandrus	3	
07GC001	GC	E	32	2009	BOUCUR	BOCU	1	12	Bouteloua curtipendula	3	
07GC001	GC	E	32	2009	BOUHIR	BOHI2	6	8	Bouteloua hirsuta	3	
07GC001	GC	E	32	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	32	2009	PHYGOR	LEGO	0.1	4	Physaria	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									gordonii		
07GC001	GC	E	32	2009	QUEHAV	QUHA3	15	25	Quercus havardii	2	
07GC001	GC	E	32	2009	SCHSCO	SCSC	19	30	Schizachyrium scoparium	3	
07GC001	GC	E	32	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GC001	GC	E	42	2009	ANDHAL	ANHA	3	32	Andropogon hallii	3	
07GC001	GC	E	42	2009	ARIPUR	ARPU9	7	25	Aristida purpurea	3	
07GC001	GC	E	42	2009	CYPRET	CYRE14	0.1	17	Cyperus retroflexus	3	
07GC001	GC	E	42	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GC001	GC	E	42	2009	QUEHAV	QUHA3	6	25	Quercus havardii	2	
07GC001	GC	E	42	2009	SCHSCO	SCSC	23	28	Schizachyrium scoparium	3	
07GC001	GC	E	42	2009	SPOCRY	SPCR	1	16	Sporobolus cryptandrus	3	
07GC001	GC	F	2	2009	BOUCUR	BOCU	1	14	Bouteloua curtipendula	3	
07GC001	GC	F	2	2009	BOUHIR	BOHI2	5	12	Bouteloua hirsuta	3	
07GC001	GC	F	2	2009	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	
07GC001	GC	F	2	2009	GUTSAR	GUSA2	8	20	Gutierrezia sarothrae	2.5	
07GC001	GC	F	2	2009	LITMUL	LIMU3	0.1	12	Lithospermum multiflorum	4	
07GC001	GC	F	2	2009	PASSETS	PASES	4	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	2	2009	QUEHAV	QUHA3	2	22	Quercus havardii	2	read quads toward west
07GC001	GC	F	2	2009	SCHSCO	SCSC	38	20	Schizachyrium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									scoparium		
07GC001	GC	F	12	2009	ANDHAL	ANHA	2	35	Andropogon hallii	3	
07GC001	GC	F	12	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GC001	GC	F	12	2009	COMERE	COER	0.5	20	Commelina erecta	4	
07GC001	GC	F	12	2009	ERASEC	ERSE	1	18	Eragrostis secundiflora	3	
07GC001	GC	F	12	2009	GUTSAR	GUSA2	2	15	Gutierrezia sarothrae	2.5	
07GC001	GC	F	12	2009	PASSETS	PASES	1	13	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	12	2009	QUEHAV	QUHA3	7	40	Quercus havardii	2	
07GC001	GC	F	12	2009	SCHSCO	SCSC	33	25	Schizachyrium scoparium	3	
07GC001	GC	F	12	2009	SENSPA	SESP3	1	24	Senecio spartioides	4	
07GC001	GC	F	12	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GC001	GC	F	12	2009	XANSPI2	MAPI	0.5	20	Xanthisma spinulosum	4	
07GC001	GC	F	22	2009	ANDHAL	ANHA	9	35	Andropogon hallii	3	
07GC001	GC	F	22	2009	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GC001	GC	F	22	2009	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GC001	GC	F	22	2009	CALSER	CASE12	0.1	21	Calylophus serrulatus	4	
07GC001	GC	F	22	2009	COMERE	COER	0.1	12	Commelina erecta	4	
07GC001	GC	F	22	2009	DALNANN	DANAN	0.1	8	Dalea nana var. nana	4	
07GC001	GC	F	22	2009	LITMUL	LIMU3	0.1	16	Lithospermum multiflorum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	F	22	2009	PARJAM	PAJA	0.5	4	Paronychia jamesii	4	
07GC001	GC	F	22	2009	QUEHAV	QUHA3	3	30	Quercus havardii	2	
07GC001	GC	F	22	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GC001	GC	F	22	2009	SPOCRY	SPCR	4	30	Sporobolus cryptandrus	3	
07GC001	GC	F	32	2009	ANDHAL	ANHA	1	48	Andropogon hallii	3	
07GC001	GC	F	32	2009	BOUCUR	BOCU	2	15	Bouteloua curtipendula	3	
07GC001	GC	F	32	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GC001	GC	F	32	2009	COMERE	COER	0.5	7	Commelina erecta	4	
07GC001	GC	F	32	2009	EVOSER	EVSE	0.5	15	Evolvulus sericeus	4	
07GC001	GC	F	32	2009	LITMUL	LIMU3	0.1	14	Lithospermum multiflorum	4	
07GC001	GC	F	32	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	32	2009	QUEHAV	QUHA3	11	45	Quercus havardii	2	
07GC001	GC	F	32	2009	SCHSCO	SCSC	36	25	Schizachyrium scoparium	3	
07GC001	GC	F	32	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GC001	GC	F	42	2009	ANDHAL	ANHA	4	45	Andropogon hallii	3	
07GC001	GC	F	42	2009	BOUCUR	BOCU	3	15	Bouteloua curtipendula	3	
07GC001	GC	F	42	2009	BRIEUPC	BREUC2	2	43	Brickellia eupatorioides var. chlorolepis	2.5	
07GC001	GC	F	42	2009	CALSER	CASE12	2	25	Calylophus serrulatus	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	F	42	2009	COMERE	COER	1	10	Commelina erecta	4	
07GC001	GC	F	42	2009	DIGPUB	DIPU9	4	12	Digitaria pubiflora	3	
07GC001	GC	F	42	2009	EVOSER	EVSE	2	15	Evolvulus sericeus	4	
07GC001	GC	F	42	2009	HETVIL	HEVI4	0.1	12	Heterotheca villosa	4	
07GC001	GC	F	42	2009	LITMUL	LIMU3	0.1	11	Lithospermum multiflorum	4	
07GC001	GC	F	42	2009	LORPUL	CHPU4	0.5	60	Lorandersonia pulchella	2	
07GC001	GC	F	42	2009	MELLEU	MELE2	1	14	Melampodium leucanthum	4	
07GC001	GC	F	42	2009	PASSETS	PASES	2	20	Paspalum setaceum var. stramineum	3	
07GC001	GC	F	42	2009	QUEHAV	QUHA3	35	45	Quercus havardii	2	
07GC001	GC	F	42	2009	SCHSCO	SCSC	16	30	Schizachyrium scoparium	3	
07GC001	GC	F	42	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GC001	GC	G	2	2009	ARIPUR	ARPU9	6	30	Aristida purpurea	3	
07GC001	GC	G	2	2009	CENSPI	CESP4	0.5	7	Cenchrus spinifex	3	
07GC001	GC	G	2	2009	MIRLIN	MILI3	0.1	8	Mirabilis linearis	4	change MIRGLA to MIRLIN-YC
07GC001	GC	G	2	2009	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	2	2009	QUEHAV	QUHA3	14	50	Quercus havardii	2	read quads toward west
07GC001	GC	G	2	2009	SCHSCO	SCSC	6	20	Schizachyrium scoparium	3	
07GC001	GC	G	2	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	G	12	2009	BOUHIR	BOHI2	1	6	Bouteloua hirsuta	3	
07GC001	GC	G	12	2009	CYPRET	CYRE14	1	12	Cyperus retroflexus	3	
07GC001	GC	G	12	2009	PASSETS	PASES	10	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	12	2009	QUEHAV	QUHA3	28	40	Quercus havardii	2	
07GC001	GC	G	12	2009	SCHSCO	SCSC	8	30	Schizachyrium scoparium	3	
07GC001	GC	G	12	2009	SPOCRY	SPCR	3	20	Sporobolus cryptandrus	3	
07GC001	GC	G	12	2009	THEMEG	THME	0.5	28	Thelesperma megapotamicum	4	
07GC001	GC	G	22	2009	AMBPSI	AMPS	0.5	17	Ambrosia psilostachya	4	
07GC001	GC	G	22	2009	CRYCIN	CRCI3	0.1	12	Cryptantha cinerea	4	
07GC001	GC	G	22	2009	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	
07GC001	GC	G	22	2009	PASSETS	PASES	6	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	22	2009	QUEHAV	QUHA3	20	35	Quercus havardii	2	
07GC001	GC	G	22	2009	SCHSCO	SCSC	16	30	Schizachyrium scoparium	3	
07GC001	GC	G	22	2009	SPOCRY	SPCR	0.5	20	Sporobolus cryptandrus	3	
07GC001	GC	G	22	2009	XANSPI2	MAPI	2	25	Xanthisma spinulosum	4	
07GC001	GC	G	32	2009	ARIPUR	ARPU9	3	30	Aristida purpurea	3	
07GC001	GC	G	32	2009	BOUHIR	BOHI2	1	8	Bouteloua hirsuta	3	
07GC001	GC	G	32	2009	COMERE	COER	0.5	8	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	G	32	2009	CYPRET	CYRE14	0.5	8	Cyperus retroflexus	3	
07GC001	GC	G	32	2009	DIGPUB	DIPU9	2	15	Digitaria pubiflora	3	
07GC001	GC	G	32	2009	MIRLIN	MILI3	0.1	11	Mirabilis linearis	4	change MIRGLA to MIRLIN-YC
07GC001	GC	G	32	2009	PASSETS	PASES	3	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	32	2009	QUEHAV	QUHA3	20	40	Quercus havardii	2	
07GC001	GC	G	32	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GC001	GC	G	32	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	G	32	2009	THEMEG	THME	0.5	35	Thelesperma megapotamicum	4	
07GC001	GC	G	32	2009	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GC001	GC	G	42	2009	AMBPSI	AMPS	0.1	20	Ambrosia psilostachya	4	
07GC001	GC	G	42	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GC001	GC	G	42	2009	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GC001	GC	G	42	2009	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	
07GC001	GC	G	42	2009	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	
07GC001	GC	G	42	2009	DIGPUB	DIPU9	3	10	Digitaria pubiflora	3	
07GC001	GC	G	42	2009	ERASEC	ERSE	3	25	Eragrostis secundiflora	3	
07GC001	GC	G	42	2009	GAUVIL	GAVI2	0.1	30	Gaura villosa	4	
07GC001	GC	G	42	2009	PASSETS	PASES	3	10	Paspalum setaceum var. stramineum	3	
07GC001	GC	G	42	2009	QUEHAV	QUHA3	32	30	Quercus	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									havardii		
07GC001	GC	G	42	2009	SCHSCO	SCSC	12	30	Schizachyrium scoparium	3	
07GC001	GC	G	42	2009	SPOCRY	SPCR	6	30	Sporobolus cryptandrus	3	
07GC001	GC	H	2	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GC001	GC	H	2	2009	BOUHIR	BOHI2	0.5	10	Bouteloua hirsuta	3	
07GC001	GC	H	2	2009	COMERE	COER	0.5	7	Commelina erecta	4	
07GC001	GC	H	2	2009	CRYCIN	CRCI3	0.5	16	Cryptantha cinerea	4	
07GC001	GC	H	2	2009	CYPRET	CYRE14	0.5	10	Cyperus retroflexus	3	
07GC001	GC	H	2	2009	GAUVIL	GAVI2	1	28	Gaura villosa	4	
07GC001	GC	H	2	2009	HETVIL	HEVI4	1	13	Heterotheca villosa	4	
07GC001	GC	H	2	2009	PASSETS	PASES	0.5	8	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	2	2009	QUEHAV	QUHA3	16	40	Quercus havardii	2	read quads toward west
07GC001	GC	H	2	2009	SCHSCO	SCSC	18	30	Schizachyrium scoparium	3	
07GC001	GC	H	2	2009	SPOCRY	SPCR	2	35	Sporobolus cryptandrus	3	
07GC001	GC	H	2	2009	XANSPI2	MAPI	1	17	Xanthisma spinulosum	4	
07GC001	GC	H	12	2009	AMBPSI	AMPS	1.5	28	Ambrosia psilostachya	4	
07GC001	GC	H	12	2009	ANDHAL	ANHA	12	50	Andropogon hallii	3	
07GC001	GC	H	12	2009	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GC001	GC	H	12	2009	CALSER	CASE12	1	20	Calylophus serrulatus	4	
07GC001	GC	H	12	2009	COMERE	COER	0.5	12	Commelina	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									erecta		
07GC001	GC	H	12	2009	HETVIL	HEVI4	3	22	Heterotheca villosa	4	
07GC001	GC	H	12	2009	LITMUL	LIMU3	0.1	23	Lithospermum multiflorum	4	
07GC001	GC	H	12	2009	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	12	2009	QUEHAV	QUHA3	8	35	Quercus havardii	2	
07GC001	GC	H	12	2009	SCHSCO	SCSC	25	30	Schizachyrium scoparium	3	
07GC001	GC	H	12	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GC001	GC	H	12	2009	XANSPI2	MAPI	2	30	Xanthisma spinulosum	4	
07GC001	GC	H	12	2009	YUCGLA	YUGL	1	40	Yucca glauca	2	
07GC001	GC	H	22	2009	ANDHAL	ANHA	6	30	Andropogon hallii	3	
07GC001	GC	H	22	2009	BOUHIR	BOHI2	5	8	Bouteloua hirsuta	3	
07GC001	GC	H	22	2009	CRYCIN	CRCI3	2	15	Cryptantha cinerea	4	
07GC001	GC	H	22	2009	EVOSER	EVSE	0.5	15	Evolvulus sericeus	4	
07GC001	GC	H	22	2009	HETVIL	HEVI4	0.1	12	Heterotheca villosa	4	
07GC001	GC	H	22	2009	LITMUL	LIMU3	0.1	22	Lithospermum multiflorum	4	
07GC001	GC	H	22	2009	PARJAM	PAJA	1	6	Paronychia jamesii	4	
07GC001	GC	H	22	2009	PASSETS	PASES	3	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	22	2009	POMJAM	POJA5	0.5	6	Pomaria jamesii	4	
07GC001	GC	H	22	2009	QUEHAV	QUHA3	7	35	Quercus havardii	2	
07GC001	GC	H	22	2009	SCHSCO	SCSC	30	25	Schizachyrium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									scoparium		
07GC001	GC	H	22	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GC001	GC	H	32	2009	AMBPSI	AMPS	0.1	25	Ambrosia psilostachya	4	
07GC001	GC	H	32	2009	ANDHAL	ANHA	4	60	Andropogon hallii	3	
07GC001	GC	H	32	2009	BOUCUR	BOCU	2	20	Bouteloua curtipendula	3	
07GC001	GC	H	32	2009	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GC001	GC	H	32	2009	CHAFEN	CHFE3	0.5	3	Chamaesyce fendleri	4	
07GC001	GC	H	32	2009	COMERE	COER	1	15	Commelina erecta	4	
07GC001	GC	H	32	2009	CRYCIN	CRCI3	0.1	7	Cryptantha cinerea	4	
07GC001	GC	H	32	2009	CYPRET	CYRE14	0.1	7	Cyperus retroflexus	3	
07GC001	GC	H	32	2009	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	
07GC001	GC	H	32	2009	HETVIL	HEVI4	0.5	22	Heterotheca villosa	4	
07GC001	GC	H	32	2009	PASSETS	PASES	3	12	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	32	2009	QUEHAV	QUHA3	9	40	Quercus havardii	2	
07GC001	GC	H	32	2009	SCHSCO	SCSC	35	25	Schizachyrium scoparium	3	
07GC001	GC	H	32	2009	SPOCRY	SPCR	1	35	Sporobolus cryptandrus	3	
07GC001	GC	H	42	2009	AMBPSI	AMPS	0.1	12	Ambrosia psilostachya	4	
07GC001	GC	H	42	2009	ANDHAL	ANHA	1	25	Andropogon hallii	3	
07GC001	GC	H	42	2009	BOUCUR	BOCU	5	12	Bouteloua curtipendula	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GC001	GC	H	42	2009	BOUHIR	BOHI2	2	11	Bouteloua hirsuta	3	
07GC001	GC	H	42	2009	CALSER	CASE12	1	15	Calylophus serrulatus	4	
07GC001	GC	H	42	2009	CYPRET	CYRE14	0.5	10	Cyperus retroflexus	3	
07GC001	GC	H	42	2009	OPUPHA	OPPH	0.1	4	Opuntia phaeacantha	2.5	
07GC001	GC	H	42	2009	PASSETS	PASES	4	15	Paspalum setaceum var. stramineum	3	
07GC001	GC	H	42	2009	QUEHAV	QUHA3	14	35	Quercus havardii	2	
07GC001	GC	H	42	2009	SCHSCO	SCSC	17	25	Schizachyrium scoparium	3	
07GC001	GC	H	42	2009	SPOCRY	SPCR	3	25	Sporobolus cryptandrus	3	
07GC001	GC	H	42	2009	THEMEG	THME	0.1	17	Thelesperma megapotamicum	4	
07GC001	GC	H	42	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	A	2	2009	ANDHAL	ANHA	7	15	Andropogon hallii	3	
07GR001	GR	A	2	2009	ARIPUR	ARPU9	4	15	Aristida purpurea	3	Read quads toward N.
07GR001	GR	A	2	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	A	2	2009	CALSER	CASE12	1	15	Calylophus serrulatus	4	
07GR001	GR	A	2	2009	COMERE	COER	0.1	7	Commelina erecta	4	
07GR001	GR	A	2	2009	ERASEC	ERSE	1	10	Eragrostis secundiflora	3	
07GR001	GR	A	2	2009	FROGRA	FRGR3	0.1	6	Froelichia gracilis	4	
07GR001	GR	A	2	2009	PARJAM	PAJA	1	6	Paronychia jamesii	4	
07GR001	GR	A	2	2009	PASSETS	PASES	1	6	Paspalum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									setaceum var. stramineum		
07GR001	GR	A	2	2009	QUEHAV	QUHA3	11	30	Quercus havardii	2	
07GR001	GR	A	2	2009	SCHSCO	SCSC	12	20	Schizachyrium scoparium	3	
07GR001	GR	A	2	2009	SPOCRY	SPCR	0.5	8	Sporobolus cryptandrus	3	
07GR001	GR	A	2	2009	THEMEG	THME	0.1	48	Thelesperma megapotamicum	4	
07GR001	GR	A	2	2009	XANSPI2	MAPI	0.5	18	Xanthisma spinulosum	4	
07GR001	GR	A	12	2009	ANDHAL	ANHA	1	28	Andropogon hallii	3	
07GR001	GR	A	12	2009	BOUHIR	BOHI2	1	6	Bouteloua hirsuta	3	
07GR001	GR	A	12	2009	CALSER	CASE12	0.5	8	Calylophus serrulatus	4	
07GR001	GR	A	12	2009	CYPRET	CYRE14	1	12	Cyperus retroflexus	3	
07GR001	GR	A	12	2009	ERASEC	ERSE	0.1	18	Eragrostis secundiflora	3	
07GR001	GR	A	12	2009	FROGRA	FRGR3	0.1	8	Froelichia gracilis	4	
07GR001	GR	A	12	2009	KRALAN	KRLA	3	6	Krameria lanceolata	4	
07GR001	GR	A	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	12	2009	QUEHAV	QUHA3	19	25	Quercus havardii	2	
07GR001	GR	A	12	2009	SCHSCO	SCSC	22	20	Schizachyrium scoparium	3	
07GR001	GR	A	12	2009	SPOCRY	SPCR	2	26	Sporobolus cryptandrus	3	
07GR001	GR	A	12	2009	THEMEG	THME	0.1	45	Thelesperma megapotamicum	4	
07GR001	GR	A	22	2009	BOUCUR	BOCU	1	18	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									curtipendula		
07GR001	GR	A	22	2009	BOUHIR	BOHI2	3	10	Bouteloua hirsuta	3	
07GR001	GR	A	22	2009	CALSER	CASE12	0.5	15	Calylophus serrulatus	4	
07GR001	GR	A	22	2009	CHAFEN	CHFE3	0.1	5	Chamaesyce fendleri	4	
07GR001	GR	A	22	2009	CYPRET	CYRE14	1	11	Cyperus retroflexus	3	
07GR001	GR	A	22	2009	DIGPUB	DIPU9	4	14	Digitaria pubiflora	3	
07GR001	GR	A	22	2009	ERASEC	ERSE	2	18	Eragrostis secundiflora	3	
07GR001	GR	A	22	2009	PARJAM	PAJA	0.1	6	Paronychia jamesii	4	
07GR001	GR	A	22	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	22	2009	QUEHAV	QUHA3	28	25	Quercus havardii	2	
07GR001	GR	A	22	2009	SCHSCO	SCSC	16	26	Schizachyrium scoparium	3	
07GR001	GR	A	22	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GR001	GR	A	32	2009	ANDHAL	ANHA	12	33	Andropogon hallii	3	
07GR001	GR	A	32	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	A	32	2009	CALSER	CASE12	1	15	Calylophus serrulatus	4	
07GR001	GR	A	32	2009	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	
07GR001	GR	A	32	2009	DIGPUB	DIPU9	6	15	Digitaria pubiflora	3	
07GR001	GR	A	32	2009	PARJAM	PAJA	0.1	5	Paronychia jamesii	4	
07GR001	GR	A	32	2009	PASSETS	PASES	3	10	Paspalum setaceum var.	3	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GR001	GR	A	32	2009	QUEHAV	QUHA3	13	45	Quercus havardii	2	
07GR001	GR	A	32	2009	SCHSCO	SCSC	14	30	Schizachyrium scoparium	3	
07GR001	GR	A	42	2009	ANDHAL	ANHA	1	52	Andropogon hallii	3	
07GR001	GR	A	42	2009	ARIPUR	ARPU9	0.5	17	Aristida purpurea	3	
07GR001	GR	A	42	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GR001	GR	A	42	2009	CALSER	CASE12	1	18	Calylophus serrulatus	4	
07GR001	GR	A	42	2009	COMERE	COER	0.1	12	Commelina erecta	4	
07GR001	GR	A	42	2009	CYPRET	CYRE14	0.1	5	Cyperus retroflexus	3	
07GR001	GR	A	42	2009	DIGPUB	DIPU9	5	15	Digitaria pubiflora	3	
07GR001	GR	A	42	2009	EVOSER	EVSE	0.5	8	Evolvulus sericeus	4	
07GR001	GR	A	42	2009	LINRIGR	LIRIR	0.1	10	Linum rigidum var. rigidum	4	
07GR001	GR	A	42	2009	LITMUL	LIMU3	1	10	Lithospermum multiflorum	4	
07GR001	GR	A	42	2009	MIRLIN	MILI3	0.5	13	Mirabilis linearis	4	
07GR001	GR	A	42	2009	PASSETS	PASES	2	13	Paspalum setaceum var. stramineum	3	
07GR001	GR	A	42	2009	QUEHAV	QUHA3	12	30	Quercus havardii	2	
07GR001	GR	A	42	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GR001	GR	A	42	2009	SPOCRY	SPCR	0.5	32	Sporobolus cryptandrus	3	
07GR001	GR	A	42	2009	XANSPI2	MAPI	1	20	Xanthisma spinulosum	4	
07GR001	GR	B	2	2009	AMBPSI	AMPS	1	25	Ambrosia	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									psilostachya		
07GR001	GR	B	2	2009	ANDHAL	ANHA	1	45	Andropogon hallii	3	change ANDGER to ANDHAL-YC
07GR001	GR	B	2	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GR001	GR	B	2	2009	PARJAM	PAJA	2	5	Paronychia jamesii	4	
07GR001	GR	B	2	2009	PASSETS	PASES	1	7	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	2	2009	POMJAM	POJA5	3	14	Pomaria jamesii	4	
07GR001	GR	B	2	2009	QUEHAV	QUHA3	23	50	Quercus havardii	2	
07GR001	GR	B	2	2009	SCHSCO	SCSC	7	30	Schizachyrium scoparium	3	
07GR001	GR	B	2	2009	SPOCRY	SPCR	0.5	20	Sporobolus cryptandrus	3	
07GR001	GR	B	2	2009	XANSPI2	MAPI	0.5	17	Xanthisma spinulosum	4	
07GR001	GR	B	2	2009	YUCGLA	YUGL	5	35	Yucca glauca	2	read quads toward N.
07GR001	GR	B	12	2009	AMBPSI	AMPS	0.1	12	Ambrosia psilostachya	4	
07GR001	GR	B	12	2009	ANDHAL	ANHA	10	35	Andropogon hallii	3	change ANDGER to ANDHAL-YC
07GR001	GR	B	12	2009	BOUHIR	BOHI2	4	7	Bouteloua hirsuta	3	
07GR001	GR	B	12	2009	ERASEC	ERSE	2	15	Eragrostis secundiflora	3	
07GR001	GR	B	12	2009	EVOSER	EVSE	0.5	21	Evolvulus sericeus	4	
07GR001	GR	B	12	2009	HETVIL	HEVI4	0.1	17	Heterotheca villosa	4	
07GR001	GR	B	12	2009	POMJAM	POJA5	0.5	21	Pomaria jamesii	4	
07GR001	GR	B	12	2009	QUEHAV	QUHA3	5	40	Quercus havardii	2	
07GR001	GR	B	12	2009	SCHSCO	SCSC	13	26	Schizachyrium scoparium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	B	12	2009	SPOCRY	SPCR	3	16	Sporobolus cryptandrus	3	
07GR001	GR	B	12	2009	THEMEG	THME	0.5	53	Thelesperma megapotamicum	4	
07GR001	GR	B	22	2009	ANDHAL	ANHA	5	38	Andropogon hallii	3	change ANDGER to ANDHAL-YC
07GR001	GR	B	22	2009	BOUHIR	BOHI2	3	5	Bouteloua hirsuta	3	
07GR001	GR	B	22	2009	CRYCIN	CRCI3	0.1	7	Cryptantha cinerea	4	
07GR001	GR	B	22	2009	DIGPUB	DIPU9	1	12	Digitaria pubiflora	3	
07GR001	GR	B	22	2009	GUTSAR	GUSA2	6	22	Gutierrezia sarothrae	2.5	
07GR001	GR	B	22	2009	PASSETS	PASES	1	9	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	22	2009	QUEHAV	QUHA3	25	45	Quercus havardii	2	
07GR001	GR	B	22	2009	SCHSCO	SCSC	9	18	Schizachyrium scoparium	3	
07GR001	GR	B	22	2009	THEMEG	THME	0.1	45	Thelesperma megapotamicum	4	
07GR001	GR	B	32	2009	ANDHAL	ANHA	3	53	Andropogon hallii	3	change ANDGER to ANDHAL-YC
07GR001	GR	B	32	2009	BOUCUR	BOCU	1	19	Bouteloua curtipendula	3	
07GR001	GR	B	32	2009	BOUHIR	BOHI2	4	7	Bouteloua hirsuta	3	
07GR001	GR	B	32	2009	CHAGLY	CHGL13	0.5	2	Chamaesyce glyptosperma	4	
07GR001	GR	B	32	2009	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	
07GR001	GR	B	32	2009	DALPUR	DAPU5	0.1	6	Dalea purpurea	4	
07GR001	GR	B	32	2009	DIGPUB	DIPU9	15	8	Digitaria pubiflora	3	
07GR001	GR	B	32	2009	FROGRA	FRGR3	0.1	17	Froelichia gracilis	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	B	32	2009	GUTSAR	GUSA2	0.1	8	Gutierrezia sarothrae	2.5	
07GR001	GR	B	32	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	32	2009	QUEHAV	QUHA3	10	35	Quercus havardii	2	
07GR001	GR	B	32	2009	SCHSCO	SCSC	12	15	Schizachyrium scoparium	3	
07GR001	GR	B	32	2009	SPOCRY	SPCR	2	24	Sporobolus cryptandrus	3	
07GR001	GR	B	32	2009	THEMEG	THME	0.1	38	Thelesperma megapotamicum	4	
07GR001	GR	B	42	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GR001	GR	B	42	2009	BOUCUR	BOCU	2	20	Bouteloua curtipendula	3	
07GR001	GR	B	42	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	B	42	2009	CALSER	CASE12	0.5	25	Calylophus serrulatus	4	
07GR001	GR	B	42	2009	PASSETS	PASES	3	11	Paspalum setaceum var. stramineum	3	
07GR001	GR	B	42	2009	QUEHAV	QUHA3	13	37	Quercus havardii	2	
07GR001	GR	B	42	2009	SCHSCO	SCSC	19	22	Schizachyrium scoparium	3	
07GR001	GR	B	42	2009	SPOCRY	SPCR	3	30	Sporobolus cryptandrus	3	
07GR001	GR	B	42	2009	THEMEG	THME	0.5	58	Thelesperma megapotamicum	4	
07GR001	GR	B	42	2009	XANSPI2	MAPI	0.5	17	Xanthisma spinulosum	4	
07GR001	GR	C	2	2009	ANDHAL	ANHA	5	45	Andropogon hallii	3	
07GR001	GR	C	2	2009	BOUHIR	BOHI2	3	7	Bouteloua hirsuta	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	C	2	2009	CALSER	CASE12	0.1	22	Calylophus serrulatus	4	
07GR001	GR	C	2	2009	COMERE	COER	0.1	25	Commelina erecta	4	
07GR001	GR	C	2	2009	CYPRET	CYRE14	0.1	7	Cyperus retroflexus	3	
07GR001	GR	C	2	2009	DIGPUB	DIPU9	1	14	Digitaria pubiflora	3	
07GR001	GR	C	2	2009	PASSETS	PASES	2	12	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	2	2009	QUEHAV	QUHA3	5	30	Quercus havardii	2	read quads towards north
07GR001	GR	C	2	2009	SCHSCO	SCSC	20	25	Schizachyrium scoparium	3	
07GR001	GR	C	2	2009	SPOCRY	SPCR	0.1	12	Sporobolus cryptandrus	3	
07GR001	GR	C	12	2009	ANDHAL	ANHA	12	45	Andropogon hallii	3	
07GR001	GR	C	12	2009	ARIPUR	ARPU9	11	22	Aristida purpurea	3	
07GR001	GR	C	12	2009	BOUHIR	BOHI2	10	12	Bouteloua hirsuta	3	
07GR001	GR	C	12	2009	COMERE	COER	0.1	10	Commelina erecta	4	
07GR001	GR	C	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	12	2009	QUEHAV	QUHA3	8	28	Quercus havardii	2	
07GR001	GR	C	12	2009	SCHSCO	SCSC	14	20	Schizachyrium scoparium	3	
07GR001	GR	C	12	2009	SPOCRY	SPCR	5	28	Sporobolus cryptandrus	3	
07GR001	GR	C	22	2009	ANDHAL	ANHA	0.5	55	Andropogon hallii	3	
07GR001	GR	C	22	2009	BOUHIR	BOHI2	3	12	Bouteloua hirsuta	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	C	22	2009	EVOSE	EVSE	0.5	12	Evolvulus sericeus	4	
07GR001	GR	C	22	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	22	2009	QUEHAV	QUHA3	1	47	Quercus havardii	2	
07GR001	GR	C	22	2009	SCHSCO	SCSC	28	27	Schizachyrium scoparium	3	
07GR001	GR	C	22	2009	SPOCRY	SPCR	0.1	7	Sporobolus cryptandrus	3	
07GR001	GR	C	22	2009	THEMEG	THME	0.1	50	Thelesperma megapotamicum	4	
07GR001	GR	C	22	2009	YUCGLA	YUGL	5	48	Yucca glauca	2	
07GR001	GR	C	32	2009	ANDHAL	ANHA	3	60	Andropogon hallii	3	
07GR001	GR	C	32	2009	BOUCUR	BOCU	3	18	Bouteloua curtipendula	3	
07GR001	GR	C	32	2009	BOUHIR	BOHI2	8	10	Bouteloua hirsuta	3	
07GR001	GR	C	32	2009	COMERE	COER	0.1	9	Commelina erecta	4	
07GR001	GR	C	32	2009	CRYCIN	CRCI3	0.1	18	Cryptantha cinerea	4	
07GR001	GR	C	32	2009	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	
07GR001	GR	C	32	2009	ERASEC	ERSE	0.5	12	Eragrostis secundiflora	3	
07GR001	GR	C	32	2009	EVOSE	EVSE	1	20	Evolvulus sericeus	4	
07GR001	GR	C	32	2009	PASSETS	PASES	0.1	12	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	32	2009	QUEHAV	QUHA3	17	30	Quercus havardii	2	
07GR001	GR	C	32	2009	SCHSCO	SCSC	20	35	Schizachyrium scoparium	3	
07GR001	GR	C	32	2009	SPOCRY	SPCR	1	30	Sporobolus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cryptandrus		
07GR001	GR	C	32	2009	XANSPI2	MAPI	2	25	Xanthisma spinulosum	4	
07GR001	GR	C	42	2009	ANDHAL	ANHA	0.5	35	Andropogon hallii	3	
07GR001	GR	C	42	2009	BOUCUR	BOCU	1	15	Bouteloua curtipendula	3	
07GR001	GR	C	42	2009	BOUHIR	BOHI2	6	7	Bouteloua hirsuta	3	
07GR001	GR	C	42	2009	LIAPUN	LIPU	1	15	Liatris punctata	4	
07GR001	GR	C	42	2009	PARJAM	PAJA	0.1	4	Paronychia jamesii	4	
07GR001	GR	C	42	2009	PASSETS	PASES	0.1	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	C	42	2009	QUEHAV	QUHA3	7	35	Quercus havardii	2	
07GR001	GR	C	42	2009	SCHSCO	SCSC	29	25	Schizachyrium scoparium	3	
07GR001	GR	C	42	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GR001	GR	D	2	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	D	2	2009	COMERE	COER	0.1	15	Commelina erecta	4	
07GR001	GR	D	2	2009	DIGPUB	DIPU9	0.5	8	Digitaria pubiflora	3	
07GR001	GR	D	2	2009	EVOSER	EVSE	1	20	Evolvulus sericeus	4	
07GR001	GR	D	2	2009	HETVIL	HEVI4	1.5	15	Heterotheca villosa	4	
07GR001	GR	D	2	2009	LINRIGR	LIRIR	0.1	23	Linum rigidum var. rigidum	4	
07GR001	GR	D	2	2009	LITMUL	LIMU3	0.5	20	Lithospermum multiflorum	4	
07GR001	GR	D	2	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	D	2	2009	QUEHAV	QUHA3	17	24	Quercus havardii	2	read quads towards north
07GR001	GR	D	2	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GR001	GR	D	2	2009	XANSPI2	MAPI	0.1	18	Xanthisma spinulosum	4	
07GR001	GR	D	12	2009	ANDHAL	ANHA	0.5	40	Andropogon hallii	3	
07GR001	GR	D	12	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GR001	GR	D	12	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	D	12	2009	CHAFEN	CHFE3	0.5	4	Chamaesyce fendleri	4	
07GR001	GR	D	12	2009	COMERE	COER	0.1	15	Commelina erecta	4	
07GR001	GR	D	12	2009	CYPRET	CYRE14	0.1	15	Cyperus retroflexus	3	
07GR001	GR	D	12	2009	DIGPUB	DIPU9	1	10	Digitaria pubiflora	3	
07GR001	GR	D	12	2009	EVOSER	EVSE	0.5	10	Evolvulus sericeus	4	
07GR001	GR	D	12	2009	HETVIL	HEVI4	1	15	Heterotheca villosa	4	
07GR001	GR	D	12	2009	LINRIGR	LIRIR	0.1	14	Linum rigidum var. rigidum	4	
07GR001	GR	D	12	2009	PARJAM	PAJA	0.5	10	Paronychia jamesii	4	
07GR001	GR	D	12	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	12	2009	QUEHAV	QUHA3	15	30	Quercus havardii	2	
07GR001	GR	D	12	2009	SCHSCO	SCSC	17	20	Schizachyrium scoparium	3	
07GR001	GR	D	12	2009	SPOCRY	SPCR	4	20	Sporobolus cryptandrus	3	
07GR001	GR	D	12	2009	XANSPI2	MAPI	1	26	Xanthisma	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									spinulosum		
07GR001	GR	D	22	2009	ANDHAL	ANHA	3	50	Andropogon hallii	3	
07GR001	GR	D	22	2009	ARIPUR	ARPU9	5	22	Aristida purpurea	3	
07GR001	GR	D	22	2009	BOUHIR	BOHI2	5	13	Bouteloua hirsuta	3	
07GR001	GR	D	22	2009	CALSER	CASE12	0.5	17	Calylophus serrulatus	4	
07GR001	GR	D	22	2009	HETVIL	HEVI4	3	15	Heterotheca villosa	4	
07GR001	GR	D	22	2009	LINRIGR	LIRIR	0.5	17	Linum rigidum var. rigidum	4	
07GR001	GR	D	22	2009	MIRLIN	MILI3	0.1	6	Mirabilis linearis	4	
07GR001	GR	D	22	2009	PARJAM	PAJA	1	10	Paronychia jamesii	4	
07GR001	GR	D	22	2009	PASSETS	PASES	0.1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	22	2009	POMJAM	POJA5	0.1	15	Pomaria jamesii	4	
07GR001	GR	D	22	2009	QUEHAV	QUHA3	6	26	Quercus havardii	2	
07GR001	GR	D	22	2009	SCHSCO	SCSC	7	28	Schizachyrium scoparium	3	
07GR001	GR	D	22	2009	SPOCRY	SPCR	1	16	Sporobolus cryptandrus	3	
07GR001	GR	D	22	2009	THEMEG	THME	0.5	57	Thelesperma megapotamicum	4	
07GR001	GR	D	32	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GR001	GR	D	32	2009	CYPRET	CYRE14	0.5	17	Cyperus retroflexus	3	
07GR001	GR	D	32	2009	ERASEC	ERSE	1	15	Eragrostis secundiflora	3	
07GR001	GR	D	32	2009	EVOSER	EVSE	1	25	Evolvulus sericeus	4	
07GR001	GR	D	32	2009	HETVIL	HEVI4	0.1	10	Heterotheca villosa	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	D	32	2009	PASSETS	PASES	0.5	5	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	32	2009	QUEHAV	QUHA3	12	26	Quercus havardii	2	
07GR001	GR	D	32	2009	SCHSCO	SCSC	27	35	Schizachyrium scoparium	3	
07GR001	GR	D	32	2009	XANSPI2	MAPI	0.1	24	Xanthisma spinulosum	4	
07GR001	GR	D	42	2009	ARIPUR	ARPU9	2	22	Aristida purpurea	3	
07GR001	GR	D	42	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GR001	GR	D	42	2009	CHAFEN	CHFE3	0.1	4	Chamaesyce fendleri	4	
07GR001	GR	D	42	2009	COMERE	COER	0.5	25	Commelina erecta	4	
07GR001	GR	D	42	2009	CRYCIN	CRCI3	0.5	20	Cryptantha cinerea	4	
07GR001	GR	D	42	2009	ERASEC	ERSE	2	15	Eragrostis secundiflora	3	
07GR001	GR	D	42	2009	HYMFLAC	HYFLC	0.1	5	Hymenopappus flavescens var. canotomentosus	4	
07GR001	GR	D	42	2009	PARJAM	PAJA	0.1	5	Paronychia jamesii	4	
07GR001	GR	D	42	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	D	42	2009	QUEHAV	QUHA3	12	30	Quercus havardii	2	
07GR001	GR	D	42	2009	SCHSCO	SCSC	33	23	Schizachyrium scoparium	3	
07GR001	GR	D	42	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GR001	GR	D	42	2009	XANSPI2	MAPI	1	20	Xanthisma spinulosum	4	
07GR001	GR	E	2	2009	ANDHAL	ANHA	10	27	Andropogon	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hallii		
07GR001	GR	E	2	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	E	2	2009	CALSER	CASE12	2	20	Calylophus serrulatus	4	
07GR001	GR	E	2	2009	EVOSER	EVSE	1	12	Evolvulus sericeus	4	
07GR001	GR	E	2	2009	LITMUL	LIMU3	0.1	10	Lithospermum multiflorum	4	
07GR001	GR	E	2	2009	PASSETS	PASES	2	9	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	2	2009	QUEHAV	QUHA3	24	35	Quercus havardii	2	read quads toward N.
07GR001	GR	E	2	2009	SCHSCO	SCSC	1	10	Schizachyrium scoparium	3	
07GR001	GR	E	2	2009	SPOCRY	SPCR	1	12	Sporobolus cryptandrus	3	
07GR001	GR	E	2	2009	THEMEG	THME	0.5	45	Thelesperma megapotamicum	4	
07GR001	GR	E	2	2009	XANSPI2	MAPI	0.1	14	Xanthisma spinulosum	4	
07GR001	GR	E	12	2009	BOUHIR	BOHI2	8	5	Bouteloua hirsuta	3	
07GR001	GR	E	12	2009	CALSER	CASE12	2	20	Calylophus serrulatus	4	
07GR001	GR	E	12	2009	DIGPUB	DIPU9	1	13	Digitaria pubiflora	3	
07GR001	GR	E	12	2009	EVOSER	EVSE	0.5	12	Evolvulus sericeus	4	
07GR001	GR	E	12	2009	PASSETS	PASES	4	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	12	2009	QUEHAV	QUHA3	26	40	Quercus havardii	2	
07GR001	GR	E	12	2009	SCHSCO	SCSC	11	25	Schizachyrium scoparium	3	
07GR001	GR	E	12	2009	SPOCRY	SPCR	2	18	Sporobolus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									cryptandrus		
07GR001	GR	E	12	2009	XANSPI2	MAPI	0.1	24	Xanthisma spinulosum	4	
07GR001	GR	E	22	2009	BOUCUR	BOCU	0.1	10	Bouteloua curtipendula	3	
07GR001	GR	E	22	2009	BOUHIR	BOHI2			Bouteloua hirsuta	3	
07GR001	GR	E	22	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GR001	GR	E	22	2009	DIGPUB	DIPU9	2	14	Digitaria pubiflora	3	
07GR001	GR	E	22	2009	ERASEC	ERSE	1	16	Eragrostis secundiflora	3	
07GR001	GR	E	22	2009	EVOSE	EVSE	0.5	13	Evolvulus sericeus	4	
07GR001	GR	E	22	2009	LITMUL	LIMU3	0.1	13	Lithospermum multiflorum	4	
07GR001	GR	E	22	2009	PASSETS	PASES	4	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	22	2009	QUEHAV	QUHA3	21	33	Quercus havardii	2	
07GR001	GR	E	22	2009	SCHSCO	SCSC	18	25	Schizachyrium scoparium	3	
07GR001	GR	E	22	2009	SPOCRY	SPCR	1	22	Sporobolus cryptandrus	3	
07GR001	GR	E	22	2009	XANSPI2	MAPI	0.5	16	Xanthisma spinulosum	4	
07GR001	GR	E	32	2009	ANDHAL	ANHA	3	28	Andropogon hallii	3	
07GR001	GR	E	32	2009	ARIPUR	ARPU9	0.5	14	Aristida purpurea	3	
07GR001	GR	E	32	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	E	32	2009	CALSER	CASE12	1	17	Calylophus serrulatus	4	
07GR001	GR	E	32	2009	COMERE	COER	0.5	14	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	E	32	2009	DIGPUB	DIPU9	3	10	Digitaria pubiflora	3	
07GR001	GR	E	32	2009	PARJAM	PAJA	0.1	3	Paronychia jamesii	4	
07GR001	GR	E	32	2009	PASSETS	PASES	2	6	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	32	2009	QUEHAV	QUHA3	9	30	Quercus havardii	2	
07GR001	GR	E	32	2009	SCHSCO	SCSC	14	14	Schizachyrium scoparium	3	
07GR001	GR	E	32	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GR001	GR	E	42	2009	ANDHAL	ANHA	3	50	Andropogon hallii	3	
07GR001	GR	E	42	2009	BOUCUR	BOCU	1	30	Bouteloua curtipendula	3	
07GR001	GR	E	42	2009	BOUHIR	BOHI2	1	10	Bouteloua hirsuta	3	
07GR001	GR	E	42	2009	CALSER	CASE12	2	13	Calylophus serrulatus	4	
07GR001	GR	E	42	2009	CHAFEN	CHFE3	0.5	3	Chamaesyce fendleri	4	
07GR001	GR	E	42	2009	COMERE	COER	0.5	15	Commelina erecta	4	
07GR001	GR	E	42	2009	CYPRET	CYRE14	0.5	12	Cyperus retroflexus	3	
07GR001	GR	E	42	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	E	42	2009	QUEHAV	QUHA3	21	40	Quercus havardii	2	
07GR001	GR	E	42	2009	SCHSCO	SCSC	12	18	Schizachyrium scoparium	3	
07GR001	GR	E	42	2009	SPOCRY	SPCR	2	25	Sporobolus cryptandrus	3	
07GR001	GR	E	42	2009	XANSPI2	MAPI	0.5	16	Xanthisma spinulosum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	E	42	2009	YUCGLA	YUGL	7	56	Yucca glauca	2	
07GR001	GR	F	2	2009	ANDHAL	ANHA	1	32	Andropogon hallii	3	
07GR001	GR	F	2	2009	BOUCUR	BOCU	1	8	Bouteloua curtipendula	3	
07GR001	GR	F	2	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GR001	GR	F	2	2009	CALSER	CASE12	2	14	Calylophus serrulatus	4	
07GR001	GR	F	2	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	2	2009	QUEHAV	QUHA3	3	21	Quercus havardii	2	
07GR001	GR	F	2	2009	SCHSCO	SCSC	32	25	Schizachyrium scoparium	3	
07GR001	GR	F	2	2009	SPOCRY	SPCR	1	26	Sporobolus cryptandrus	3	
07GR001	GR	F	2	2009	YUCGLA	YUGL	5	42	Yucca glauca	2	read quads towards north
07GR001	GR	F	12	2009	ANDHAL	ANHA	3	45	Andropogon hallii	3	
07GR001	GR	F	12	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GR001	GR	F	12	2009	CALSER	CASE12	0.5	12	Calylophus serrulatus	4	
07GR001	GR	F	12	2009	CHAGLY	CHGL13	0.1	5	Chamaesyce glyptosperma	4	
07GR001	GR	F	12	2009	COMERE	COER	0.1	8	Commelina erecta	4	
07GR001	GR	F	12	2009	CYPRET	CYRE14	1	8	Cyperus retroflexus	3	
07GR001	GR	F	12	2009	ERASEC	ERSE	0.5	7	Eragrostis secundiflora	3	
07GR001	GR	F	12	2009	PASSETS	PASES	3	8	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	12	2009	QUEHAV	QUHA3	16	35	Quercus	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									havardii		
07GR001	GR	F	12	2009	SCHSCO	SCSC	17	21	Schizachyrium scoparium	3	
07GR001	GR	F	12	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GR001	GR	F	22	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	F	22	2009	EVOSER	EVSE	0.5	20	Evolvulus sericeus	4	
07GR001	GR	F	22	2009	GAUVIL	GAVI2	0.5	27	Gaura villosa	4	
07GR001	GR	F	22	2009	LINRIGR	LIRIR	0.1	20	Linum rigidum var. rigidum	4	
07GR001	GR	F	22	2009	PARJAM	PAJA	0.5	5	Paronychia jamesii	4	
07GR001	GR	F	22	2009	PASSETS	PASES	3	14	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	22	2009	QUEHAV	QUHA3	4	30	Quercus havardii	2	
07GR001	GR	F	22	2009	SCHSCO	SCSC	26	21	Schizachyrium scoparium	3	
07GR001	GR	F	22	2009	SPOCRY	SPCR	0.5	20	Sporobolus cryptandrus	3	
07GR001	GR	F	22	2009	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GR001	GR	F	32	2009	ANDHAL	ANHA	2	20	Andropogon hallii	3	
07GR001	GR	F	32	2009	ARIPUR	ARPU9	1	13	Aristida purpurea	3	
07GR001	GR	F	32	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GR001	GR	F	32	2009	CALSER	CASE12	0.5	16	Calylophus serrulatus	4	
07GR001	GR	F	32	2009	COMERE	COER	0.5	6	Commelina erecta	4	
07GR001	GR	F	32	2009	DIGPUB	DIPU9	1	12	Digitaria pubiflora	3	
07GR001	GR	F	32	2009	ERASEC	ERSE	1	11	Eragrostis	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									secundiflora		
07GR001	GR	F	32	2009	LINRIGR	LIRIR	0.1	19	Linum rigidum var. rigidum	4	
07GR001	GR	F	32	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	32	2009	QUEHAV	QUHA3	10	35	Quercus havardii	2	
07GR001	GR	F	32	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GR001	GR	F	32	2009	SPOCRY	SPCR	0.5	12	Sporobolus cryptandrus	3	
07GR001	GR	F	32	2009	XANSPI2	MAPI	0.1	19	Xanthisma spinulosum	4	
07GR001	GR	F	42	2009	AMBPSI	AMPS	0.1	8	Ambrosia psilostachya	4	
07GR001	GR	F	42	2009	ANDHAL	ANHA	13	48	Andropogon hallii	3	
07GR001	GR	F	42	2009	BOUHIR	BOHI2	1	9	Bouteloua hirsuta	3	
07GR001	GR	F	42	2009	CALSER	CASE12	1	25	Calylophus serrulatus	4	
07GR001	GR	F	42	2009	EVOSER	EVSE	1	20	Evolvulus sericeus	4	
07GR001	GR	F	42	2009	HETVIL	HEVI4	0.5	14	Heterotheca villosa	4	
07GR001	GR	F	42	2009	PARJAM	PAJA	0.5	9	Paronychia jamesii	4	
07GR001	GR	F	42	2009	PASSETS	PASES	2	14	Paspalum setaceum var. stramineum	3	
07GR001	GR	F	42	2009	QUEHAV	QUHA3	16	45	Quercus havardii	2	
07GR001	GR	F	42	2009	SCHSCO	SCSC	12	25	Schizachyrium scoparium	3	
07GR001	GR	F	42	2009	SPOCRY	SPCR	2	28	Sporobolus cryptandrus	3	
07GR001	GR	F	42	2009	XANSPI2	MAPI	0.5	13	Xanthisma	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									spinulosum		
07GR001	GR	G	2	2009	ANDHAL	ANHA	1	45	Andropogon hallii	3	
07GR001	GR	G	2	2009	BOUCUR	BOCU	1	12	Bouteloua curtipendula	3	
07GR001	GR	G	2	2009	BOUHIR	BOHI2	2	12	Bouteloua hirsuta	3	
07GR001	GR	G	2	2009	CALSER	CASE12	0.5	16	Calylophus serrulatus	4	
07GR001	GR	G	2	2009	COMERE	COER	0.1	10	Commelina erecta	4	
07GR001	GR	G	2	2009	CYPRET	CYRE14	0.5	20	Cyperus retroflexus	3	
07GR001	GR	G	2	2009	DIGPUB	DIPU9	2	9	Digitaria pubiflora	3	
07GR001	GR	G	2	2009	LECMUC	LEMU3	2	20	Lechea mucronata	4	
07GR001	GR	G	2	2009	PARJAM	PAJA	0.1	6	Paronychia jamesii	4	
07GR001	GR	G	2	2009	PASSETS	PASES	4	11	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	2	2009	PSITAG	PSTA	0.1	5	Psilostrophe tagetina	4	
07GR001	GR	G	2	2009	QUEHAV	QUHA3	11	30	Quercus havardii	2	read quads towards north
07GR001	GR	G	2	2009	SCHSCO	SCSC	27	35	Schizachyrium scoparium	3	
07GR001	GR	G	2	2009	SPOCRY	SPCR	3	30	Sporobolus cryptandrus	3	
07GR001	GR	G	12	2009	BOUHIR	BOHI2	12	10	Bouteloua hirsuta	3	
07GR001	GR	G	12	2009	CALSER	CASE12	0.5	25	Calylophus serrulatus	4	
07GR001	GR	G	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	12	2009	QUEHAV	QUHA3	5	18	Quercus	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									havardii		
07GR001	GR	G	12	2009	SCHSCO	SCSC	23	20	Schizachyrium scoparium	3	
07GR001	GR	G	12	2009	SPOCRY	SPCR	2	15	Sporobolus cryptandrus	3	
07GR001	GR	G	22	2009	ANDHAL	ANHA	5	35	Andropogon hallii	3	
07GR001	GR	G	22	2009	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GR001	GR	G	22	2009	BOUHIR	BOHI2	0.5	10	Bouteloua hirsuta	3	
07GR001	GR	G	22	2009	COMERE	COER	0.1	15	Commelina erecta	4	
07GR001	GR	G	22	2009	LITMUL	LIMU3	2	12	Lithospermum multiflorum	4	
07GR001	GR	G	22	2009	PARJAM	PAJA	2	8	Paronychia jamesii	4	
07GR001	GR	G	22	2009	PASSETS	PASES	2	20	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	22	2009	QUEHAV	QUHA3	16	35	Quercus havardii	2	
07GR001	GR	G	22	2009	SCHSCO	SCSC	44	30	Schizachyrium scoparium	3	
07GR001	GR	G	22	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GR001	GR	G	32	2009	ANDHAL	ANHA	3	60	Andropogon hallii	3	
07GR001	GR	G	32	2009	ARIPUR	ARPU9	0.5	10	Aristida purpurea	3	
07GR001	GR	G	32	2009	BOUCUR	BOCU	1	10	Bouteloua curtipendula	3	
07GR001	GR	G	32	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GR001	GR	G	32	2009	CHAFEN	CHFE3	0.1	3	Chamaesyce fendleri	4	
07GR001	GR	G	32	2009	COMERE	COER	0.1	13	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	G	32	2009	DIGPUB	DIPU9	0.5	15	Digitaria pubiflora	3	
07GR001	GR	G	32	2009	PARJAM	PAJA	0.1	6	Paronychia jamesii	4	
07GR001	GR	G	32	2009	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	32	2009	QUEHAV	QUHA3	4	45	Quercus havardii	2	
07GR001	GR	G	32	2009	SCHSCO	SCSC	45	30	Schizachyrium scoparium	3	
07GR001	GR	G	32	2009	THEMEG	THME	0.1	42	Thelesperma megapotamicum	4	
07GR001	GR	G	32	2009	YUCGLA	YUGL	7	50	Yucca glauca	2	
07GR001	GR	G	42	2009	ANDHAL	ANHA	2	35	Andropogon hallii	3	
07GR001	GR	G	42	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	G	42	2009	COMERE	COER	0.1	11	Commelina erecta	4	
07GR001	GR	G	42	2009	ERASEC	ERSE	1	13	Eragrostis secundiflora	3	
07GR001	GR	G	42	2009	HETVIL	HEVI4	2	10	Heterotheca villosa	4	
07GR001	GR	G	42	2009	LECMUC	LEMU3	0.5	3	Lechea mucronata	4	
07GR001	GR	G	42	2009	PARJAM	PAJA	0.1	18	Paronychia jamesii	4	
07GR001	GR	G	42	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	G	42	2009	QUEHAV	QUHA3	6	28	Quercus havardii	2	
07GR001	GR	G	42	2009	SCHSCO	SCSC	32	20	Schizachyrium scoparium	3	
07GR001	GR	G	42	2009	SPOCRY	SPCR	1	18	Sporobolus cryptandrus	3	
07GR001	GR	G	42	2009	THEMEG	THME	0.5	60	Thelesperma	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									megapotamicum		
07GR001	GR	G	42	2009	XANSPI2	MAPI	0.5	20	Xanthisma spinulosum	4	
07GR001	GR	H	2	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GR001	GR	H	2	2009	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	
07GR001	GR	H	2	2009	COMUMBP	COUMP	1	15	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	2	2009	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	
07GR001	GR	H	2	2009	PARJAM	PAJA	0.5	9	Paronychia jamesii	4	
07GR001	GR	H	2	2009	PASSETS	PASES	1	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	2	2009	PSITAG	PSTA	1	18	Psilostrophe tagetina	4	
07GR001	GR	H	2	2009	QUEHAV	QUHA3	10	26	Quercus havardii	2	read quads towards north
07GR001	GR	H	2	2009	SCHSCO	SCSC	33	25	Schizachyrium scoparium	3	
07GR001	GR	H	2	2009	SPOCRY	SPCR	2	25	Sporobolus cryptandrus	3	
07GR001	GR	H	2	2009	THEMEG	THME	0.1	32	Thelesperma megapotamicum	4	
07GR001	GR	H	12	2009	ANDHAL	ANHA	1	40	Andropogon hallii	3	
07GR001	GR	H	12	2009	BOUHIR	BOHI2	5	9	Bouteloua hirsuta	3	
07GR001	GR	H	12	2009	CALSER	CASE12	0.1	14	Calylophus serrulatus	4	
07GR001	GR	H	12	2009	COMUMBP	COUMP	0.5	11	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	12	2009	COMERE	COER	0.1	20	Commelina erecta	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	H	12	2009	DALPUR	DAPU5	0.1	13	Dalea purpurea	4	
07GR001	GR	H	12	2009	ERASEC	ERSE	2	22	Eragrostis secundiflora	3	
07GR001	GR	H	12	2009	LITMUL	LIMU3	0.1	20	Lithospermum multiflorum	4	
07GR001	GR	H	12	2009	PARJAM	PAJA	0.1	7	Paronychia jamesii	4	
07GR001	GR	H	12	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	12	2009	QUEHAV	QUHA3	9	23	Quercus havardii	2	
07GR001	GR	H	12	2009	SCHSCO	SCSC	37	30	Schizachyrium scoparium	3	
07GR001	GR	H	12	2009	SPOCRY	SPCR	0.5	8	Sporobolus cryptandrus	3	
07GR001	GR	H	22	2009	ANDHAL	ANHA	29	55	Andropogon hallii	3	
07GR001	GR	H	22	2009	BOUCUR	BOCU	1	7	Bouteloua curtipendula	3	
07GR001	GR	H	22	2009	BOUHIR	BOHI2	1	8	Bouteloua hirsuta	3	
07GR001	GR	H	22	2009	CALSER	CASE12	0.5	23	Calylophus serrulatus	4	
07GR001	GR	H	22	2009	DALPUR	DAPU5	0.1	8	Dalea purpurea	4	
07GR001	GR	H	22	2009	ERASEC	ERSE	1	18	Eragrostis secundiflora	3	
07GR001	GR	H	22	2009	PARJAM	PAJA	0.1	8	Paronychia jamesii	4	
07GR001	GR	H	22	2009	PASSETS	PASES	2	18	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	22	2009	QUEHAV	QUHA3	6	28	Quercus havardii	2	
07GR001	GR	H	22	2009	SCHSCO	SCSC	16	25	Schizachyrium scoparium	3	
07GR001	GR	H	32	2009	ANDHAL	ANHA	0.5	55	Andropogon hallii	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	H	32	2009	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GR001	GR	H	32	2009	COMUMBP	COUMP	0.5	6	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	32	2009	COMERE	COER	0.1	6	Commelina erecta	4	
07GR001	GR	H	32	2009	CYPRET	CYRE14	0.1	12	Cyperus retroflexus	3	
07GR001	GR	H	32	2009	ERASEC	ERSE	1	14	Eragrostis secundiflora	3	
07GR001	GR	H	32	2009	GAUVIL	GAVI2	0.1	15	Gaura villosa	4	
07GR001	GR	H	32	2009	LINRIGR	LIRIR	0.1	26	Linum rigidum var. rigidum	4	
07GR001	GR	H	32	2009	PASSETS	PASES	5	15	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	32	2009	QUEHAV	QUHA3	2	30	Quercus havardii	2	
07GR001	GR	H	32	2009	SCHSCO	SCSC	27	30	Schizachyrium scoparium	3	
07GR001	GR	H	42	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GR001	GR	H	42	2009	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GR001	GR	H	42	2009	CHAGLY	CHGL13	0.1	1	Chamaesyce glyptosperma	4	
07GR001	GR	H	42	2009	COMUMBP	COUMP	0.5	15	Comandra umbellata ssp. pallida	4	
07GR001	GR	H	42	2009	COMERE	COER	0.1	15	Commelina erecta	4	
07GR001	GR	H	42	2009	ERASEC	ERSE	2	15	Eragrostis secundiflora	3	
07GR001	GR	H	42	2009	GUTSAR	GUSA2	1	25	Gutierrezia sarthrae	2.5	
07GR001	GR	H	42	2009	LECMUC	LEMU3	0.5	20	Lechea mucronata	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GR001	GR	H	42	2009	LITMUL	LIMU3	0.1	5	Lithospermum multiflorum	4	
07GR001	GR	H	42	2009	PARJAM	PAJA	1	7	Paronychia jamesii	4	
07GR001	GR	H	42	2009	PASSETS	PASES	4	10	Paspalum setaceum var. stramineum	3	
07GR001	GR	H	42	2009	SCHSCO	SCSC	22	35	Schizachyrium scoparium	3	
07GR001	GR	H	42	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GR001	GR	H	42	2009	XANSPI2	MAPI	0.1	8	Xanthisma spinulosum	4	
07GR001	GR	H	42	2009	XANTEXD	XATED2	0.1	10	Xanthisma texanum ssp. drummondii	4	
07GY001	GY	A	2	2009	AMBPSI	AMPS	0.1	7	Ambrosia psilostachya	4	
07GY001	GY	A	2	2009	ANDHAL	ANHA	3	43	Andropogon hallii	3	
07GY001	GY	A	2	2009	BOUCUR	BOCU	1	15	Bouteloua curtipendula	3	
07GY001	GY	A	2	2009	BOUHIR	BOHI2	14	8	Bouteloua hirsuta	3	
07GY001	GY	A	2	2009	CHAFEN	CHFE3	0.1	3	Chamaesyce fendleri	4	
07GY001	GY	A	2	2009	DALPUR	DAPU5	0.5	7	Dalea purpurea	4	
07GY001	GY	A	2	2009	FROGRA	FRGR3	0.1	9	Froelichia gracilis	4	
07GY001	GY	A	2	2009	PARJAM	PAJA	1	5	Paronychia jamesii	4	
07GY001	GY	A	2	2009	PASSETS	PASES	5	14	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	2	2009	QUEHAV	QUHA3	2	18	Quercus havardii	2	read quads towards north
07GY001	GY	A	2	2009	SCHSCO	SCSC	14	22	Schizachyrium scoparium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	A	2	2009	XANSPI2	MAPI	0.1	15	Xanthisma spinulosum	4	
07GY001	GY	A	12	2009	ANDHAL	ANHA	4	50	Andropogon hallii	3	
07GY001	GY	A	12	2009	ARIPUR	ARPU9	0.5	8	Aristida purpurea	3	
07GY001	GY	A	12	2009	BOUHIR	BOHI2	10	10	Bouteloua hirsuta	3	
07GY001	GY	A	12	2009	CALSER	CASE12	2	12	Calylophus serrulatus	4	
07GY001	GY	A	12	2009	COMERE	COER	0.1	8	Commelina erecta	4	
07GY001	GY	A	12	2009	DALPUR	DAPU5	2	30	Dalea purpurea	4	
07GY001	GY	A	12	2009	DIGPUB	DIPU9	0.5	8	Digitaria pubiflora	3	
07GY001	GY	A	12	2009	PASSETS	PASES	1	13	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	12	2009	QUEHAV	QUHA3	5	20	Quercus havardii	2	
07GY001	GY	A	12	2009	SCHSCO	SCSC	15	22	Schizachyrium scoparium	3	
07GY001	GY	A	12	2009	SPOCRY	SPCR	0.5	12	Sporobolus cryptandrus	3	
07GY001	GY	A	12	2009	XANSPI2	MAPI	0.1	24	Xanthisma spinulosum	4	
07GY001	GY	A	22	2009	ANDHAL	ANHA	2	70	Andropogon hallii	3	
07GY001	GY	A	22	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GY001	GY	A	22	2009	BOUCUR	BOCU	2	18	Bouteloua curtipendula	3	
07GY001	GY	A	22	2009	BOUHIR	BOHI2	8	10	Bouteloua hirsuta	3	
07GY001	GY	A	22	2009	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	A	22	2009	DIGPUB	DIPU9	7	18	Digitaria pubiflora	3	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	A	22	2009	HETVIL	HEVI4	1.5	18	Heterotheca villosa	4	
07GY001	GY	A	22	2009	LITMUL	LIMU3	1	12	Lithospermum multiflorum	4	
07GY001	GY	A	22	2009	PASSETS	PASES	5	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	22	2009	QUEHAV	QUHA3	7	40	Quercus havardii	2	
07GY001	GY	A	22	2009	SCHSCO	SCSC	16	25	Schizachyrium scoparium	3	
07GY001	GY	A	22	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GY001	GY	A	22	2009	THEMEG	THME	0.1	40	Thelesperma megapotamicum	4	
07GY001	GY	A	32	2009	ARIPUR	ARPU9	3	20	Aristida purpurea	3	
07GY001	GY	A	32	2009	BOUHIR	BOHI2	12	10	Bouteloua hirsuta	3	
07GY001	GY	A	32	2009	CALSER	CASE12	0.5	12	Calylophus serrulatus	4	
07GY001	GY	A	32	2009	DIGPUB	DIPU9	16	15	Digitaria pubiflora	3	
07GY001	GY	A	32	2009	GAUVIL	GAVI2	0.5	14	Gaura villosa	4	
07GY001	GY	A	32	2009	HYMFLAC	HYFLC	0.5	10	Hymenopappus flavescens var. canotomentosus	4	
07GY001	GY	A	32	2009	PASSETS	PASES	7	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	32	2009	SCHSCO	SCSC	8	32	Schizachyrium scoparium	3	
07GY001	GY	A	32	2009	SPOCRY	SPCR	2	20	Sporobolus cryptandrus	3	
07GY001	GY	A	32	2009	THEMEG	THME	0.5	30	Thelesperma megapotamicum	4	
07GY001	GY	A	32	2009	XANSPI2	MAPI	0.1	18	Xanthisma spinulosum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	A	42	2009	AMBPSI	AMPS	0.5	27	Ambrosia psilostachya	4	
07GY001	GY	A	42	2009	ARIPUR	ARPU9	4	12	Aristida purpurea	3	
07GY001	GY	A	42	2009	BOUCUR	BOCU	4	20	Bouteloua curtipendula	3	
07GY001	GY	A	42	2009	BOUHIR	BOHI2	7	7	Bouteloua hirsuta	3	
07GY001	GY	A	42	2009	CRYCIN	CRCI3	0.1	15	Cryptantha cinerea	4	
07GY001	GY	A	42	2009	DIGPUB	DIPU9	2	15	Digitaria pubiflora	3	
07GY001	GY	A	42	2009	EVOSER	EVSE	2	17	Evolvulus sericeus	4	
07GY001	GY	A	42	2009	HETVIL	HEVI4	1	16	Heterotheca villosa	4	
07GY001	GY	A	42	2009	PARJAM	PAJA	1	5	Paronychia jamesii	4	
07GY001	GY	A	42	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	A	42	2009	QUEHAV	QUHA3	8	35	Quercus havardii	2	
07GY001	GY	A	42	2009	SCHSCO	SCSC	7	25	Schizachyrium scoparium	3	
07GY001	GY	A	42	2009	SPOCRY	SPCR	5	20	Sporobolus cryptandrus	3	
07GY001	GY	A	42	2009	THEMEG	THME	1	50	Thelesperma megapotamicum	4	
07GY001	GY	A	42	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GY001	GY	B	2	2009	AMBPSI	AMPS	1	25	Ambrosia psilostachya	4	
07GY001	GY	B	2	2009	ANDHAL	ANHA	8	55	Andropogon hallii	3	
07GY001	GY	B	2	2009	ARIPUR	ARPU9	1	18	Aristida purpurea	3	
07GY001	GY	B	2	2009	BOUCUR	BOCU	1	10	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									curtipendula		
07GY001	GY	B	2	2009	BOUHIR	BOHI2	6	10	Bouteloua hirsuta	3	
07GY001	GY	B	2	2009	COMUMP	COUMP	0.5	8	Comandra umbellata ssp. pallida	4	
07GY001	GY	B	2	2009	COMERE	COER	0.5	12	Commelina erecta	4	
07GY001	GY	B	2	2009	CYPRET	CYRE14	0.5	8	Cyperus retroflexus	3	
07GY001	GY	B	2	2009	GAUVIL	GAVI2	0.1	15	Gaura villosa	4	
07GY001	GY	B	2	2009	PASSETS	PASES	3	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	2	2009	POMJAM	POJA5	0.5	18	Pomaria jamesii	4	
07GY001	GY	B	2	2009	QUEHAV	QUHA3	8	60	Quercus havardii	2	read quads towards north
07GY001	GY	B	2	2009	SCHSCO	SCSC	14	30	Schizachyrium scoparium	3	
07GY001	GY	B	2	2009	SPOCRY	SPCR	3	25	Sporobolus cryptandrus	3	
07GY001	GY	B	2	2009	THEMEG	THME	0.5	60	Thelesperma megapotamicum	4	
07GY001	GY	B	2	2009	XANSPI2	MAPI	0.5	18	Xanthisma spinulosum	4	
07GY001	GY	B	12	2009	ARIPUR	ARPU9	1	8	Aristida purpurea	3	
07GY001	GY	B	12	2009	BOUHIR	BOHI2	12	10	Bouteloua hirsuta	3	
07GY001	GY	B	12	2009	CYPRET	CYRE14	0.1	8	Cyperus retroflexus	3	
07GY001	GY	B	12	2009	DALPUR	DAPU5	0.1	4	Dalea purpurea	4	
07GY001	GY	B	12	2009	ERASEC	ERSE	0.5	15	Eragrostis secundiflora	3	
07GY001	GY	B	12	2009	EVOSER	EVSE	0.1	5	Evolvulus sericeus	4	
07GY001	GY	B	12	2009	PASSETS	PASES	1	10	Paspalum setaceum var.	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GY001	GY	B	12	2009	POMJAM	POJA5	0.1	15	Pomaria jamesii	4	
07GY001	GY	B	12	2009	QUEHAV	QUHA3	2	40	Quercus havardii	2	
07GY001	GY	B	12	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GY001	GY	B	12	2009	SPOCRY	SPCR	2	18	Sporobolus cryptandrus	3	
07GY001	GY	B	12	2009	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GY001	GY	B	22	2009	ANDHAL	ANHA	1	30	Andropogon hallii	3	
07GY001	GY	B	22	2009	BOUCUR	BOCU	1	20	Bouteloua curtipendula	3	
07GY001	GY	B	22	2009	BOUHIR	BOHI2	7	12	Bouteloua hirsuta	3	
07GY001	GY	B	22	2009	CALSER	CASE12	0.5	20	Calylophus serrulatus	4	
07GY001	GY	B	22	2009	CYPRET	CYRE14	1	13	Cyperus retroflexus	3	
07GY001	GY	B	22	2009	GAUVIL	GAVI2	0.1	16	Gaura villosa	4	
07GY001	GY	B	22	2009	HYMFLAC	HYFLC	0.1	5	Hymenopappus flavescens var. canotomentosus	4	
07GY001	GY	B	22	2009	PASSETS	PASES	1	8	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	22	2009	QUEHAV	QUHA3	12	50	Quercus havardii	2	
07GY001	GY	B	22	2009	SCHSCO	SCSC	38	25	Schizachyrium scoparium	3	
07GY001	GY	B	22	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GY001	GY	B	22	2009	THEMEG	THME	0.5	65	Thelesperma megapotamicum	4	
07GY001	GY	B	32	2009	ANDHAL	ANHA	1	40	Andropogon hallii	3	
07GY001	GY	B	32	2009	BOUHIR	BOHI2	2	8	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hirsuta		
07GY001	GY	B	32	2009	CALSER	CASE12	2	20	Calylophus serrulatus	4	
07GY001	GY	B	32	2009	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	B	32	2009	ERASEC	ERSE	1	17	Eragrostis secundiflora	3	
07GY001	GY	B	32	2009	EVOSER	EVSE	0.1	8	Evolvulus sericeus	4	
07GY001	GY	B	32	2009	FROGRA	FRGR3	0.1	30	Froelichia gracilis	4	
07GY001	GY	B	32	2009	MELLEU	MELE2	1	17	Melampodium leucanthum	4	
07GY001	GY	B	32	2009	PASSETS	PASES	3	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	32	2009	QUEHAV	QUHA3	2	27	Quercus havardii	2	
07GY001	GY	B	32	2009	SCHSCO	SCSC	23	25	Schizachyrium scoparium	3	
07GY001	GY	B	32	2009	SPOCRY	SPCR	2	25	Sporobolus cryptandrus	3	
07GY001	GY	B	32	2009	THEMEG	THME	0.1	45	Thelesperma megapotamicum	4	
07GY001	GY	B	32	2009	YUCGLA	YUGL	30	40	Yucca glauca	2	
07GY001	GY	B	42	2009	ARIPUR	ARPU9	1	8	Aristida purpurea	3	
07GY001	GY	B	42	2009	BOUCUR	BOCU	2	20	Bouteloua curtipendula	3	
07GY001	GY	B	42	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GY001	GY	B	42	2009	CALSER	CASE12	0.5	28	Calylophus serrulatus	4	
07GY001	GY	B	42	2009	DALPUR	DAPU5	0.1	11	Dalea purpurea	4	
07GY001	GY	B	42	2009	EVOSER	EVSE	0.1	16	Evolvulus sericeus	4	
07GY001	GY	B	42	2009	HETVIL	HEVI4	0.5	12	Heterotheca villosa	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	B	42	2009	PARJAM	PAJA	2	6	Paronychia jamesii	4	
07GY001	GY	B	42	2009	PASSETS	PASES	2	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	B	42	2009	POMJAM	POJA5	0.5	16	Pomaria jamesii	4	
07GY001	GY	B	42	2009	QUEHAV	QUHA3	1	30	Quercus havardii	2	
07GY001	GY	B	42	2009	SCHSCO	SCSC	38	30	Schizachyrium scoparium	3	
07GY001	GY	B	42	2009	SPOCRY	SPCR	1	12	Sporobolus cryptandrus	3	
07GY001	GY	B	42	2009	THEMEG	THME	0.1	20	Thelesperma megapotamicum	4	
07GY001	GY	C	2	2009	ARIPUR	ARPU9	20	3	Aristida purpurea	3	
07GY001	GY	C	2	2009	BOUCUR	BOCU	1	8	Bouteloua curtipendula	3	
07GY001	GY	C	2	2009	BOUHIR	BOHI2	1	12	Bouteloua hirsuta	3	
07GY001	GY	C	2	2009	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	
07GY001	GY	C	2	2009	DALPUR	DAPU5	0.1	8	Dalea purpurea	4	
07GY001	GY	C	2	2009	DIGPUB	DIPU9	0.5	10	Digitaria pubiflora	3	
07GY001	GY	C	2	2009	ERASEC	ERSE	20	1	Eragrostis secundiflora	3	
07GY001	GY	C	2	2009	GAUVIL	GAVI2	0.1	13	Gaura villosa	4	
07GY001	GY	C	2	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	2	2009	QUEHAV	QUHA3	5	35	Quercus havardii	2	
07GY001	GY	C	2	2009	SCHSCO	SCSC	26	35	Schizachyrium scoparium	3	
07GY001	GY	C	2	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GY001	GY	C	2	2009	YUCGLA	YUGL	1	45	Yucca glauca	2	read quads

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
											towards north
07GY001	GY	C	12	2009	ANDHAL	ANHA	2	64	Andropogon hallii	3	
07GY001	GY	C	12	2009	ARIPUR	ARPU9	3	18	Aristida purpurea	3	
07GY001	GY	C	12	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GY001	GY	C	12	2009	COMERE	COER	1	20	Commelina erecta	4	
07GY001	GY	C	12	2009	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	
07GY001	GY	C	12	2009	PASSETS	PASES	1	14	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	12	2009	POMJAM	POJA5	0.1	7	Pomaria jamesii	4	
07GY001	GY	C	12	2009	QUEHAV	QUHA3	13	30	Quercus havardii	2	
07GY001	GY	C	12	2009	SCHSCO	SCSC	30	25	Schizachyrium scoparium	3	
07GY001	GY	C	12	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GY001	GY	C	12	2009	XANSPI2	MAPI	0.5	23	Xanthisma spinulosum	4	
07GY001	GY	C	22	2009	AMBPSI	AMPS	0.1	18	Ambrosia psilostachya	4	
07GY001	GY	C	22	2009	ARIPUR	ARPU9	0.5	12	Aristida purpurea	3	
07GY001	GY	C	22	2009	BOTLAGT	BOLAT	3	30	Bothriochloa laguroides ssp. torreyana	3	
07GY001	GY	C	22	2009	BOUHIR	BOHI2	13	10	Bouteloua hirsuta	3	
07GY001	GY	C	22	2009	COMERE	COER	0.5	8	Commelina erecta	4	
07GY001	GY	C	22	2009	ERASES	ERSE2	1.5	16	Eragrostis sessilispica	3	
07GY001	GY	C	22	2009	GAUVIL	GAVI2	0.1	15	Gaura villosa	4	
07GY001	GY	C	22	2009	PARJAM	PAJA	0.1	6	Paronychia	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									jamesii		
07GY001	GY	C	22	2009	PASSETS	PASES	2	11	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	22	2009	QUEHAV	QUHA3	8	30	Quercus havardii	2	
07GY001	GY	C	22	2009	SCHSCO	SCSC	12	22	Schizachyrium scoparium	3	
07GY001	GY	C	22	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GY001	GY	C	22	2009	THEMEG	THME	0.1	8	Thelesperma megapotamicum	4	
07GY001	GY	C	22	2009	YUCGLA	YUGL	2	50	Yucca glauca	2	
07GY001	GY	C	32	2009	ARIPUR	ARPU9	2	15	Aristida purpurea	3	
07GY001	GY	C	32	2009	BOUHIR	BOHI2	8	8	Bouteloua hirsuta	3	
07GY001	GY	C	32	2009	CALSER	CASE12	0.5	18	Calylophus serrulatus	4	
07GY001	GY	C	32	2009	CHAFEN	CHFE3	0.1	3	Chamaesyce fendleri	4	
07GY001	GY	C	32	2009	COMERE	COER	0.5	15	Commelina erecta	4	
07GY001	GY	C	32	2009	ERASEC	ERSE	2	18	Eragrostis secundiflora	3	
07GY001	GY	C	32	2009	PARJAM	PAJA	0.1	5	Paronychia jamesii	4	
07GY001	GY	C	32	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	32	2009	QUEHAV	QUHA3	7	25	Quercus havardii	2	
07GY001	GY	C	32	2009	SCHSCO	SCSC	15	38	Schizachyrium scoparium	3	
07GY001	GY	C	32	2009	SPOCRY	SPCR	0.5	15	Sporobolus cryptandrus	3	
07GY001	GY	C	42	2009	AMBPSI	AMPS	0.1	21	Ambrosia psilostachya	4	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	C	42	2009	ARIPUR	ARPU9	2	14	Aristida purpurea	3	
07GY001	GY	C	42	2009	BOUCUR	BOCU	1	12	Bouteloua curtipendula	3	
07GY001	GY	C	42	2009	BOUHIR	BOHI2	6	8	Bouteloua hirsuta	3	
07GY001	GY	C	42	2009	CALSER	CASE12	0.5	10	Calylophus serrulatus	4	
07GY001	GY	C	42	2009	CHAFEN	CHFE3	0.1	2	Chamaesyce fendleri	4	
07GY001	GY	C	42	2009	COMERE	COER	0.5	5	Commelina erecta	4	
07GY001	GY	C	42	2009	CRYCIN	CRCI3	0.1	12	Cryptantha cinerea	4	
07GY001	GY	C	42	2009	CYPRET	CYRE14	0.1	8	Cyperus retroflexus	3	
07GY001	GY	C	42	2009	DALNANN	DANAN	1	14	Dalea nana var. nana	4	
07GY001	GY	C	42	2009	DALPUR	DAPU5	0.1	7	Dalea purpurea	4	
07GY001	GY	C	42	2009	ERASEC	ERSE	5	17	Eragrostis secundiflora	3	
07GY001	GY	C	42	2009	EVOSER	EVSE	0.5	6	Evolvulus sericeus	4	
07GY001	GY	C	42	2009	HETVIL	HEVI4	0.5	10	Heterotheca villosa	4	
07GY001	GY	C	42	2009	LITMUL	LIMU3	0.1	11	Lithospermum multiflorum	4	
07GY001	GY	C	42	2009	PARJAM	PAJA	0.1	4	Paronychia jamesii	4	
07GY001	GY	C	42	2009	PASSETS	PASES	2	7	Paspalum setaceum var. stramineum	3	
07GY001	GY	C	42	2009	QUEHAV	QUHA3	5	25	Quercus havardii	2	
07GY001	GY	C	42	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GY001	GY	C	42	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	C	42	2009	THEMEG	THME	1	45	Thelesperma megapotamicum	4	
07GY001	GY	D	2	2009	AMBPSI	AMPS	0.5	13	Ambrosia psilostachya	4	
07GY001	GY	D	2	2009	BOUCUR	BOCU	3	20	Bouteloua curtipendula	3	
07GY001	GY	D	2	2009	BOUHIR	BOHI2	15	12	Bouteloua hirsuta	3	
07GY001	GY	D	2	2009	CHLVER	CHVE2	1	8	Chloris verticillata	3	
07GY001	GY	D	2	2009	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	D	2	2009	CYPRET	CYRE14	0.5	15	Cyperus retroflexus	3	
07GY001	GY	D	2	2009	ERASEC	ERSE	1	20	Eragrostis secundiflora	3	
07GY001	GY	D	2	2009	EVOSER	EVSE	1	18	Evolvulus sericeus	4	
07GY001	GY	D	2	2009	PARJAM	PAJA	0.1	5	Paronychia jamesii	4	
07GY001	GY	D	2	2009	PASSETS	PASES	2	13	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	2	2009	QUEHAV	QUHA3		40	Quercus havardii	2	
07GY001	GY	D	2	2009	SCHSCO	SCSC	20	40	Schizachyrium scoparium	3	
07GY001	GY	D	2	2009	SPOCRY	SPCR	5	30	Sporobolus cryptandrus	3	
07GY001	GY	D	2	2009	YUCGLA	YUGL	35	55	Yucca glauca	2	read quads towards north
07GY001	GY	D	12	2009	ARIPUR	ARPU9	2	12	Aristida purpurea	3	
07GY001	GY	D	12	2009	BOUHIR	BOHI2	9	8	Bouteloua hirsuta	3	
07GY001	GY	D	12	2009	COMERE	COER	0.1	10	Commelina erecta	4	
07GY001	GY	D	12	2009	CYPRET	CYRE14	1	15	Cyperus	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									retroflexus		
07GY001	GY	D	12	2009	ERASEC	ERSE	5	25	Eragrostis secundiflora	3	
07GY001	GY	D	12	2009	EVOSE	EVSE	2	10	Evolvulus sericeus	4	
07GY001	GY	D	12	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	12	2009	QUEHAV	QUHA3	0.5	32	Quercus havardii	2	
07GY001	GY	D	12	2009	SCHSCO	SCSC	30	25	Schizachyrium scoparium	3	
07GY001	GY	D	12	2009	THEMEG	THME	0.1	15	Thelesperma megapotamicum	4	
07GY001	GY	D	12	2009	XANSPI2	MAPI	0.1	8	Xanthisma spinulosum	4	
07GY001	GY	D	22	2009	ARIPUR	ARPU9	1	15	Aristida purpurea	3	
07GY001	GY	D	22	2009	BOUHIR	BOHI2	20	10	Bouteloua hirsuta	3	
07GY001	GY	D	22	2009	ERASEC	ERSE	5	20	Eragrostis secundiflora	3	
07GY001	GY	D	22	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	22	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GY001	GY	D	22	2009	SPOCRY	SPCR	3	25	Sporobolus cryptandrus	3	
07GY001	GY	D	32	2009	ARIPUR	ARPU9	0.5	6	Aristida purpurea	3	
07GY001	GY	D	32	2009	BOUHIR	BOHI2	8	7	Bouteloua hirsuta	3	
07GY001	GY	D	32	2009	CALSER	CASE12	1	12	Calylophus serrulatus	4	
07GY001	GY	D	32	2009	DIGPUB	DIPU9	5	17	Digitaria pubiflora	3	
07GY001	GY	D	32	2009	ERASEC	ERSE	1	15	Eragrostis	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									secundiflora		
07GY001	GY	D	32	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	32	2009	SCHSCO	SCSC	18	40	Schizachyrium scoparium	3	
07GY001	GY	D	42	2009	ANDHAL	ANHA	3	45	Andropogon hallii	3	
07GY001	GY	D	42	2009	BOUHIR	BOHI2	6	6	Bouteloua hirsuta	3	
07GY001	GY	D	42	2009	CALSER	CASE12	0.1	19	Calylophus serrulatus	4	
07GY001	GY	D	42	2009	COMERE	COER	0.5	15	Commelina erecta	4	
07GY001	GY	D	42	2009	DIGPUB	DIPU9	3	15	Digitaria pubiflora	3	
07GY001	GY	D	42	2009	PASSETS	PASES	2	9	Paspalum setaceum var. stramineum	3	
07GY001	GY	D	42	2009	SCHSCO	SCSC	20	35	Schizachyrium scoparium	3	
07GY001	GY	D	42	2009	SPOCRY	SPCR	2	20	Sporobolus cryptandrus	3	
07GY001	GY	D	42	2009	THEMEG	THME	0.5	22	Thelesperma megapotamicum	4	
07GY001	GY	E	2	2009	AMBPSI	AMPS	0.1	20	Ambrosia psilostachya	4	
07GY001	GY	E	2	2009	ARIPUR	ARPU9	4	20	Aristida purpurea	3	
07GY001	GY	E	2	2009	BOUHIR	BOHI2	1	8	Bouteloua hirsuta	3	
07GY001	GY	E	2	2009	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	E	2	2009	EVOSER	EVSE	0.5	12	Evolvulus sericeus	4	
07GY001	GY	E	2	2009	GAUVIL	GAVI2	0.1	15	Gaura villosa	4	
07GY001	GY	E	2	2009	HETVIL	HEVI4	0.5	15	Heterotheca villosa	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSPName	LifeForm	Comments
07GY001	GY	E	2	2009	PARJAM	PAJA	1	7	Paronychia jamesii	4	
07GY001	GY	E	2	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	2	2009	QUEHAV	QUHA3	3	40	Quercus havardii	2	read quads towards north
07GY001	GY	E	2	2009	SCHSCO	SCSC	23	30	Schizachyrium scoparium	3	
07GY001	GY	E	2	2009	XANSPI2	MAPI	1	20	Xanthisma spinulosum	4	
07GY001	GY	E	12	2009	ARIPUR	ARPU9	2	12	Aristida purpurea	3	
07GY001	GY	E	12	2009	BOUHIR	BOHI2	3	7	Bouteloua hirsuta	3	
07GY001	GY	E	12	2009	CALSER	CASE12	0.1	15	Calylophus serrulatus	4	
07GY001	GY	E	12	2009	CHAFEN	CHFE3	0.5	3	Chamaesyce fendleri	4	
07GY001	GY	E	12	2009	DIGPUB	DIPU9	5	12	Digitaria pubiflora	3	
07GY001	GY	E	12	2009	ERASEC	ERSE	1	15	Eragrostis secundiflora	3	
07GY001	GY	E	12	2009	EVOSER	EVSE	1	15	Evolvulus sericeus	4	
07GY001	GY	E	12	2009	GAUVIL	GAVI2	0.1	7	Gaura villosa	4	
07GY001	GY	E	12	2009	HETVIL	HEVI4	1	15	Heterotheca villosa	4	
07GY001	GY	E	12	2009	LINRIGR	LIRIR	0.1	20	Linum rigidum var. rigidum	4	
07GY001	GY	E	12	2009	PARJAM	PAJA	1	5	Paronychia jamesii	4	
07GY001	GY	E	12	2009	PASSETS	PASES	3	18	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	12	2009	POMJAM	POJA5	1	10	Pomaria jamesii	4	
07GY001	GY	E	12	2009	QUEHAV	QUHA3	0.5	50	Quercus havardii	2	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	E	12	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GY001	GY	E	12	2009	SPOCRY	SPCR	0.5	20	Sporobolus cryptandrus	3	
07GY001	GY	E	22	2009	ANDHAL	ANHA	14	40	Andropogon hallii	3	
07GY001	GY	E	22	2009	ARIPUR	ARPU9	3	20	Aristida purpurea	3	
07GY001	GY	E	22	2009	BOUHIR	BOHI2	2	8	Bouteloua hirsuta	3	
07GY001	GY	E	22	2009	CRYCIN	CRCI3	1	8	Cryptantha cinerea	4	
07GY001	GY	E	22	2009	HETVIL	HEVI4	0.5	17	Heterotheca villosa	4	
07GY001	GY	E	22	2009	QUEHAV	QUHA3	8	45	Quercus havardii	2	
07GY001	GY	E	22	2009	SCHSCO	SCSC	11	30	Schizachyrium scoparium	3	
07GY001	GY	E	22	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GY001	GY	E	22	2009	THEMEG	THME	0.1	52	Thelesperma megapotamicum	4	
07GY001	GY	E	22	2009	XANSPI2	MAPI	0.1	12	Xanthisma spinulosum	4	
07GY001	GY	E	32	2009	ARIPUR	ARPU9	3	25	Aristida purpurea	3	
07GY001	GY	E	32	2009	BOUCUR	BOCU	4	25	Bouteloua curtipendula	3	
07GY001	GY	E	32	2009	BOUHIR	BOHI2	2	12	Bouteloua hirsuta	3	
07GY001	GY	E	32	2009	QUEHAV	QUHA3	25	45	Quercus havardii	2	
07GY001	GY	E	32	2009	SCHSCO	SCSC	17	22	Schizachyrium scoparium	3	
07GY001	GY	E	32	2009	THEMEG	THME	0.5	50	Thelesperma megapotamicum	4	
07GY001	GY	E	32	2009	YUCGLA	YUGL	1	35	Yucca glauca	2	
07GY001	GY	E	42	2009	ARIPUR	ARPU9	3	20	Aristida	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									purpurea		
07GY001	GY	E	42	2009	BOUCUR	BOCU	2	20	Bouteloua curtipendula	3	
07GY001	GY	E	42	2009	BOUHIR	BOHI2	4	12	Bouteloua hirsuta	3	
07GY001	GY	E	42	2009	EUPDAV	EUDA5	0.1	12	Euphorbia davidii	4	
07GY001	GY	E	42	2009	PASSETS	PASES	0.5	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	E	42	2009	QUEHAV	QUHA3	23	40	Quercus havardii	2	
07GY001	GY	E	42	2009	SCHSCO	SCSC	13	30	Schizachyrium scoparium	3	
07GY001	GY	E	42	2009	SPOCRY	SPCR	2	30	Sporobolus cryptandrus	3	
07GY001	GY	E	42	2009	THEMEG	THME	1	56	Thelesperma megapotamicum	4	
07GY001	GY	F	2	2009	BOUCUR	BOCU	1	15	Bouteloua curtipendula	3	
07GY001	GY	F	2	2009	BOUHIR	BOHI2	5	8	Bouteloua hirsuta	3	
07GY001	GY	F	2	2009	CALSER	CASE12	0.2	17	Calylophus serrulatus	4	
07GY001	GY	F	2	2009	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	
07GY001	GY	F	2	2009	DALPUR	DAPU5	0.1	7	Dalea purpurea	4	
07GY001	GY	F	2	2009	ERASES	ERSE2	1	18	Eragrostis sessilispica	3	
07GY001	GY	F	2	2009	HETVIL	HEVI4	0.1	8	Heterotheca villosa	4	
07GY001	GY	F	2	2009	PARJAM	PAJA	1	5	Paronychia jamesii	4	
07GY001	GY	F	2	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	2	2009	SCHSCO	SCSC	43	25	Schizachyrium scoparium	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	F	2	2009	XANSPI2	MAPI	0.5	20	Xanthisma spinulosum	4	
07GY001	GY	F	2	2009	YUCGLA	YUGL	0.1	45	Yucca glauca	2	Read quads toward N.
07GY001	GY	F	12	2009	ARIPUR	ARPU9	2	25	Aristida purpurea	3	
07GY001	GY	F	12	2009	BOUCUR	BOCU	3	20	Bouteloua curtipendula	3	
07GY001	GY	F	12	2009	BOUHIR	BOHI2	3	11	Bouteloua hirsuta	3	
07GY001	GY	F	12	2009	CALSER	CASE12	0.5	17	Calylophus serrulatus	4	
07GY001	GY	F	12	2009	CYPRET	CYRE14	0.1	8	Cyperus retroflexus	3	
07GY001	GY	F	12	2009	DALPUR	DAPU5	0.1	10	Dalea purpurea	4	
07GY001	GY	F	12	2009	ERASES	ERSE2	1	10	Eragrostis sessilispica	3	
07GY001	GY	F	12	2009	PASSETS	PASES	2	13	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	12	2009	QUEHAV	QUHA3	16	40	Quercus havardii	2	
07GY001	GY	F	12	2009	SCHSCO	SCSC	40	20	Schizachyrium scoparium	3	
07GY001	GY	F	12	2009	SPOCRY	SPCR	1	25	Sporobolus cryptandrus	3	
07GY001	GY	F	12	2009	THEMEG	THME	0.5	57	Thelesperma megapotamicum	4	
07GY001	GY	F	12	2009	XANSPI2	MAPI	0.1	20	Xanthisma spinulosum	4	
07GY001	GY	F	22	2009	BOUCUR	BOCU	2	17	Bouteloua curtipendula	3	
07GY001	GY	F	22	2009	BOUHIR	BOHI2	3	8	Bouteloua hirsuta	3	
07GY001	GY	F	22	2009	COMERE	COER	0.1	12	Commelina erecta	4	
07GY001	GY	F	22	2009	PASSETS	PASES	2	15	Paspalum setaceum var.	3	



PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									stramineum		
07GY001	GY	F	22	2009	POMJAM	POJA5	2	20	Pomaria jamesii	4	
07GY001	GY	F	22	2009	QUEHAV	QUHA3	11	50	Quercus havardii	2	
07GY001	GY	F	22	2009	SCHSCO	SCSC	35	30	Schizachyrium scoparium	3	
07GY001	GY	F	22	2009	SPOCRY	SPCR	2	20	Sporobolus cryptandrus	3	
07GY001	GY	F	22	2009	THEMEG	THME	0.5	45	Thelesperma megapotamicum	4	
07GY001	GY	F	22	2009	XANSPI2	MAPI	1	25	Xanthisma spinulosum	4	
07GY001	GY	F	22	2009	YUCGLA	YUGL	35	55	Yucca glauca	2	
07GY001	GY	F	32	2009	BOUHIR	BOHI2	6	12	Bouteloua hirsuta	3	
07GY001	GY	F	32	2009	CALSER	CASE12	3	28	Calylophus serrulatus	4	
07GY001	GY	F	32	2009	CRYCIN	CRCI3	0.1	14	Cryptantha cinerea	4	
07GY001	GY	F	32	2009	CYPRET	CYRE14	0.1	10	Cyperus retroflexus	3	
07GY001	GY	F	32	2009	DIGPUB	DIPU9	3	18	Digitaria pubiflora	3	
07GY001	GY	F	32	2009	GUTSAR	GUSA2	2	20	Gutierrezia sarothrae	2.5	
07GY001	GY	F	32	2009	PARJAM	PAJA	0.5	6	Paronychia jamesii	4	
07GY001	GY	F	32	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	32	2009	QUEHAV	QUHA3	11	50	Quercus havardii	2	
07GY001	GY	F	32	2009	SCHSCO	SCSC	23	35	Schizachyrium scoparium	3	
07GY001	GY	F	32	2009	SPOCRY	SPCR	1	20	Sporobolus cryptandrus	3	
07GY001	GY	F	32	2009	XANSPI2	MAPI	0.5	10	Xanthisma spinulosum	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	F	42	2009	BOUHIR	BOHI2	5	9	Bouteloua hirsuta	3	
07GY001	GY	F	42	2009	COMERE	COER	0.5	13	Commelina erecta	4	
07GY001	GY	F	42	2009	CYPRET	CYRE14	0.1	7	Cyperus retroflexus	3	
07GY001	GY	F	42	2009	FROGRA	FRGR3	0.1	5	Froelichia gracilis	4	
07GY001	GY	F	42	2009	LIAPUN	LIPU	1	20	Liatris punctata	4	
07GY001	GY	F	42	2009	PARJAM	PAJA	0.1	7	Paronychia jamesii	4	
07GY001	GY	F	42	2009	PASSETS	PASES	0.1	5	Paspalum setaceum var. stramineum	3	
07GY001	GY	F	42	2009	POMJAM	POJA5	0.1	12	Pomaria jamesii	4	
07GY001	GY	F	42	2009	QUEHAV	QUHA3	7	40	Quercus havardii	2	
07GY001	GY	F	42	2009	SCHSCO	SCSC	40	17	Schizachyrium scoparium	3	
07GY001	GY	F	42	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GY001	GY	F	42	2009	THEMEG	THME	0.5	50	Thelesperma megapotamicum	4	
07GY001	GY	G	2	2009	AMBPSI	AMPS	0.5	9	Ambrosia psilostachya	4	
07GY001	GY	G	2	2009	ANDHAL	ANHA	4	47	Andropogon hallii	3	
07GY001	GY	G	2	2009	ARIPUR	ARPU9	7	20	Aristida purpurea	3	
07GY001	GY	G	2	2009	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GY001	GY	G	2	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GY001	GY	G	2	2009	CALSER	CASE12	1	20	Calylophus serrulatus	4	
07GY001	GY	G	2	2009	DIGPUB	DIPU9	5	15	Digitaria pubiflora	3	
07GY001	GY	G	2	2009	PASSETS	PASES	2	15	Paspalum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									setaceum var. stramineum		
07GY001	GY	G	2	2009	PSITAG	PSTA	1	15	Psilostrophe tagetina	4	
07GY001	GY	G	2	2009	QUEHAV	QUHA3	9	17	Quercus havardii	2	Read quads toward N.
07GY001	GY	G	2	2009	SCHSCO	SCSC	10	30	Schizachyrium scoparium	3	
07GY001	GY	G	2	2009	SPOCRY	SPCR	1	40	Sporobolus cryptandrus	3	
07GY001	GY	G	12	2009	BOUHIR	BOHI2	5	10	Bouteloua hirsuta	3	
07GY001	GY	G	12	2009	CALSER	CASE12	0.1	10	Calylophus serrulatus	4	
07GY001	GY	G	12	2009	COMERE	COER	0.1	10	Commelina erecta	4	
07GY001	GY	G	12	2009	ERASEC	ERSE	2	15	Eragrostis secundiflora	3	
07GY001	GY	G	12	2009	PASSETS	PASES	5	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	12	2009	QUEHAV	QUHA3	4	15	Quercus havardii	2	
07GY001	GY	G	12	2009	SCHSCO	SCSC	48	25	Schizachyrium scoparium	3	
07GY001	GY	G	12	2009	UNIDFS		0.1	2	unidentified forb - seedling	4	
07GY001	GY	G	22	2009	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GY001	GY	G	22	2009	BOUHIR	BOHI2	8	10	Bouteloua hirsuta	3	
07GY001	GY	G	22	2009	CHAERI	CHER2	5	10	Chaetopappa ericoides	4	
07GY001	GY	G	22	2009	CYPRET	CYRE14	0.5	11	Cyperus retroflexus	3	
07GY001	GY	G	22	2009	DIGPUB	DIPU9	6	12	Digitaria pubiflora	3	
07GY001	GY	G	22	2009	PASSETS	PASES	2	15	Paspalum	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									setaceum var. stramineum		
07GY001	GY	G	22	2009	QUEHAV	QUHA3	9	38	Quercus havardii	2	
07GY001	GY	G	22	2009	SCHSCO	SCSC	21	30	Schizachyrium scoparium	3	
07GY001	GY	G	22	2009	SPOCRY	SPCR	1	30	Sporobolus cryptandrus	3	
07GY001	GY	G	32	2009	ARIPUR	ARPU9	2	20	Aristida purpurea	3	
07GY001	GY	G	32	2009	BOUCUR	BOCU	1	20	Bouteloua curtipendula	3	
07GY001	GY	G	32	2009	BOUHIR	BOHI2	2	15	Bouteloua hirsuta	3	
07GY001	GY	G	32	2009	CHAERI	CHER2	3	10	Chaetopappa ericoides	4	
07GY001	GY	G	32	2009	COMERE	COER	1	9	Commelina erecta	4	
07GY001	GY	G	32	2009	CYPRET	CYRE14	0.5	8	Cyperus retroflexus	3	
07GY001	GY	G	32	2009	EVOSER	EVSE	0.5	9	Evolvulus sericeus	4	
07GY001	GY	G	32	2009	PASSETS	PASES	2	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	32	2009	PSITAG	PSTA	0.5	10	Psilostrophe tagetina	4	
07GY001	GY	G	32	2009	QUEHAV	QUHA3	20	45	Quercus havardii	2	
07GY001	GY	G	32	2009	SCHSCO	SCSC	15	20	Schizachyrium scoparium	3	
07GY001	GY	G	32	2009	SPOCRY	SPCR	1	40	Sporobolus cryptandrus	3	
07GY001	GY	G	32	2009	THEMEG	THME	0.1	53	Thelesperma megapotamicum	4	
07GY001	GY	G	42	2009	AMBPSI	AMPS	0.5	17	Ambrosia psilostachya	4	
07GY001	GY	G	42	2009	ARIPUR	ARPU9	3	23	Aristida	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									purpurea		
07GY001	GY	G	42	2009	BOUCUR	BOCU	2	18	Bouteloua curtipendula	3	
07GY001	GY	G	42	2009	BOUHIR	BOHI2	10	12	Bouteloua hirsuta	3	
07GY001	GY	G	42	2009	CHAGLY	CHGL13	0.1	3	Chamaesyce glyptosperma	4	
07GY001	GY	G	42	2009	CRYCIN	CRCI3	0.5	11	Cryptantha cinerea	4	
07GY001	GY	G	42	2009	MIRLIN	MILI3	0.1	17	Mirabilis linearis	4	change MIRGLA to MIRLIN-YC
07GY001	GY	G	42	2009	MUNSQU	MUSQ3	0.5	6	Munroa squarrosa	3	
07GY001	GY	G	42	2009	PASSETS	PASES	1	25	Paspalum setaceum var. stramineum	3	
07GY001	GY	G	42	2009	QUEHAV	QUHA3	16	45	Quercus havardii	2	
07GY001	GY	G	42	2009	SCHSCO	SCSC	5	25	Schizachyrium scoparium	3	
07GY001	GY	G	42	2009	SPOCRY	SPCR	2	25	Sporobolus cryptandrus	3	
07GY001	GY	H	2	2009	ARIPUR	ARPU9	18	25	Aristida purpurea	3	
07GY001	GY	H	2	2009	BOUHIR	BOHI2	6	12	Bouteloua hirsuta	3	
07GY001	GY	H	2	2009	CALSER	CASE12	0.5	15	Calylophus serrulatus	4	
07GY001	GY	H	2	2009	CENSPI	CESP4	2	25	Cenchrus spinifex	3	
07GY001	GY	H	2	2009	COMERE	COER	3	12	Commelina erecta	4	
07GY001	GY	H	2	2009	DIGPUB	DIPU9	4	18	Digitaria pubiflora	3	
07GY001	GY	H	2	2009	ERASEC	ERSE	3	20	Eragrostis secundiflora	3	
07GY001	GY	H	2	2009	FROGRA	FRGR3	0.5	24	Froelichia gracilis	4	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	H	2	2009	PASSETS	PASES	1	15	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	2	2009	PROGLA	PRGL2	23	100	Prosopis glandulosa	2	read quads towards north
07GY001	GY	H	2	2009	QUEHAV	QUHA3	1	35	Quercus havardii	2	
07GY001	GY	H	2	2009	SCHSCO	SCSC	8	25	Schizachyrium scoparium	3	
07GY001	GY	H	2	2009	SPOCRY	SPCR	1	15	Sporobolus cryptandrus	3	
07GY001	GY	H	2	2009	XANSPI2	MAPI	2	18	Xanthisma spinulosum	4	
07GY001	GY	H	12	2009	ARIPUR	ARPU9	1	20	Aristida purpurea	3	
07GY001	GY	H	12	2009	BOUHIR	BOHI2	4	10	Bouteloua hirsuta	3	
07GY001	GY	H	12	2009	COMERE	COER	0.5	10	Commelina erecta	4	
07GY001	GY	H	12	2009	DIGPUB	DIPU9	1	18	Digitaria pubiflora	3	
07GY001	GY	H	12	2009	ERASEC	ERSE	3	20	Eragrostis secundiflora	3	
07GY001	GY	H	12	2009	PARJAM	PAJA	0.5	6	Paronychia jamesii	4	
07GY001	GY	H	12	2009	QUEHAV	QUHA3	10	25	Quercus havardii	2	
07GY001	GY	H	12	2009	SCHSCO	SCSC	31	25	Schizachyrium scoparium	3	
07GY001	GY	H	12	2009	SPOCRY	SPCR	1	12	Sporobolus cryptandrus	3	
07GY001	GY	H	12	2009	THEMEG	THME	0.5	42	Thelesperma megapotamicum	4	
07GY001	GY	H	22	2009	ANDHAL	ANHA	5	45	Andropogon hallii	3	
07GY001	GY	H	22	2009	BOUCUR	BOCU	0.5	15	Bouteloua curtipendula	3	
07GY001	GY	H	22	2009	BOUHIR	BOHI2	3	7	Bouteloua	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
									hirsuta		
07GY001	GY	H	22	2009	EVOSE	EVSE	0.1	12	Evolvulus sericeus	4	
07GY001	GY	H	22	2009	QUEHAV	QUHA3	15	30	Quercus havardii	2	
07GY001	GY	H	22	2009	SCHSCO	SCSC	32	30	Schizachyrium scoparium	3	
07GY001	GY	H	22	2009	SPOCRY	SPCR	3	20	Sporobolus cryptandrus	3	
07GY001	GY	H	32	2009	BOUCUR	BOCU	1	10	Bouteloua curtipendula	3	
07GY001	GY	H	32	2009	BOUHIR	BOHI2	2	10	Bouteloua hirsuta	3	
07GY001	GY	H	32	2009	CALSER	CASE12	0.5	17	Calylophus serrulatus	4	
07GY001	GY	H	32	2009	DIGPUB	DIPU9	1	10	Digitaria pubiflora	3	
07GY001	GY	H	32	2009	ERASEC	ERSE	1	14	Eragrostis secundiflora	3	
07GY001	GY	H	32	2009	PARJAM	PAJA	0.5	6	Paronychia jamesii	4	
07GY001	GY	H	32	2009	PASSETS	PASES	1	12	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	32	2009	QUEHAV	QUHA3	12	27	Quercus havardii	2	
07GY001	GY	H	32	2009	SCHSCO	SCSC	35	18	Schizachyrium scoparium	3	
07GY001	GY	H	32	2009	XANSPI2	MAPI	1	15	Xanthisma spinulosum	4	
07GY001	GY	H	42	2009	ANDHAL	ANHA	3	35	Andropogon hallii	3	
07GY001	GY	H	42	2009	BOUHIR	BOHI2	9	10	Bouteloua hirsuta	3	
07GY001	GY	H	42	2009	CALSER	CASE12	1	14	Calylophus serrulatus	4	
07GY001	GY	H	42	2009	ERASEC	ERSE	2	20	Eragrostis secundiflora	3	

PlotID	Treatment	Transect	Quad	Year	ACRO1	NM_K_Symbol	Cover	Ht	NMSpName	LifeForm	Comments
07GY001	GY	H	42	2009	PASSETS	PASES	2	10	Paspalum setaceum var. stramineum	3	
07GY001	GY	H	42	2009	QUEHAV	QUHA3	11	30	Quercus havardii	2	
07GY001	GY	H	42	2009	SCHSCO	SCSC	22	18	Schizachyrium scoparium	3	
07GY001	GY	H	42	2009	SPOCRY	SPCR	2	22	Sporobolus cryptandrus	3	
07GY001	GY	H	42	2009	THEMEG	THME	1	48	Thelesperma megapotamicum	4	



**Table B2. Raw biomass (grams) by vegetation type (herbaceous or woody) per clipping quadrat at the Sandhills Grazing Area (SGA).**

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GC001	GC	A	4	H	2.09	09-Oct-09
07GC001	GC	A	14	H	6.65	09-Oct-09
07GC001	GC	A	24	H	1.98	09-Oct-09
07GC001	GC	A	24	W	16.86	09-Oct-09
07GC001	GC	A	34	H	4.17	09-Oct-09
07GC001	GC	A	34	W	37.91	09-Oct-09
07GC001	GC	A	44	H	8.2	09-Oct-09
07GC001	GC	A	44	W	53.13	09-Oct-09
07GC001	GC	B	4	W	2.32	09-Oct-09
07GC001	GC	B	4	H	1.84	09-Oct-09
07GC001	GC	B	14	H	2.74	09-Oct-09
07GC001	GC	B	14	W	2.45	09-Oct-09
07GC001	GC	B	24	H	6.36	09-Oct-09
07GC001	GC	B	24	W	39.87	09-Oct-09
07GC001	GC	B	34	W	36.97	09-Oct-09
07GC001	GC	B	34	H	9.06	09-Oct-09
07GC001	GC	B	44	H	4.39	09-Oct-09
07GC001	GC	B	44	W	24.28	09-Oct-09
07GC001	GC	C	4	H	13.84	10-Oct-09
07GC001	GC	C	14	H	5.26	10-Oct-09
07GC001	GC	C	24	H	4.58	10-Oct-09
07GC001	GC	C	24	W	52.98	10-Oct-09
07GC001	GC	C	34	W	49.78	10-Oct-09
07GC001	GC	C	34	H	8.25	10-Oct-09
07GC001	GC	C	44	W	29.69	10-Oct-09
07GC001	GC	C	44	H	1.84	10-Oct-09
07GC001	GC	D	4	H	49.67	10-Oct-09
07GC001	GC	D	14	W	29.64	10-Oct-09
07GC001	GC	D	14	H	33.33	10-Oct-09
07GC001	GC	D	24	H	12.65	10-Oct-09

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GC001	GC	D	34	H	14.06	10-Oct-09
07GC001	GC	D	34	W	50.95	10-Oct-09
07GC001	GC	D	44	H	12.75	10-Oct-09
07GC001	GC	D	44	W	0.35	10-Oct-09
07GC001	GC	E	4	H	3.4	09-Oct-09
07GC001	GC	E	4	W	18.4	09-Oct-09
07GC001	GC	E	14	H	13.1	09-Oct-09
07GC001	GC	E	24	H	12.49	09-Oct-09
07GC001	GC	E	24	W	7.36	09-Oct-09
07GC001	GC	E	34	H	9.66	09-Oct-09
07GC001	GC	E	44	W	12.29	09-Oct-09
07GC001	GC	E	44	H	12.52	09-Oct-09
07GC001	GC	F	4	W	0.82	09-Oct-09
07GC001	GC	F	4	H	5.59	09-Oct-09
07GC001	GC	F	14	H	8.57	09-Oct-09
07GC001	GC	F	24	H	3.94	09-Oct-09
07GC001	GC	F	34	H	26.2	09-Oct-09
07GC001	GC	F	44	H	3.61	09-Oct-09
07GC001	GC	G	4	W	43.7	10-Oct-09
07GC001	GC	G	4	H	8.33	10-Oct-09
07GC001	GC	G	14	H	14.44	10-Oct-09
07GC001	GC	G	24	H	9.61	10-Oct-09
07GC001	GC	G	24	W	1.05	10-Oct-09
07GC001	GC	G	34	W	24.07	10-Oct-09
07GC001	GC	G	34	H	2.72	10-Oct-09
07GC001	GC	G	44	H	13.27	10-Oct-09
07GC001	GC	H	4	W	2.23	10-Oct-09
07GC001	GC	H	14	W	36.05	10-Oct-09
07GC001	GC	H	14	H	1.36	10-Oct-09
07GC001	GC	H	24	H	7.02	10-Oct-09
07GC001	GC	H	24	W	4.85	10-Oct-09
07GC001	GC	H	34	W	1.18	10-Oct-09
07GC001	GC	H	34	H	49.1	10-Oct-09
07GC001	GC	H	44	W	18.71	10-Oct-09

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GC001	GC	H	44	H	2.07	10-Oct-09
07GR001	GR	A	4	W	26.29	07-Oct-09
07GR001	GR	A	4	H	4.38	07-Oct-09
07GR001	GR	A	14	W	4.48	07-Oct-09
07GR001	GR	A	14	H	5.08	07-Oct-09
07GR001	GR	A	24	H	2.29	07-Oct-09
07GR001	GR	A	24	W	4.63	07-Oct-09
07GR001	GR	A	34	H	43.21	07-Oct-09
07GR001	GR	A	34	W	7.36	07-Oct-09
07GR001	GR	A	44	W	4.51	07-Oct-09
07GR001	GR	A	44	H	5.67	07-Oct-09
07GR001	GR	B	4	H	16.73	07-Oct-09
07GR001	GR	B	4	W	16.93	07-Oct-09
07GR001	GR	B	14	W	23.71	07-Oct-09
07GR001	GR	B	14	H	26.39	07-Oct-09
07GR001	GR	B	24	W	9.11	07-Oct-09
07GR001	GR	B	24	H	2.8	07-Oct-09
07GR001	GR	B	34	W	38.91	07-Oct-09
07GR001	GR	B	34	H	11.82	07-Oct-09
07GR001	GR	B	44	H	8.13	07-Oct-09
07GR001	GR	B	44	W	25.14	07-Oct-09
07GR001	GR	C	4	H	1.35	08-Oct-09
07GR001	GR	C	14	W	6.87	08-Oct-09
07GR001	GR	C	14	H	14.7	08-Oct-09
07GR001	GR	C	14	W	7.74	08-Oct-09
07GR001	GR	C	24	H	9.87	08-Oct-09
07GR001	GR	C	34	W	7	08-Oct-09
07GR001	GR	C	34	H	36.39	08-Oct-09
07GR001	GR	C	44	W	43.14	08-Oct-09
07GR001	GR	C	44	H	3.16	08-Oct-09
07GR001	GR	D	4	W	0.65	08-Oct-09
07GR001	GR	D	4	H	18.83	08-Oct-09
07GR001	GR	D	14	H	94.51	08-Oct-09
07GR001	GR	D	24	H	29.37	08-Oct-09

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GR001	GR	D	24	W	13.26	08-Oct-09
07GR001	GR	D	34	W	6.23	08-Oct-09
07GR001	GR	D	34	H	17.69	08-Oct-09
07GR001	GR	D	44	H	32.23	08-Oct-09
07GR001	GR	E	4	H	7.52	07-Oct-09
07GR001	GR	E	4	H	1.39	07-Oct-09
07GR001	GR	E	4	W	6.64	07-Oct-09
07GR001	GR	E	14	H	5.78	07-Oct-09
07GR001	GR	E	14	W	34.37	07-Oct-09
07GR001	GR	E	14	H	15.91	07-Oct-09
07GR001	GR	E	24	H	4.24	07-Oct-09
07GR001	GR	E	24	H	33.26	07-Oct-09
07GR001	GR	E	24	W	3.25	07-Oct-09
07GR001	GR	E	24	W	5.29	07-Oct-09
07GR001	GR	E	34	W	29.81	07-Oct-09
07GR001	GR	E	34	H	8.37	07-Oct-09
07GR001	GR	E	34	H	5.89	07-Oct-09
07GR001	GR	E	44	H	3.65	07-Oct-09
07GR001	GR	E	44	W	16.78	07-Oct-09
07GR001	GR	E	44	H	6.88	07-Oct-09
07GR001	GR	G	4	H	10.86	08-Oct-09
07GR001	GR	G	4	W	1.33	08-Oct-09
07GR001	GR	G	14	H	17.53	08-Oct-09
07GR001	GR	G	14	W	3.02	08-Oct-09
07GR001	GR	G	24	H	2.38	08-Oct-09
07GR001	GR	G	24	W	12.69	08-Oct-09
07GR001	GR	G	34	H	6.77	08-Oct-09
07GR001	GR	G	34	W	4.68	08-Oct-09
07GR001	GR	G	44	H	34.68	08-Oct-09
07GR001	GR	H	4	H	3.55	08-Oct-09
07GR001	GR	H	14	H	9.67	08-Oct-09
07GR001	GR	H	24	H	40.77	08-Oct-09
07GR001	GR	H	34	W	1.81	08-Oct-09
07GR001	GR	H	34	H	11.28	08-Oct-09

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GR001	GR	H	44	H	7.35	08-Oct-09
07GR001	GR	H	44	W	14.53	08-Oct-09
07GY001	GY	A	4	H	10.38	09-Oct-09
07GY001	GY	A	14	H	14.05	09-Oct-09
07GY001	GY	A	24	H	4.35	09-Oct-09
07GY001	GY	A	34	H	5.55	09-Oct-09
07GY001	GY	A	44	H	6.32	09-Oct-09
07GY001	GY	B	4	H	12.38	09-Oct-09
07GY001	GY	B	4	W	6.97	09-Oct-09
07GY001	GY	B	14	H	4.34	09-Oct-09
07GY001	GY	B	14	W	2.66	09-Oct-09
07GY001	GY	B	24	H	15.54	09-Oct-09
07GY001	GY	B	24	H	17.13	09-Oct-09
07GY001	GY	B	44	W	174.39	09-Oct-09
07GY001	GY	C	4	H	2.81	09-Oct-09
07GY001	GY	C	4	W	10.77	09-Oct-09
07GY001	GY	C	14	W	57.55	09-Oct-09
07GY001	GY	C	14	H	1.72	09-Oct-09
07GY001	GY	C	24	W	36.7	09-Oct-09
07GY001	GY	C	24	H	30.02	09-Oct-09
07GY001	GY	C	34	H	5.75	09-Oct-09
07GY001	GY	C	34	W	2.58	09-Oct-09
07GY001	GY	C	44	H	9.1	09-Oct-09
07GY001	GY	D	4	W	20.53	08-Oct-09
07GY001	GY	D	4	H	23.09	08-Oct-09
07GY001	GY	D	14	H	23.88	08-Oct-09
07GY001	GY	D	24	W	32.13	08-Oct-09
07GY001	GY	D	24	H	16.74	08-Oct-09
07GY001	GY	D	34	H	27.05	08-Oct-09
07GY001	GY	D	44	H	9.67	08-Oct-09
07GY001	GY	E	4	H	0.219999	09-Oct-09
07GY001	GY	E	14	H	14.95	09-Oct-09
07GY001	GY	E	24	H	12.37	09-Oct-09
07GY001	GY	E	34	H	9.57	09-Oct-09

PlotID	Treatment	Transect	WeightLoc	VegType	VegWeight	Date
07GY001	GY	E	44	W	19.19	09-Oct-09
07GY001	GY	E	44	H	3.33	09-Oct-09
07GY001	GY	F	4	H	32.07	09-Oct-09
07GY001	GY	F	14	W	8.31	09-Oct-09
07GY001	GY	F	14	H	28.91	09-Oct-09
07GY001	GY	F	24	H	9.18	09-Oct-09
07GY001	GY	F	34	H	9.26	09-Oct-09
07GY001	GY	F	44	H	24.44	09-Oct-09
07GY001	GY	G	4	H	24.34	08-Oct-09
07GY001	GY	G	14	W	23.31	08-Oct-09
07GY001	GY	G	14	H	6.81	08-Oct-09
07GY001	GY	G	24	H	5.5	08-Oct-09
07GY001	GY	G	34	W	76.84	08-Oct-09
07GY001	GY	G	34	H	1.05	08-Oct-09
07GY001	GY	G	44	W	11.08	08-Oct-09
07GY001	GY	G	44	H	6.45	08-Oct-09
07GY001	GY	H	4	H	14.56	08-Oct-09
07GY001	GY	H	4	W	2.86	08-Oct-09
07GY001	GY	H	14	H	8.28	08-Oct-09
07GY001	GY	H	14	W	19.76	08-Oct-09
07GY001	GY	H	24	W	14.28	08-Oct-09
07GY001	GY	H	24	H	6.94	08-Oct-09
07GY001	GY	H	34	H	13.37	08-Oct-09
07GY001	GY	H	44	W	29.43	08-Oct-09
07GY001	GY	H	44	H	3.55	08-Oct-09

**Table B3. Raw percent basal cover data based on transect line point intercept at the Sandhills Grazing Area (SGA).**

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GC001	GC	A	2007	1	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GC001	GC	A	2007	68	LITTER			Bill Dunn
07GC001	GC	A	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GC001	GC	A	2007	8	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	A	2007	21	SOIL			Bill Dunn
07GC001	GC	A	2007	1	SPOCRY	SPCR	Sporobolus cryptandrus	Bill Dunn
07GC001	GC	B	2007	2	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GC001	GC	B	2007	59	LITTER			Bill Dunn
07GC001	GC	B	2007	2	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GC001	GC	B	2007	7	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	B	2007	28	SOIL			Bill Dunn
07GC001	GC	B	2007	1	SPOCRY	SPCR	Sporobolus cryptandrus	Bill Dunn
07GC001	GC	C	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GC001	GC	C	2007	2	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GC001	GC	C	2007	1	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GC001	GC	C	2007	57	LITTER			Bill Dunn
07GC001	GC	C	2007	1	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GC001	GC	C	2007	5	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	C	2007	33	SOIL			Bill Dunn
07GC001	GC	D	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GC001	GC	D	2007	3	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GC001	GC	D	2007	55	LITTER			Bill Dunn
07GC001	GC	D	2007	4	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	D	2007	37	SOIL			Bill Dunn
07GC001	GC	E	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GC001	GC	E	2007	1	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GC001	GC	E	2007	2	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GC001	GC	E	2007	56	LITTER			Bill Dunn
07GC001	GC	E	2007	14	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	E	2007	26	SOIL			Bill Dunn
07GC001	GC	F	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GC001	GC	F	2007	1	DUNG			Bill Dunn
07GC001	GC	F	2007	1	GUTSAR	GUSA2	Gutierrezia sarothrae	Bill Dunn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GC001	GC	F	2007	31	LITTER			Bill Dunn
07GC001	GC	F	2007	15	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	F	2007	48	SOIL			Bill Dunn
07GC001	GC	F	2007	2	YUCGLA	YUGL	Yucca glauca	Bill Dunn
07GC001	GC	G	2007	58	LITTER			Bill Dunn
07GC001	GC	G	2007	1	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GC001	GC	G	2007	3	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GC001	GC	G	2007	4	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	G	2007	34	SOIL			Bill Dunn
07GC001	GC	H	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GC001	GC	H	2007	1	DUNG			Bill Dunn
07GC001	GC	H	2007	1	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GC001	GC	H	2007	57	LITTER			Bill Dunn
07GC001	GC	H	2007	12	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GC001	GC	H	2007	27	SOIL			Bill Dunn
07GR001	GR	A	2007	2	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GR001	GR	A	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	A	2007	51	LITTER			Bill Dunn
07GR001	GR	A	2007	1	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GR001	GR	A	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GR001	GR	A	2007	5	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	A	2007	38	SOIL			Bill Dunn
07GR001	GR	B	2007	2	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GR001	GR	B	2007	4	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	B	2007	1	DUNG			Bill Dunn
07GR001	GR	B	2007	46	LITTER			Bill Dunn
07GR001	GR	B	2007	1	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GR001	GR	B	2007	13	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	B	2007	33	SOIL			Bill Dunn
07GR001	GR	C	2007	3	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GR001	GR	C	2007	1	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GR001	GR	C	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	C	2007	50	LITTER			Bill Dunn
07GR001	GR	C	2007	9	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	C	2007	32	SOIL			Bill Dunn
07GR001	GR	C	2007	2	YUCGLA	YUGL	Yucca glauca	Bill Dunn



PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GR001	GR	D	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GR001	GR	D	2007	4	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	D	2007	1	DUNG			Bill Dunn
07GR001	GR	D	2007	38	LITTER			Bill Dunn
07GR001	GR	D	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GR001	GR	D	2007	17	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	D	2007	38	SOIL			Bill Dunn
07GR001	GR	E	2007	4	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GR001	GR	E	2007	4	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	E	2007	51	LITTER			Bill Dunn
07GR001	GR	E	2007	6	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	E	2007	34	SOIL			Bill Dunn
07GR001	GR	F	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	F	2007	37	LITTER			Bill Dunn
07GR001	GR	F	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GR001	GR	F	2007	10	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	F	2007	49	SOIL			Bill Dunn
07GR001	GR	G	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GR001	GR	G	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GR001	GR	G	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	G	2007	36	LITTER			Bill Dunn
07GR001	GR	G	2007	15	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	G	2007	45	SOIL			Bill Dunn
07GR001	GR	G	2007	1	YUCGLA	YUGL	Yucca glauca	Bill Dunn
07GR001	GR	H	2007	1	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GR001	GR	H	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GR001	GR	H	2007	1	DUNG			Bill Dunn
07GR001	GR	H	2007	2	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GR001	GR	H	2007	37	LITTER			Bill Dunn
07GR001	GR	H	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GR001	GR	H	2007	14	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GR001	GR	H	2007	41	SOIL			Bill Dunn
07GY001	GY	A	2007	2	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	A	2007	9	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	A	2007	24	LITTER			Bill Dunn
07GY001	GY	A	2007	2	PASSET	PASE5	Paspalum setaceum	Bill Dunn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GY001	GY	A	2007	12	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	A	2007	50	SOIL			Bill Dunn
07GY001	GY	B	2007	2	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	B	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GY001	GY	B	2007	6	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	B	2007	33	LITTER			Bill Dunn
07GY001	GY	B	2007	1	PARJAM	PAJA	Paronychia jamesii	Bill Dunn
07GY001	GY	B	2007	2	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GY001	GY	B	2007	13	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	B	2007	41	SOIL			Bill Dunn
07GY001	GY	B	2007	1	YUCGLA	YUGL	Yucca glauca	Bill Dunn
07GY001	GY	C	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	C	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GY001	GY	C	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	C	2007	45	LITTER			Bill Dunn
07GY001	GY	C	2007	1	PARJAM	PAJA	Paronychia jamesii	Bill Dunn
07GY001	GY	C	2007	13	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	C	2007	38	SOIL			Bill Dunn
07GY001	GY	D	2007	1	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	D	2007	1	DUNG			Bill Dunn
07GY001	GY	D	2007	34	LITTER			Bill Dunn
07GY001	GY	D	2007	2	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GY001	GY	D	2007	12	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	D	2007	50	SOIL			Bill Dunn
07GY001	GY	E	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	E	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	E	2007	50	LITTER			Bill Dunn
07GY001	GY	E	2007	10	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	E	2007	34	SOIL			Bill Dunn
07GY001	GY	E	2007	1	YUCGLA	YUGL	Yucca glauca	Bill Dunn
07GY001	GY	F	2007	1	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	F	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GY001	GY	F	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	F	2007	1	DUNG			Bill Dunn
07GY001	GY	F	2007	35	LITTER			Bill Dunn
07GY001	GY	F	2007	2	PASSET	PASE5	Paspalum setaceum	Bill Dunn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GY001	GY	F	2007	15	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	F	2007	41	SOIL			Bill Dunn
07GY001	GY	G	2007	2	ARIPUR	ARPU9	Aristida purpurea	Bill Dunn
07GY001	GY	G	2007	1	BOUCUR	BOCU	Bouteloua curtipendula	Bill Dunn
07GY001	GY	G	2007	3	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	G	2007	36	LITTER			Bill Dunn
07GY001	GY	G	2007	1	PASSET	PASE5	Paspalum setaceum	Bill Dunn
07GY001	GY	G	2007	1	QUEHAV	QUHA3	Quercus havardii	Bill Dunn
07GY001	GY	G	2007	12	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	G	2007	42	SOIL			Bill Dunn
07GY001	GY	H	2007	3	ANDHAL	ANHA	Andropogon hallii	Bill Dunn
07GY001	GY	H	2007	2	BOUHIR	BOHI2	Bouteloua hirsuta	Bill Dunn
07GY001	GY	H	2007	3	DUNG			Bill Dunn
07GY001	GY	H	2007	1	ERASEC	ERSE	Eragrostis secundiflora	Bill Dunn
07GY001	GY	H	2007	44	LITTER			Bill Dunn
07GY001	GY	H	2007	10	SCHSCO	SCSC	Schizachyrium scoparium	Bill Dunn
07GY001	GY	H	2007	36	SOIL			Bill Dunn
07GC001	GC	A	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GC001	GC	A	2009	1	ERASEC	ERSE	Eragrostis secundiflora	Conor Flynn
07GC001	GC	A	2009	62	LITTER			Conor Flynn
07GC001	GC	A	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GC001	GC	A	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	A	2009	4	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	A	2009	29	SOIL			Conor Flynn
07GC001	GC	A	2009	1	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GC001	GC	B	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GC001	GC	B	2009	59	LITTER			Conor Flynn
07GC001	GC	B	2009	3	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	B	2009	10	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	B	2009	26	SOIL			Conor Flynn
07GC001	GC	C	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GC001	GC	C	2009	1	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GC001	GC	C	2009	51	LITTER			Conor Flynn
07GC001	GC	C	2009	5	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	C	2009	42	SOIL			Conor Flynn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GC001	GC	D	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GC001	GC	D	2009	3	ERASEC	ERSE	Eragrostis secundiflora	Conor Flynn
07GC001	GC	D	2009	59	LITTER			Conor Flynn
07GC001	GC	D	2009	1	PARJAM	PAJA	Paronychia jamesii	Conor Flynn
07GC001	GC	D	2009	2	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	D	2009	11	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	D	2009	23	SOIL			Conor Flynn
07GC001	GC	E	2009	2	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GC001	GC	E	2009	58	LITTER			Conor Flynn
07GC001	GC	E	2009	2	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GC001	GC	E	2009	2	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	E	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	E	2009	24	SOIL			Conor Flynn
07GC001	GC	F	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GC001	GC	F	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GC001	GC	F	2009	4	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GC001	GC	F	2009	45	LITTER			Conor Flynn
07GC001	GC	F	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	F	2009	11	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	F	2009	36	SOIL			Conor Flynn
07GC001	GC	G	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GC001	GC	G	2009	2	ERASEC	ERSE	Eragrostis secundiflora	Conor Flynn
07GC001	GC	G	2009	1	GUTSAR	GUSA2	Gutierrezia sarothrae	Conor Flynn
07GC001	GC	G	2009	64	LITTER			Conor Flynn
07GC001	GC	G	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GC001	GC	G	2009	7	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	G	2009	23	SOIL			Conor Flynn
07GC001	GC	H	2009	3	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GC001	GC	H	2009	50	LITTER			Conor Flynn
07GC001	GC	H	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GC001	GC	H	2009	2	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GC001	GC	H	2009	15	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GC001	GC	H	2009	29	SOIL			Conor Flynn
07GR001	GR	A	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GR001	GR	A	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GR001	GR	A	2009	1	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	A	2009	54	LITTER			Conor Flynn
07GR001	GR	A	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GR001	GR	A	2009	7	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	A	2009	34	SOIL			Conor Flynn
07GR001	GR	B	2009	6	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	B	2009	1	DUNG			Conor Flynn
07GR001	GR	B	2009	2	GUTSAR	GUSA2	Gutierrezia sarothrae	Conor Flynn
07GR001	GR	B	2009	59	LITTER			Conor Flynn
07GR001	GR	B	2009	2	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GR001	GR	B	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GR001	GR	B	2009	9	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	B	2009	20	SOIL			Conor Flynn
07GR001	GR	C	2009	2	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	C	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GR001	GR	C	2009	3	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	C	2009	58	LITTER			Conor Flynn
07GR001	GR	C	2009	9	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	C	2009	24	SOIL			Conor Flynn
07GR001	GR	C	2009	1	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GR001	GR	C	2009	1	XANSPI2	MAPI	Xanthisma spinulosum	Conor Flynn
07GR001	GR	D	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	D	2009	1	BOUCUR	BOCU	Bouteloua curtipendula	Conor Flynn
07GR001	GR	D	2009	3	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	D	2009	1	DUNG			Conor Flynn
07GR001	GR	D	2009	49	LITTER			Conor Flynn
07GR001	GR	D	2009	2	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GR001	GR	D	2009	16	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	D	2009	26	SOIL			Conor Flynn
07GR001	GR	D	2009	1	XANSPI2	MAPI	Xanthisma spinulosum	Conor Flynn
07GR001	GR	E	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	E	2009	1	CALSER	CASE12	Calylophus serrulatus	Conor Flynn
07GR001	GR	E	2009	61	LITTER			Conor Flynn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GR001	GR	E	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	E	2009	25	SOIL			Conor Flynn
07GR001	GR	F	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	F	2009	1	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GR001	GR	F	2009	59	LITTER			Conor Flynn
07GR001	GR	F	2009	7	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	F	2009	32	SOIL			Conor Flynn
07GR001	GR	G	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	G	2009	1	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GR001	GR	G	2009	1	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	G	2009	1	DUNG			Conor Flynn
07GR001	GR	G	2009	1	ERASEC	ERSE	Eragrostis secundiflora	Conor Flynn
07GR001	GR	G	2009	55	LITTER			Conor Flynn
07GR001	GR	G	2009	3	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GR001	GR	G	2009	14	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	G	2009	22	SOIL			Conor Flynn
07GR001	GR	H	2009	5	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GR001	GR	H	2009	4	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GR001	GR	H	2009	45	LITTER			Conor Flynn
07GR001	GR	H	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GR001	GR	H	2009	19	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GR001	GR	H	2009	24	SOIL			Conor Flynn
07GR001	GR	H	2009	2	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GY001	GY	A	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GY001	GY	A	2009	10	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	A	2009	43	LITTER			Conor Flynn
07GY001	GY	A	2009	2	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GY001	GY	A	2009	9	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	A	2009	35	SOIL			Conor Flynn
07GY001	GY	B	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GY001	GY	B	2009	1	BOUCUR	BOCU	Bouteloua curtipendula	Conor Flynn
07GY001	GY	B	2009	4	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	B	2009	54	LITTER			Conor Flynn
07GY001	GY	B	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GY001	GY	B	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GY001	GY	B	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	B	2009	23	SOIL			Conor Flynn
07GY001	GY	B	2009	1	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GY001	GY	B	2009	1	YUCGLA	YUGL	Yucca glauca	Conor Flynn
07GY001	GY	C	2009	1	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GY001	GY	C	2009	1	BOUCUR	BOCU	Bouteloua curtipendula	Conor Flynn
07GY001	GY	C	2009	4	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	C	2009	50	LITTER			Conor Flynn
07GY001	GY	C	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GY001	GY	C	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	C	2009	31	SOIL			Conor Flynn
07GY001	GY	D	2009	2	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GY001	GY	D	2009	3	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	D	2009	46	LITTER			Conor Flynn
07GY001	GY	D	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GY001	GY	D	2009	18	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	D	2009	29	SOIL			Conor Flynn
07GY001	GY	D	2009	1	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GY001	GY	E	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GY001	GY	E	2009	1	ARIPUR	ARPU9	Aristida purpurea	Conor Flynn
07GY001	GY	E	2009	4	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	E	2009	58	LITTER			Conor Flynn
07GY001	GY	E	2009	1	PARJAM	PAJA	Paronychia jamesii	Conor Flynn
07GY001	GY	E	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	E	2009	21	SOIL			Conor Flynn
07GY001	GY	E	2009	1	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GY001	GY	E	2009	1	YUCGLA	YUGL	Yucca glauca	Conor Flynn
07GY001	GY	F	2009	1	ANDHAL	ANHA	Andropogon hallii	Conor Flynn
07GY001	GY	F	2009	3	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	F	2009	1	DUNG			Conor Flynn
07GY001	GY	F	2009	40	LITTER			Conor Flynn
07GY001	GY	F	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GY001	GY	F	2009	17	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn

PlotID	Treatment	Transect	Year	Cover	GCclass	NM_K_Symbol	NMSpName	Surveyor
07GY001	GY	F	2009	37	SOIL			Conor Flynn
07GY001	GY	G	2009	1	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	G	2009	54	LITTER			Conor Flynn
07GY001	GY	G	2009	2	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GY001	GY	G	2009	1	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GY001	GY	G	2009	15	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	G	2009	27	SOIL			Conor Flynn
07GY001	GY	H	2009	2	BOUHIR	BOHI2	Bouteloua hirsuta	Conor Flynn
07GY001	GY	H	2009	1	DUNG			Conor Flynn
07GY001	GY	H	2009	48	LITTER			Conor Flynn
07GY001	GY	H	2009	1	PASSET	PASE5	Paspalum setaceum	Conor Flynn
07GY001	GY	H	2009	2	QUEHAV	QUHA3	Quercus havardii	Conor Flynn
07GY001	GY	H	2009	12	SCHSCO	SCSC	Schizachyrium scoparium	Conor Flynn
07GY001	GY	H	2009	31	SOIL			Conor Flynn
07GY001	GY	H	2009	2	SPOCRY	SPCR	Sporobolus cryptandrus	Conor Flynn
07GY001	GY	H	2009	1	YUCGLA	YUGL	Yucca glauca	Conor Flynn



**Table B4. Raw floristic data by quadrat at the Mesquite Treatment Area (MTA).**

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2008	MT	1A	0	6	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1A	0	2	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	1A	0	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	1A	0	22	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	1A	0	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1A	0	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	1A	0	15	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1A	10	36	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1A	10	4	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	1A	10	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	1A	10	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1A	10	5	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	1A	40	7	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	1A	40	40	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1A	40	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	1A	40	0.5	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	1A	40	5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1A	40	12	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	1A	40	3	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	1A	50	60	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	1A	50	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1A	50	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1A	50	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	1A	50	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1B	0	30	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	1B	0	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1B	0	1	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	1B	0	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	1B	0	1	ELYELY	ELEL5	Elymus elymoides	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2008	MT	1B	0	3	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	1B	0	0.5	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	1B	0	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1B	0	1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	1B	0	1	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	1B	10	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1B	10	5	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	1B	10	10	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2008	MT	1B	10	20	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	1B	10	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1B	10	20	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	1B	40	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1B	40	45	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	1B	40	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	1B	40	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1B	50	40	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	1B	50	22	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1B	50	1	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	1B	50	1	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	1B	50	1	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	1B	50	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1B	50	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	1B	50	0.5	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	1C	0	1	CIRUND	CIUN	Cirsium undulatum	4	
2008	MT	1C	0	3	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	1C	0	98	MUHPOR	MUPO2	Muhlenbergia porteri	3	
2008	MT	1C	0	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1C	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	1C	0	0.5	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	1C	10	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1C	10	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	1C	10	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	1C	10	1	CIRUND	CIUN	Cirsium undulatum	4	
2008	MT	1C	10	18	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2008	MT	1C	10	2	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	1C	10	1.5	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	1C	10	2	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	1C	10	0.5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1C	10	10	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	1C	40	1	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	1C	40	33	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1C	40	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	
2008	MT	1C	40	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	1C	50	22	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	1C	50	3	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	1C	50	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	PANICU- 07MT001-G9, 2008 - keyed to ERACUR
2008	MT	1C	50	65	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	1C	50	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	2A	0	4	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	2A	0	2	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2A	0	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2A	0	3	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	2A	0	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	2A	10	12	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2A	10	0.5	CHAERI	CHER2	Chaetopappa ericoides	4	
2008	MT	2A	10	45	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	2A	10	10	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	2A	40	18	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2A	40	3	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	2A	40	25	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	2A	40	15	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	2A	40	2	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	2A	50	2	ARIPUR	ARPU9	Aristida purpurea	3	
2008	MT	2A	50	1	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2A	50	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	2A	50	1	CIRUND	CIUN	Cirsium undulatum	4	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2008	MT	2A	50	12	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2A	50	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2A	50	1	SALTRA	SATR12	Salsola tragus	4	
2008	MT	2A	50	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	2A	50	3	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	2B	0	20	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	2B	0	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2B	0	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	2B	0	2	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2B	0	3	ERACUR	ERCU	Eragrostis curtipedicellata	3	PANICU-07MT001-G9, 2008 - keyed to ERACUR
2008	MT	2B	0	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2B	0	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	2B	10	43	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2B	10	1	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	2B	40	1	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	2B	40	43	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2B	40	6	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	2B	40	2	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2008	MT	2B	40	0.5	MUNSQU	MUSQ3	Munroa squarrosa	3	
2008	MT	2B	40	17	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	2B	40	2	POROLE	POOL	Portulaca oleracea	4	
2008	MT	2B	40	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	2B	50	30	ARIPUR	ARPU9	Aristida purpurea	3	
2008	MT	2B	50	10	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2B	50	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	2B	50	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2B	50	15	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	2C	0	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2C	0	2	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	2C	0	2	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2C	0	20	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2008	MT	2C	0	0.5	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	2C	0	75	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2C	0	1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	2C	10	20	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2C	10	35	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	2C	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	2C	40	70	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2C	40	2	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	2C	40	1	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	2C	50	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	2C	50	10	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	2C	50	3	ERACUR	ERCU	Eragrostis curtipedicellata	3	PANICU- 07MT001-G9, 2008 - keyed to ERACUR
2008	MT	2C	50	1	MUHPOR	MUPO2	Muhlenbergia porteri	3	
2008	MT	2C	50	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	2C	50	5	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	3A	0	15	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	3A	0	3	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	3A	0	1	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	3A	0	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3A	0	1	SOLROS	SORO	Solanum rostratum	4	
2008	MT	3A	0	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	3A	10	33	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3A	10	13	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	3A	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3A	10	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	3A	40	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3A	40	2	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	3A	40	10	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	3A	40	0.5	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	3A	40	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	3A	50	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2008	MT	3A	50	1	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	3A	50	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	3A	50	60	MUHPOR	MUPO2	Muhlenbergia porteri	3	
2008	MT	3A	50	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3A	50	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	3B	0	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3B	0	0.5	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	3B	0	30	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	3B	0	2	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	3B	0	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3B	0	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3B	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	3B	0	0.5	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	3B	10	0.5	BERLYR	BELY	Berlandiera lyrata	4	
2008	MT	3B	10	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3B	10	3	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	3B	10	28	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2008	MT	3B	10	28	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	3B	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3B	40	60	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3B	40	1	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	3B	40	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3B	50	1	ARIPUR	ARPU9	Aristida purpurea	3	
2008	MT	3B	50	30	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	3B	50	15	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2008	MT	3B	50	2	PARCONL	PACOL	Parthenium confertum var. lyratum	4	
2008	MT	3B	50	85	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3B	50	3	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3B	50	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	3B	50	1	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	3C	0	3	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	3C	0	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3C	0	2	ELYELY	ELEL5	Elymus elymoides	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2008	MT	3C	0	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	3C	0	1	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	3C	0	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3C	0	6	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	3C	10	65	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3C	10	1	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	3C	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	3C	10	1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	3C	40	20	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	3C	40	18	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	3C	40	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	3C	40	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	PANICU-07MT001-G9, 2008 - keyed to ERACUR
2008	MT	3C	40	3	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	3C	40	1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	3C	40	40	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	3C	40	3	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	3C	50	15	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	3C	50	5	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	3C	50	0.5	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	3C	50	85	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	3C	50	2	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2008	MT	4A	0	2	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	4A	0	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	4A	0	1	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	4A	0	85	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	4A	0	2	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	4A	0	1	SOLROS	SORO	Solanum rostratum	4	
2008	MT	4A	0	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	4A	10	1	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4A	10	7	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	4A	10	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2008	MT	4A	10	1	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	4A	10	12	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	4A	10	10	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	4A	10	30	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	4A	40	3	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	4A	40	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4A	40	10	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	4A	40	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	4A	40	6	DYSPAP	DYPA	Dyssodia papposa	4	
2008	MT	4A	40	17	MUNSQU	MUSQ3	Munroa squarrosa	3	
2008	MT	4A	40	1	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	4A	40	3	SOLROS	SORO	Solanum rostratum	4	
2008	MT	4A	40	5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	4A	40	25	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	4A	50	18	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	4A	50	4	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4A	50	2	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2008	MT	4A	50	60	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	4A	50	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	4A	50	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	4A	50	10	ZINGRA	ZIGR	Zinnia grandiflora	4	
2008	MT	4B	0	30	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4B	0	4	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	4B	0	85	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	4B	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	4B	10	25	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4B	10	1	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	4B	40	1	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	4B	40	47	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4B	40	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	MUHARE2(G18)
2008	MT	4B	40	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	4B	50	1	ASCVIR	ASVI	Asclepias viridiflora	4	ASCASP(07MT001-F-8, 2008)



Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
									keyed to ASCVIR
2008	MT	4B	50	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4B	50	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	4B	50	13	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	4B	50	70	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	4C	0	1	ARIPUR	ARPU9	Aristida purpurea	3	
2008	MT	4C	0	30	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4C	0	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	4C	0	0.5	CIRUND	CIUN	Cirsium undulatum	4	
2008	MT	4C	0	20	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	4C	0	80	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	4C	10	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4C	10	58	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	4C	40	0.5	BERLYR	BELY	Berlandiera lyrata	4	
2008	MT	4C	40	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4C	40	55	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	4C	50	23	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	4C	50	2	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	4C	50	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	4C	50	20	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	4C	50	12	ERACUR	ERCU	Eragrostis curtipedicellata	3	PANICU- 07MT001-G9, 2008 - keyed to ERACUR
2008	MT	4C	50	5	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	4C	50	0.5	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	4C	50	85	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5A	0	1	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5A	0	3	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	5A	0	60	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5A	0	1	SALREF	SARE3	Salvia reflexa	4	
2008	MT	5A	0	4	SOLROS	SORO	Solanum rostratum	4	
2008	MT	5A	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5A	0	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	5A	10	28	BOUGRA	BOGR2	Bouteloua gracilis	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2008	MT	5A	10	20	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	5A	10	2	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	5A	10	1	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5A	10	8	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2008	MT	5A	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	5A	10	0.5	SOLROS	SORO	Solanum rostratum	4	
2008	MT	5A	10	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5A	10	30	YUCGLA	YUGL	Yucca glauca	2	
2008	MT	5A	40	2	ARIPUR	ARPU9	Aristida purpurea	3	
2008	MT	5A	40	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5A	40	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	5A	40	38	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	5A	40	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5A	40	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	5A	40	0.5	UNIDF		unidentified forb	4	UNIDF-F7
2008	MT	5A	50	2	CENSPI	CESP4	Cenchrus spinifex	3	
2008	MT	5A	50	2	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5A	50	6	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	5A	50	1	PHYSAL	PHYSA	Physalis spp.	4	
2008	MT	5A	50	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5A	50	0.5	SALREF	SARE3	Salvia reflexa	4	
2008	MT	5A	50	2	SOLELA	SOEL	Solanum elaeagnifolium	4	
2008	MT	5A	50	1	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	5A	50	2	UNIDF		unidentified forb	4	UNIDF-F7
2008	MT	5B	0	22	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5B	0	1	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	5B	0	2	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5B	0	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	5B	0	2	LITMUL	LIMU3	Lithospermum multiflorum	4	
2008	MT	5B	0	60	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5B	0	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5B	10	47	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5B	10	0.1	TEULAC	TELA	Teucrium laciniatum	4	
2008	MT	5B	40	65	BOUGRA	BOGR2	Bouteloua gracilis	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2008	MT	5B	40	3	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	5B	40	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5B	50	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5B	50	4	CHALAT	CHLA10	Chamaesyce lata	4	
2008	MT	5B	50	12	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5B	50	95	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5B	50	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5C	0	10	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5C	0	9	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5C	0	5	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2008	MT	5C	0	65	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5C	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2008	MT	5C	10	6	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5C	10	65	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	5C	40	50	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5C	40	6	BUCDAC	BUDA	Buchloe dactyloides	3	
2008	MT	5C	40	0.5	STPAU	STPA4	Stephanomeria pauciflora	4	
2008	MT	5C	50	20	BOUERI	BOER4	Bouteloua eriopoda	3	
2008	MT	5C	50	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2008	MT	5C	50	1	COMERE	COER	Commelina erecta	4	
2008	MT	5C	50	8	ELYELY	ELEL5	Elymus elymoides	3	
2008	MT	5C	50	5	PANOBT	PAOB	Panicum obtusum	3	
2008	MT	5C	50	90	PROGLA	PRGL2	Prosopis glandulosa	2	
2008	MT	5C	50	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1A	0	4	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1A	0	0.5	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	1A	0	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1A	0	1	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	1A	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead; has been mechanically knocked down
2009	MT	1A	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	1A	0	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	1A	10	40	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1A	10	7	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	1A	10	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1A	10	2	MUNSQU	MUSQ3	Munroa squarrosa	3	
2009	MT	1A	10	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1A	10	3	ZINGRA	ZIGR	Zinnia grandiflora	4	
2009	MT	1A	40	7	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1A	40	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1A	40	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1A	40	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1A	40	0.5	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	1A	40	3	ZINGRA	ZIGR	Zinnia grandiflora	4	
2009	MT	1A	50	33	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1A	50	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1A	50	2	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1A	50	3	PROGLA	PRGL2	Prosopis glandulosa	2	98% defoliation, some resprout
2009	MT	1A	50	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1B	0	45	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1B	0	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1B	0	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1B	0	8	PROGLA	PRGL2	Prosopis glandulosa	2	90% defoliation, some resprout
2009	MT	1B	0	0.5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1B	0	0.1	UNIDF		unidentified forb	4	
2009	MT	1B	8	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1B	8	0.5	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	1B	8	10	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2009	MT	1B	8	7	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	1B	8	0.1	SPHCOC	SPCO	Sphaeralcea coccinea	4	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	1B	8	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1B	8	5	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	1B	40	7	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1B	40	42	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	1B	40	0.1	PORPIL	POPI3	Portulaca pilosa	4	
2009	MT	1B	40	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	1B	40	0.1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1B	50	40	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1B	50	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1B	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	99% defoliation, some resprout
2009	MT	1C	0	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	1C	0	2	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1C	0	3	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	1C	0	1	CIRUND	CIUN	Cirsium undulatum	4	
2009	MT	1C	0	1	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	1C	0	85	MUHPOR	MUPO2	Muhlenbergia porteri	3	
2009	MT	1C	0	2	PROGLA	PRGL2	Prosopis glandulosa	2	98% defoliation, some resprout
2009	MT	1C	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	1C	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1C	0	0.5	STPAU	STPA4	Stephanomeria pauciflora	4	
2009	MT	1C	11	13	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1C	11	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	1C	11	1	CHALAT	CHLA10	Chamaesyce lata	4	
2009	MT	1C	11	2	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	1C	11	3	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	area across quad mechanically dragged, some YUCGLA&PROGLA knocked over.

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2009	MT	1C	11	2	MUHARE2	MUAR2	Muhlenbergia arenicola	3	
2009	MT	1C	11	1	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	1C	11	1	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	
2009	MT	1C	11	4	SALTRA	SATR12	Salsola tragus	4	
2009	MT	1C	11	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	1C	11	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1C	11	29	YUCGLA	YUGL	Yucca glauca	2	two track road starts at 12.5 and ends at 15.7
2009	MT	1C	40	6	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1C	40	28	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1C	40	0.1	PORPIL	POPI3	Portulaca pilosa	4	
2009	MT	1C	50	2	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	1C	50	18	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	1C	50	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	1C	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	99% defoliation, some resprout
2009	MT	1C	50	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	1C	50	2	UNIDF		unidentified forb	4	
2009	MT	2A	0	15	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	2A	0	8	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	2A	0	12	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	2A	0	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	2A	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	95% defoliation, some resprout
2009	MT	2A	0	8	SOLROS	SORO	Solanum rostratum	4	
2009	MT	2A	0	5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	2A	11	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2A	11	1	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	2A	11	0.1	CHAERI	CHER2	Chaetopappa ericoides	4	
2009	MT	2A	11	40	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	2A	11	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	2A	40	16	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2A	40	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	2A	40	2	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	2A	40	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	2A	40	22	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	2A	40	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	2A	40	1	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	2A	40	10	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	2A	50	15	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	2A	50	5	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	2A	50	4	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2A	50	1	CIRUND	CIUN	Cirsium undulatum	4	
2009	MT	2A	50	2	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	2A	50	2	PROGLA	PRGL2	Prosopis glandulosa	2	99% defoliation, some resprout
2009	MT	2A	50	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	2A	50	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	2A	50	2	ZINGRA	ZIGR	Zinnia grandiflora	4	
2009	MT	2B	0	2	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	2B	0	32	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	2B	0	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2B	0	1	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	2B	0	1	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	2B	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead; PROGLA has been mechanically knocked down
2009	MT	2B	10	52	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2B	10	1	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	2B	40	2	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	2B	40	51	BOUGRA	BOGR2	Bouteloua gracilis	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	2B	40	1	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	2B	40	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	2B	40	0.5	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	2B	40	0.1	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2009	MT	2B	40	12	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	2B	40	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	2B	40	0.5	UNIDF		unidentified forb	4	
2009	MT	2B	50	75	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	2B	50	18	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2B	50	4	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	2B	50	1	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	2B	50	0.5	PROGLA	PRGL2	Prosopis glandulosa	2	99% defoliation, some resprout
2009	MT	2B	50	3	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	2C	0	62	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2C	0	1	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	2C	0	1	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	2C	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead; PROGLA has been mechanically knocked down
2009	MT	2C	0	0.1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	2C	10	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2C	10	18	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	2C	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	2C	40	55	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2C	40	15	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	2C	40	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	2C	50	2	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	2C	50	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	2C	50	2	CHLVER	CHVE2	Chloris verticillata	3	



Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	2C	50	7	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	2C	50	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	2C	50	4	PANHAL	PAHA	Panicum hallii	3	
2009	MT	2C	50	1	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	
2009	MT	2C	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	2C	50	0.5	SALTRA	SATR12	Salsola tragus	4	
2009	MT	2C	50	32	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	3A	0	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3A	0	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3A	0	8	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	3A	0	4	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	3A	0	7	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	3A	0	2	ERIANN	ERAN4	Eriogonum annuum	4	
2009	MT	3A	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	98% defoliation, some resprout
2009	MT	3A	0	10	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3A	10	0.5	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3A	10	32	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3A	10	10	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	3A	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	3A	10	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3A	10	1	XANTEX	XATE	Xanthisma texanum	4	
2009	MT	3A	40	45	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3A	40	1	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	3A	40	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	3A	40	6	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	3A	40	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	3A	40	6	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3A	50	0.5	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3A	50	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3A	50	2	ELYELY	ELEL5	Elymus elymoides	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2009	MT	3A	50	52	MUHPOR	MUPO2	Muhlenbergia porteri	3	
2009	MT	3A	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	3A	50	3	SALTRA	SATR12	Salsola tragus	4	
2009	MT	3A	50	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3A	50	0.5	ZINGRA	ZIGR	Zinnia grandiflora	4	
2009	MT	3B	0	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3B	0	42	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3B	0	0.5	CHALAT	CHLA10	Chamaesyce lata	4	
2009	MT	3B	0	1	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	3B	0	1	PROGLA	PRGL2	Prosopis glandulosa	2	99% defoliation, some resprout
2009	MT	3B	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	3B	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3B	0	0.1	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	3B	10	80	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3B	10	1	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	3B	10	4	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2009	MT	3B	10	8	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	3B	40	68	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3B	40	2	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	3B	40	0.1	PORPIL	POPI3	Portulaca pilosa	4	
2009	MT	3B	40	0.1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	3B	50	15	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3B	50	7	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3B	50	0.5	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	3B	50	2	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	3B	50	18	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2009	MT	3B	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2009	MT	3B	50	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	3B	50	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	3B	50	0.1	UNIDF		unidentified forb	4	
2009	MT	3C	0	15	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	3C	0	20	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3C	0	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	3C	0	0.1	GAUCOC	GACO5	Gaura coccinea	4	
2009	MT	3C	0	2	MUHARE2	MUAR2	Muhlenbergia arenicola	3	
2009	MT	3C	0	0.1	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	
2009	MT	3C	0	3	PROGLA	PRGL2	Prosopis glandulosa	2	97% defoliation, some resprout
2009	MT	3C	0	3	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	3C	0	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	3C	10	75	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3C	10	0.1	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	3C	10	0.5	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	3C	40	5	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	3C	40	48	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3C	40	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	3C	40	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	3C	40	0.1	GAUCOC	GACO5	Gaura coccinea	4	
2009	MT	3C	40	2	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	3C	40	0.5	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	3C	40	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	3C	40	12	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	3C	50	6	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	3C	50	7	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	3C	50	6	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	3C	50	2	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	3C	50	3	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	3C	50	0.1	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSPName	LifeForm	Comments
2009	MT	3C	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	3C	50	1	SPHCOC	SPCO	Sphaeralcea coccinea	4	
2009	MT	3C	50	1	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	3C	50	3	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	4A	0	23	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	4A	0	2	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	4A	0	1	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	4A	0	2	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	4A	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation
2009	MT	4A	0	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	4A	10	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4A	10	5	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	4A	10	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4A	10	6	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	4A	10	2	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	
2009	MT	4A	10	8	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	4A	10	0.5	XANTEX	XATE	Xanthisma texanum	4	
2009	MT	4A	10	20	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	4A	40	2	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4A	40	2	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	4A	40	4	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4A	40	3	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	4A	40	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4A	40	1	DYSPAP	DYPA	Dyssodia papposa	4	
2009	MT	4A	40	5	MUNSQU	MUSQ3	Munroa squarrosa	3	
2009	MT	4A	40	0.5	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	4A	40	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	4A	40	20	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	4A	50	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4A	50	7	BOUERI	BOER4	Bouteloua eriopoda	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	4A	50	11	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4A	50	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4A	50	0.5	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	4A	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation
2009	MT	4A	50	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	4A	50	2	SOLROS	SORO	Solanum rostratum	4	
2009	MT	4A	50	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	4A	50	1	SPOFLE	SPFL2	Sporobolus flexuosus	3	
2009	MT	4A	50	5	ZINGRA	ZIGR	Zinnia grandiflora	4	
2009	MT	4B	0	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4B	0	17	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4B	0	1	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	4B	0	3	PROGLA	PRGL2	Prosopis glandulosa	2	98% defoliation- mostly dead, some resprout
2009	MT	4B	0	0.5	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	4B	11	50	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4B	11	2	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	4B	11	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4B	40	0.5	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	4B	40	54	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4B	40	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	
2009	MT	4B	50	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4B	50	6	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4B	50	2	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4B	50	0.1	CHALAT	CHLA10	Chamaesyce lata	4	
2009	MT	4B	50	6	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	4B	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	99.8% defoliation- mostly dead, some resprout

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	4C	0	16	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4C	0	15	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4C	0	1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	4C	0	1	CIRUND	CIUN	Cirsium undulatum	4	
2009	MT	4C	0	2	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	4C	0	2	MUHARE2	MUAR2	Muhlenbergia arenicola	3	
2009	MT	4C	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	4C	10	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4C	10	57	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	4C	40	0.5	BERLYR	BELY	Berlandiera lyrata	4	
2009	MT	4C	40	23	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4C	40	55	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	4C	50	50	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	4C	50	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	4C	50	8	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	4C	50	7	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	4C	50	2	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	4C	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5A	0	0.5	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	5A	0	1	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5A	0	2	CHLCUC	CHCU2	Chloris cucullata	3	
2009	MT	5A	0	5	ERACUR	ERCU	Eragrostis curtipedicellata	3	07MT001-G1, 2009
2009	MT	5A	0	1	MACTAN	MATA2	Machaeranthera tanacetifolia	4	
2009	MT	5A	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5A	0	5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5A	10	30	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5A	10	15	BUCDAC	BUDA	Buchloe dactyloides	3	

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	5A	10	2	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	5A	10	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	5A	10	15	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	
2009	MT	5A	10	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	5A	10	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5A	10	35	YUCGLA	YUGL	Yucca glauca	2	
2009	MT	5A	40	1.5	ARIPUR	ARPU9	Aristida purpurea	3	
2009	MT	5A	40	3	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5A	40	2	CENSPI	CESP4	Cenchrus spinifex	3	
2009	MT	5A	40	0.1	CHALAT	CHLA10	Chamaesyce lata	4	
2009	MT	5A	40	0.5	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	5A	40	29	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	5A	40	1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	5A	40	5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5A	40	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	5A	50	3	CHLVER	CHVE2	Chloris verticillata	3	
2009	MT	5A	50	3	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	5A	50	18	PANOBT	PAOB	Panicum obtusum	3	
2009	MT	5A	50	0.5	PHYCINC	PHCIC3	Physalis cinerascens var. cinerascens	4	
2009	MT	5A	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5A	50	0.1	SOLELA	SOEL	Solanum elaeagnifolium	4	
2009	MT	5A	50	1	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	5B	0	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	5B	0	13	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5B	0	0.1	CHALAT	CHLA10	Chamaesyce lata	4	
2009	MT	5B	0	3	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	5B	0	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	5B	0	2	MOLVER	MOVE	Mollugo verticillata	4	Was UNID F1, 2009
2009	MT	5B	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead

Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	5B	0	1	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5B	0	0.5	TEULAC	TELA	Teucrium laciniatum	4	
2009	MT	5B	10	58	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5B	40	72	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5B	40	0.5	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5B	50	1	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	5B	50	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5B	50	0.1	CHAGLY	CHGL13	Chamaesyce glyptosperma	4	
2009	MT	5B	50	7	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	5B	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5B	50	3	SPOCRY	SPCR	Sporobolus cryptandrus	3	
2009	MT	5C	0	12	ARIDIV	ARDI5	Aristida divaricata	3	
2009	MT	5C	0	12	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5C	0	0.5	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	5C	0	2	GUTSAR	GUSA2	Gutierrezia sarothrae	2.5	
2009	MT	5C	0	0.5	MOLVER	MOVE	Mollugo verticillata	4	Was UNID F1, 2009
2009	MT	5C	0	0.1	PORPIL	POPI3	Portulaca pilosa	4	
2009	MT	5C	0	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5C	10	2	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	5C	10	5	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5C	10	75	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	5C	40	42	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5C	40	7	BUCDAC	BUDA	Buchloe dactyloides	3	
2009	MT	5C	40	0.5	STPAU	STPA4	Stephanomeria pauciflora	4	
2009	MT	5C	50	6	BOUERI	BOER4	Bouteloua eriopoda	3	
2009	MT	5C	50	8	BOUGRA	BOGR2	Bouteloua gracilis	3	
2009	MT	5C	50	6	ELYELY	ELEL5	Elymus elymoides	3	
2009	MT	5C	50	5	ERACUR	ERCU	Eragrostis curtipedicellata	3	
2009	MT	5C	50	2	PANOBT	PAOB	Panicum obtusum	3	



Year	Treatment	Transect	Quad	Cover	ACRO1	NM_K_Symbol	NMSpName	LifeForm	Comments
2009	MT	5C	50	0	PROGLA	PRGL2	Prosopis glandulosa	2	100% defoliation-dead
2009	MT	5C	50	4	SPOCRY	SPCR	Sporobolus cryptandrus	3	

**Table B5. Raw percent basal cover data based on transect line point intercept at the Mesquite Treatment Area (MTA).**

Treatment	Year	Transect	Cover	ACRO	NM_K_Symbol	NMSpName	LifeForm	LifeFormName
MT	2009	1A	1	ARIDIV	ARDI5	Aristida divaricata	3	Graminoid
MT	2009	1A	1	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	1A	25	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	1A	1	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	1A	1	CHAMAE2	CHAMA15	Chamaesyce spp.	4	Forb
MT	2009	1A	8	DUNG				Litter
MT	2009	1A	28	LITTER				Litter
MT	2009	1A	33	SOIL				Soil
MT	2009	1A	1	XANTEX	XATE	Xanthisma texanum	4	Forb
MT	2009	1A	1	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	1B	14	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	1B	3	CHAMAE2	CHAMA15	Chamaesyce spp.	4	Forb
MT	2009	1B	1	DUNG				Litter
MT	2009	1B	45	LITTER				Litter
MT	2009	1B	1	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera	2	Shrub
MT	2009	1B	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	Graminoid
MT	2009	1B	35	SOIL				Soil
MT	2009	1C	2	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	1C	14	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	1C	2	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	1C	2	DUNG				Litter
MT	2009	1C	25	LITTER				Litter
MT	2009	1C	52	SOIL				Soil
MT	2009	1C	2	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	1C	1	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	2A	5	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	2A	4	CENSPI	CESP4	Cenchrus spinifex	3	Graminoid
MT	2009	2A	1	CHAMAE2	CHAMA15	Chamaesyce spp.	4	Forb
MT	2009	2A	1	DUNG				Litter
MT	2009	2A	35	LITTER				Litter
MT	2009	2A	5	PANOBT	PAOB	Panicum obtusum	3	Graminoid
MT	2009	2A	45	SOIL				Soil

Treatment	Year	Transect	Cover	ACRO	NM_K_Symbol	NMSpName	LifeForm	LifeFormName
MT	2009	2A	2	SPOCRY	SPCR	Sporobolus cryptandrus	3	Graminoid
MT	2009	2A	1	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	2A	1	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	2B	9	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	2B	6	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	2B	3	DUNG				Litter
MT	2009	2B	30	LITTER				Litter
MT	2009	2B	1	PANOBT	PAOB	Panicum obtusum	3	Graminoid
MT	2009	2B	34	SOIL				Soil
MT	2009	2B	17	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	2C	6	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	2C	7	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	2C	5	DUNG				Litter
MT	2009	2C	23	LITTER				Litter
MT	2009	2C	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	Graminoid
MT	2009	2C	38	SOIL				Soil
MT	2009	2C	20	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	3A	2	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	3A	9	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	3A	1	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	3A	2	CENSPI	CESP4	Cenchrus spinifex	3	Graminoid
MT	2009	3A	1	CHAMAE2	CHAMA15	Chamaesyce spp.	4	Forb
MT	2009	3A	1	DUNG				Litter
MT	2009	3A	33	LITTER				Litter
MT	2009	3A	4	MUNSQU	MUSQ3	Munroa squarrosa	3	Graminoid
MT	2009	3A	1	PANOBT	PAOB	Panicum obtusum	3	Graminoid
MT	2009	3A	31	SOIL				Soil
MT	2009	3A	15	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	3B	1	ARIDIV	ARDI5	Aristida divaricata	3	Graminoid
MT	2009	3B	1	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	3B	3	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	3B	2	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	3B	3	DUNG				Litter
MT	2009	3B	33	LITTER				Litter
MT	2009	3B	1	OPUPOL	OPPO	Opuntia polyacantha	2.5	Dwarf Shrub
MT	2009	3B	30	SOIL				Soil

Treatment	Year	Transect	Cover	ACRO	NM_K_Symbol	NMSpName	LifeForm	LifeFormName
MT	2009	3B	24	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	3B	2	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	3C	9	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	3C	3	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	3C	2	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	3C	25	LITTER				Litter
MT	2009	3C	39	SOIL				Soil
MT	2009	3C	20	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	3C	2	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	4A	2	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	4A	8	CENSPI	CESP4	Cenchrus spinifex	3	Graminoid
MT	2009	4A	53	LITTER				Litter
MT	2009	4A	2	PANOBT	PAOB	Panicum obtusum	3	Graminoid
MT	2009	4A	30	SOIL				Soil
MT	2009	4A	4	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	4A	1	YUCGLA	YUGL	Yucca glauca	2	Shrub
MT	2009	4B	1	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	4B	11	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	4B	5	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	4B	1	DUNG				Litter
MT	2009	4B	25	LITTER				Litter
MT	2009	4B	1	MUHARE2	MUAR2	Muhlenbergia arenicola	3	Graminoid
MT	2009	4B	45	SOIL				Soil
MT	2009	4B	11	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	4C	1	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	4C	8	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	4C	9	DUNG				Litter
MT	2009	4C	33	LITTER				Litter
MT	2009	4C	35	SOIL				Soil
MT	2009	4C	14	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	5A	1	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	5A	13	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	5A	5	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	5A	1	DUNG				Litter
MT	2009	5A	32	LITTER				Litter
MT	2009	5A	2	PANOBT	PAOB	Panicum obtusum	3	Graminoid

Treatment	Year	Transect	Cover	ACRO	NM_K_Symbol	NMSpName	LifeForm	LifeFormName
MT	2009	5A	1	PANVIR	PAVI2	Panicum virgatum	3	Graminoid
MT	2009	5A	41	SOIL				Soil
MT	2009	5A	4	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	5B	1	BOUERI	BOER4	Bouteloua eriopoda	3	Graminoid
MT	2009	5B	1	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	5B	6	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	5B	6	DUNG				Litter
MT	2009	5B	32	LITTER				Litter
MT	2009	5B	35	SOIL				Soil
MT	2009	5B	19	UNIDG		unidentified graminoid	3	Graminoid
MT	2009	5C	7	BOUGRA	BOGR2	Bouteloua gracilis	3	Graminoid
MT	2009	5C	8	BUCDAC	BUDA	Buchloe dactyloides	3	Graminoid
MT	2009	5C	1	DUNG				Litter
MT	2009	5C	26	LITTER				Litter
MT	2009	5C	45	SOIL				Soil
MT	2009	5C	13	UNIDG		unidentified graminoid	3	Graminoid

**Table B6. Raw percent mesquite defoliation and percent cover of ground cover elements at the Mesquite Treatment Area (MTA). Includes location information (angle and distance) for the mesquite quadrats.**

Year	Treatment	Transect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
2008	MT	1A	0	MSQ	7	296	0		21	72	28	0	0	0	0	0		Read transect quads N of line. No die off
2008	MT	1A	10	TRAN					45	57	38	0	0	0	0	5		Read transect quads to N of line
2008	MT	1A	40	TRAN					53	80.9	16.1	0	0	0	0	3		Read transect quads to N of line
2008	MT	1A	50	MSQ	6.7	120	30		61	98	2	0	0	0	0	0		Read transect quads to N of line. Some die off of pods and leaves
2008	MT	1B	0	MSQ	3.5	110	50		35	100	0	0	0	0	0	0		Read transect quads to N of line
2008	MT	1B	10	TRAN					64	90	10	0	0	0	0	0		Read transect quads to N of line. 9-13 M in PROGLA canopy. Start quad at 8 M, not 10 M.
2008	MT	1B	40	TRAN					59	72	28	0	0	0	0	0		Read transect quads to N of line
2008	MT	1B	50	MSQ	2.2	60	40		62	100	0	0	0	0	0	0		Read transect quads to N

Year	Treat-ment	Tran-sect	Quad	Quad Type	Distance	Angle	% Defol-iation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
																		of line
2008	MT	1C	0	MSQ	2.3	144	80		100	100	0	0	0	0	0	0		Read transect quads to N of line
2008	MT	1C	10	TRAN					15	71.9	25	0.1	0	0	0	3		Read transect quads to N of line. 10 M in PROGLA canopy. Start quad at 11 M, not 10 M. Old rd starts at 12.2 M Ends 16.2 M
2008	MT	1C	40	TRAN					35	42	57	0	0	0	0	1		Read transect quads to N of line
2008	MT	1C	50	MSQ	4.6	285	70		25	90	10	0	0	0	0	0		Read transect quads to N of line
2008	MT	2A	0	MSQ	8	310	20		11	97	3	0	0	0	0	0		
2008	MT	2A	10	TRAN					63	70	30	0	0	0	0	0		10 M under PROGLA canopy. Start quad at 11 M, not 10 M.
2008	MT	2A	40	TRAN					58	69	28	0	0	0	0	3		
2008	MT	2A	50	MSQ	3.3	220	60		20	99.5	0	0	0	0	0.5	0		
2008	MT	2B	0	MSQ	5	113	40		27	74	26	0	0	0	0	0		
2008	MT	2B	10	TRAN					43	58	42	0	0	0	0	0		
2008	MT	2B	40	TRAN					67	68	32	0	0	0	0	0		
2008	MT	2B	50	MSQ	10	178	40		53	100	0	0	0	0	0	0		
2008	MT	2C	0	MSQ	0.8	84	90		18	99	1	0	0	0	0	0		
2008	MT	2C	10	TRAN					53	54.5	45	0	0	0	0	0.5		

Year	Treat-ment	Tran-sect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
2008	MT	2C	40	TRAN					71	69	26	0	0	1	0	4		
2008	MT	2C	50	MSQ	5.5	330	90		27	100	0	0	0	0	0	0		
2008	MT	3A	0	MSQ	8.5	208	10		26	93	7	0	0	0	0	0		
2008	MT	3A	10	TRAN					0	74.5	25	0	0	0	0	0.5		
2008	MT	3A	40	TRAN					58	67	32	0	0	0	0	1		
2008	MT	3A	50	MSQ	2.3	100	80		61	97	3	0	0	0	0	0		
2008	MT	3B	0	MSQ	8.8	280	40		36	100	0	0	0	0	0	0		
2008	MT	3B	10	TRAN					72	71.5	26	0	0	0.5	0	2		
2008	MT	3B	40	TRAN					60	58	42	0	0	0	0	2		
2008	MT	3B	50	MSQ	5.5	340	90		35	98	2	0	0	0	0	0		
2008	MT	3C	0	MSQ	2.7	170	90		24	99	1	0	0	0	0	0		
2008	MT	3C	10	TRAN					66	64	36	0	0	0	0	0		
2008	MT	3C	40	TRAN					40	88	10	0	0	0	0	2		
2008	MT	3C	50	MSQ	6	208	80		16	100	0	0	0	0	0	0		
2008	MT	4A	0	MSQ	8.5	225	50		9	74	25	0	0	0	0	1		
2008	MT	4A	10	TRAN					28	93	7	0	0	0	0	0		
2008	MT	4A	40	TRAN					44	58	42	0	0	0	0	0		
2008	MT	4A	50	MSQ	8.5	137	90		33	93	7	0	0	0	0	0		
2008	MT	4B	0	MSQ	6	42	50		33	99	1	0	0	0	0	0		
2008	MT	4B	10	TRAN					26	62	38	0	0	0	0	0		10 M within PROGLA canopy. Start quad at 11 M, not at 10 M
2008	MT	4B	40	TRAN					49	50	50	0	0	0	0	0		
2008	MT	4B	50	MSQ	4.2	300	90		16	98	2	0	0	0	0	0		
2008	MT	4C	0	MSQ	7.5	214	80		48	98	2	0	0	0	0	0		
2008	MT	4C	10	TRAN					60	62	35	0	0	1	0	2		
2008	MT	4C	40	TRAN					63	75	20	0	0	0	0	5		
2008	MT	4C	50	MSQ	7	194	80		53	100	0	0	0	0	0	0		
2008	MT	5A	0	MSQ	8.5	160	80		9	93	7	0	0	0	0	0		Transect quads read N of line
2008	MT	5A	10	TRAN					51	0	0	0	0	0	0	0		Transect quads read N of line
2008	MT	5A	40	TRAN					52	65	35	0	0	0	0	0		Transect



Year	Treat-ment	Tran-sect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
																		quads read N of line
2008	MT	5A	50	MSQ	1.9	268	80		15	99	1	0	0	0	0	0		Transect quads read N of line
2008	MT	5B	0	MSQ	6.8	302	90		27	96	2	0	0	0	0	2		Transect quads read N of line. Leaves brown
2008	MT	5B	10	TRAN					47	51.9	48	0	0	0.1	0	0		Transect quads read N of line
2008	MT	5B	40	TRAN					66	62	33	0	0	1	0	4		Transect quads read N of line
2008	MT	5B	50	MSQ	8.5	216	50		22	99	1	0	0	0	0	0		Transect quads read N of line
2008	MT	5C	0	MSQ	10.8	170	50		18	97	3	0	0	0	0	0		Transect quads read N of line. Most leaves brown
2008	MT	5C	10	TRAN					68	60.5	25	0	0	0.5	0	14		Transect quads read N of line
2008	MT	5C	40	TRAN					54	55	40	0	0	1	0	4		Transect quads read N of line
2008	MT	5C	50	MSQ	4.5	330	50		42	100	0	0	0	0	0	0		Transect quads read N of line. All leaves brown
2009	MT	1A	0	MSQ	7	296		10	10	8	92	0	0					100% defoliation-dead; has been mechanically knocked down
2009	MT	1A	10	TRAN				53	53			0	0					
2009	MT	1A	40	TRAN				57	57			0	0					

Year	Treatment	Transect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
2009	MT	1A	50	MSQ	6.7	120	98	38	36	88	12	0	0					98% defoliation, some resprout
2009	MT	1B	0	MSQ	3.5	110	90	53	49	91	7	0	0				2	90% defoliation, some resprout
2009	MT	1B	8	TRAN				60	51			0	0					
2009	MT	1B	40	TRAN				48	48			0	0					
2009	MT	1B	50	MSQ	2.2	60	99	46	46	91	7	0	0				2	99% defoliation, some resprout
2009	MT	1C	0	MSQ	2.3	144	98	93	91	100		0	0					98% defoliation, some resprout
2009	MT	1C	11	TRAN				54	25			0	0					two track road starts at 12.5 and ends at 15.7. area across quad mechanically dragged, some YUCGLA&P ROGLA knocked over.
2009	MT	1C	40	TRAN				33	33			0	0					
2009	MT	1C	50	MSQ	4.6	285	99	30	30	90	9	0	0				1	99% defoliation, some resprout
2009	MT	2A	0	MSQ	8	310	95	42	42	96.5	3	0	0	0.5				95% defoliation, some resprout
2009	MT	2A	11	TRAN				52	52			0	0					
2009	MT	2A	40	TRAN				50	46			0	0					
2009	MT	2A	50	MSQ	3.3	220	99	36	32	95	4	0	0		1			99% defoliation, some

Year	Treatment	Transect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
																		resprout
2009	MT	2B	0	MSQ	5	113	100	37	37	87	12	0	0	1				100% defoliation-dead; PROGLA has been mechanically knocked down
2009	MT	2B	10	TRAN				52	52			0	0					
2009	MT	2B	40	TRAN				63	63			0	0					
2009	MT	2B	50	MSQ	10	178	99	97	97	100		0	0					99% defoliation, some resprout
2009	MT	2C	0	MSQ	0.8	84	100	63	62	95	5	0	0					100% defoliation-dead; PROGLA has been mechanically knocked down
2009	MT	2C	10	TRAN				62	62			0	0					
2009	MT	2C	40	TRAN				69	69			0	0					
2009	MT	2C	50	MSQ	5.5	330	100	57	30	98	1	0	0				1	100% defoliation-dead
2009	MT	3A	0	MSQ	8.5	208	98	32	32	95	5	0	0					98% defoliation, some resprout
2009	MT	3A	10	TRAN				44	44			0	0					
2009	MT	3A	40	TRAN				57	57			0	0					
2009	MT	3A	50	MSQ	2.3	100	100	58	58	97	3	0	0					100% defoliation-dead
2009	MT	3B	0	MSQ	8.8	280	99	45	45	98	2	0	0					99% defoliation, some resprout
2009	MT	3B	10	TRAN				88	88			0	0					
2009	MT	3B	40	TRAN				69	69			0	0					

Year	Treatment	Transect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
2009	MT	3B	50	MSQ	5.5	340	100	38	35	98	2	0	0					100% defoliation-dead
2009	MT	3C	0	MSQ	2.7	170	97	43	41	97	3	0	0					97% defoliation, some resprout
2009	MT	3C	10	TRAN				75	75			0	0					
2009	MT	3C	40	TRAN				65	57			0	0					
2009	MT	3C	50	MSQ	6	208	100	24	22	98	1	0	0				1	100% defoliation-dead
2009	MT	4A	0	MSQ	8.5	225	100	34	34	86	12	0	0				2	100% defoliation
2009	MT	4A	10	TRAN				44	25			0	0					
2009	MT	4A	40	TRAN				36	19			0	0					
2009	MT	4A	50	MSQ	8.5	137	100	29	29	67	33	0	0					100% defoliation
2009	MT	4B	0	MSQ	6	42	98	20	19	96	2	0	0				2	98% defoliation-mostly dead, some resprout
2009	MT	4B	11	TRAN				51	51			0	0					
2009	MT	4B	40	TRAN				55	55			0	0					
2009	MT	4B	50	MSQ	4.2	300	99.8	14	14	95	5	0	0					99.8% defoliation-mostly dead, some resprout
2009	MT	4C	0	MSQ	7.5	214	100	34	34	94	5	0	0				1	100% defoliation-dead
2009	MT	4C	10	TRAN				56	56			0	0					
2009	MT	4C	40	TRAN				77	77			0	0					
2009	MT	4C	50	MSQ	7	194	100	65	65	96	1	0	0				3	100% defoliation-dead
2009	MT	5A	0	MSQ	8.5	160	100	14		94	6	0	0					100% defoliation-dead
2009	MT	5A	10	TRAN				85	48			0	0					
2009	MT	5A	40	TRAN				40	40			0	0					

Year	Treat-ment	Tran-sect	Quad	Quad Type	Distance	Angle	% Defoliation	Tot Veg	HC C	L/BV	Soil	Gravel	Rock	Micro	Trash	Cow Dung	Wood	Comments
2009	MT	5A	50	MSQ	1.9	268	100	25	25	98	2	0	0					100% defoliation-dead
2009	MT	5B	0	MSQ	6.8	302	100	22	20	88	11	0	0			1		100% defoliation-dead
2009	MT	5B	10	TRAN				58	58			0	0					
2009	MT	5B	40	TRAN				72	72			0	0					
2009	MT	5B	50	MSQ	8.5	216	100	14	14	98	2	0	0					100% defoliation-dead
2009	MT	5C	0	MSQ	10.8	170	100	25	23	82	17	0	0			1		100% defoliation-dead
2009	MT	5C	10	TRAN				81	81			0	0					
2009	MT	5C	40	TRAN				48	48			0	0					
2009	MT	5C	50	MSQ	4.5	330	100	27	27	98	2	0	0					100% defoliation-dead

**Table B7. Raw ground cover line intercept of species and ground cover elements at the Mesquite Treatment Area (MTA).**

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	0	1	1	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	1	37	36	BARE		
MT	07MT001	2008	1A	50	37	45	8	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	45	82	37	BARE		
MT	07MT001	2008	1A	50	82	89	7	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	89	155	66	BARE		
MT	07MT001	2008	1A	50	155	181	26	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	181	198	17	BARE		
MT	07MT001	2008	1A	50	198	202	4	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	202	219	17	BARE		
MT	07MT001	2008	1A	50	219	221	2	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	221	229	8	BARE		
MT	07MT001	2008	1A	50	229	232	3	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	232	271	39	BARE		
MT	07MT001	2008	1A	50	271	273	2	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	273	295	22	BARE		
MT	07MT001	2008	1A	50	295	299	4	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	299	365	66	BARE		
MT	07MT001	2008	1A	50	365	416	51	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	416	492	76	BARE		
MT	07MT001	2008	1A	50	492	509	17	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	509	517	8	BARE		
MT	07MT001	2008	1A	50	517	530	13	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	530	580	50	BARE		
MT	07MT001	2008	1A	50	580	599	19	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	599	615	16	BARE		
MT	07MT001	2008	1A	50	615	622	7	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	622	641	19	BARE		
MT	07MT001	2008	1A	50	641	643	2	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	643	690	47	BARE		
MT	07MT001	2008	1A	50	690	736	46	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	736	752	16	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	752	755	3	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	755	760	5	BARE		
MT	07MT001	2008	1A	50	760	764	4	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	764	783	19	BARE		
MT	07MT001	2008	1A	50	783	787	4	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	787	823	36	BARE		
MT	07MT001	2008	1A	50	823	830	7	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	830	872	42	BARE		
MT	07MT001	2008	1A	50	872	876	4	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	876	903	27	BARE		
MT	07MT001	2008	1A	50	903	926	23	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	926	932	6	BARE		
MT	07MT001	2008	1A	50	932	938	6	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	938	950	12	BARE		
MT	07MT001	2008	1A	50	950	957	7	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	957	1005	48	BARE		
MT	07MT001	2008	1A	50	1005	1027	22	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1027	1053	26	BARE		
MT	07MT001	2008	1A	50	1053	1082	29	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1082	1103	21	BARE		
MT	07MT001	2008	1A	50	1103	1113	10	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1113	1117	4	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1117	1139	22	BARE		
MT	07MT001	2008	1A	50	1139	1142	3	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1142	1160	18	BARE		
MT	07MT001	2008	1A	50	1160	1217	57	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1217	1232	15	BARE		
MT	07MT001	2008	1A	50	1232	1235	3	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1235	1265	30	BARE		
MT	07MT001	2008	1A	50	1265	1287	22	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1287	1294	7	BARE		
MT	07MT001	2008	1A	50	1294	1320	26	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1320	1339	19	BARE		
MT	07MT001	2008	1A	50	1339	1359	20	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1359	1368	9	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	1368	1376	8	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1376	1384	8	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1384	1412	28	BARE		
MT	07MT001	2008	1A	50	1412	1424	12	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1424	1443	19	BARE		
MT	07MT001	2008	1A	50	1443	1451	8	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1451	1453	2	BARE		
MT	07MT001	2008	1A	50	1453	1457	4	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1457	1505	48	BARE		
MT	07MT001	2008	1A	50	1505	1510	5	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	1A	50	1510	1575	65	BARE		
MT	07MT001	2008	1A	50	1575	1690	115	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1690	1702	12	DUNG		
MT	07MT001	2008	1A	50	1702	1707	5	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1707	1717	10	DUNG		
MT	07MT001	2008	1A	50	1717	1803	86	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1803	1821	18	BARE		
MT	07MT001	2008	1A	50	1821	1828	7	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1828	1862	34	BARE		
MT	07MT001	2008	1A	50	1862	1873	11	BOUERI	BOER4	Bouteloua eriopoda
MT	07MT001	2008	1A	50	1873	1877	4	BARE		
MT	07MT001	2008	1A	50	1877	1892	15	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1892	1930	38	BARE		
MT	07MT001	2008	1A	50	1930	1950	20	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	1950	1960	10	BARE		
MT	07MT001	2008	1A	50	1960	1964	4	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	1964	1968	4	BARE		
MT	07MT001	2008	1A	50	1968	2010	42	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2010	2022	12	BARE		
MT	07MT001	2008	1A	50	2022	2068	46	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2068	2132	64	BARE		
MT	07MT001	2008	1A	50	2132	2144	12	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2144	2146	2	BARE		
MT	07MT001	2008	1A	50	2146	2161	15	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	2161	2207	46	BARE		



Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	2207	2212	5	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2212	2238	26	BARE		
MT	07MT001	2008	1A	50	2238	2242	4	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	2242	2270	28	BARE		
MT	07MT001	2008	1A	50	2270	2275	5	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2275	2319	44	BARE		
MT	07MT001	2008	1A	50	2319	2321	2	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2321	2331	10	BARE		
MT	07MT001	2008	1A	50	2331	2337	6	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2337	2343	6	BARE		
MT	07MT001	2008	1A	50	2343	2346	3	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2346	2359	13	BARE		
MT	07MT001	2008	1A	50	2359	2371	12	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2371	2385	14	BARE		
MT	07MT001	2008	1A	50	2385	2426	41	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2426	2436	10	BARE		
MT	07MT001	2008	1A	50	2436	2445	9	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2445	2489	44	BARE		
MT	07MT001	2008	1A	50	2489	2497	8	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2497	2507	10	BARE		
MT	07MT001	2008	1A	50	2507	2515	8	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2515	2530	15	BARE		
MT	07MT001	2008	1A	50	2530	2543	13	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2543	2556	13	BARE		
MT	07MT001	2008	1A	50	2556	2560	4	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2560	2570	10	BARE		
MT	07MT001	2008	1A	50	2570	2586	16	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2586	2618	32	BARE		
MT	07MT001	2008	1A	50	2618	2620	2	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2620	2629	9	BARE		
MT	07MT001	2008	1A	50	2629	2631	2	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2631	2642	11	BARE		
MT	07MT001	2008	1A	50	2642	2657	15	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2657	2687	30	BARE		
MT	07MT001	2008	1A	50	2687	2689	2	CENSPI	CESP4	Cenchrus spinifex

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	2689	2716	27	BARE		
MT	07MT001	2008	1A	50	2716	2731	15	CENSPI	CESP4	Cenchrus spinifex
MT	07MT001	2008	1A	50	2731	2889	158	BARE		
MT	07MT001	2008	1A	50	2889	2891	2	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2891	2981	90	BARE		
MT	07MT001	2008	1A	50	2981	2992	11	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	2992	3005	13	BARE		
MT	07MT001	2008	1A	50	3005	3007	2	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	3007	3069	62	BARE		
MT	07MT001	2008	1A	50	3069	3088	19	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3088	3109	21	BARE		
MT	07MT001	2008	1A	50	3109	3120	11	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3120	3140	20	BARE		
MT	07MT001	2008	1A	50	3140	3155	15	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3155	3165	10	BARE		
MT	07MT001	2008	1A	50	3165	3170	5	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3170	3193	23	BARE		
MT	07MT001	2008	1A	50	3193	3205	12	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3205	3214	9	BARE		
MT	07MT001	2008	1A	50	3214	3227	13	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	3227	3265	38	BARE		
MT	07MT001	2008	1A	50	3265	3274	9	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3274	3296	22	BARE		
MT	07MT001	2008	1A	50	3296	3306	10	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3306	3324	18	BARE		
MT	07MT001	2008	1A	50	3324	3332	8	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3332	3355	23	BARE		
MT	07MT001	2008	1A	50	3355	3369	14	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3369	3396	27	BARE		
MT	07MT001	2008	1A	50	3396	3527	131	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3527	3555	28	BARE		
MT	07MT001	2008	1A	50	3555	3568	13	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3568	3580	12	BARE		
MT	07MT001	2008	1A	50	3580	3586	6	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3586	3592	6	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	3592	3624	32	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3624	3633	9	BARE		
MT	07MT001	2008	1A	50	3633	3636	3	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3636	3645	9	BARE		
MT	07MT001	2008	1A	50	3645	3655	10	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3655	3667	12	BARE		
MT	07MT001	2008	1A	50	3667	3672	5	BOUERI	BOER4	Bouteloua eriopoda
MT	07MT001	2008	1A	50	3672	3681	9	BARE		
MT	07MT001	2008	1A	50	3681	3692	11	BOUERI	BOER4	Bouteloua eriopoda
MT	07MT001	2008	1A	50	3692	3707	15	BARE		
MT	07MT001	2008	1A	50	3707	3837	130	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	3815	3935	120	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	1A	50	3910	3960	50	BOUERI	BOER4	Bouteloua eriopoda
MT	07MT001	2008	1A	50	3940	4031	91	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	1A	50	4031	4044	13	BARE		
MT	07MT001	2008	1A	50	4044	4063	19	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4063	4074	11	BARE		
MT	07MT001	2008	1A	50	4074	4103	29	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4103	4110	7	BARE		
MT	07MT001	2008	1A	50	4110	4468	358	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4200	4340	140	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1A	50	4468	4480	12	BARE		
MT	07MT001	2008	1A	50	4480	4485	5	SPOCRY	SPCR	Sporobolus cryptandrus
MT	07MT001	2008	1A	50	4485	4491	6	BARE		
MT	07MT001	2008	1A	50	4491	4494	3	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4494	4505	11	BARE		
MT	07MT001	2008	1A	50	4505	4507	2	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4507	4519	12	BARE		
MT	07MT001	2008	1A	50	4519	4577	58	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4577	4596	19	BARE		
MT	07MT001	2008	1A	50	4596	4638	42	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1A	50	4638	4661	23	BARE		
MT	07MT001	2008	1A	50	4661	4688	27	BOUERI	BOER4	Bouteloua eriopoda
MT	07MT001	2008	1A	50	4688	4730	42	BARE		
MT	07MT001	2008	1A	50	4730	4745	15	BOUGRA	BOGR2	Bouteloua gracilis

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1A	50	4745	4826	81	BARE		
MT	07MT001	2008	1A	50	4826	5000	174	BOUGRA	BOGR2	Bouteloua gracilis
MT	07MT001	2008	1B	50	0	285	285	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	140	193	53	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	1B	50	165	187	22	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1B	50	285	345	60	BARE		
MT	07MT001	2008	1B	50	331	410	79	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1B	50	345	1095	750	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	420	450	30	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1B	50	855	882	27	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2008	1B	50	985	1180	195	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1B	50	1095	1132	37	BARE		
MT	07MT001	2008	1B	50	1132	1190	58	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	1183	1205	22	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	1B	50	1190	1343	153	BARE		
MT	07MT001	2008	1B	50	1220	1245	25	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1B	50	1343	1510	167	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	1510	1545	35	BARE		
MT	07MT001	2008	1B	50	1545	1690	145	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	1690	1725	35	BARE		
MT	07MT001	2008	1B	50	1695	1712	17	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	1B	50	1725	4155	2430	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	3190	3200	10	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	1B	50	4155	4205	50	BARE		
MT	07MT001	2008	1B	50	4205	5000	795	UNIDG		unidentified graminoid
MT	07MT001	2008	1B	50	4430	4675	245	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1C	50	0	37	37	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1C	50	0	950	950	UNIDG		unidentified graminoid
MT	07MT001	2008	1C	50	836	855	19	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	1C	50	875	1015	140	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1C	50	950	1285	335	BARE		
MT	07MT001	2008	1C	50	991	1027	36	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	1C	50	1055	1165	110	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	1C	50	1285	2760	1475	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	1C	50	2760	2805	45	BARE		
MT	07MT001	2008	1C	50	2805	4700	1895	UNIDG		unidentified graminoid
MT	07MT001	2008	1C	50	4430	4640	210	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	1C	50	4700	4760	60	BARE		
MT	07MT001	2008	1C	50	4760	5000	240	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	0	2130	2130	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	2130	2185	55	BARE		
MT	07MT001	2008	2A	50	2185	2192	7	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	2192	2250	58	BARE		
MT	07MT001	2008	2A	50	2195	2215	20	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	2A	50	2250	2270	20	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	2270	2320	50	BARE		
MT	07MT001	2008	2A	50	2290	2320	30	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	2A	50	2320	2770	450	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	2770	2815	45	BARE		
MT	07MT001	2008	2A	50	2815	2830	15	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	2830	3115	285	BARE		
MT	07MT001	2008	2A	50	2930	3040	110	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	2A	50	3115	3180	65	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	3180	3270	90	BARE		
MT	07MT001	2008	2A	50	3220	3305	85	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2008	2A	50	3270	3320	50	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	3320	3525	205	BARE		
MT	07MT001	2008	2A	50	3350	3395	45	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2A	50	3525	3800	275	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	3800	3885	85	BARE		
MT	07MT001	2008	2A	50	3885	3892	7	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	3892	3990	98	BARE		
MT	07MT001	2008	2A	50	3990	4370	380	UNIDG		unidentified graminoid
MT	07MT001	2008	2A	50	4015	4060	45	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	2A	50	4285	4309	24	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	2A	50	4370	4435	65	BARE		
MT	07MT001	2008	2A	50	4435	5000	565	UNIDG		unidentified graminoid
MT	07MT001	2008	2B	50	0	860	860	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	2B	50	30	41	11	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2008	2B	50	350	490	140	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2B	50	810	900	90	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	2B	50	860	915	55	BARE		
MT	07MT001	2008	2B	50	915	1660	745	UNIDG		unidentified graminoid
MT	07MT001	2008	2B	50	950	980	30	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2B	50	1660	1730	70	BARE		
MT	07MT001	2008	2B	50	1730	1770	40	UNIDG		unidentified graminoid
MT	07MT001	2008	2B	50	1770	1825	55	BARE		
MT	07MT001	2008	2B	50	1825	5000	3175	UNIDG		unidentified graminoid
MT	07MT001	2008	2B	50	4250	4295	45	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2C	50	0	78	78	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2C	50	0	35	35	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	35	110	75	BARE		
MT	07MT001	2008	2C	50	87	174	87	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	2C	50	110	135	25	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	135	160	25	BARE		
MT	07MT001	2008	2C	50	160	782	622	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	782	805	23	BARE		
MT	07MT001	2008	2C	50	805	810	5	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	810	970	160	BARE		
MT	07MT001	2008	2C	50	910	915	5	ZINGRA	ZIGR	Zinnia grandiflora
MT	07MT001	2008	2C	50	970	980	10	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	980	1001	21	BARE		
MT	07MT001	2008	2C	50	1001	1399	398	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	1399	1527	128	BARE		
MT	07MT001	2008	2C	50	1527	2475	948	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	2475	2520	45	BARE		
MT	07MT001	2008	2C	50	2520	5000	2480	UNIDG		unidentified graminoid
MT	07MT001	2008	2C	50	3255	3290	35	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	2C	50	3920	3955	35	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3A	50	0	16	16	BARE		
MT	07MT001	2008	3A	50	16	19	3	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	19	35	16	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	3A	50	35	81	46	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	81	99	18	BARE		
MT	07MT001	2008	3A	50	99	113	14	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	113	152	39	BARE		
MT	07MT001	2008	3A	50	152	376	224	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	376	432	56	BARE		
MT	07MT001	2008	3A	50	432	451	19	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	451	499	48	BARE		
MT	07MT001	2008	3A	50	499	502	3	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	502	554	52	BARE		
MT	07MT001	2008	3A	50	554	719	165	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	717	809	92	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3A	50	719	804	85	BARE		
MT	07MT001	2008	3A	50	804	1210	406	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1210	1232	22	BARE		
MT	07MT001	2008	3A	50	1232	1250	18	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1250	1271	21	BARE		
MT	07MT001	2008	3A	50	1271	1390	119	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1390	1455	65	BARE		
MT	07MT001	2008	3A	50	1455	1569	114	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1569	1624	55	BARE		
MT	07MT001	2008	3A	50	1606	1617	11	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	3A	50	1624	1684	60	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1684	1720	36	BARE		
MT	07MT001	2008	3A	50	1720	1925	205	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	1925	2042	117	BARE		
MT	07MT001	2008	3A	50	2042	2230	188	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	2230	2294	64	BARE		
MT	07MT001	2008	3A	50	2294	2730	436	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	2730	2770	40	BARE		
MT	07MT001	2008	3A	50	2760	2864	104	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2008	3A	50	2770	2786	16	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	2786	2997	211	BARE		
MT	07MT001	2008	3A	50	2997	3087	90	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	3A	50	3087	3135	48	BARE		
MT	07MT001	2008	3A	50	3135	3750	615	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	3750	3785	35	BARE		
MT	07MT001	2008	3A	50	3785	4082	297	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	4082	4159	77	BARE		
MT	07MT001	2008	3A	50	4159	4342	183	UNIDG		unidentified graminoid
MT	07MT001	2008	3A	50	4342	4369	27	BARE		
MT	07MT001	2008	3A	50	4369	5000	631	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	0	473	473	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	453	530	77	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3B	50	473	530	57	BARE		
MT	07MT001	2008	3B	50	530	1210	680	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	1210	1335	125	BARE		
MT	07MT001	2008	3B	50	1225	1275	50	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3B	50	1335	1900	565	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	1900	1920	20	BARE		
MT	07MT001	2008	3B	50	1915	1955	40	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3B	50	1920	2041	121	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	2041	2063	22	BARE		
MT	07MT001	2008	3B	50	2063	4300	2237	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	3131	3233	102	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3B	50	4260	4295	35	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3B	50	4285	4295	10	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	3B	50	4300	4350	50	BARE		
MT	07MT001	2008	3B	50	4340	4400	60	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3B	50	4350	4430	80	UNIDG		unidentified graminoid
MT	07MT001	2008	3B	50	4430	4570	140	BARE		
MT	07MT001	2008	3B	50	4430	4550	120	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3B	50	4570	5000	430	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	0	44	44	BARE		
MT	07MT001	2008	3C	50	44	47	3	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	47	69	22	BARE		
MT	07MT001	2008	3C	50	69	140	71	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	90	155	65	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3C	50	140	168	28	BARE		



Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	3C	50	168	205	37	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	181	240	59	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3C	50	205	320	115	BARE		
MT	07MT001	2008	3C	50	310	380	70	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	3C	50	320	590	270	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	395	509	114	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3C	50	590	623	33	BARE		
MT	07MT001	2008	3C	50	623	1484	861	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	1414	1530	116	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3C	50	1484	1534	50	BARE		
MT	07MT001	2008	3C	50	1486	1532	46	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	3C	50	1534	1752	218	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	1589	1666	77	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	3C	50	1650	1695	45	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3C	50	1725	1772	47	BARE		
MT	07MT001	2008	3C	50	1772	2555	783	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	2550	2615	65	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3C	50	2555	2600	45	BARE		
MT	07MT001	2008	3C	50	2600	4025	1425	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	4025	4085	60	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3C	50	4025	4080	55	BARE		
MT	07MT001	2008	3C	50	4080	4140	60	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	4125	4180	55	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	3C	50	4140	4165	25	BARE		
MT	07MT001	2008	3C	50	4165	5000	835	UNIDG		unidentified graminoid
MT	07MT001	2008	3C	50	4250	4303	53	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	4A	50	0	29	29	BARE		
MT	07MT001	2008	4A	50	29	54	25	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	54	71	17	BARE		
MT	07MT001	2008	4A	50	71	74	3	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	74	100	26	BARE		
MT	07MT001	2008	4A	50	100	549	449	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	549	575	26	BARE		
MT	07MT001	2008	4A	50	575	762	187	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	715	735	20	YUCGLA	YUGL	Yucca glauca

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	4A	50	762	840	78	BARE		
MT	07MT001	2008	4A	50	815	852	37	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	4A	50	840	880	40	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	880	945	65	BARE		
MT	07MT001	2008	4A	50	945	1005	60	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	1005	1045	40	BARE		
MT	07MT001	2008	4A	50	1045	1052	7	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	1052	1150	98	BARE		
MT	07MT001	2008	4A	50	1150	1560	410	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	1560	1660	100	BARE		
MT	07MT001	2008	4A	50	1660	1954	294	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	1670	1765	95	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	4A	50	1954	2001	47	BARE		
MT	07MT001	2008	4A	50	2001	2142	141	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	2142	2178	36	BARE		
MT	07MT001	2008	4A	50	2178	2696	518	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	2696	2741	45	BARE		
MT	07MT001	2008	4A	50	2741	2755	14	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	2755	2917	162	BARE		
MT	07MT001	2008	4A	50	2790	2880	90	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	4A	50	2917	2930	13	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	2930	2974	44	BARE		
MT	07MT001	2008	4A	50	2974	3514	540	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	3514	3531	17	BARE		
MT	07MT001	2008	4A	50	3531	4523	992	UNIDG		unidentified graminoid
MT	07MT001	2008	4A	50	4523	4579	56	BARE		
MT	07MT001	2008	4A	50	4579	5000	421	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	0	17	17	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	17	34	17	BARE		
MT	07MT001	2008	4B	50	34	163	129	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	163	202	39	BARE		
MT	07MT001	2008	4B	50	202	365	163	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	365	384	19	BARE		
MT	07MT001	2008	4B	50	384	763	379	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	735	778	43	PROGLA	PRGL2	Prosopis glandulosa

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	4B	50	763	804	41	BARE		
MT	07MT001	2008	4B	50	770	810	40	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	4B	50	804	1033	229	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	830	1006	176	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	4B	50	1033	1060	27	BARE		
MT	07MT001	2008	4B	50	1060	1116	56	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	1116	1181	65	BARE		
MT	07MT001	2008	4B	50	1145	1180	35	BARE		
MT	07MT001	2008	4B	50	1180	2120	940	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	1181	1145	-36	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	2120	2150	30	BARE		
MT	07MT001	2008	4B	50	2150	2230	80	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	2230	2254	24	BARE		
MT	07MT001	2008	4B	50	2254	2448	194	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	2266	2285	19	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	4B	50	2448	2468	20	BARE		
MT	07MT001	2008	4B	50	2468	3564	1096	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	3084	3140	56	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	4B	50	3564	3591	27	BARE		
MT	07MT001	2008	4B	50	3591	4061	470	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	4061	4078	17	BARE		
MT	07MT001	2008	4B	50	4078	4241	163	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	4241	4258	17	BARE		
MT	07MT001	2008	4B	50	4258	5000	742	UNIDG		unidentified graminoid
MT	07MT001	2008	4B	50	4502	4608	106	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	4B	50	4562	4575	13	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2008	4C	50	0	165	165	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	165	189	24	BARE		
MT	07MT001	2008	4C	50	189	437	248	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	437	459	22	BARE		
MT	07MT001	2008	4C	50	459	939	480	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	939	967	28	BARE		
MT	07MT001	2008	4C	50	967	1139	172	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	1139	1172	33	BARE		
MT	07MT001	2008	4C	50	1172	1181	9	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	4C	50	1181	1207	26	BARE		
MT	07MT001	2008	4C	50	1207	1219	12	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	1219	1246	27	BARE		
MT	07MT001	2008	4C	50	1246	1271	25	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	1271	1299	28	BARE		
MT	07MT001	2008	4C	50	1299	2242	943	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	2231	2374	143	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	4C	50	2242	2336	94	BARE		
MT	07MT001	2008	4C	50	2336	3057	721	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	3057	3073	16	BARE		
MT	07MT001	2008	4C	50	3073	3109	36	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	3109	3144	35	BARE		
MT	07MT001	2008	4C	50	3144	3378	234	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	3378	3397	19	BARE		
MT	07MT001	2008	4C	50	3397	3669	272	UNIDG		unidentified graminoid
MT	07MT001	2008	4C	50	3456	3464	8	OPUPOL	OPPO	Opuntia polyacantha
MT	07MT001	2008	4C	50	3669	3720	51	BARE		
MT	07MT001	2008	4C	50	3720	5000	1280	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	0	26	26	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	26	49	23	BARE		
MT	07MT001	2008	5A	50	49	86	37	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	86	109	23	BARE		
MT	07MT001	2008	5A	50	109	135	26	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	135	179	44	BARE		
MT	07MT001	2008	5A	50	179	188	9	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	188	203	15	BARE		
MT	07MT001	2008	5A	50	203	305	102	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	305	333	28	BARE		
MT	07MT001	2008	5A	50	333	535	202	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	535	573	38	BARE		
MT	07MT001	2008	5A	50	573	976	403	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	920	999	79	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	5A	50	976	1040	64	BARE		
MT	07MT001	2008	5A	50	1040	1636	596	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	1636	1678	42	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	5A	50	1678	1694	16	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	1694	1734	40	BARE		
MT	07MT001	2008	5A	50	1734	1737	3	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	1737	1797	60	BARE		
MT	07MT001	2008	5A	50	1797	3038	1241	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	1919	2035	116	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2008	5A	50	3038	3079	41	BARE		
MT	07MT001	2008	5A	50	3079	3244	165	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	3244	3272	28	BARE		
MT	07MT001	2008	5A	50	3272	3316	44	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	3316	3345	29	BARE		
MT	07MT001	2008	5A	50	3345	3869	524	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	3869	3906	37	BARE		
MT	07MT001	2008	5A	50	3906	3927	21	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	3927	4028	101	BARE		
MT	07MT001	2008	5A	50	4028	4122	94	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	4122	4217	95	BARE		
MT	07MT001	2008	5A	50	4217	4362	145	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	4362	4425	63	BARE		
MT	07MT001	2008	5A	50	4425	4434	9	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	4434	4495	61	BARE		
MT	07MT001	2008	5A	50	4495	4504	9	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	4504	4569	65	BARE		
MT	07MT001	2008	5A	50	4569	4670	101	UNIDG		unidentified graminoid
MT	07MT001	2008	5A	50	4665	5000	335	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	5A	50	4670	4860	190	BARE		
MT	07MT001	2008	5A	50	4860	5000	140	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	0	121	121	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	121	149	28	BARE		
MT	07MT001	2008	5B	50	149	180	31	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	180	197	17	BARE		
MT	07MT001	2008	5B	50	197	300	103	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	300	324	24	BARE		
MT	07MT001	2008	5B	50	324	528	204	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	379	442	63	PROGLA	PRGL2	Prosopis glandulosa

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	5B	50	528	552	24	BARE		
MT	07MT001	2008	5B	50	552	802	250	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	802	832	30	BARE		
MT	07MT001	2008	5B	50	832	2390	1558	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	1898	1971	73	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2008	5B	50	2390	2422	32	BARE		
MT	07MT001	2008	5B	50	2422	2493	71	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	2493	2524	31	BARE		
MT	07MT001	2008	5B	50	2524	3046	522	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	3046	3067	21	BARE		
MT	07MT001	2008	5B	50	3067	4404	1337	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	4404	4426	22	BARE		
MT	07MT001	2008	5B	50	4426	4801	375	UNIDG		unidentified graminoid
MT	07MT001	2008	5B	50	4801	4831	30	BARE		
MT	07MT001	2008	5B	50	4831	5000	169	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	0	410	410	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	410	432	22	BARE		
MT	07MT001	2008	5C	50	432	916	484	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	916	1004	88	BARE		
MT	07MT001	2008	5C	50	1004	1591	587	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	1591	1613	22	BARE		
MT	07MT001	2008	5C	50	1613	2624	1011	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	2624	2652	28	BARE		
MT	07MT001	2008	5C	50	2652	2675	23	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	2675	2701	26	BARE		
MT	07MT001	2008	5C	50	2701	2819	118	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	2819	2848	29	BARE		
MT	07MT001	2008	5C	50	2848	2863	15	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	2864	2876	12	BARE		
MT	07MT001	2008	5C	50	2876	2892	16	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	2892	2921	29	BARE		
MT	07MT001	2008	5C	50	2921	3838	917	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	3838	3881	43	BARE		
MT	07MT001	2008	5C	50	3881	4085	204	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	4085	4113	28	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2008	5C	50	4113	5000	887	UNIDG		unidentified graminoid
MT	07MT001	2008	5C	50	4526	4567	41	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1A	50	0	64	64	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	64	107	43	LITTER		
MT	07MT001	2009	1A	50	107	221	114	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	221	240	19	BARE		
MT	07MT001	2009	1A	50	240	450	210	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	450	480	30	BARE		
MT	07MT001	2009	1A	50	480	1110	630	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	1110	1132	22	BARE		
MT	07MT001	2009	1A	50	1132	1146	14	UNIDF		unidentified forb
MT	07MT001	2009	1A	50	1140	1225	85	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	1225	1248	23	BARE		
MT	07MT001	2009	1A	50	1248	2461	1213	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	1842	1849	7	UNIDF		unidentified forb
MT	07MT001	2009	1A	50	2231	3278	1047	UNIDF		unidentified forb
MT	07MT001	2009	1A	50	2461	2478	17	LITTER		
MT	07MT001	2009	1A	50	2478	2590	112	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	2590	2615	25	BARE		
MT	07MT001	2009	1A	50	2615	2650	35	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	2650	2656	6	BARE		
MT	07MT001	2009	1A	50	2656	2800	144	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	2800	2848	48	BARE		
MT	07MT001	2009	1A	50	2848	2852	4	UNIDF		unidentified forb
MT	07MT001	2009	1A	50	2852	2870	18	BARE		
MT	07MT001	2009	1A	50	2870	2899	29	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	2899	2917	18	BARE		
MT	07MT001	2009	1A	50	2917	2938	21	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	2938	2975	37	BARE		
MT	07MT001	2009	1A	50	2975	3265	290	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	3265	3292	27	DUNG		
MT	07MT001	2009	1A	50	3292	3951	659	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	3820	3853	33	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	1A	50	3951	3959	8	UNIDF		unidentified forb
MT	07MT001	2009	1A	50	3959	3988	29	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	1A	50	3988	4022	34	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	1A	50	3995	4020	25	LITTER		
MT	07MT001	2009	1A	50	4020	4754	734	UNIDG		unidentified graminoid
MT	07MT001	2009	1A	50	4220	4290	70	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1A	50	4754	4822	68	BARE		
MT	07MT001	2009	1A	50	4822	5000	178	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	0	390	390	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	117	188	71	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	1B	50	220	240	20	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1B	50	330	360	30	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1B	50	390	414	24	BARE		
MT	07MT001	2009	1B	50	414	1100	686	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	842	878	36	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2009	1B	50	1031	1289	258	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1B	50	1100	1145	45	LITTER		
MT	07MT001	2009	1B	50	1145	1188	43	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	1188	1311	123	LITTER		
MT	07MT001	2009	1B	50	1311	1320	9	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	1320	1345	25	LITTER		
MT	07MT001	2009	1B	50	1345	1519	174	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	1519	1549	30	BARE		
MT	07MT001	2009	1B	50	1549	4162	2613	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	4162	4208	46	BARE		
MT	07MT001	2009	1B	50	4208	5000	792	UNIDG		unidentified graminoid
MT	07MT001	2009	1B	50	4444	4550	106	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1C	50	0	546	546	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	0	34	34	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1C	50	546	573	27	BARE		
MT	07MT001	2009	1C	50	573	762	189	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	762	788	26	BARE		
MT	07MT001	2009	1C	50	788	876	88	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	876	923	47	LITTER		
MT	07MT001	2009	1C	50	923	930	7	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	930	963	33	BARE		



Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	1C	50	963	1055	92	LITTER		
MT	07MT001	2009	1C	50	1010	1020	10	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2009	1C	50	1055	1182	127	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	1C	50	1160	1195	35	LITTER		
MT	07MT001	2009	1C	50	1195	1259	64	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	1259	1297	38	BARE		
MT	07MT001	2009	1C	50	1297	1303	6	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	1303	1415	112	BARE		
MT	07MT001	2009	1C	50	1415	1538	123	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	1538	1580	42	BARE		
MT	07MT001	2009	1C	50	1580	2218	638	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	2218	2240	22	DUNG		
MT	07MT001	2009	1C	50	2240	2920	680	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	2920	2944	24	BARE		
MT	07MT001	2009	1C	50	2944	3385	441	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3385	3405	20	BARE		
MT	07MT001	2009	1C	50	3405	3490	85	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3490	3515	25	BARE		
MT	07MT001	2009	1C	50	3515	3640	125	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3640	3670	30	BARE		
MT	07MT001	2009	1C	50	3670	3810	140	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3810	3830	20	BARE		
MT	07MT001	2009	1C	50	3830	3890	60	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3890	3923	33	BARE		
MT	07MT001	2009	1C	50	3923	3958	35	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	3958	3990	32	BARE		
MT	07MT001	2009	1C	50	3990	4535	545	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	4460	4667	207	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	1C	50	4535	4600	65	LITTER		
MT	07MT001	2009	1C	50	4600	4705	105	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	4705	4723	18	BARE		
MT	07MT001	2009	1C	50	4723	4802	79	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	4802	4830	28	BARE		
MT	07MT001	2009	1C	50	4830	4864	34	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	4864	4902	38	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	1C	50	4902	4972	70	UNIDG		unidentified graminoid
MT	07MT001	2009	1C	50	4972	5000	28	BARE		
MT	07MT001	2009	2A	50	0	407	407	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	407	462	55	BARE		
MT	07MT001	2009	2A	50	462	475	13	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	475	525	50	BARE		
MT	07MT001	2009	2A	50	525	2007	1482	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2007	2035	28	BARE		
MT	07MT001	2009	2A	50	2035	2147	112	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2147	2165	18	LITTER		
MT	07MT001	2009	2A	50	2165	2188	23	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2188	2230	42	LITTER		
MT	07MT001	2009	2A	50	2230	2249	19	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2249	2269	20	BARE		
MT	07MT001	2009	2A	50	2269	2756	487	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2756	2795	39	BARE		
MT	07MT001	2009	2A	50	2795	2909	114	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	2909	3015	106	BARE		
MT	07MT001	2009	2A	50	3005	3142	137	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	2A	50	3130	3205	75	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	3205	3236	31	BARE		
MT	07MT001	2009	2A	50	3236	3249	13	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	3249	3282	33	BARE		
MT	07MT001	2009	2A	50	3282	3389	107	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	2A	50	3365	3400	35	LITTER		
MT	07MT001	2009	2A	50	3400	3440	40	BARE		
MT	07MT001	2009	2A	50	3440	3460	20	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2009	2A	50	3460	3485	25	BARE		
MT	07MT001	2009	2A	50	3485	3965	480	UNIDG		unidentified graminoid
MT	07MT001	2009	2A	50	3905	3933	28	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	2A	50	3965	3980	15	BARE		
MT	07MT001	2009	2A	50	3980	4005	25	UNIDF		unidentified forb
MT	07MT001	2009	2A	50	4002	4060	58	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	2A	50	4055	5000	945	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	0	1080	1080	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	2B	50	460	474	14	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	2B	50	835	955	120	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	2B	50	1080	1113	33	BARE		
MT	07MT001	2009	2B	50	1113	1367	254	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	1367	1400	33	BARE		
MT	07MT001	2009	2B	50	1400	1764	364	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	1764	1795	31	BARE		
MT	07MT001	2009	2B	50	1795	2980	1185	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	2980	3002	22	DUNG		
MT	07MT001	2009	2B	50	3002	3995	993	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	3980	3995	15	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2009	2B	50	3995	4013	18	BARE		
MT	07MT001	2009	2B	50	4013	4136	123	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	4065	4090	25	UNIDF		unidentified forb
MT	07MT001	2009	2B	50	4136	4220	84	LITTER		
MT	07MT001	2009	2B	50	4140	4285	145	UNIDF		unidentified forb
MT	07MT001	2009	2B	50	4220	5000	780	UNIDG		unidentified graminoid
MT	07MT001	2009	2B	50	4415	4516	101	UNIDF		unidentified forb
MT	07MT001	2009	2C	50	0	50	50	UNIDG		unidentified graminoid
MT	07MT001	2009	2C	50	50	73	23	LITTER		
MT	07MT001	2009	2C	50	73	1035	962	UNIDG		unidentified graminoid
MT	07MT001	2009	2C	50	1035	1065	30	BARE		
MT	07MT001	2009	2C	50	1065	5000	3935	UNIDG		unidentified graminoid
MT	07MT001	2009	2C	50	1853	1872	19	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2009	2C	50	3248	4280	1032	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	2C	50	3910	3942	32	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	2C	50	4709	4732	23	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3A	50	0	36	36	BARE		
MT	07MT001	2009	3A	50	36	45	9	UNIDF		unidentified forb
MT	07MT001	2009	3A	50	45	104	59	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	88	107	19	UNIDF		unidentified forb
MT	07MT001	2009	3A	50	104	138	34	BARE		
MT	07MT001	2009	3A	50	138	493	355	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	493	525	32	BARE		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	3A	50	525	530	5	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	530	560	30	BARE		
MT	07MT001	2009	3A	50	560	715	155	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	657	665	8	UNIDF		unidentified forb
MT	07MT001	2009	3A	50	700	740	40	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3A	50	740	780	40	LITTER		
MT	07MT001	2009	3A	50	780	1072	292	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1072	1090	18	BARE		
MT	07MT001	2009	3A	50	1090	1310	220	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1310	1340	30	BARE		
MT	07MT001	2009	3A	50	1340	1471	131	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1470	1506	36	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1471	1470	-1	BARE		
MT	07MT001	2009	3A	50	1506	1530	24	BARE		
MT	07MT001	2009	3A	50	1530	1553	23	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1553	1596	43	BARE		
MT	07MT001	2009	3A	50	1596	1680	84	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	1680	1700	20	BARE		
MT	07MT001	2009	3A	50	1700	2082	382	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	2053	2070	17	UNIDF		unidentified forb
MT	07MT001	2009	3A	50	2082	2107	25	LITTER		
MT	07MT001	2009	3A	50	2107	2334	227	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	2149	2157	8	UNIDF		unidentified forb
MT	07MT001	2009	3A	50	2334	2357	23	BARE		
MT	07MT001	2009	3A	50	2357	2825	468	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	2740	2888	148	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2009	3A	50	2825	2888	63	LITTER		
MT	07MT001	2009	3A	50	2888	2940	52	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	2940	2985	45	BARE		
MT	07MT001	2009	3A	50	2985	4076	1091	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	4076	4124	48	BARE		
MT	07MT001	2009	3A	50	4124	4187	63	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	4187	4210	23	BARE		
MT	07MT001	2009	3A	50	4210	4340	130	UNIDG		unidentified graminoid

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	3A	50	4340	4360	20	BARE		
MT	07MT001	2009	3A	50	4360	4436	76	UNIDG		unidentified graminoid
MT	07MT001	2009	3A	50	4436	4478	42	BARE		
MT	07MT001	2009	3A	50	4478	5000	522	UNIDG		unidentified graminoid
MT	07MT001	2009	3B	50	0	2147	2147	UNIDG		unidentified graminoid
MT	07MT001	2009	3B	50	460	535	75	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3B	50	2147	2164	17	BARE		
MT	07MT001	2009	3B	50	2164	4420	2256	UNIDG		unidentified graminoid
MT	07MT001	2009	3B	50	3139	3182	43	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	3B	50	4284	4294	10	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2009	3B	50	4404	4485	81	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3B	50	4420	4530	110	LITTER		
MT	07MT001	2009	3B	50	4530	5000	470	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	0	9	9	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	9	36	27	BARE		
MT	07MT001	2009	3C	50	36	92	56	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	92	107	15	BARE		
MT	07MT001	2009	3C	50	107	135	28	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	116	155	39	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	3C	50	135	151	16	LITTER		
MT	07MT001	2009	3C	50	151	393	242	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	193	240	47	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	3C	50	393	415	22	LITTER		
MT	07MT001	2009	3C	50	415	774	359	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	451	483	32	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	3C	50	774	797	23	BARE		
MT	07MT001	2009	3C	50	797	1712	915	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	1403	1890	487	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	3C	50	1639	1719	80	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3C	50	1712	1743	31	LITTER		
MT	07MT001	2009	3C	50	1743	1770	27	BARE		
MT	07MT001	2009	3C	50	1770	2573	803	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	2540	2620	80	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3C	50	2605	4040	1435	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	4040	4085	45	LITTER		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	3C	50	4085	5000	915	UNIDG		unidentified graminoid
MT	07MT001	2009	3C	50	4127	4184	57	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3C	50	4250	4302	52	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	3C	50	4430	4500	70	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4A	50	0	284	284	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	284	315	31	LITTER		
MT	07MT001	2009	4A	50	315	372	57	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	372	399	27	BARE		
MT	07MT001	2009	4A	50	399	769	370	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	706	788	82	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4A	50	769	843	74	LITTER		
MT	07MT001	2009	4A	50	843	1601	758	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	1055	1085	30	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4A	50	1601	1642	41	BARE		
MT	07MT001	2009	4A	50	1642	2806	1164	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	1695	1755	60	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4A	50	2806	2870	64	LITTER		
MT	07MT001	2009	4A	50	2825	2867	42	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4A	50	2870	2895	25	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	2895	2965	70	BARE		
MT	07MT001	2009	4A	50	2965	5000	2035	UNIDG		unidentified graminoid
MT	07MT001	2009	4A	50	4016	4080	64	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	4B	50	0	793	793	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	730	950	220	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	4B	50	773	785	12	GUTSAR	GUSA2	Gutierrezia sarothrae
MT	07MT001	2009	4B	50	793	835	42	LITTER		
MT	07MT001	2009	4B	50	835	885	50	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	885	970	85	LITTER		
MT	07MT001	2009	4B	50	970	1134	164	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	1134	1167	33	BARE		
MT	07MT001	2009	4B	50	1167	3570	2403	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	3079	3150	71	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	4B	50	3570	3590	20	BARE		
MT	07MT001	2009	4B	50	3590	3778	188	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	3778	3800	22	DUNG		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	4B	50	3800	3844	44	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	3844	3852	8	BARE		
MT	07MT001	2009	4B	50	3852	3864	12	DUNG		
MT	07MT001	2009	4B	50	3864	4240	376	UNIDG		unidentified graminoid
MT	07MT001	2009	4B	50	4240	4257	17	BARE		
MT	07MT001	2009	4B	50	4257	5000	743	UNIDG		unidentified graminoid
MT	07MT001	2009	4C	50	0	430	430	UNIDG		unidentified graminoid
MT	07MT001	2009	4C	50	430	444	14	DUNG		
MT	07MT001	2009	4C	50	444	4001	3557	UNIDG		unidentified graminoid
MT	07MT001	2009	4C	50	2247	2358	111	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	4C	50	3450	3459	9	OPUPOL	OPPO	Opuntia polyacantha
MT	07MT001	2009	4C	50	4001	4019	18	DUNG		
MT	07MT001	2009	4C	50	4019	4177	158	UNIDG		unidentified graminoid
MT	07MT001	2009	4C	50	4177	4196	19	DUNG		
MT	07MT001	2009	4C	50	4196	4870	674	UNIDG		unidentified graminoid
MT	07MT001	2009	4C	50	4870	4890	20	DUNG		
MT	07MT001	2009	4C	50	4890	5000	110	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	0	29	29	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	29	46	17	BARE		
MT	07MT001	2009	5A	50	46	84	38	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	84	95	11	BARE		
MT	07MT001	2009	5A	50	95	102	7	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	102	118	16	BARE		
MT	07MT001	2009	5A	50	118	180	62	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	180	199	19	BARE		
MT	07MT001	2009	5A	50	199	211	12	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	211	220	9	DUNG		
MT	07MT001	2009	5A	50	220	970	750	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	919	1020	101	MIMACUB	MIACB	Mimosa aculeaticarpa var. biuncifera
MT	07MT001	2009	5A	50	970	1012	42	BARE		
MT	07MT001	2009	5A	50	1012	1060	48	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1060	1075	15	LITTER		
MT	07MT001	2009	5A	50	1075	1288	213	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1288	1304	16	DUNG		

Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	5A	50	1304	1719	415	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1719	1753	34	BARE		
MT	07MT001	2009	5A	50	1753	1770	17	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1770	1795	25	BARE		
MT	07MT001	2009	5A	50	1795	1822	27	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1822	1839	17	BARE		
MT	07MT001	2009	5A	50	1839	1890	51	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1875	1876	1	UNIDF		unidentified forb
MT	07MT001	2009	5A	50	1890	1905	15	BARE		
MT	07MT001	2009	5A	50	1905	2372	467	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	1917	2034	117	YUCGLA	YUGL	Yucca glauca
MT	07MT001	2009	5A	50	2372	2414	42	LITTER		
MT	07MT001	2009	5A	50	2414	2447	33	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	2447	2470	23	BARE		
MT	07MT001	2009	5A	50	2470	2910	440	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	2910	2925	15	BARE		
MT	07MT001	2009	5A	50	2925	3044	119	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	3044	3066	22	BARE		
MT	07MT001	2009	5A	50	3066	3117	51	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	3117	3138	21	BARE		
MT	07MT001	2009	5A	50	3138	3645	507	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	3645	3666	21	BARE		
MT	07MT001	2009	5A	50	3666	3870	204	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	3870	3890	20	BARE		
MT	07MT001	2009	5A	50	3890	4420	530	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	4420	4559	139	BARE		
MT	07MT001	2009	5A	50	4559	4676	117	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	4665	5000	335	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	5A	50	4676	4722	46	LITTER		
MT	07MT001	2009	5A	50	4722	4795	73	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	4795	4810	15	LITTER		
MT	07MT001	2009	5A	50	4810	4846	36	UNIDG		unidentified graminoid
MT	07MT001	2009	5A	50	4846	4874	28	LITTER		
MT	07MT001	2009	5A	50	4874	5000	126	UNIDG		unidentified graminoid
MT	07MT001	2009	5B	50	0	22	22	LITTER		



Treatment	PlotID	Year	Transect	Tran Len	Start	End	Dist	GCclass	NM_K_Symbol	NMSpName
MT	07MT001	2009	5B	50	22	122	100	UNIDG		unidentified graminoid
MT	07MT001	2009	5B	50	122	165	43	DUNG		
MT	07MT001	2009	5B	50	165	635	470	UNIDG		unidentified graminoid
MT	07MT001	2009	5B	50	385	456	71	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	5B	50	635	655	20	DUNG		
MT	07MT001	2009	5B	50	655	2030	1375	UNIDG		unidentified graminoid
MT	07MT001	2009	5B	50	1914	1974	60	PROGLA	PRGL2	Prosopis glandulosa
MT	07MT001	2009	5B	50	2030	2060	30	DUNG		
MT	07MT001	2009	5B	50	2060	3625	1565	UNIDG		unidentified graminoid
MT	07MT001	2009	5B	50	3625	3643	18	DUNG		
MT	07MT001	2009	5B	50	3643	5000	1357	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	0	14	14	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	14	37	23	LITTER		
MT	07MT001	2009	5C	50	37	149	112	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	149	170	21	DUNG		
MT	07MT001	2009	5C	50	170	295	125	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	295	317	22	DUNG		
MT	07MT001	2009	5C	50	317	385	68	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	385	418	33	DUNG		
MT	07MT001	2009	5C	50	418	1810	1392	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	1810	1837	27	DUNG		
MT	07MT001	2009	5C	50	1837	2632	795	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	2632	2652	20	BARE		
MT	07MT001	2009	5C	50	2652	4860	2208	UNIDG		unidentified graminoid
MT	07MT001	2009	5C	50	3180	3205	25	UNIDF		unidentified forb
MT	07MT001	2009	5C	50	4860	4876	16	DUNG		
MT	07MT001	2009	5C	50	4876	5000	124	UNIDG		unidentified graminoid

## Appendix C. List of plant species recorded between 2007 and 2009 for the Landowner Incentive Program: Wildlife Habitat Improvement of the Parkinson Ranch, Milnesand, New Mexico.

**Table C1. Plant species arranged by life form and alphabetically by scientific name followed by the common name and plant family; NHNM Acronym refers to the Natural Heritage New Mexico database code for species; PLANT symbol is database code for the USDA PLANTS database; Distribution is coded by sampling location where GC=grazing control; GR=grazing rotational; GY=grazing year-round; MT=mesquite treatment; Map=vegetation map. Whether a voucher collection was made for the species is indicated in the last column.**

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
1	Tree	Juniperus monosperma	oneseed juniper	Cupressaceae	JUNMON	JUMO				X	No
1	Tree	Sapindus saponaria	wingleaf soapberry	Sapindaceae	SAPSAP	SASA4				X	No
2	Shrub	Acacia spp.	acacia	Fabaceae	ACACIA	ACACI				X	No
2	Shrub	Artemisia filifolia	sand sagebrush	Asteraceae	ARTFIL	ARFI2	X			X	No
2	Shrub	Atriplex canescens	fourwing saltbush	Chenopodiaceae	ATRCAN	ATCA2				X	No
2	Shrub	Baccharis spp.	baccharis	Asteraceae	BACCHA	BACCH				X	No
2	Shrub	Condalia ericoides	javelina bush	Rhamnaceae	CONERI	COER5				X	No
2	Shrub	Cylindropuntia imbricata	tree cholla	Cactaceae	CYLIMB	OPIM	X		X	X	No
2	Shrub	Cylindropuntia leptocaulis	Christmas cactus	Cactaceae	CYLLEP	CYLE8				X	No
2	Shrub	Ephedra spp.	jointfir	Ephedraceae	EPHEDR	EPHED				X	No
2	Shrub	Ephedra torreyana	Torrey's jointfir	Ephedraceae	EPHTOR	EPTO				X	No
2	Shrub	Ericameria spp.	heath goldenrod	Asteraceae	ERICAM	ERICA2				X	No
2	Shrub	Flourensia cernua	tarbush	Asteraceae	FLOCER	FLCE				X	No
2	Shrub	Koeberlinia spinosa	crown of thorns	Koeberliniaceae	KOESPI	KOSP				X	No
2	Shrub	Larrea tridentata	creosotebush	Zygophyllaceae	LARTRI	LATR2				X	No

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
2	Shrub	Lorandersonia pulchella	southwestern rabbitbrush	Asteraceae	LORPUL	CHPU4				X	Yes
2	Shrub	Mimosa aculeaticarpa var. biuncifera	catclaw mimosa	Fabaceae	MIMACUB	MIACB		X	X	X	Yes
2	Shrub	Prosopis glandulosa	honey mesquite	Fabaceae	PROGLA	PRGL2		X	X	X	No
2	Shrub	Quercus havardii	shinnery oak	Fagaceae	QUEHAV	QUHA3	X	X		X	Yes
2	Shrub	Rhus microphylla	littleleaf sumac	Anacardiaceae	RHUMIC	RHMI3				X	Yes
2	Shrub	Yucca elata	soaptree yucca	Agavaceae	YUCELA	YUEL				X	No
2	Shrub	Yucca glauca	soapweed yucca	Agavaceae	YUCGLA	YUGL	X	X	X	X	No
2	Shrub	Ziziphus obtusifolia	lotebush	Rhamnaceae	ZIZOBT	ZIOB				X	Yes
2.5	Sub-shrub	Brickellia eupatorioides var. chlorolepis	No boneset	Asteraceae	BRIEUPC	BREUC2				X	Yes
2.5	Sub-shrub	Dalea formosa	featherplume	Fabaceae	DALFOR	DAFO				X	Yes
2.5	Sub-shrub	Echinocactus texensis	horse crippler	Cactaceae	ECHTEX	ECTE				X	No
2.5	Sub-shrub	Escobaria vivipara var. vivipara	spinystar	Cactaceae	ESCVIVV	ESVIV				X	No
2.5	Sub-shrub	Gutierrezia sarothrae	broom snakeweed	Asteraceae	GUTSAR	GUSA2	X	X	X	X	Yes
2.5	Sub-shrub	Krameria grayi	white ratany	Krameriaceae	KRAGRA	KRGR				X	No
2.5	Sub-shrub	Mammillaria spp.	nipple cactus	Cactaceae	MAMMIL	MAMMI				X	No
2.5	Sub-shrub	Opuntia phaeacantha	tulip pricklypear	Cactaceae	OPUPHA	OPPH	X			X	No
2.5	Sub-shrub	Opuntia polyacantha	plains pricklypear	Cactaceae	OPUPOL	OPPO	X		X	X	No
2.5	Sub-shrub	Parthenium incanum	mariola	Asteraceae	PARINC	PAIN2				X	No
2.5	Sub-shrub	Thymophylla acerosa	pricklyleaf dogweed	Asteraceae	THYACE	THAC				X	No
3	Grass	Andropogon hallii	sand bluestem	Poaceae	ANDHAL	ANHA	X	X		X	Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
3	Grass	<i>Aristida divaricata</i>	poverty threeawn	Poaceae	ARIDIV	ARDI5		X	X	X	Yes
3	Grass	<i>Aristida purpurea</i>	purple threeawn	Poaceae	ARIPUR	ARPU9	X	X	X	X	Yes
3	Grass	<i>Aristida purpurea</i> var. <i>longiseta</i>	red threeawn	Poaceae	ARIPURL	ARPUL		X	X		Yes
3	Grass	<i>Aristida purpurea</i> var. <i>purpurea</i>	purple threeawn	Poaceae	ARIPURP	ARPUP6			X		Yes
3	Grass	<i>Bothriochloa laguroides</i> ssp. <i>torreyana</i>	silver beardgrass	Poaceae	BOTLAGT	BOLAT		X		X	Yes
3	Grass	<i>Bouteloua curtipendula</i>	sideoats grama	Poaceae	BOUCUR	BOCU	X	X		X	Yes
3	Grass	<i>Bouteloua eriopoda</i>	black grama	Poaceae	BOUERI	BOER4			X	X	Yes
3	Grass	<i>Bouteloua gracilis</i>	blue grama	Poaceae	BOUGRA	BOGR2			X	X	Yes
3	Grass	<i>Bouteloua hirsuta</i>	hairy grama	Poaceae	BOUHIR	BOHI2	X	X		X	Yes
3	Grass	<i>Buchloe dactyloides</i>	buffalograss	Poaceae	BUCDAC	BUDA			X	X	Yes
3	Grass	<i>Cenchrus spinifex</i>	sandbur	Poaceae	CENSPI	CESP4		X	X	X	Yes
3	Grass	<i>Chloris crinita</i>	No Rhodes grass	Poaceae	CHLCRI	CHCR				X	No
3	Grass	<i>Chloris cucullata</i>	hooded windmill grass	Poaceae	CHLCUC	CHCU2			X	X	Yes
3	Grass	<i>Chloris verticillata</i>	tumble windmill grass	Poaceae	CHLVER	CHVE2		X	X	X	Yes
3	Grass	<i>Cyperus esculentus</i>	chufa flatsedge	Cyperaceae	CYPESC	CYES				X	No
3	Grass	<i>Cyperus retroflexus</i>	oneflower flatsedge	Cyperaceae	CYPRET	CYRE14	X	X		X	Yes
3	Grass	<i>Dasyochloa pulchella</i>	fluffgrass	Poaceae	DASPUL	DAPU7				X	Yes
3	Grass	<i>Digitaria californica</i>	Arizona cottontop	Poaceae	DIGCAL	DICA8				X	Yes
3	Grass	<i>Digitaria pubiflora</i>	Carolina crabgrass	Poaceae	DIGPUB	DIPU9	X	X		X	Yes
3	Grass	<i>Elymus elymoides</i>	bottlebrush squirreltail	Poaceae	ELYELY	ELEL5			X	X	No
3	Grass	<i>Eragrostis cilianensis</i>	stinkgrass	Poaceae	ERACIL	ERCI			X		Yes
3	Grass	<i>Eragrostis</i>	gummy	Poaceae	ERACUR	ERCU		X	X	X	Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		curtipedicellata	lovegrass								
3	Grass	Eragrostis curvula	weeping lovegrass	Poaceae	ERACUR2	ERCU2				X	Yes
3	Grass	Eragrostis lehmanniana	Lehmann's lovegrass	Poaceae	ERALEH	ERLE				X	Yes
3	Grass	Eragrostis secundiflora	red lovegrass	Poaceae	ERASEC	ERSE	X	X		X	Yes
3	Grass	Eragrostis sessilispica	tumble lovegrass	Poaceae	ERASES	ERSE2	X	X		X	Yes
3	Grass	Eragrostis trichodes	sand lovegrass	Poaceae	ERATRI	ERTR3				X	Yes
3	Grass	Hesperostipa comata ssp. comata	needle-and-thread grass	Poaceae	HESCOMC	HECOC8		X		X	Yes
3	Grass	Hesperostipa neomexicana	New Mexico needlegrass	Poaceae	HESNEO	HENE5				X	No
3	Grass	Lycurus phleoides	common wolfstail	Poaceae	LYCPHL	LYPH				X	No
3	Grass	Lycurus setosus	bristly wolfstail	Poaceae	LYCSET	LYSE3		X		X	Yes
3	Grass	Muhlenbergia arenicola	sand muhly	Poaceae	MUHARE2	MUAR2			X	X	Yes
3	Grass	Muhlenbergia porteri	bush muhly	Poaceae	MUHPOR	MUPO2			X	X	Yes
3	Grass	Muhlenbergia repens	creeping muhly	Poaceae	MUHREP	MURE				X	No
3	Grass	Muhlenbergia torreyi	ring muhly	Poaceae	MUHTOR	MUTO2				X	Yes
3	Grass	Munroa squarrosa	No buffalograss	Poaceae	MUNSQU	MUSQ3	X	X	X	X	Yes
3	Grass	Panicum hallii	Hall's panicgrass	Poaceae	PANHAL	PAHA			X		Yes
3	Grass	Panicum obtusum	vine mesquite	Poaceae	PANOBT	PAOB			X	X	Yes
3	Grass	Panicum virgatum	switchgrass	Poaceae	PANVIR	PAVI2				X	Yes
3	Grass	Pascopyrum smithii	western wheatgrass	Poaceae	PASSMI	PASM					No
3	Grass	Paspalum setaceum var. stramineum	yellow sand paspalum	Poaceae	PASSETS	PASES	X	X		X	Yes
3	Grass	Pleuraphis mutica	tobosa	Poaceae	PLEMUT	PLMU3				X	Yes
3	Grass	Schedonnardus paniculatus	tumblegrass	Poaceae	SCHPAN	SCPA			X		Yes
3	Grass	Schizachyrium	little bluestem	Poaceae	SCHSCO	SCSC	X	X		X	Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		scoparium									
3	Grass	Scleropogon brevifolius	burrograss	Poaceae	SCLBRE	SCBR2				X	Yes
3	Grass	Setaria leucopila	streambed bristlegrass	Poaceae	SETLEU	SELE6				X	Yes
3	Grass	Sorghum halepense	johnsongrass	Poaceae	SORHAL	SOHA			X		Yes
3	Grass	Sporobolus contractus	spike dropseed	Poaceae	SPOCON	SPCO4				X	No
3	Grass	Sporobolus cryptandrus	sand dropseed	Poaceae	SPOCRY	SPCR	X	X	X	X	No
3	Grass	Sporobolus flexuosus	mesa dropseed	Poaceae	SPOFLE	SPFL2			X	X	No
3	Grass	Sporobolus giganteus	giant dropseed	Poaceae	SPOGIG	SPGI				X	No
3	Grass	Urochloa ciliatissima	fringed signalgrass	Poaceae	UROCIL	URCI				X	Yes
3	Grass	Vulpia octoflora	sixweeks fescue	Poaceae	VULOCT	VUOC				X	No
4	Forb	Acourtia nana	desert holly	Asteraceae	ACONAN	ACNA2				X	No
4	Forb	Amaranthus palmeri	carelessweed	Amaranthaceae	AMAPAL	AMPA			X		Yes
4	Forb	Ambrosia psilostachya	Cuman ragweed	Asteraceae	AMBPSI	AMPS	X	X	X	X	Yes
4	Forb	Aphanostephus ramosissimus	plains dozedaisy	Asteraceae	APHRAM	APRA	X	X	X	X	Yes
4	Forb	Artemisia campestris	field sagewort	Asteraceae	ARTCAM	ARCA12				X	Yes
4	Forb	Artemisia carruthii	Carruth's sagewort	Asteraceae	ARTCAR	ARCA14			X	X	Yes
4	Forb	Artemisia dracunculus	tarragon	Asteraceae	ARTDRA	ARDR4					Yes
4	Forb	Artemisia ludoviciana	white sagebrush	Asteraceae	ARTLUD	ARLU				X	No
4	Forb	Asclepias engelmanniana	Engelman's milkweed	Asclepiadaceae	ASCENG	ASEN		X			Yes
4	Forb	Asclepias latifolia	broadleaf milkweed	Asclepiadaceae	ASCLAT	ASLA4				X	No
4	Forb	Asclepias pumila	plains milkweed	Asclepiadaceae	ASCPUM	ASPU	X	X			Yes
4	Forb	Asclepias viridiflora	green comet	Asclepiadaceae	ASCVIR	ASVI			X		Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
			milkweed								
4	Forb	<i>Astragalus mollissimus</i>	woolly milkvetch	Fabaceae	ASTMOL	ASMO7	X				Yes
4	Forb	<i>Astragalus</i> spp.	milkvetch	Fabaceae	ASTRAG	ASTRA				X	No
4	Forb	<i>Berlandiera lyrata</i>	lyreleaf greeneyes	Asteraceae	BERLYR	BELY			X	X	No
4	Forb	<i>Calylophus serrulatus</i>	yellow sundrops	Onagraceae	CALSER	CASE12	X	X		X	Yes
4	Forb	<i>Chaetopappa ericoides</i>	rose heath	Asteraceae	CHAERI	CHER2		X	X	X	No
4	Forb	<i>Chamaesyce fendleri</i>	Fendler's sandmat	Euphorbiaceae	CHAFEN	CHFE3	X	X		X	Yes
4	Forb	<i>Chamaesyce glyptosperma</i>	ribseed sandmat	Euphorbiaceae	CHAGLY	CHGL13	X	X	X	X	Yes
4	Forb	<i>Chamaesyce lata</i>	hoary sandmat	Euphorbiaceae	CHALAT	CHLA10			X	X	Yes
4	Forb	<i>Chamaesyce missurica</i>	prairie sandmat	Euphorbiaceae	CHAMIS	CHMI8	X				Yes
4	Forb	<i>Chenopodium berlandieri</i>	pitseed goosefoot	Chenopodiaceae	CHEBER	CHBE4					Yes
4	Forb	<i>Chenopodium cycloides</i>	sandhill goosefoot	Chenopodiaceae	CHECYC	CHCY	X	X			Yes
4	Forb	<i>Cirsium undulatum</i>	wavyleaf thistle	Asteraceae	CIRUND	CIUN			X	X	Yes
4	Forb	<i>Comandra umbellata</i> ssp. <i>pallida</i>	pale bastard toadflax	Santalaceae	COMUMBP	COUMP	X	X			Yes
4	Forb	<i>Commelina dianthifolia</i>	birdbill dayflower	Commelinaceae	COMDIA	CODI4		X			No
4	Forb	<i>Commelina erecta</i>	whitemouth dayflower	Commelinaceae	COMERE	COER	X	X	X	X	Yes
4	Forb	<i>Conyza canadensis</i>	Canadian horseweed	Asteraceae	CONCAN	COCA5	X		X		Yes
4	Forb	<i>Croton dioicus</i>	grassland croton	Euphorbiaceae	CRODIO	CRDI6				X	Yes
4	Forb	<i>Croton pottsii</i>	leatherweed	Euphorbiaceae	CROPOT	CRPO5				X	No
4	Forb	<i>Croton texensis</i>	Texas croton	Euphorbiaceae	CROTEX	CRTE4		X		X	Yes
4	Forb	<i>Cryptantha cinerea</i> var. <i>cinerea</i>	James' catseye	Boraginaceae	CRYCINC	CRCIC	X	X		X	Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	<i>Cryptantha crassisejala</i>	hiddenflower	Boraginaceae	CRYCRA	CRCR3				X	No
4	Forb	<i>Cryptantha minima</i>	little cryptantha	Boraginaceae	CRYMIN	CRMI5				X	Yes
4	Forb	<i>Cycloloma atriplicifolium</i>	winged pigweed	Chenopodiaceae	CYCATR	CYAT	X	X			Yes
4	Forb	<i>Dalea lanata</i>	woolly prairieclover	Fabaceae	DALLAN	DALA3				X	No
4	Forb	<i>Dalea nana</i> var. <i>nana</i>	dwarf prairie clover	Fabaceae	DALNANN	DANAN	X	X			Yes
4	Forb	<i>Dalea purpurea</i>	purple prairieclover	Fabaceae	DALPUR	DAPU5	X	X		X	Yes
4	Forb	<i>Dalea villosa</i> var. <i>villosa</i>	silky prairie clover	Fabaceae	DALVILV	DAVIV					Yes
4	Forb	<i>Delphinium</i> spp.	larkspur	Ranunculaceae	DELPHI	DELPH				X	No
4	Forb	<i>Dimorphocarpa wislizeni</i>	spectacle pod	Brassicaceae	DIMWIS	DIWI2	X	X		X	Yes
4	Forb	<i>Dyssodia papposa</i>	fetid marigold	Asteraceae	DYSPAP	DYPA			X	X	Yes
4	Forb	<i>Echinacea angustifolia</i>	prairie coneflower	Asteraceae	ECHANG	ECAN2				X	No
4	Forb	<i>Erigeron bellidiastrum</i> var. <i>bellidiastrum</i>	western daisy fleabane	Asteraceae	ERIBELB	ERBEB	X	X		X	Yes
4	Forb	<i>Eriogonum alatum</i>	winged buckwheat	Polygonaceae	ERIALA	ERAL4				X	Yes
4	Forb	<i>Eriogonum annuum</i>	annual buckwheat	Polygonaceae	ERIANN	ERAN4	X	X	X	X	Yes
4	Forb	<i>Euphorbia davidii</i>	David's spurge	Euphorbiaceae	EUPDAV	EUDA5		X			No
4	Forb	<i>Evolvulus sericeus</i>	silver dwarf morningglory	Convolvulaceae	EVOSER	EVSE	X	X		X	Yes
4	Forb	<i>Froelichia gracilis</i>	slender snakecotton	Amaranthaceae	FROGRA	FRGR3	X	X		X	Yes
4	Forb	<i>Gaillardia pulchella</i>	firewheel	Asteraceae	GAIPUL	GAPU				X	Yes
4	Forb	<i>Gaura coccinea</i>	scarlet beeblossom	Onagraceae	GAUCOC	GACO5			X	X	Yes
4	Forb	<i>Gaura mollis</i>	velvetweed	Onagraceae	GAUMOL	GAMO5			X	X	Yes
4	Forb	<i>Gaura villosa</i>	wolly gaura	Onagraceae	GAUVIL	GAVI2	X	X			Yes



Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	Glandularia spp.	vervain	Verbenaceae	GLANDU	GLAND				X	No
4	Forb	Grindelia squarrosa	curlycup gumweed	Asteraceae	GRISQU	GRSQ					Yes
4	Forb	Helianthus annuus	common sunflower	Asteraceae	HELANN	HEAN3				X	No
4	Forb	Helianthus petiolaris ssp. petiolaris	prairie sunflower	Asteraceae	HELPETP	HEPEP			X	X	Yes
4	Forb	Heliotropium convolvulaceum	phlox heliotrope	Boraginaceae	HELCON2	HECO5				X	Yes
4	Forb	Heterotheca subaxillaris	camphorweed	Asteraceae	HETSUB	HESU3	X	X	X		Yes
4	Forb	Heterotheca villosa	hairy goldenaster	Asteraceae	HETVIL	HEVI4	X	X		X	Yes
4	Forb	Hoffmannseggia spp.	rushpea	Fabaceae	HOFFMA	HOFFM				X	No
4	Forb	Houstonia humifusa	matted bluet	Rubiaceae	HOUHUM	HOHU				X	Yes
4	Forb	Hymenopappus flavescens var. canotomentosus	collegeflower	Asteraceae	HYMFLAC	HYFLC	X	X	X	X	Yes
4	Forb	Ipomoea leptophylla	bush morningglory	Convolvulaceae	IPOLEP	IPLE				X	No
4	Forb	Ipomopsis spp.	gilia	Polemoniaceae	IPOMOP	IPOMO2				X	Yes
4	Forb	Krameria lanceolata	trailing krameria	Krameriaceae	KRALAN	KRLA	X			X	Yes
4	Forb	Lappula occidentalis	flatspine stickseed	Boraginaceae	LAPOCC	LAOC3				X	No
4	Forb	Lechea mucronata	hairy pinweed	Cistaceae	LECMUC	LEMU3	X	X		X	Yes
4	Forb	Liatris punctata	dotted gayfeather	Asteraceae	LIAPUN	LIPU	X	X			Yes
4	Forb	Linum rigidum var. rigidum	stiffstem flax	Linaceae	LINRIGR	LIRIR	X	X		X	Yes
4	Forb	Lithospermum multiflorum	manyflowered gromwell	Boraginaceae	LITMUL	LIMU3	X	X	X		Yes
4	Forb	Loeflingia squarrosa	spreading pygmyleaf	Caryophyllaceae	LOESQU	LOSQ	X				Yes
4	Forb	Machaeranthera tanacetifolia	tanseyleaf aster	Asteraceae	MACTAN	MATA2			X		Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	Marrubium vulgare	horehound	Lamiaceae	MARVUL	MAVU				X	No
4	Forb	Melampodium leucanthum	plains blackfoot	Asteraceae	MELLEU	MELE2	X	X		X	Yes
4	Forb	Mentzelia albicaulis	whitestem blazingstar	Loasaceae	MENALB	MEAL6				X	No
4	Forb	Mimosa quadrivalvis var. occidentalis	eastern sensitive plant	Fabaceae	MIMQUAO	MIQUO				X	Yes
4	Forb	Mirabilis glabra	smooth four o'clock	Nyctaginaceae	MIRGLA	MIGL3				X	Yes
4	Forb	Mirabilis linearis	narrowleaf four o'clock	Nyctaginaceae	MIRLIN	MILI3	X	X		X	Yes
4	Forb	Mollugo verticillata	green carpetweed	Molluginaceae	MOLVER	MOVE			X		Yes
4	Forb	Monarda punctata	spotted beebalm	Lamiaceae	MONPUN	MOPU				X	Yes
4	Forb	Nama hispidum	bristly nama	Hydrophyllaceae	NAMHIS	NAHI			X	X	Yes
4	Forb	Palafoxia rosea	rosy palafox	Asteraceae	PALROS	PARO				X	Yes
4	Forb	Palafoxia sphacelata	sand palafoxia	Asteraceae	PALSPH	PASP	X	X	X	X	Yes
4	Forb	Paronychia jamesii	James' nailwort	Caryophyllaceae	PARJAM	PAJA	X	X		X	Yes
4	Forb	Parthenium confertum var. lyratum	Gray's feverfew	Asteraceae	PARCONL	PACOL			X		No
4	Forb	Penstemon spp.	beardtongue	Scrophulariaceae	PENSTE	PENST				X	Yes
4	Forb	Phacelia integrifolia	gypsum scorpionweed	Hydrophyllaceae	PHAINT	PHIN				X	No
4	Forb	Phemeranthus calycinus	largeflower fameflower	Portulacaceae	PHECAL	PHCA48	X				Yes
4	Forb	Physalis cinerascens var. cinerascens	smallflower groundcherry	Solanaceae	PHYCINC	PHCIC3			X	X	Yes
4	Forb	Physaria gordonii	Gordon's bladderpod	Brassicaceae	PHYGOR	LEGO				X	No
4	Forb	Plantago patagonica	woolly plantain	Plantaginaceae	PLAPAT	PLPA2		X		X	No
4	Forb	Plantago wrightiana	Wright's plantain	Plantaginaceae	PLAWRI4	PLWR	X		X		Yes
4	Forb	Polanisia jamesii	James'	Capparaceae	POLJAM	POJA3					Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
			clammyweed								
4	Forb	<i>Polygala alba</i>	white milkwort	Polygalaceae	POLALB	POAL4				X	No
4	Forb	<i>Polygonum</i> spp.	knotweed	Polygonaceae	POLYGO	POLYG4				X	No
4	Forb	<i>Pomaria jamesii</i>	James's hog-potato	Fabaceae	POMJAM	POJA5	X	X		X	Yes
4	Forb	<i>Portulaca oleracea</i>	common purslane	Portulacaceae	POROLE	POOL			X		No
4	Forb	<i>Portulaca pilosa</i>	kiss me quick	Portulacaceae	PORPIL	POPI3			X	X	Yes
4	Forb	<i>Psilostrophe tagetina</i>	woolly paperflower	Asteraceae	PSITAG	PSTA	X	X		X	Yes
4	Forb	<i>Psoraleidium tenuiflorum</i>	slimflower scurfpea	Fabaceae	PSOTEN	PSTE5	X				Yes
4	Forb	<i>Ratibida columnifera</i>	upright prairie coneflower	Asteraceae	RATCOL	RACO3			X		Yes
4	Forb	<i>Salsola tragus</i>	prickly Russian thistle	Chenopodiaceae	SALTRA	SATR12			X		Yes
4	Forb	<i>Salvia reflexa</i>	lanceleaf sage	Lamiaceae	SALREF	SARE3				X	Yes
4	Forb	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	threadleaf ragwort	Asteraceae	SENFLAF	SEFLF				X	No
4	Forb	<i>Senecio spartioides</i>	broom groundsel	Asteraceae	SENSPA	SESP3				X	No
4	Forb	<i>Senna bauhinioides</i>	twinleaf senna	Fabaceae	SENBAU	SEBA3				X	No
4	Forb	<i>Senna roemeriana</i>	twoleaf wild sensitive plant	Fabaceae	SENROE	SERO8				X	Yes
4	Forb	<i>Solanum elaeagnifolium</i>	silverleaf nightshade	Solanaceae	SOLELA	SOEL			X	X	No
4	Forb	<i>Solanum rostratum</i>	buffalobur nightshade	Solanaceae	SOLROS	SORO			X	X	Yes
4	Forb	<i>Sphaeralcea coccinea</i>	scarlet globemallow	Malvaceae	SPHCOC	SPCO			X	X	No
4	Forb	<i>Stephanomeria pauciflora</i>	brownplume wirelettuce	Asteraceae	STPAU	STPA4			X	X	No
4	Forb	<i>Stillingia sylvatica</i>	queen's-delight	Euphorbiaceae	STISYL	STSY				X	Yes
4	Forb	<i>Teucrium laciniatum</i>	lacy germander	Lamiaceae	TEULAC	TELA			X	X	Yes
4	Forb	<i>Thelesperma</i>	Hopi tea	Asteraceae	THEMEG	THME	X	X		X	Yes

Life Form Code	Life form	Scientific Name	Common Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		megapotamicum	greenthread								
4	Forb	Townsendia exscapa	stemless townsendia	Asteraceae	TOWEXS	TOEX2					Yes
4	Forb	Verbena bracteata	bigbract verbena	Verbenaceae	VERBRA	VEBR			X		Yes
4	Forb	Verbesina encelioides	golden crownbeard	Asteraceae	VERENC	VEEN			X		Yes
4	Forb	Xanthisma spinulosum	lacy tansyaster	Asteraceae	XANSPI2	MAPI	X	X	X	X	Yes
4	Forb	Xanthisma texanum ssp. drummondii	Texas sleepydaisy	Asteraceae	XANTEXD	XATED2	X	X	X	X	Yes
4	Forb	Zinnia grandiflora	Rocky Mountain zinnia	Asteraceae	ZINGRA	ZIGR			X	X	Yes

**Table C2. Plant species arranged by life form and alphabetically by common name followed by the scientific name and plant family; NHNM Acronym refers to the Natural Heritage New Mexico database code for species; PLANT symbol is database code for the USDA PLANTS database; Distribution is coded by sampling location where GC=grazing control; GR=grazing rotational; GY=grazing year-round; MT=mesquite treatment; Map=vegetation map. Whether a voucher collection was made for the species is indicated in the last column.**

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
1	Tree	oneseed juniper	Juniperus monosperma	Cupressaceae	JUNMON	JUMO				X	No
1	Tree	wingleaf soapberry	Sapindus saponaria	Sapindaceae	SAPSAP	SASA4				X	No
2	Shrub	acacia	Acacia spp.	Fabaceae	ACACIA	ACACI				X	No
2	Shrub	baccharis	Baccharis spp.	Asteraceae	BACCHA	BACCH				X	No
2	Shrub	catclaw mimosa	Mimosa aculeaticarpa var. biuncifera	Fabaceae	MIMACUB	MIACB		X	X	X	Yes
2	Shrub	Christmas cactus	Cylindropuntia leptocaulis	Cactaceae	CYLLEP	CYLE8				X	No
2	Shrub	creosotebush	Larrea tridentata	Zygophyllaceae	LARTRI	LATR2				X	No
2	Shrub	crown of thorns	Koeberlinia spinosa	Koeberliniaceae	KOESPI	KOSP				X	No
2	Shrub	fourwing saltbush	Atriplex canescens	Chenopodiaceae	ATRCAN	ATCA2				X	No
2	Shrub	heath goldenrod	Ericameria spp.	Asteraceae	ERICAM	ERICA2				X	No
2	Shrub	honey mesquite	Prosopis glandulosa	Fabaceae	PROGLA	PRGL2		X	X	X	No
2	Shrub	javelina bush	Condalia ericoides	Rhamnaceae	CONERI	COER5				X	No
2	Shrub	jointfir	Ephedra spp.	Ephedraceae	EPHEDR	EPHED				X	No
2	Shrub	littleleaf sumac	Rhus microphylla	Anacardiaceae	RHUMIC	RHMI3				X	Yes
2	Shrub	lotebush	Ziziphus obtusifolia	Rhamnaceae	ZIZOBT	ZIOB				X	Yes
2	Shrub	sand sagebrush	Artemisia filifolia	Asteraceae	ARTFIL	ARFI2	X			X	No
2	Shrub	shinnery oak	Quercus havardii	Fagaceae	QUEHAV	QUHA3	X	X		X	Yes
2	Shrub	soaptree yucca	Yucca elata	Agavaceae	YUCELA	YUEL				X	No
2	Shrub	soapweed yucca	Yucca glauca	Agavaceae	YUCGLA	YUGL	X	X	X	X	No
2	Shrub	southwestern	Lorandersonia	Asteraceae	LORPUL	CHPU4				X	Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		rabbitbrush	pulchella								
2	Shrub	tarbush	Flourensia cernua	Asteraceae	FLOCER	FLCE				X	No
2	Shrub	Torrey's jointfir	Ephedra torreyana	Ephedraceae	EPHTOR	EPTO				X	No
2	Shrub	tree cholla	Cylindropuntia imbricata	Cactaceae	CYLIMB	OPIM	X		X	X	No
2.5	Sub-shrub	broom snakeweed	Gutierrezia sarothrae	Asteraceae	GUTSAR	GUSA2	X	X	X	X	Yes
2.5	Sub-shrub	featherplume	Dalea formosa	Fabaceae	DALFOR	DAFO				X	Yes
2.5	Sub-shrub	horse crippler	Echinocactus texensis	Cactaceae	ECHTEX	ECTE				X	No
2.5	Sub-shrub	mariola	Parthenium incanum	Asteraceae	PARINC	PAIN2				X	No
2.5	Sub-shrub	nipple cactus	Mammillaria spp.	Cactaceae	MAMMIL	MAMMI				X	No
2.5	Sub-shrub	No boneset	Brickellia eupatorioides var. chlorolepis	Asteraceae	BRIEUPC	BREUC2				X	Yes
2.5	Sub-shrub	plains pricklypear	Opuntia polyacantha	Cactaceae	OPUPOL	OPPO	X		X	X	No
2.5	Sub-shrub	pricklyleaf dogweed	Thymophylla acerosa	Asteraceae	THYACE	THAC				X	No
2.5	Sub-shrub	spinystar	Escobaria vivipara var. vivipara	Cactaceae	ESCVIVV	ESVIV				X	No
2.5	Sub-shrub	tulip pricklypear	Opuntia phaeacantha	Cactaceae	OPUPHA	OPPH	X			X	No
2.5	Sub-shrub	white ratany	Krameria grayi	Krameriaceae	KRAGRA	KRGR				X	No
3	Grass	Arizona cottontop	Digitaria californica	Poaceae	DIGCAL	DICA8				X	Yes
3	Grass	black grama	Bouteloua eriopoda	Poaceae	BOUERI	BOER4			X	X	Yes
3	Grass	blue grama	Bouteloua gracilis	Poaceae	BOUGRA	BOGR2			X	X	Yes
3	Grass	bottlebrush squirreltail	Elymus elymoides	Poaceae	ELYELY	ELEL5			X	X	No
3	Grass	bristly wolfstail	Lycurus setosus	Poaceae	LYCSET	LYSE3		X		X	Yes
3	Grass	buffalograss	Buchloe dactyloides	Poaceae	BUCDAC	BUDA			X	X	Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
3	Grass	burrograss	Scleropogon brevifolius	Poaceae	SCLBRE	SCBR2				X	Yes
3	Grass	bush muhly	Muhlenbergia porteri	Poaceae	MUHPOR	MUPO2			X	X	Yes
3	Grass	Carolina crabgrass	Digitaria pubiflora	Poaceae	DIGPUB	DIPU9	X	X		X	Yes
3	Grass	chufa flatsedge	Cyperus esculentus	Cyperaceae	CYPESC	CYES				X	No
3	Grass	common wolfstail	Lycurus phleoides	Poaceae	LYCPHL	LYPH				X	No
3	Grass	creeping muhly	Muhlenbergia repens	Poaceae	MUHREP	MURE				X	No
3	Grass	fluffgrass	Dasyochloa pulchella	Poaceae	DASPUL	DAPU7				X	Yes
3	Grass	fringed signalgrass	Urochloa ciliatissima	Poaceae	UROCIL	URCI				X	Yes
3	Grass	giant dropseed	Sporobolus giganteus	Poaceae	SPOGIG	SPGI				X	No
3	Grass	gummy lovegrass	Eragrostis curtipedicellata	Poaceae	ERACUR	ERCU		X	X	X	Yes
3	Grass	hairy grama	Bouteloua hirsuta	Poaceae	BOUHIR	BOHI2	X	X		X	Yes
3	Grass	Hall's panicgrass	Panicum hallii	Poaceae	PANHAL	PAHA			X		Yes
3	Grass	hooded windmill grass	Chloris cucullata	Poaceae	CHLCUC	CHCU2			X	X	Yes
3	Grass	johnsongrass	Sorghum halepense	Poaceae	SORHAL	SOHA			X		Yes
3	Grass	Lehmann's lovegrass	Eragrostis lehmanniana	Poaceae	ERALEH	ERLE				X	Yes
3	Grass	little bluestem	Schizachyrium scoparium	Poaceae	SCHSCO	SCSC	X	X		X	Yes
3	Grass	mesa dropseed	Sporobolus flexuosus	Poaceae	SPOFLE	SPFL2			X	X	No
3	Grass	needle-and-thread grass	Hesperostipa comata ssp. comata	Poaceae	HESCOMC	HECOC8		X		X	Yes
3	Grass	New Mexico needlegrass	Hesperostipa neomexicana	Poaceae	HESNEO	HENE5				X	No
3	Grass	No buffalograss	Munroa squarrosa	Poaceae	MUNSQU	MUSQ3	X	X	X	X	Yes
3	Grass	No Rhodes grass	Chloris crinita	Poaceae	CHLCRI	CHCR				X	No
3	Grass	oneflower flatsedge	Cyperus retroflexus	Cyperaceae	CYPRET	CYRE14	X	X		X	Yes
3	Grass	poverty	Aristida divaricata	Poaceae	ARIDIV	ARDI5		X	X	X	Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		threeawn									
3	Grass	purple threeawn	<i>Aristida purpurea</i>	Poaceae	ARIPUR	ARPU9	X	X	X	X	Yes
3	Grass	purple threeawn	<i>Aristida purpurea</i> var. <i>purpurea</i>	Poaceae	ARIPURP	ARPUP6			X		Yes
3	Grass	red lovegrass	<i>Eragrostis secundiflora</i>	Poaceae	ERASEC	ERSE	X	X		X	Yes
3	Grass	red threeawn	<i>Aristida purpurea</i> var. <i>longiseta</i>	Poaceae	ARIPURL	ARPUL		X	X		Yes
3	Grass	ring muhly	<i>Muhlenbergia torreyi</i>	Poaceae	MUHTOR	MUTO2				X	Yes
3	Grass	sand bluestem	<i>Andropogon hallii</i>	Poaceae	ANDHAL	ANHA	X	X		X	Yes
3	Grass	sand dropseed	<i>Sporobolus cryptandrus</i>	Poaceae	SPOCRY	SPCR	X	X	X	X	No
3	Grass	sand lovegrass	<i>Eragrostis trichodes</i>	Poaceae	ERATRI	ERTR3				X	Yes
3	Grass	sand muhly	<i>Muhlenbergia arenicola</i>	Poaceae	MUHARE2	MUAR2			X	X	Yes
3	Grass	sandbur	<i>Cenchrus spinifex</i>	Poaceae	CENSPI	CESP4		X	X	X	Yes
3	Grass	sideoats grama	<i>Bouteloua curtipendula</i>	Poaceae	BOUCUR	BOCU	X	X		X	Yes
3	Grass	silver beardgrass	<i>Bothriochloa laguroides</i> ssp. <i>torreyana</i>	Poaceae	BOTLAGT	BOLAT		X		X	Yes
3	Grass	sixweeks fescue	<i>Vulpia octoflora</i>	Poaceae	VULOCT	VUOC				X	No
3	Grass	spike dropseed	<i>Sporobolus contractus</i>	Poaceae	SPOCON	SPCO4				X	No
3	Grass	stinkgrass	<i>Eragrostis cilianensis</i>	Poaceae	ERACIL	ERCI			X		Yes
3	Grass	streambed bristlegrass	<i>Setaria leucopila</i>	Poaceae	SETLEU	SELE6				X	Yes
3	Grass	switchgrass	<i>Panicum virgatum</i>	Poaceae	PANVIR	PAVI2				X	Yes
3	Grass	tobosa	<i>Pleuraphis mutica</i>	Poaceae	PLEMUT	PLMU3				X	Yes
3	Grass	tumble lovegrass	<i>Eragrostis sessilispica</i>	Poaceae	ERASES	ERSE2	X	X		X	Yes
3	Grass	tumble windmill grass	<i>Chloris verticillata</i>	Poaceae	CHLVER	CHVE2		X	X	X	Yes
3	Grass	tumblegrass	<i>Schedonnardus paniculatus</i>	Poaceae	SCHPAN	SCPA			X		Yes



Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
3	Grass	vine mesquite	<i>Panicum obtusum</i>	Poaceae	PANOBT	PAOB			X	X	Yes
3	Grass	weeping lovegrass	<i>Eragrostis curvula</i>	Poaceae	ERACUR2	ERCU2				X	Yes
3	Grass	western wheatgrass	<i>Pascopyrum smithii</i>	Poaceae	PASSMI	PASM					No
3	Grass	yellow sand paspalum	<i>Paspalum setaceum</i> var. <i>stramineum</i>	Poaceae	PASSETS	PASES	X	X		X	Yes
4	Forb	annual buckwheat	<i>Eriogonum annuum</i>	Polygonaceae	ERIANN	ERAN4	X	X	X	X	Yes
4	Forb	beardtongue	<i>Penstemon</i> spp.	Scrophulariaceae	PENSTE	PENST				X	Yes
4	Forb	bigbract verbena	<i>Verbena bracteata</i>	Verbenaceae	VERBRA	VEBR			X		Yes
4	Forb	birdbill dayflower	<i>Commelina dianthifolia</i>	Commelinaceae	COMDIA	CODI4		X			No
4	Forb	bristly nama	<i>Nama hispidum</i>	Hydrophyllaceae	NAMHIS	NAHI			X	X	Yes
4	Forb	broadleaf milkweed	<i>Asclepias latifolia</i>	Asclepiadaceae	ASCLAT	ASLA4				X	No
4	Forb	broom groundsel	<i>Senecio spartioides</i>	Asteraceae	SENSPA	SESP3				X	No
4	Forb	brownplume wirelettuce	<i>Stephanomeria pauciflora</i>	Asteraceae	STEPAU	STPA4			X	X	No
4	Forb	buffalobur nightshade	<i>Solanum rostratum</i>	Solanaceae	SOLROS	SORO			X	X	Yes
4	Forb	bush morningglory	<i>Ipomoea leptophylla</i>	Convolvulaceae	IPOLEP	IPLE				X	No
4	Forb	camphorweed	<i>Heterotheca subaxillaris</i>	Asteraceae	HETSUB	HESU3	X	X	X		Yes
4	Forb	Canadian horseweed	<i>Conyza canadensis</i>	Asteraceae	CONCAN	COCA5	X		X		Yes
4	Forb	carelessweed	<i>Amaranthus palmeri</i>	Amaranthaceae	AMAPAL	AMPA			X		Yes
4	Forb	Carruth's sagewort	<i>Artemisia carruthii</i>	Asteraceae	ARTCAR	ARCA14			X	X	Yes
4	Forb	collegeflower	<i>Hymenopappus flavescens</i> var. <i>canotomentosus</i>	Asteraceae	HYMFLAC	HYFLC	X	X	X	X	Yes
4	Forb	common	<i>Portulaca oleracea</i>	Portulacaceae	POROLE	POOL			X		No

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		purslane									
4	Forb	common sunflower	<i>Helianthus annuus</i>	Asteraceae	HELANN	HEAN3				X	No
4	Forb	Cuman ragweed	<i>Ambrosia psilostachya</i>	Asteraceae	AMBPSI	AMPS	X	X	X	X	Yes
4	Forb	curlycup gumweed	<i>Grindelia squarrosa</i>	Asteraceae	GRISQU	GRSQ					Yes
4	Forb	David's spurge	<i>Euphorbia davidii</i>	Euphorbiaceae	EUPDAV	EUDA5		X			No
4	Forb	desert holly	<i>Acourtia nana</i>	Asteraceae	ACONAN	ACNA2				X	No
4	Forb	dotted gayfeather	<i>Liatris punctata</i>	Asteraceae	LIAPUN	LIPU	X	X			Yes
4	Forb	dwarf prairie clover	<i>Dalea nana</i> var. <i>nana</i>	Fabaceae	DALNANN	DANAN	X	X			Yes
4	Forb	eastern sensitive plant	<i>Mimosa quadrivalvis</i> var. <i>occidentalis</i>	Fabaceae	MIMQUAO	MIQUO				X	Yes
4	Forb	Engelman's milkweed	<i>Asclepias engelmanniana</i>	Asclepiadaceae	ASCENG	ASEN		X			Yes
4	Forb	Fendler's sandmat	<i>Chamaesyce fendleri</i>	Euphorbiaceae	CHAFEN	CHFE3	X	X		X	Yes
4	Forb	fetid marigold	<i>Dyssodia papposa</i>	Asteraceae	DYSPAP	DYPA			X	X	Yes
4	Forb	field sagewort	<i>Artemisia campestris</i>	Asteraceae	ARTCAM	ARCA12				X	Yes
4	Forb	firewheel	<i>Gaillardia pulchella</i>	Asteraceae	GAIPUL	GAPU				X	Yes
4	Forb	flatspine stickseed	<i>Lappula occidentalis</i>	Boraginaceae	LAPOCC	LAOC3				X	No
4	Forb	gilia	<i>Ipomopsis</i> spp.	Polemoniaceae	IPOMOP	IPOMO2				X	Yes
4	Forb	golden crownbeard	<i>Verbesina encelioides</i>	Asteraceae	VERENC	VEEN			X		Yes
4	Forb	Gordon's bladderpod	<i>Physaria gordonii</i>	Brassicaceae	PHYGOR	LEGO				X	No
4	Forb	grassland croton	<i>Croton dioicus</i>	Euphorbiaceae	CRODIO	CRDI6				X	Yes
4	Forb	Gray's feverfew	<i>Parthenium confertum</i> var. <i>lyratum</i>	Asteraceae	PARCONL	PACOL			X		No
4	Forb	green carpetweed	<i>Mollugo verticillata</i>	Molluginaceae	MOLVER	MOVE			X		Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	green comet milkweed	<i>Asclepias viridiflora</i>	Asclepiadaceae	ASCVIR	ASVI			X		Yes
4	Forb	gypsum scorpionweed	<i>Phacelia integrifolia</i>	Hydrophyllaceae	PHAINT	PHIN				X	No
4	Forb	hairy goldenaster	<i>Heterotheca villosa</i>	Asteraceae	HETVIL	HEVI4	X	X		X	Yes
4	Forb	hairy pinweed	<i>Lechea mucronata</i>	Cistaceae	LECMUC	LEMU3	X	X		X	Yes
4	Forb	hiddenflower	<i>Cryptantha crassisepala</i>	Boraginaceae	CRYCRA	CRCR3				X	No
4	Forb	hoary sandmat	<i>Chamaesyce lata</i>	Euphorbiaceae	CHALAT	CHLA10			X	X	Yes
4	Forb	Hopi tea greenthread	<i>Thelesperma megapotamicum</i>	Asteraceae	THEMEG	THME	X	X		X	Yes
4	Forb	horehound	<i>Marrubium vulgare</i>	Lamiaceae	MARVUL	MAVU				X	No
4	Forb	James' catseye	<i>Cryptantha cinerea</i> var. <i>cinerea</i>	Boraginaceae	CRYCINC	CRCIC	X	X		X	Yes
4	Forb	James' clammyweed	<i>Polanisia jamesii</i>	Capparaceae	POLJAM	POJA3					Yes
4	Forb	James' nailwort	<i>Paronychia jamesii</i>	Caryophyllaceae	PARJAM	PAJA	X	X		X	Yes
4	Forb	James's hog-potato	<i>Pomaria jamesii</i>	Fabaceae	POMJAM	POJA5	X	X		X	Yes
4	Forb	kiss me quick	<i>Portulaca pilosa</i>	Portulacaceae	PORPIL	POPI3			X	X	Yes
4	Forb	knotweed	<i>Polygonum</i> spp.	Polygonaceae	POLYGO	POLYG4				X	No
4	Forb	lacy germander	<i>Teucrium laciniatum</i>	Lamiaceae	TEULAC	TELA			X	X	Yes
4	Forb	lacy tansyaster	<i>Xanthisma spinulosum</i>	Asteraceae	XANSPI2	MAPI	X	X	X	X	Yes
4	Forb	lanceleaf sage	<i>Salvia reflexa</i>	Lamiaceae	SALREF	SARE3				X	Yes
4	Forb	largeflower fameflower	<i>Phemeranthus calycinus</i>	Portulacaceae	PHECAL	PHCA48	X				Yes
4	Forb	larkspur	<i>Delphinium</i> spp.	Ranunculaceae	DELPHI	DELPH				X	No
4	Forb	leatherweed	<i>Croton pottsii</i>	Euphorbiaceae	CROPOT	CRPO5				X	No
4	Forb	little cryptantha	<i>Cryptantha minima</i>	Boraginaceae	CRYMIN	CRMI5				X	Yes
4	Forb	lyreleaf greeneyes	<i>Berlandiera lyrata</i>	Asteraceae	BERLYR	BELY			X	X	No
4	Forb	manyflowered gromwell	<i>Lithospermum multiflorum</i>	Boraginaceae	LITMUL	LIMU3	X	X	X		Yes
4	Forb	matted bluet	<i>Houstonia humifusa</i>	Rubiaceae	HOUHUM	HOHU				X	Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	milkvetch	Astragalus spp.	Fabaceae	ASTRAG	ASTRA				X	No
4	Forb	narrowleaf four o'clock	Mirabilis linearis	Nyctaginaceae	MIRLIN	MILI3	X	X		X	Yes
4	Forb	pale bastard toadflax	Comandra umbellata ssp. pallida	Santalaceae	COMUMBP	COUMP	X	X			Yes
4	Forb	phlox heliotrope	Heliotropium convolvulaceum	Boraginaceae	HELCON2	HECO5				X	Yes
4	Forb	pitseed goosefoot	Chenopodium berlandieri	Chenopodiaceae	CHEBER	CHBE4					Yes
4	Forb	plains blackfoot	Melampodium leucanthum	Asteraceae	MELLEU	MELE2	X	X		X	Yes
4	Forb	plains dozedaisy	Aphanostephus ramosissimus	Asteraceae	APHRAM	APRA	X	X	X	X	Yes
4	Forb	plains milkweed	Asclepias pumila	Asclepiadaceae	ASCPUM	ASPU	X	X			Yes
4	Forb	prairie coneflower	Echinacea angustifolia	Asteraceae	ECHANG	ECAN2				X	No
4	Forb	prairie sandmat	Chamaesyce missurica	Euphorbiaceae	CHAMIS	CHMI8	X				Yes
4	Forb	prairie sunflower	Helianthus petiolaris ssp. petiolaris	Asteraceae	HELPETP	HEPEP			X	X	Yes
4	Forb	prickly Russian thistle	Salsola tragus	Chenopodiaceae	SALTRA	SATR12			X		Yes
4	Forb	purple prairieclover	Dalea purpurea	Fabaceae	DALPUR	DAPU5	X	X		X	Yes
4	Forb	queen's-delight	Stillingia sylvatica	Euphorbiaceae	STISYL	STSY				X	Yes
4	Forb	ribseed sandmat	Chamaesyce glyptosperma	Euphorbiaceae	CHAGLY	CHGL13	X	X	X	X	Yes
4	Forb	Rocky Mountain zinnia	Zinnia grandiflora	Asteraceae	ZINGRA	ZIGR			X	X	Yes
4	Forb	rose heath	Chaetopappa ericoides	Asteraceae	CHAERI	CHER2		X	X	X	No
4	Forb	rosy palafox	Palafoxia rosea	Asteraceae	PALROS	PARO				X	Yes
4	Forb	rushpea	Hoffmannseggia spp.	Fabaceae	HOFFMA	HOFFM				X	No
4	Forb	sand palafoxia	Palafoxia sphacelata	Asteraceae	PALSPH	PASP	X	X	X	X	Yes
4	Forb	sandhill goosefoot	Chenopodium cycloides	Chenopodiaceae	CHECYC	CHCY	X	X			Yes

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
4	Forb	scarlet beeblossom	<i>Gaura coccinea</i>	Onagraceae	GAUCOC	GACO5			X	X	Yes
4	Forb	scarlet globemallow	<i>Sphaeralcea coccinea</i>	Malvaceae	SPHCOC	SPCO			X	X	No
4	Forb	silky prairie clover	<i>Dalea villosa</i> var. <i>villosa</i>	Fabaceae	DALVILV	DAVIV					Yes
4	Forb	silver dwarf morningglory	<i>Evolvulus sericeus</i>	Convolvulaceae	EVOSER	EVSE	X	X		X	Yes
4	Forb	silverleaf nightshade	<i>Solanum elaeagnifolium</i>	Solanaceae	SOLELA	SOEL			X	X	No
4	Forb	slender snakecotton	<i>Froelichia gracilis</i>	Amaranthaceae	FROGRA	FRGR3	X	X		X	Yes
4	Forb	slimflower scurfpea	<i>Psoraleidium tenuiflorum</i>	Fabaceae	PSOTEN	PSTE5	X				Yes
4	Forb	smallflower groundcherry	<i>Physalis cinerascens</i> var. <i>cinerascens</i>	Solanaceae	PHYCINC	PHCIC3			X	X	Yes
4	Forb	smooth four o'clock	<i>Mirabilis glabra</i>	Nyctaginaceae	MIRGLA	MIGL3				X	Yes
4	Forb	spectacle pod	<i>Dimorphocarpa wislizeni</i>	Brassicaceae	DIMWIS	DIWI2	X	X		X	Yes
4	Forb	spotted beebalm	<i>Monarda punctata</i>	Lamiaceae	MONPUN	MOPU				X	Yes
4	Forb	spreading pygmyleaf	<i>Loeflingia squarrosa</i>	Caryophyllaceae	LOESQU	LOSQ	X				Yes
4	Forb	stemless townsendia	<i>Townsendia exscapa</i>	Asteraceae	TOWEXS	TOEX2					Yes
4	Forb	stiffstem flax	<i>Linum rigidum</i> var. <i>rigidum</i>	Linaceae	LINRIGR	LIRIR	X	X		X	Yes
4	Forb	tanseyleaf aster	<i>Machaeranthera tanacetifolia</i>	Asteraceae	MACTAN	MATA2			X		Yes
4	Forb	tarragon	<i>Artemisia dracunculus</i>	Asteraceae	ARTDRA	ARDR4					Yes
4	Forb	Texas croton	<i>Croton texensis</i>	Euphorbiaceae	CROTEX	CRTE4		X		X	Yes
4	Forb	Texas sleepydaisy	<i>Xanthisma texanum</i> ssp. <i>drummondii</i>	Asteraceae	XANTEXD	XATED2	X	X	X	X	Yes
4	Forb	threadleaf	<i>Senecio flaccidus</i> var.	Asteraceae	SENFLAF	SEFLF				X	No

Life Form Code	Life form	Common Name	Scientific Name	Family	NHNM Acronym	PLANTS Symbol	GR	GY	MT	Map	Collected
		ragwort	flaccidus								
4	Forb	trailing krameria	Krameria lanceolata	Krameriaceae	KRALAN	KRLA	X			X	Yes
4	Forb	twinleaf senna	Senna bauhinioides	Fabaceae	SENBAU	SEBA3				X	No
4	Forb	twoleaf wild sensitive plant	Senna roemeriana	Fabaceae	SENROE	SERO8				X	Yes
4	Forb	upright prairie coneflower	Ratibida columnifera	Asteraceae	RATCOL	RACO3			X		Yes
4	Forb	velvetweed	Gaura mollis	Onagraceae	GAUMOL	GAMO5			X	X	Yes
4	Forb	vervain	Glandularia spp.	Verbenaceae	GLANDU	GLAND				X	No
4	Forb	wavyleaf thistle	Cirsium undulatum	Asteraceae	CIRUND	CIUN			X	X	Yes
4	Forb	western daisy fleabane	Erigeron bellidiastrum var. bellidiastrum	Asteraceae	ERIBELB	ERBEB	X	X		X	Yes
4	Forb	white milkwort	Polygala alba	Polygalaceae	POLALB	POAL4				X	No
4	Forb	white sagebrush	Artemisia ludoviciana	Asteraceae	ARTLUD	ARLU				X	No
4	Forb	whitemouth dayflower	Commelina erecta	Commelinaceae	COMERE	COER	X	X	X	X	Yes
4	Forb	whitestem blazingstar	Mentzelia albicaulis	Loasaceae	MENALB	MEAL6				X	No
4	Forb	winged buckwheat	Eriogonum alatum	Polygonaceae	ERIALA	ERAL4				X	Yes
4	Forb	winged pigweed	Cycloloma atriplicifolium	Chenopodiaceae	CYCATR	CYAT	X	X			Yes
4	Forb	wolly gaura	Gaura villosa	Onagraceae	GAUVIL	GAVI2	X	X			Yes
4	Forb	woolly milkvetch	Astragalus mollissimus	Fabaceae	ASTMOL	ASMO7	X				Yes
4	Forb	woolly paperflower	Psilostrophe tagetina	Asteraceae	PSITAG	PSTA	X	X		X	Yes
4	Forb	woolly plantain	Plantago patagonica	Plantaginaceae	PLAPAT	PLPA2		X		X	No
4	Forb	woolly prairieclover	Dalea lanata	Fabaceae	DALLAN	DALA3				X	No
4	Forb	Wright's plantain	Plantago wrightiana	Plantaginaceae	PLAWRI4	PLWR	X		X		Yes
4	Forb	yellow sundrops	Calylophus serrulatus	Onagraceae	CALSER	CASE12	X	X		X	Yes

## Appendix D. NRCS Nontechnical Descriptions of Soil Map Units on the Parkinson Ranch, New Mexico

**Map unit:** Aa - Amarillo loamy fine sand, 0 to 3 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Amarillo soils make up 85 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderately slow. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 10 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 10 inches; loamy fine sand; neutral.*

*Bt - 10 to 51 inches; sandy clay loam; moderately alkaline.*

*Btk - 51 to 60 inches; clay loam; moderately alkaline.*

**Map unit:** Ab - Amarillo fine sandy loam, 0 to 1 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Amarillo soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderately slow. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 10 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 2e. It is nonirrigated land capability subclass 3e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 9 inches; fine sandy loam; neutral.*

*Bt - 9 to 43 inches; sandy clay loam; moderately alkaline.*

*Btk - 43 to 60 inches; clay loam; moderately alkaline.*

**Map unit:** Af - Amarillo and Clovis soils, 0 to 3 percent slopes, severely eroded

**Text kind/Category:** Nontechnical description/SOI

*Clovis soils make up 60 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 4 inches; loamy fine sand; neutral.*

*Bt - 4 to 19 inches; sandy clay loam; slightly alkaline.*

*Bk - 19 to 60 inches; fine sandy loam; moderately alkaline.*

*Amarillo soils make up 40 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is high, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 10 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 4 inches; loamy fine sand; neutral.*

*Bt - 4 to 52 inches; sandy clay loam; moderately alkaline.*

**Map unit:** Ag - Arch loamy fine sand

**Text kind/Category:** Nontechnical description/SOI

*Arch soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .10. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; loamy fine sand; strongly alkaline.*

*Bk1 - 8 to 18 inches; loam; strongly alkaline.*

*Bk2 - 18 to 60 inches; loam; strongly alkaline.*

**Map unit:** Ah - Arch fine sandy loam

**Text kind/Category:** Nontechnical description/SOI

*Arch soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .17. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*



A - 0 to 6 inches; fine sandy loam; strongly alkaline.  
Bk1 - 6 to 18 inches; loam; strongly alkaline.  
Bk2 - 18 to 60 inches; loam; strongly alkaline.

**Map unit:** Ak - Arch loam

**Text kind/Category:** Nontechnical description/SOI

*Arch soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 6 inches; loam; strongly alkaline.  
Bk1 - 6 to 14 inches; loam; strongly alkaline.  
Bk2 - 14 to 60 inches; loam; strongly alkaline.*

**Map unit:** Am - Arch soils, severely eroded

**Text kind/Category:** Nontechnical description/SOI

*Arch soils make up 45 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .10. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; loamy fine sand; strongly alkaline.  
Bk - 8 to 60 inches; loam; strongly alkaline.*

*Arch soils make up 40 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; fine sandy loam; strongly alkaline.  
Bk - 8 to 60 inches; loam; strongly alkaline.*

**Map unit:** An - Arvana loamy fine sand, 0 to 3 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Arvana soils make up 100 percent of the map unit. The runoff class is low. The depth to a restrictive feature is 20 to 40 inches to a petrocalcic. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 95 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 6e. It is nonirrigated land capability subclass 6s. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 10 inches; loamy fine sand; neutral.*

*Bt - 10 to 26 inches; sandy clay loam; moderately alkaline.*

*Bkm - 26 to 36 inches; cemented material.*

**Map unit:** Ar - Arvana fine sandy loam, 1 to 3 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Arvana soils make up 85 percent of the map unit. The runoff class is low. The depth to a restrictive feature is 20 to 40 inches to a petrocalcic. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 95 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 6s. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 7 inches; fine sandy loam; slightly alkaline.*

*Bt - 7 to 25 inches; sandy clay loam; moderately alkaline.*

*Bkm - 25 to 35 inches; cemented material.*

**Map unit:** Av - Arvana soils, 0 to 3 percent slopes, severely eroded

**Text kind/Category:** Nontechnical description/SOI

*Arvana soils make up 45 percent of the map unit. The runoff class is low. The depth to a restrictive feature is 20 to 40 inches to a petrocalcic. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 95 percent. The assigned Kw erodibility factor is .15. It is nonirrigated land capability subclass 6s. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 3 inches; loamy fine sand; neutral.*

*Bt - 3 to 15 inches; sandy clay loam; moderately alkaline.*

*Bkm - 15 to 25 inches; cemented material.*

*Arvana soils make up 40 percent of the map unit. The runoff class is low. The depth to a restrictive feature is 20 to 40 inches to a petrocalcic. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 95 percent. The assigned Kw erodibility factor is .24. It is nonirrigated land capability subclass 6s. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 3 inches; fine sandy loam; slightly alkaline.*

*Bt - 3 to 15 inches; sandy clay loam; moderately alkaline.*

*Bkm - 15 to 25 inches; cemented material.*

**Map unit:** Be - Brownfield fine sand

**Text kind/Category:** Nontechnical description/SOI

*Brownfield soils make up 85 percent of the map unit. The runoff class is very low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 20 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 21 inches; fine sand; neutral.*

*Bt - 21 to 60 inches; sandy clay loam; neutral.*

**Map unit:** Bf - Brownfield soils, severely eroded

**Text kind/Category:** Nontechnical description/SOI

*Brownfield soils make up 60 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is high, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 5 percent. The assigned Kw erodibility factor is .28. It is nonirrigated land capability subclass 7e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 10 inches; sandy clay loam; neutral.*

*Bt1 - 10 to 60 inches; sandy clay loam; slightly alkaline.*

*Bt2 - 60 to 80 inches; clay loam; moderately alkaline.*

*Brownfield soils make up 40 percent of the map unit. The runoff class is very low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to*

*a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 5 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 30 inches; fine sand; neutral.*

*Bt - 30 to 60 inches; sandy clay loam; neutral.*

**Map unit:** Cc - Clovis loamy fine sand, 0 to 3 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Clovis soils make up 85 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .15. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; loamy fine sand; neutral.*

*Bt - 8 to 28 inches; sandy clay loam; slightly alkaline.*

*Bk - 28 to 60 inches; loam; moderately alkaline.*

**Map unit:** Cd - Clovis fine sandy loam, 0 to 1 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Clovis soils make up 85 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 60 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 2e. It is nonirrigated land capability subclass 3e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 7 inches; fine sandy loam; moderately alkaline.*

*Bt - 7 to 31 inches; sandy clay loam; slightly alkaline.*

*Bk - 31 to 60 inches; loam; moderately alkaline.*

**Map unit:** Dr - Drake soils

**Text kind/Category:** Nontechnical description/SOI

*Drake soils make up 60 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .37. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; loam; moderately alkaline.*

*Bk - 8 to 60 inches; loam; moderately alkaline.*

*Drake soils make up 35 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 8 inches; fine sandy loam; moderately alkaline.*

**Map unit:** Go - Gomez loamy fine sand

**Text kind/Category:** Nontechnical description/SOI

*Gomez soils make up 100 percent of the map unit. The runoff class is very low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderately rapid. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .17. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 6e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 12 inches; loamy fine sand; moderately alkaline.*

*Bk - 12 to 22 inches; fine sandy loam; moderately alkaline.*

*C - 22 to 60 inches; loam; moderately alkaline.*

**Map unit:** Mc - Mansker and Portales fine sandy loams, 1 to 3 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Mansker soils make up 60 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 65 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 4e. It is nonirrigated land capability subclass 4e.*

*This component is not a hydric soil.*

*Typical Profile:*

*A1 - 0 to 5 inches; fine sandy loam; moderately alkaline.*

*A2 - 5 to 14 inches; clay loam; moderately alkaline.*

*Btk - 14 to 60 inches; sandy clay loam; moderately alkaline.*

*Portales soils make up 30 percent of the map unit. The runoff class is low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is high, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 5 inches; fine sandy loam; moderately alkaline.*

*Bk - 5 to 60 inches; loam; moderately alkaline.*

**Map unit:** Pa - Portales fine sandy loam, 0 to 1 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Portales soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is high, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 2e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 6 inches; fine sandy loam; moderately alkaline.*

*Bk - 6 to 60 inches; sandy clay loam; moderately alkaline.*

**Map unit:** Sf - Springer loamy fine sand

**Text kind/Category:** Nontechnical description/SOI

*Springer soils make up 85 percent of the map unit. The runoff class is very low. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderately rapid. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The assigned Kw erodibility factor is .17. It is irrigated land capability subclass 3e. It is nonirrigated land capability subclass 4e. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 14 inches; loamy fine sand; neutral.*

*Bt - 14 to 49 inches; fine sandy loam; slightly alkaline.*

*EB - 49 to 60 inches; loamy fine sand; slightly alkaline.*

**Map unit:** Zf - Zita fine sandy loam, 0 to 1 percent slopes

**Text kind/Category:** Nontechnical description/SOI

*Zita soils make up 85 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is moderate. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 70 percent. The assigned Kw erodibility factor is .24. It is irrigated land capability subclass 2e. It is nonirrigated land capability subclass 3e. This soil is prime farmland if irrigated. This component is not a hydric soil.*

*Typical Profile:*

*A - 0 to 6 inches; fine sandy loam; moderately alkaline.*

*Bw - 6 to 20 inches; sandy clay loam; moderately alkaline.*

*Bk - 20 to 60 inches; sandy clay loam; moderately alkaline.*

## Appendix E. NRCS Soil Taxonomic Classification for the Parkinson Ranch, New Mexico

Soil name	Family or higher taxonomic classification
Amarillo	Fine-loamy, mixed, superactive, thermic Aridic Paleustalfs
Arch	Fine-loamy, carbonatic, thermic Aridic Calcustepts
Arvana	Fine-loamy, mixed, superactive, thermic Petrocalcic Paleustalfs
Brownfield	Loamy, mixed, superactive, thermic Arenic Aridic Paleustalfs
Clovis	Fine-loamy, mixed, superactive, mesic Ustic Calcargids
Drake	Fine-loamy, mixed, superactive, thermic Aridic Calcustepts
Gomez	Coarse-loamy, mixed, active, thermic Aridic Calcustepts
Mansker	Fine-loamy, carbonatic, thermic Calcidic Paleustolls
Playa	Fine, mixed, mesic Aquic Camborthids
Portales	Fine-loamy, mixed, superactive, thermic Aridic Calcustolls
Springer	Coarse-loamy, mixed, superactive, thermic Typic Paleustalfs
Zita	Fine-loamy, mixed, superactive, thermic Aridic Haplustolls



## Appendix F. NRCS Soil Component Legend for the Parkinson Ranch, New Mexico

Map unit symbol and name	map unit	Component name	Component kind	Low	RV	High
Aa: Amarillo loamy fine sand, 0 to 3 percent slopes	85	Amarillo	Series	0	2	3
	1	Playa	Miscellaneous	0	1	1
Ab: Amarillo fine sandy loam, 0 to 1 percent slopes	85	Amarillo	Series	0	0.5	1
Af: Amarillo and Clovis soils, 0 to 3 percent slopes, severely eroded	60	Clovis	Series	0	2	3
	40	Amarillo	Series	0	2	3
Ag: Arch loamy fine sand	85	Arch	Series	0	0.5	1
	1	Playa	Miscellaneous	0	1	1
Ah: Arch fine sandy loam	85	Arch	Series	0	0.5	1
	1	Playa	Miscellaneous	0	1	1
Ak: Arch loam	85	Arch	Series	0	0.5	1
	1	Playa	Miscellaneous	0	1	1

Map unit symbol and name	map unit	Component name	Component kind	Low	RV	High
Am: Arch soils, severely eroded	45	Arch	Series	0	0.5	1
	40	Arch	Series	0	0.5	1
An: Arvana loamy fine sand, 0 to 3 percent slopes	100	Arvana	Series	0	2	3
	1	Playa	Miscellaneous	0	1	1
Ar: Arvana fine sandy loam, 1 to 3 percent slopes	85	Arvana	Series	1	2	3
	1	Playa	Miscellaneous	0	1	1
Av: Arvana soils, 0 to 3 percent slopes, severely eroded	45	Arvana	Series	0	2	3
	40	Arvana	Series	0	2	3
	1	Playa	Miscellaneous	0	1	1
Be: Brownfield fine sand	85	Brownfield	Series	0	2	3
Bf: Brownfield soils, severely eroded	60	Brownfield	Series	0	2	3
	40	Brownfield	Series	0	2	3

Map unit symbol and name	map unit	Component name	Component kind	Low	RV	High
Cc: Clovis loamy fine sand, 0 to 3 percent slopes	85	Clovis	Series	0	2	3
	1	Playa	Miscellaneous	0	1	1
Cd: Clovis fine sandy loam, 0 to 1 percent slopes	85	Clovis	Series	0	0.5	1
Dr: Drake soils	60	Drake	Series	1	3	5
	35	Drake	Series	1	3	5
	1	Playa	Miscellaneous	0	1	1
Go: Gomez loamy fine sand	100	Gomez	Series	0	2	3
Go: Gomez loamy fine sand	1	Playa	Miscellaneous	0	1	1
Mc: Mansker and Portales fine sandy loams, 1 to 3 percent slopes	60	Mansker	Series	1	2	3
	30	Portales	Series	1	2	3
	1	Playa	Miscellaneous	0	1	1
Pa: Portales fine sandy loam, 0 to 1 percent slopes	85	Portales	Series	0	0.5	1
	1	Playa	Miscellaneous	0	1	1

Map unit symbol and name	map unit	Component name	Component kind	Low	RV	High
Sf: Springer loamy fine sand	85	Springer	Series	0	3	5
	1	Playa	Miscellaneous	0	1	1
Zf: Zita fine sandy loam, 0 to 1 percent slopes	85	Zita	Series	0	0.5	1

## Appendix G. NRCS Rangeland Productivity of Soils on the Parkinson Ranch, New Mexico

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
Aa:						
Amarillo	SANDY PLAINS	2800	2000	1200	Little bluestem	30
					Sideoats grama	15
					Other perennial grasses	10
					Other shrubs	10
					Blue grama	5
					Hairy grama	5
					Other perennial forbs	5
					Plains bristlegrass	5
					Sand bluestem	5
					Sand dropseed	5
					Sand lovegrass	5
Aa:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Ab:						

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
Amarillo	SANDY	2800	2100	1400	Blue grama	30
					Sideoats grama	15
					Arizona cottontop	10
					Buffalograss	10
					Little bluestem	5
					Other annual forbs	5
					Other perennial forbs	5
					Other perennial grasses	5
					Other shrubs	5
					Plains bristlegrass	5
					Sand dropseed	5
Af:						
Clovis	SANDY PLAINS	2400		1100	Little bluestem	15
					Other perennial grasses	15
					Sideoats grama	15
					Other perennial forbs	10
					Sand bluestem	10
					Sand dropseed	10
					Blue grama	5
					Other shrubs	5
					Plains bristlegrass	5
					Plains lovegrass	5
					Sand sagebrush	5
Af:						
Amarillo	SANDY PLAINS	2800	2000	1200	Little bluestem	30
					Sideoats grama	15
					Other perennial grasses	10

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other shrubs	10
					Blue grama	5
					Hairy grama	5
					Other perennial forbs	5
					Plains brome	5
					Sand bluestem	5
					Sand dropseed	5
					Sand lovegrass	5
Ag:						
Arch	LOAMY SAND	2800	--	1500	Dropseed	20
					Sand bluestem	20
					Little bluestem	15
					Other perennial forbs	15
					Other perennial grasses	10
					Black grama	5
					Other shrubs	5
					Sideoats grama	5
Ag:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
Ah:						
Arch	HIGH LIME	1150	--	500	Other perennial grasses	20
					Sideoats grama	20
					Black grama	10
					Blue grama	10
					Other perennial forbs	10
					Other shrubs	10
					Fourwing saltbush	5
					Hairy grama	5
					Little bluestem	5
					Winterfat	5
Ah:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Ak:						
Arch	HIGH LIME	1150	--	500	Other perennial grasses	20
					Sideoats grama	20
					Black grama	10
					Blue grama	10
					Other perennial forbs	10



Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other shrubs	10
					Fourwing saltbush	5
					Hairy grama	5
					Little bluestem	5
					Winterfat	5
Ak:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Am:						
Arch	LOAMY SAND	2800	--	1500	Dropseed	20
					Sand bluestem	20
					Little bluestem	15
					Other perennial forbs	15
					Other perennial grasses	10
					Black grama	5
					Other shrubs	5
					Sideoats grama	5
Am:						
Arch	HIGH LIME	1150	--	500	Other perennial grasses	20
					Sideoats grama	20

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Black grama	10
					Blue grama	10
					Other perennial forbs	10
					Other shrubs	10
					Fourwing saltbush	5
					Hairy grama	5
					Little bluestem	5
					Winterfat	5
An:						
Arvana	SANDY PLAINS	2700	2000	1200	Little bluestem	30
					Sideoats grama	15
					Other perennial grasses	10
					Other shrubs	10
					Blue grama	5
					Hairy grama	5
					Other annual forbs	5
					Other perennial forbs	5
					Plains bristlegrass	5
					Sand bluestem	5
					Sand dropseed	5
An:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Ar:						
Arvana	SANDY	2700	2000	1300	Blue grama	30
					Sideoats grama	15
					Arizona cottontop	10
					Buffalograss	10
					Little bluestem	5
					Other annual forbs	5
					Other perennial forbs	5
					Other perennial grasses	5
					Other shrubs	5
					Plains bristlegrass	5
					Sand dropseed	5
Ar:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Av:						
Arvana	SANDY PLAINS	2700	2000	1200	Little bluestem	30

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Sideoats grama	15
					Other perennial grasses	10
					Other shrubs	10
					Blue grama	5
					Hairy grama	5
					Other annual forbs	5
					Other perennial forbs	5
					Plains bristlegrass	5
					Sand bluestem	5
					Sand dropseed	5
Av:						
Arvana	SANDY	2700	2000	1300	Blue grama	30
					Sideoats grama	15
					Arizona cottontop	10
					Buffalograss	10
					Little bluestem	5
					Other annual forbs	5
					Other perennial forbs	5
					Other perennial grasses	5
					Other shrubs	5
					Plains bristlegrass	5
					Sand dropseed	5
Av:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Be:						
Brownfield	LOAMY SAND	3200	2200	1200	Sand bluestem	20
					Giant dropseed	10
					Little bluestem	10
					Other shrubs	10
					Annual grasses	5
					Cane bluestem	5
					Fall witchgrass	5
					Hairy grama	5
					Other perennial forbs	5
					Other perennial grasses	5
					Sand dropseed	5
					Sand lovegrass	5
					Silver bluestem	5
					Yellow Indiangrass	5
Bf:						
Brownfield	SANDY	2200	1600	1000	Blue grama	30
					Buffalograss	25
					Vine mesquite	10
					Annual grasses	5
					Other annual forbs	5
					Other perennial forbs	5

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other perennial grasses	5
					Other shrubs	5
					Sideoats grama	5
					Tobosa	5
Bf:						
Brownfield	DEEP SAND	3200	2200	1200	Sand bluestem	30
					Giant dropseed	25
					Little bluestem	10
					Other shrubs	5
					Annual grasses	5
					Cane bluestem	5
					Fall witchgrass	5
					Hairy grama	5
					Other perennial forbs	5
					Other perennial grasses	5
					Sand dropseed	
					Sand lovegrass	
					Silver bluestem	
					Yellow Indiangrass	
Cc:						
Clovis	SANDY PLAINS	2400		1000	Little bluestem	15
					Other perennial grasses	15
					Sideoats grama	15
					Other perennial forbs	10
					Sand bluestem	10
					Sand dropseed	10
					Blue grama	5

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other shrubs	5
					Plains bristlegrass	5
					Plains lovegrass	5
					Sand sagebrush	5
Cc:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Cd:						
Clovis	SANDY	1500	--	700	Blue grama	20
					Sideoats grama	20
					Black grama	15
					Little bluestem	10
					Other perennial forbs	10
					Other perennial grasses	10
					Other shrubs	5
					Plains bristlegrass	5
					Sand dropseed	5
Dr:						
Drake	DEEP SAND	1300	800	500	Alkali sacaton	20
					Blue grama	15

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Sideoats grama	15
					Black grama	10
					Vine mesquite	10
					Buffalograss	5
					Fourwing saltbush	5
					Other perennial forbs	5
					Other perennial grasses	5
					Other shrubs	5
					Sand dropseed	5
Dr:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	5
					Vine mesquite	5
					Other shrubs	5
					Switchgrass	5
Go:						
Gomez	SANDY PLAINS	2800	2100	1400	Little bluestem	30
					Other perennial grasses	15
					Sideoats grama	15
					Other shrubs	10
					Blue grama	5
					Hairy grama	5
					Other perennial forbs	5



Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Plains bristlegrass	5
					Sand dropseed	5
					Sand lovegrass	5
Go:						
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	5
					Vine mesquite	5
					Other shrubs	5
					Switchgrass	5
Mc:						
Mankser	SANDY	2400	1750	1200	Sideoats grama	30
					Blue grama	20
					Buffalograss	10
					Little bluestem	5
					Other perennial grasses	5
					Plains bristlegrass	5
					Sand dropseed	5
					Silver bluestem	5
					Vine mesquite	5
Pa:						
Portales	SANDY	1500	--	800	Black grama	15
					Other perennial grasses	15
					Sideoats grama	15

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other perennial forbs	10
					Other shrubs	10
					Hairy grama	5
					Little bluestem	5
					Plains brome	5
					Sand dropseed	5
					Threeawn	5
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Sf:						
Springer	SANDY PLAINS	2800	2100	1400	Little bluestem	15
					Blue grama	10
					Other perennial grasses	10
					Other shrubs	10
					Sideoats grama	10
					Arizona cottontop	5
					Hooded windmill grass	5
					Other perennial forbs	5
					Plains brome	5
					Sand bluestem	5

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Sand dropseed	5
					Spike dropseed	5
					Switchgrass	5
					Yellow Indiangrass	5
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5
Zf:						
Zita	SANDY	2700	2000	1300	Blue grama	30
					Sideoats grama	15
					Arizona cottontop	10
					Buffalograss	10
					Other perennial grasses	10
					Other perennial forbs	5
					Other shrubs	5
					Plains bristlegrass	5
					Sand dropseed	5
					Vine mesquite	5
Playa	DEEP SAND	3500	2000	1500	Western wheatgrass	20
					Blue grama	15
					Other perennial grasses	15

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		Percent
		Lb/a	Lb/a	Lb/a		
					Other perennial forbs	10
					Pleuraphis jamesii	10
					Sideoats grama	10
					Vine mesquite	10
					Other shrubs	5
					Switchgrass	5

In areas that have similar climate and topography, differences in the kind and amount of rangeland or forest understory vegetation are closely related to the kind of soil. Effective management is based on the relationship between the soils and vegetation and water.

This table shows, for each soil that supports vegetation suitable for grazing, the ecological site; the total annual production of vegetation in favorable, normal, and unfavorable years; the characteristic vegetation; and the average percentage of each species. An explanation of the column headings in the table follows.

An ecological site is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of the site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service (NRCS).

Total dry-weight production is the amount of vegetation that can be expected to grow annually in a well managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Characteristic vegetation-the grasses, forbs, and shrubs that make up most of the potential natural plant community on each soil-is listed by common name. Under rangeland composition, the expected percentage of the total annual production is given for each species making up the characteristic vegetation. The amount that can be used as forage depends on the kinds of grazing animals and on the grazing season.

Range management requires knowledge of the kinds of soil and of the potential natural plant community. It also requires an evaluation of the present range similarity index and rangeland trend. Range similarity index is determined by comparing the present plant community with the potential natural plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential community, the higher the range similarity index. Rangeland trend is defined as the direction of change in an existing plant community relative to the potential natural plant community. Further information about the range similarity index and rangeland trend is available in chapter 4 of the "National Range and Pasture Handbook," which is available in local offices of NRCS or on the Internet.

The objective in range management is to control grazing so that the plants growing on a site are about the same in kind and amount as the potential natural plant community for that site. Such management generally results in the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion. Sometimes, however, an area with a range similarity index somewhat below the potential meets grazing needs, provides wildlife habitat, and protects soil and water resources.

## Appendix H – Land Cover Map Unit Descriptions

### Native Grasslands

The grasslands within the ranch fall into two main categories: (1) short-grass prairie dominated by blue grama; and (2) transition areas of short-grass prairie and vegetative elements of the sandhills such as little bluestem.

#### Short-grass Prairie Herbaceous Vegetation

Blue grama Alliance dominates the inter-dune plains and swales on nearly flat terrain with shallow, calcareous soils. The **Blue Grama-Buffalo Grass Grassland** occurs mostly within the eastern sections of the ranch and is part of a large, extensive grassland to the north and west. Another large short-grass cell occurs in the far western section of the ranch with a relatively small remnant remaining within the ranch boundaries (Section 12, T8S R34E) surrounded by fields. Black-tailed prairie dog towns fluctuate in these landscapes (**Blue Grama-Buffalo Grass/Dog Town Grassland**). Shrubs such as honey mesquite and catclaw mimosa are considered invasive within these grasslands (**Short-Grass /Honey Mesquite-Catclaw Mimosa Grassland**) but are also common in the region. We identified a relatively small area within the NW/4 of the SW/4 of Sec. 7, T8S



BLUE GRAMA-BUFFALO GRASS GRASSLAND



SHORT-GRASS/HONEY MESQUITE-CATCLAW MIMOSA GRASSLAND

R35E; however, Section 5, north of NM Highway 262 had scattered mesquite prior to treatment under this project at low to-moderate densities.

### **Mixed Mid-Grass and Short-Grass/Shin-oak Grassland**

These grasslands are considered transitional since they have elements of both the shortgrass prairies typically dominated by either grama grasses or mid-grasses such as little bluestem and/or dropseed (*Sporobolus* spp.). They exhibit a high diversity of grasses and forbs and relative to the region, grasses in this map unit have higher cover ranging from 35-60%, whereas in the region 11-42% is typical. These grasslands are geographically situated at the margins of shin-oak-dominated areas. A classic example of the transition can be seen in Sections 9, 10 and 11 of T8S R36E.



MIXED MID-GRASS AND SHORT-GRASS/SHIN-OAK GRASSLAND

### **Native Shrublands**

Native shrublands are increasingly threatened in the region due principally to conversion to grasslands. Farming and ranching interests have implemented mechanical and chemical treatments to remove shrublands and replace them with either native or non-native grasses, crops, or introduced grasses. The shrublands in this map unit are dominated by shin-oak, sand sagebrush, or honey mesquite.



SPARSE SHIN-OAK DUNELAND

The remaining semi-stabilized **Shin-oak Duneland** is scattered throughout the ranch and is composed of fine sands that rise at least 2 m (6.5 ft) above the surrounding undulating sandy plains. The dunes are dominated by shin-oak and are associated with little bluestem and scattered sand bluestem with yucca and various short grasses. The dunes can also have few grasses, sometimes due to overgrazing, thereby indicating a **Shin-oak/Sparse Duneland**. Within the surrounding landscape, shin-oak continues to dominate on the rolling plains where either the **Shin-oak/Mixed Mid-Grass and Short Grass Shrubland** or **Shin-oak/Mixed Mid-Grass and Tall Grass Shrubland** map units occur. Little bluestem is typically found within all areas of the ranch dominated by shin-oak, but other mid-grasses or shortgrasses may dominate the understory, such as hairy grama. Sand bluestem is the tall-grass typically found within this northern portion of the sandhills, but is usually relatively low in abundance to other grasses. The presence of sand bluestem probably indicates deeper sands, whereas shortgrass-dominated sub-canopies may indicate shallow sands.



SHIN-OAK/MIXED MID-GRASS AND SHORT GRASS SHRUBLAND



SHIN-OAK/MIXED MID-GRASS AND TALL GRASS SHRUBLAND



Sand sagebrush is also found scattered or as a co-dominant with shin-oak and most abundant within the center portion of the ranch. **Shin-oak-Sand Sagebrush Shrubland** occurs at the margins of the **Sand Sagebrush/Blue Grama Shrubland** and largely occurs on loamy fine sands. At one time this unit was a much larger part of the landscape, but has been converted into fields. The map unit **Honey Mesquite-**



**Catclaw Mimosa-Shin-oak/Short-** SAND SAGEBRUSH/BLUE GRAMA SHRUBLAND

**Grass Shrubland** is typically dominated by honey mesquite, but catclaw mimosa or shin-oak can be co-dominants. Honey mesquite is effectively spread by cattle but also occurs in CRP fields that have been un-grazed for over 40 years. As part of this project, the largest area covered by this unit was chemically treated in Sec. 5, T8S R36E. Little is known about the extent of catclaw mimosa in the eastern plains. It typically occurs at low to moderate densities within shortgrass grasslands, but it too may increase, as honey mesquite does with grazing pressures. Shin-oak typically occurs in minor amounts of small clumps where sands are deeper.

## Old Fields

The challenge to identifying native plant communities in eastern New Mexico lies with determining historical past use. This can be done by a thorough examination of the soils and plant cover that exist today, but is not easily derived from aerial photography or satellite imagery. Further difficulties arise when the landscape has been reseeded with native versus non-native seeds. Within the region, we have seen that CRP lands have begun to resemble natural landscapes with shrubs such as sand sagebrush and yucca moving in. We attempted to derive some of



LITTLE BLUESTEM-HAIRY GRAMA OLD FIELD

this past history of the ranch by mapping the dominant plants within the areas we determined to be old fields. In some cases these fields are maintained under the CRP and in others they are being used as



range. The majority of these lands are in the two western areas, but include portions and even sections within the far eastern part of the ranch.

## **Treated**

Depending on strength of the chemical mix and method of dispersion, the resulting landscape can look almost natural. Some treatments employ a milder mix that will “open” up the dominant shin-oak shrubland where die-off is incomplete, leaving some live shin-oak. After this type of method is used, open areas are left to adventitious establishment of grasses and shrubs. Colonization of natives or non-natives can fill the gaps, depending on season, precipitation, and nearby species mix. In some cases, areas have



SHIN-OAK/LOVEGRASS TREATED SHRUBLAND AND DUNELAND IN THE DISTANCE

been seeded with non-native mixes. The example shown here was formerly a shin-oak shrubland with small dunes and blowouts throughout. The non-native lovegrass (*Eragrostis* spp.) is very dense in spots and is the dominant grass. Remnant patches of sand bluestem of the Shin-oak/Mixed Mid-Grass and Tall Grass Duneland can be found at the apex of dunes and blowouts.