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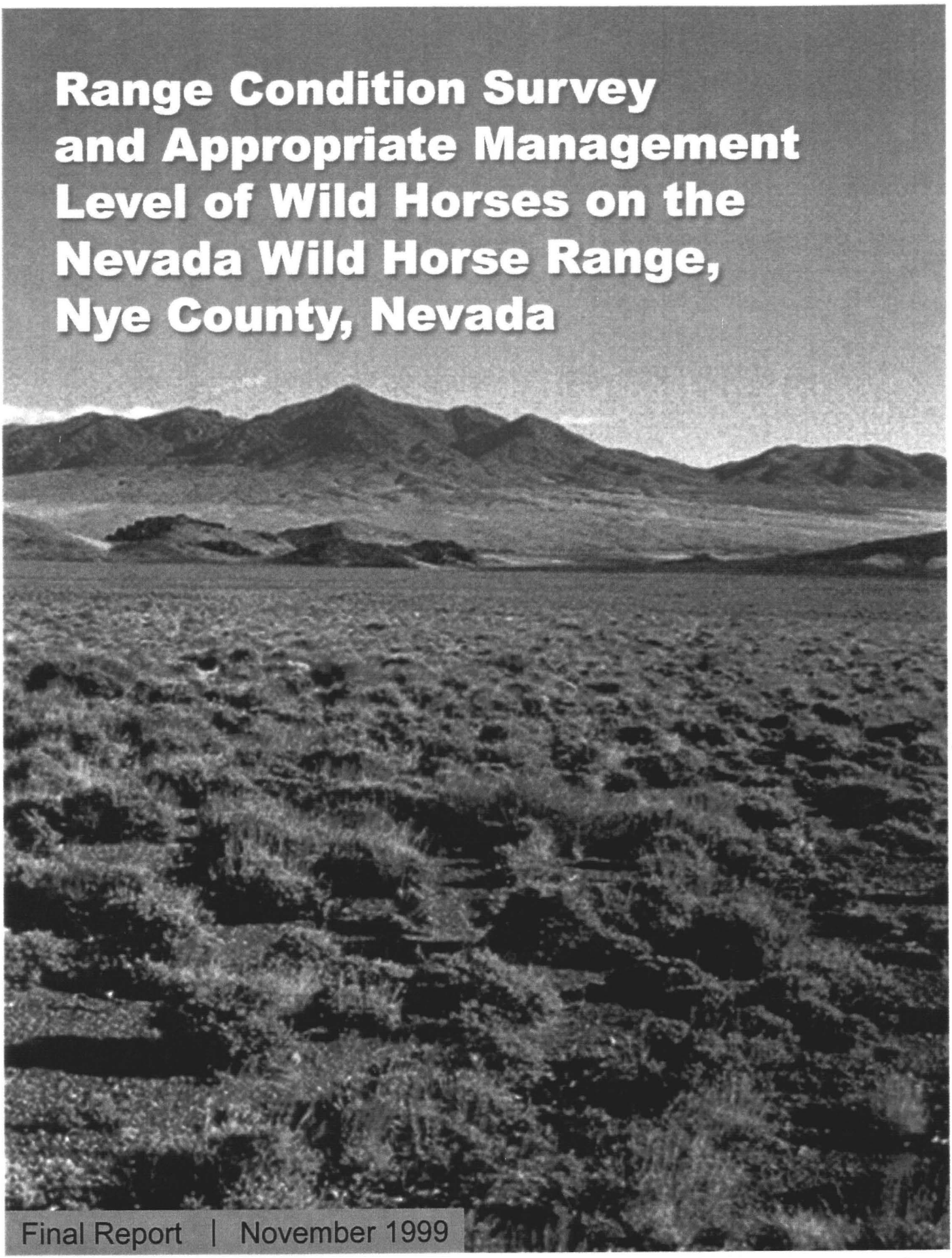
Range Condition Survey and Appropriate Management Level of Wild Horses on the Nevada Wild Horse Range, Nye County, Nevada



Final Report | November 1999

RANGE CONDITION SURVEY AND APPROPRIATE MANAGEMENT LEVEL OF WILD HORSES ON THE NEVADA WILD HORSE RANGE, NYE COUNTY, NEVADA

FINAL REPORT

Prepared by

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

for

**NELLIS AIR FORCE BOMBING AND GUNNERY RANGE
LAS VEGAS, NEVADA**

and

**U.S. ARMY CORPS OF ENGINEERS
FORT WORTH, TEXAS**

NOVEMBER 1999

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1.0 INTRODUCTION

Over the past 200 years, ranchers, miners, and others have released horses (*Equus caballus*) into the wild throughout the western United States, including Nevada. These animals have multiplied and continue to thrive in south-central Nevada, and several herds currently roam the north-central portion of the Nellis Air Force Range (NAFR).

In 1962, the Nevada Wild Horse Range (NWHR) was established on the north-central portion of the NAFR via a cooperative agreement between the U.S. Air Force (USAF) and the Bureau of Land Management (BLM) (BLM, 1989, pg. 3-7). During that year, approximately 200 wild horses roamed the 396,252-acre NWHR. Since 1962, the wild horse population on the NAFR, including the NWHR, has increased substantially (Table 1), and the distribution of horses has expanded beyond the administrative boundary of the NWHR (Shepherd, 1999). By 1984, 4,890 wild horses roamed over most of the northern portion of the NAFR in an area of approximately 1,780,000 acres (BLM, 1989, pg. D-1).

Table 1. Number of Wild Horses on the Northern Nellis Air Force Range

Year of Inventory	*Number of Wild Horses*
1963	200[a]
1973	800[a]
1976	1,064[a]
1977	1,300[a]
1980	3,122[a]
1982	4,405[a]
1983	4,860[a]
1984	4,890[a]
1987	5,000[b]
1991-1993	9,000-10,000[c]
1997	526[d]
1998	820[d]

Sources: [a] BLM, 1989; [b] USAF, 1997a; [c] Shepherd, 1999; [d] McFadden, 1999.

During the late 1980s, concerns about wild horse over-population and over-grazing prompted land managers to consider limiting wild horse numbers on the NWHR and the NAFR. The *Nevada Wild Horse Range Herd Management Plan* (BLM, 1989, Appendix D) established a limit of 2,000 wild horses on the NWHR. In addition, the *Nellis Air Force Range Resource Plan* directed the BLM to "adjust wild horse numbers to achieve a thriving ecological balance using data obtained from monitoring and, if available, from other sources," and to "continue to conduct vegetation trend and utilization studies" (BLM, 1992, pg. 9).

In the years following implementation of these planning documents, the BLM began reducing the horse population through round-ups and public adoptions. The BLM also began conducting "utilization studies" to assess the amount of forage consumed by the horses. However, vegetation trend and monitoring efforts necessary to establish an ecologically sound upper limit for the horse population were not conducted. Based on the utilization studies, the BLM lowered the preferred horse population size, and attempted to achieve these reduced limits in March and June 1997, when 1,044 of the estimated 1,570 horses on the Range were removed (McFadden, 1999). By September 1998, the population of wild horses on the northern Nellis ranges had increased to 820 (McFadden, 1999). Future plans include additional round-ups every 3 to 4 years to maintain a population size of 600 to 1,000, which was the

Appropriate Management Level (AML) established for the entire North Range (USAF, 1999, pg. 3.8-33, personal communications with McFadden, 1998).

Annual utilization studies indicate that the general condition of the vegetation on the northern Nellis ranges has improved since the early 1990s, when severe over-grazing by wild horses was common (McFadden, 1999). However, plant production and range condition data are needed to confirm this assessment. In addition, these data are needed to calculate an AML for the NWHR.

The wild horse population that the range can support is limited by the amount of forage and water available to the horses. This is the primary reason that requirements to monitor forage production were included in the *Nellis Air Force Range Resource Management Plan* (BLM, 1992). Currently, BLM uses utilization studies as an index of forage production, by assessing the amount of forage remaining at the end of the growing season. These studies are used because they require minimal time investment. However, determination of the AML from plant production, while more time consuming, is more accurate because the AML is calculated from actual plant biomass production measured in the field.

Personnel from the NAFR realized that range condition data would be needed to effectively evaluate the condition of the vegetation on the NWHR and to calculate the AML. Therefore, the USAF tasked Science Applications International Corporation (SAIC) to delineate the range associations on the NWHR, determine the condition of vegetation within the area, and determine the AML for wild horses in the NWHR. This report summarizes the results of these efforts.

2.0 METHODS

2.1 STUDY AREA

The topography of the NWHR is typical of the Basin and Range Physiographic Province, with long, north-south trending mountain ranges separated by broad alluvium-filled valleys. Most of the land area of the NWHR is in Kawich Valley, which is bordered on the east by the Belted Mountain Range and on the west by the Kawich Range. Portions of the upper bajadas on the west side of the Kawich Range are also included in the NWHR. Elevations of the NWHR range from 5,055 feet on the Gold Flat Playa to 8,495 feet in the Belted Mountains.

The vegetation of the NWHR is dominated by Great Basin flora. Shadscale saltbush (*Atriplex confertifolia*), fourwing saltbush (*Atriplex canescens*), winterfat (*Krascheninnikovia lanata*), and Indian ricegrass (*Achnatherum hymenoides*) typify the vegetation of the valley floors, and Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), black sagebrush (*Artemisia nova*), and Indian ricegrass dominate most of the bajadas at the middle and upper elevations. Additional species that are common in this area include green rabbitbrush (*Chrysothamnus viscidiflorus*), Nevada jointfir (*Ephedra nevadensis*), spiny hopsage (*Grayia spinosa*), wildrye (*Elymus elymoides spp. hordeoides*), Galleta grass (*Pleuraphis jamesii*), bud sagebrush (*Artemisia spinescens*), globemallow (*Sphaeralcea* spp.), and greenmolly (*Kochia americana*). The dominant plant community in the mountains is pinyon-juniper woodland (*Pinus monophylla* and *Juniperus osteosperma*), with big sagebrush (*Artemisia tridentata*) dominating the understory.

The climate of the NWHR is semiarid. Daily and seasonal temperatures vary greatly and are influenced by air movement and topography (BLM, 1989). Average annual precipitation from 1954 to 1998 at the Tonopah Airport (approximately 50 miles from the NWHR with similar elevation) was 5.37 inches (Desert Research Institute [DRI], 1999). Average daily temperatures range from 31.2 degrees Fahrenheit (°F) in January, to 73.8 °F in July (Table 2) (DRI, 1999). Daytime temperatures in summer often exceed 90 °F, and nighttime temperatures drop to 50 to 60 °F. Average winter temperatures are between 31 and 41 °F (BLM, 1989).

2.2 DATA COLLECTION AND CALCULATIONS

One of the methods used by BLM to determine the AML of rangeland for livestock or wild horses is to delineate range sites, collect plant production and condition data from those range sites, calculate forage production across the range, and then calculate the AML based on the desired forage utilization. To the extent possible, this method was followed. The only exception was the method used to delineate range sites as described in Section 2.2.1.

Data for this project were collected following standard BLM methods obtained from the *National Range Handbook* (Natural Resources Conservation Service [NRCS], 1985), and the *Nevada Rangeland Monitoring Handbook* (NRCS, 1984). These methods were then incorporated into procedures (Appendix A) that were reviewed and accepted by personnel of the Las Vegas, Nevada and Ely, Nevada Field Offices of the BLM. Standard BLM forms were recreated and used for recording data.

Table 2. Historic and Annual (1998 and 1999) Total Monthly Precipitation and Mean Monthly Air Temperature at the Tonopah, Nevada Airport, Nye County

Month	*Precipitation (inches)*				*Temperature (°F)*		
	1954-98 (mean)	*1998*	*1999*		*1954-98 (mean)*	*1998*	*1999*
January	0.39	0.08	1.08		31.2	34.5	33.0
February	0.48	2.25	0.06		36.4	33.7	35.4
March	0.52	0.76	0.07		41.7	42.4	41.9
April	0.37	0.34	0.67		48.3	45.6	44.5
May	0.62	1.32	0.12		57.5	50.7	57.7
June	0.33	1.67	1.17[a]		67.2	61.6	59.3[b]
July	0.54	0.40	—		73.8	73.9	—
August	0.50	0.02	—		71.8	73.8	—
September	0.50	1.68	—		63.7	63.7	—
October	0.37	0.67	—		52.7	48.8	—
November	0.44	0.23	—		39.9	39.0	—
December	0.28	0.00	—		32.3	32.2	—
Total	*5.34*	*9.42*	*3.17*	*Mean*	*51.4*	*50.0*	—

[a] Missing 18 days of data; [b] Missing 17 days of data.
Source: DRI, 1999.

2.2.1 Range Association Delineation

The first step in determining the AML was to identify areas used by wild horses. The total area within the NWHR is 396,252 acres. Based on observations by NAFR and BLM personnel, wild horses on the NWHR use basin bottoms and middle-to-upper elevation bajadas. Mountains (particularly the pinyon-juniper woodlands) and playas are used infrequently by horses; therefore, data were not collected from these areas. The area within the NWHR used by horses was estimated to be 204,145 acres (51.5 percent of the NWHR). This area is referred to in this report as the Wild Horse Use Area (WHUA), not to be confused with seasonal horse use areas (USAF, 1999, pg. 3.8-34).

The second step was to delineate range sites. A range site is a distinctive kind of rangeland that differs from others in its ability to produce a characteristic natural plant community (NRCS, 1985). For this effort, the NWHR was delineated into 17 large polygons based on similar landforms and groups of range sites typically associated with each other. These polygons are referred to in this report as Range Site Associations (associations). The delineation of the associations was initiated in the office and completed in the field. Associations were delineated by studying the following map resources: (1) an enhanced false color composite 1:100,000 LandSat Thematic Mapper (TM) satellite image; (2) a U.S. Geologic Survey (USGS) 1:24,000 topographic coverage; (3) a digital 1:250,000 northern Nye County geological coverage; and (4) soils maps from adjacent areas (unpublished NRCS soil surveys). Association boundaries were drawn around areas with apparent similarities in soil, topography, and vegetation. Delineated soil unit boundaries from adjacent areas, surveyed by the NRCS, were extrapolated into the NWHR to the extent possible. Resulting associations ranged in size from 2,458 to 26,254 acres, but most were 5,000 to 20,000 acres (Figure 1, enclosed map at the end of this document).

Between November 11 and 15, 1998, the associations were visited to confirm the boundaries and to determine, by visual estimation, the approximate percentage of each range site enclosed in each association. Sample locations were selected for the dominant range sites in each association. At least one sample location was established in each range site. The following criteria were used to select sample locations: (1) the location was more than 1 mile from a water source; (2) the location was representative of the range site; and (3) the location was not in a transition zone between range sites.

Forty sample locations were established in 14 range sites during November 1998 and June 1999. Each sample location was marked with a steel post and an aluminum tag with the name of the sample location attached to the post. The *Study Location and Documentation Data* form was then completed (selected data from these forms are in Appendix B). Personnel from the Las Vegas and Ely Field Offices of the BLM participated in the efforts to delineate the associations, determine range site percentages, and establish the sample locations.

2.2.2 Range Condition and Forage Production

Between June 2 and 8, 1999, SAIC biologists and personnel from the BLM Las Vegas and Ely Field Offices visited the NWHR to conduct range condition and production, trend, and utilization surveys. The double sampling method (NRCS, 1984) was used to collect range condition data for 27 of the 40 sample locations. A 100-foot transect was established at each sample location, and a round hoop (9.6 square feet) was laid on the ground next to the transect at 10-foot intervals (for a total of 10 samples). Plant production was measured in each of the ten hoops following the method described in Appendix A. Data were recorded on the *Total Annual Yield and Composition Record* (Appendix C).

Data from the *Total Annual Yield and Composition Record* forms were transferred to *Range Inventory Worksheets* (Appendix D). Range condition was then determined by comparing current annual production data to site potential data recorded on the *Range Site Description* form (NRCS, 1987). One of four range condition ratings was assigned to each study site: (1) Potential Natural Climax (PNC) or Excellent; (2) Late Seral or Good; (3) Mid-seral or Fair; and (4) Early Seral or Poor.

Range condition data at 13 of the 40 sample locations (see Table 5 in Section 3.2.1) were obtained by BLM personnel, who visually estimated the production (dry-weight basis) of all plant species. These data were recorded directly onto *Range Inventory Worksheets* and range condition was determined following the procedure in the previous paragraph.

Range condition within each association was determined using data from sample locations established within the association. If an association contained a range site not represented by a sample location within that association, data were used from a sample location in the same range site in another association with similar slope, aspect, and seral stage based on ocular estimate. Vegetation production was calculated for each association by multiplying the estimated production for each range site by the area it occupied within the association. The resulting values were then added together. Association "P" was not sampled for production due to restricted access to the area.

2.2.3 Appropriate Management Level (AML) Calculations

Assumptions

Plant production data were used to determine the AML for wild horses on the NWHR. Several assumptions were made to calculate the AML. These assumptions and an explanation of each follows.

- An average-sized adult wild horse is equal to one animal unit (AU).

  An AU is defined as one mature 1,000-pound cow or its equivalent based upon average daily forage consumption of 26 pounds of dry matter per day, or 9,500 pounds of dry matter per year.

- Wild horses feed primarily on perennial grasses.

  The diet of wild horses on the Northern Nellis Ranges consists primarily of perennial grasses (Zarn et al., 1977; Berger, 1986). Stager (1999) stated that at 50 percent or less perennial grass utilization, the diet of wild horses would consist of primarily perennial grasses.

- The BLM allows 55 percent utilization of available perennial grasses of Nevada rangelands.

  Forty-five percent of the grass plant produced in a year should be left after grazing to maintain the ecological condition of the soil and the plant community (NRCS, 1984).

- The target utilization rate of available perennial grasses by wild horses is 50 percent within 4 miles of water, 25 percent between 4 and 8 miles of water, and 0 percent beyond 8 miles.

  Documentation of the distance from water a horse will walk to forage is limited. It was assumed that within 4 miles of water, utilization of forage would result primarily from wild horses (50 percent of the production), with a small percentage being reserved for other wildlife (5 percent of the production). Between 4 and 8 miles from water, foraging by horses would be less frequent and less intense, therefore it is assumed that only 25 percent of the available forage would be used by wild horses.

- AMLs are calculated based on perennial grass production in a poor rainfall year.

  The AML is intended to identify the wild horse abundance that would result in the maximum number of healthy horses in the population, and minimal impact on the condition of the range. Setting an AML for wild horses based on production data from a favorable year would not be prudent. Less forage is produced during unfavorable years, and therefore, a herd of wild horses whose numbers were based on data from a favorable year would over-utilize the vegetation in a normal or unfavorable year. Therefore, the AML is determined using production data calculated for an unfavorable or poor rainfall year.

Methods

To determine the AML for the WHUA, the amount of perennial grass that would be produced in a poor rainfall year, and the amount of that production that would occur within 4 and 8 miles of water were calculated.

The amount of perennial grass likely to be produced in a poor rainfall year in the WHUA was calculated by determining the ratio of total annual production in a good rainfall year versus a poor rainfall year for each range site based on values in the Range Handbook (NRCS, 1984). The ratio was then multiplied by the perennial grass production in the range site measured in 1999 (a year with good rainfall during the growing season). The resulting value, estimated perennial grass production in each range site, was then multiplied by the proportion of each association composed of that range site, and the values were summed to determine total estimated perennial grass production in a poor rainfall year in each association.

To determine the amount of perennial grass production within 4 and 8 miles of water sources, water sources likely to provide water to horses in a poor rainfall year were identified. These waters were identified as those with surface water present in the Wetland Survey Report (USAF, 1997b), which reported data from surveys in 1996, a relatively dry year. A GIS was used to calculate the amount of area of each association within 4 miles of these waters, and the amount of land within 8 miles of the waters.

The amount of each association within 4 miles of the waters was then multiplied by the amount of perennial grass likely to be produced in each association in a poor rainfall year, and this was then multiplied by 50 percent utilization of available forage. This calculation also was made for areas between 4 and 8 miles from water sources, using 25 percent utilization. The sum of these values was the total estimated perennial grass production available to wild horses in poor rainfall years.

The total perennial grass production available to wild horses was then divided by 9,500 (pounds of forage eaten by one wild horse in one year) to obtain the AML for wild horses on the WHMA.

2.2.4 Trend Data

As defined for Range Condition Surveys, trend is the direction of change in vegetation toward or away from its potential (NRCS, 1987). At each sample location, trend was subjectively judged according to the instructions on the *Range Inventory Worksheet* by noting changes in plant vigor and age-class distribution, and soil erosion. Detailed methods are described in Appendix A. Trend data were recorded on *Range Inventory Worksheets* (Appendix D).

2.2.5 Photographs of Sample Locations

One or two color photographs were taken from the beginning point of each transect looking along the transect line (see Appendix E).

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3.0 RESULTS AND DISCUSSION

3.1 RANGE SITE DELINEATION

Fourteen range sites were identified within the WHUA of the NWHR (Table 3), and 17 range associations were delineated. Detailed descriptions of each range site are found in *Major Land Resource Area 29, Southern Nevada Basin and Range, Nevada Site Descriptions* (NRCS, 1987). Range site 029XY090NV (Coarse Gravelly Loam 6-10" PZ; Atco/Orhy) covered the most area (29,689 acres) and also was the most widely distributed (found in 12 of the 17 associations [Table 4]). Six other range sites covered over 17,000 acres each. Together, these seven range sites covered over 87 percent of the WHUA (Table 3).

Table 3. Number, Name, and Area of Range Sites in the Wild Horse Use Area, and the Percentage of the Wild Horse Use Area Covered by those Range Sites in the Nevada Wild Horse Range

Range Site Number	*Range Site Name*	*Area (acres)*	*Percentage of Use Area*
029XY006NV	Loamy 8-10" PZ; Artrw/Orhy-Stco	27,739	13.6
029XY008NV	Shallow Calcareous Loam 8-12" PZ; Arno/Orhy	26,209	12.8
029XY012NV	Sandy 5-8" PZ; Atca/Orhy	17,613	8.6
029XY014NV	Shallow Calcareous Slope 8-12" PZ; Arno/Orhy/Stco	1,182	0.6
029XY016NV	Loamy Upland 5-8" PZ; Grsp-Epne/Orhy	24,454	12.0
029XY017NV	Loamy 5-8" PZ; Atco-Arsp/Orhy	3,655	1.8
029XY020NV	Silty 5-8" PZ; Cela/Orhy-Sihy	4,497	2.2
029XY022NV	Sodic Hill 5-8" PZ; Atco/Hija-Orhy	1,097	0.5
029XY042NV	Coarse Silty 5-8" PZ; Cela/Orhy	24,623	12.1
029XY046NV	Sandy Loam 5-8" PZ; Atca-Cela/Orhy	28,135	13.8
029XY049NV	Sandy Loam 8-12" PZ; Artrw/Orhy-Stsp	2,403	1.2
029XY059NV	Shallow Silty 5-8" PZ; Atco	1,757	0.9
029XY087NV	Gravelly Loam 5-8" PZ"; Saveb/Orhy	3,237	1.6
029XY090NV	Coarse Gravelly Loam 6-10" PZ; Atco/Orhy	29,689	14.5
Unclassified		7,855	3.8
	Total	*204,145*	

Note: PZ = Precipitation zone.

3.2 RANGE CONDITION

Estimated annual production of vegetation in each range site, and in each association of range sites within the WHUA is reported in Table 4. Production in some of the associations (particularly G, H, and L) was unusually high. Production in 15 of the 40 sample locations was greater than the production predicted for those sites in favorable years (Table 5) in the *Range Site Descriptions* (NRCS, 1987). Five sample locations (06A, 46A, 46D, 90C, and 90D) had particularly high production (Table 5).

3.2.1 Total Annual Production

Total annual production for the WHUA (excluding association "P") was 138,581,288 pounds of vegetation. Total annual production by range site and association can be calculated from the data in Table 4. Production by sample location is reported in Table 5.

Table 4. Range Sites Identified in Delineated Associations on the Nevada Wild Horse Range, and Estimates of Area and Vegetative Production within those Range Sites and Associations during June 1999

Association	*Range Site Number*	*% of Association*	*Area (acres)*	*Production (lbs./acre)*	*Perennial Grass Production*			*Data Source*[e]
					Actual (%)	*PNC*[c] *(%)*	*lbs./acre*	
A	029XY008	60	8,511	871	7	50	63	08A
	029XY006	30	4,256	1,120	9	50	106	06A
	029XY049	10	1,419	628	4	50	26	49A
			14,186[a]	**921.40**[b]			**72**[d]	
B	029XY008	70	13,781	523	11	50	51	08B, 08C
	029XY006	15	2,953	594	7	50	45	06B
	029XY090	10	1,969	419	18	40	77	90A
	029XY049	5	984	628	4	50	26	49A
			19,687	**528.50**			**51**	
C	029XY012	60	15,752	635	38	70	243	12B, 12C
	029XY016	30	7,876	553	34	40	188	16A
	029XY087	7	1,838	322	13	45	43	87A
	029XY090	3	788	1,009	40	40	408	90C
			26,254	**599.71**			**217**	
D	029XY006	65	2,831	534	12	50	66	06C
	029XY008	30	1,307	378	20	50	64	08B
	029XY012	5	218	501	55	70	274	12B
			4,356	**485.55**			**76**	
E	029XY006	65	7,686	750	9	50	68	06E
	029XY008	15	1,774	747	2	50	13	08D
	029XY014	10	1,182	425	7	35	30	14A
	029XY090	10	1,182	637	38	40	245	90B
			11,824	**705.75**			**74**	
F	029XY046	45	7,071	261	23	45	60	46F
	029XY042	35	5,500	500	2	55	10	42B
	029XY090	10	1,571	637	38	40	245	90B
	029XY012	5	786	501	55	70	274	12B
	029XY006	5	786	750	9	50	68	06E
			15,714	**418.70**			**72**	
G	029XY046	40	1,754	1,679	22	45	363	46A
	029XY022	25	1,097	535	40	30	215	22A
	029XY087	25	1,097	750	20	45	150	87B
	029XY042	7	307	500	2	55	10	42B
	029XY090	3	131	1,617	14	40	221	90D
			4,386	**1,076.36**			**244**	
H	029XY090	50	10,697	1,617	14	40	221	90D
	029XY042	30	6,419	500	2	55	10	42B
	029XY046	20	4,279	664	21	45	137	46B
			21,395	**1,091.30**			**141**	

Table 4. Range Sites Identified in Delineated Associations on the Nevada Wild Horse Range, and Estimates of Area and Vegetative Production within those Range Sites and Associations during June 1999 (Continued)

Association	*Range Site Number*	*% of Association*	*Area (acres)*	*Production (lbs./acre)*	*Perennial Grass Production*			*Data Source*[e]
					Actual (%)	*PNC*[c] *(%)*	*lbs./acre*	
I	029XY020	40	2,811	400	0	25	0	20A
	029XY017	30	2,108	388	4	35	16	17B, 17C
	029XY059	25	1,757	413	0	10	0	59A, 59B
	029XY090	5	351	1,617	14	40	221	90D
			7,027	**460.50**			**16**	
J	029XY042	85	2,089	787	1	55	9	42C
	029XY020	10	246	400	0	25	0	20A
	029XY090	5	123	637	38	40	245	90B
			2,458	**740.80**			**20**	
K	029XY016	65	14,767	559	38	40	211	16B, 16C
	029XY046	20	4,543	261	23	45	60	46F
	029XY090	10	2,272	637	38	40	245	90B
	029XY042	5	1,136	787	1	55	9	42C
			22,718	**518.60**			**174**	
L	029XY046	45	8,328	1,755	0	45	1	46D
	029XY042	40	7,403	711	1	55	4	42D
	029XY090	7	1,296	450	61	40	275	90E
	029XY020	5	925	400	0	25	0	20A
	029XY012	3	555	768	28	70	212	12C
			18,507	**1,148.69**			**27**	
M	029XY090	75	8,101	450	61	40	275	90E
	029XY046	20	2,160	633	8	45	54	46E
	029XY006	5	540	700	9	50	63	06D
			10,801	**499.10**			**220**	
N	029XY006	75	6,272	700	9	50	63	06D
	029XY042	15	1,254	700	2	55	14	42E
	029XY008	10	836	747	2	50	13	08D
			8,362	**704.70**			**51**	
O	029XY017	60	1,548	300	0	35	0	17A
	029XY020	20	515	392	6	25	22	20B
	029XY042	20	515	711	1	55	4	42D
			2,578	**400.60**			**5**	
P	No Data[f]	No Data	***7,855***	No Data	No Data	No Data	No Data	No Data
Q	029XY006	40	2,415	534	12	50	66	06C
	029XY016	30	1,811	553	34	40	188	16A
	029XY090	20	1,208	1,009	40	40	408	90C
	029XY012	5	302	768	28	70	212	12C
	029XY087	5	302	322	13	45	43	87A
			6,038	**635.80**			**177**	

Table 4. Range Sites Identified in Delineated Associations on the Nevada Wild Horse Range, and Estimates of Area and Vegetative Production within those Range Sites and Associations during June 1999 (Continued)

Association	*Range Site Number*	*% of Association*	*Area (acres)*	*Production (lbs./acre)*	*Perennial Grass Production*			*Data Source*[e]
					Actual (%)	*PNC*[c] *(%)*	*lbs./acre*	
Playa	N/A	N/A	***6,944***	N/A	N/A	N/A	N/A	N/A
Mountain	N/A	N/A	***185,163***	N/A	N/A	N/A	N/A	N/A

[a] Bolded italicized values are the total area of each association.
[b] Bolded values are total production for the association, based on the proportion of the association composed of each range site and the production within the range sites.
[c] PNC = Potential Natural Climax. Potential percent grass production under climax conditions.
[d] Bolded values are perennial grass production for the associations, based on the proportion of the association composed of each range site and the production within the range sites.
[e] Production data for associations or range sites with two sources of data were calculated as the mean of the two sample locations.
[f] No data were collected from association "P" due to restrictions accessing the area.

Table 5. Production, Condition Rating, and Trend of Vegetation at 40 Sample Locations on the Nevada Wild Horse Range

Range Site	*Sample Location*	*Production (lbs./acre)*	*Condition*	*Trend*
029XY006NV	06A	1,120	Mid-seral (Fair)	Not Apparent
	06B	594	Mid-seral (Fair)	Not Apparent
	06C	534	Mid-seral (Fair)	Not Apparent
	06D	700[a]	Mid-seral (Fair)	Not Apparent
	06E	750[a]	Late Seral (Good)	Improving
	Mean	**740**		
029XY008NV	08A	871	Mid-seral (Fair)	Not Apparent
	08B	378	Mid-seral (Fair)	Not Apparent
	08C	669	Mid-seral (Fair)	Not Apparent
	08D	747	Mid-seral (Fair)	Declining
	Mean	**666**		
029XY012 NV	12B	501	Mid-seral (Fair)	Not Apparent
	12C	768	Late Seral (Good)	Not Apparent
	Mean	**623**		
029XY014 NV	14A	**425**[a]	Late Seral (Good)	Improving
029XY016NV	16A	553	Mid-seral (Fair)	Not Apparent
	16B	602	Late Seral (Good)	Not Apparent
	16C	516	Mid-seral (Fair)	Declining
	Mean	**557**		
029XY017NV	17A	300[a]	Early Seral (Poor)	Declining
	17B	450[a]	Late Seral (Good)	Not Apparent
	17C	325[a]	Early Seral (Poor)	Declining
	Mean	**358**		

Table 5. Production, Condition Rating, and Trend of Vegetation at 40 Sample Locations on the Nevada Wild Horse Range (Continued)

Range Site	*Sample Location*	*Production (lbs./acre)*	*Condition*	*Trend*
029XY020NV	20A	400[a]	Mid Seral (Fair)	Declining
	20B	392	Late Seral (Good)	Declining
	Mean	**396**		
029XY022NV	22A	**535**	Late Seral (Good)	Not Apparent
029XY042NV	42B	500[a]	Mid-seral (Fair)	Declining
	42C	787	Mid-seral (Fair)	Not Apparent
	42D	711	Mid-seral (Fair)	Not Apparent
	42E	700[a]	Mid-seral (Fair)	Not Apparent
	Mean	**675**		
029XY046NV	46A	1,679	Late Seral (Good)	Not Apparent
	46B	664	Late Seral (Good)	Improving
	46D	1,755	Mid-seral (Fair)	Declining
	46E	633	Late Seral (Good)	Not Apparent
	46F	261	Mid-seral (Fair)	Not Apparent
	Mean	**998**		
029XY049NV	49A	**628**	Mid-seral (Fair)	Not Apparent
029XY059NV	59A	575[a]	Mid-seral (Fair)	Declining
	59B	250[a]	Early Seral (Poor)	Declining
	Mean	**413**		
029XY087NV	87A	322	Mid-seral (Fair)	Declining
	87B	750[a]	Late Seral (Good)	Improving
	Mean	**536**		
029XY090NV	90A	419	Early Seral (Poor)	Declining
	90B	637	Late Seral (Good)	Not Apparent
	90C	1,009	Mid-seral (Fair)	Not Apparent
	90D	1,617	Mid-seral (Fair)	Improving
	90E	450[a]	Mid-seral (Fair)	Not Apparent
	Mean	**826**		

[a] Production was estimated by ocular method.

The high production measured at many sample locations may have been the result of the timing of precipitation events immediately prior to field data collection. Production data were collected within days after a series of precipitation events. The additional precipitation could have provided plants (particularly shadscale saltbush and fourwing saltbush) with a fresh store of water that could have added to the fresh-weight of the harvested plants. These two species (particularly shadscale saltbush) have succulent leaves that can store water. The high production also could have been the result of the phenological and dry-weight conversion factors used to calculate annual air-dry production.

3.2.2 Range Condition and Forage Production

The production data reported in Table 4 includes totals for all plant species, and totals for perennial grasses. Wild horses eat primarily perennial grasses and small amounts of forbs and shrubs (Berger, 1986). The production of perennial grasses on the NWHR during 1999 was much lower than the total production of all species (Table 4). Production of perennial grasses ranged from 0 to 61 percent of the total production per range site, and 17 percent overall. However, many of these range sites have the potential to produce from 40 to 50 percent vegetative production as perennial grasses (reported as PNC in Table 4). Actual perennial grass production at 31 of the 40 sample locations was less than 50 percent of the potential, indicating that these range sites were in less than desired condition.

Of the 40 sample locations, 4 were in poor condition (early seral stage), 24 were in fair condition (mid-seral stage), 12 were in good condition (late seral stage), and no locations were in excellent condition (PNC stage) (Figure 2). Of the WHUA, 6.4 percent was in poor condition, 59.9 percent was in fair condition, 13 percent was in good condition, and none of the area was in excellent condition (Table 6). Approximately 17 percent of the area had sample locations that were in either poor, fair, or good condition.

Table 6. The Size and Percentage of the Wild Horse Use Area in the Nevada Wild Horse Range in Various Seral Stages[a] (Condition)

Seral Stage (condition)	*Size (acres)*	*% of WHUA*
Early Seral (Poor)	12,998	6.4
Mid-seral (Fair)	122,347	59.9
Late Seral (Good)	26,561	13.0
PNC (Excellent)	0	0
Early Seral to Mid-seral	1,757	0.9
Early Seral to Late Seral	2,108	1.0
Mid-seral to Late Seral	30,519	15.0
Unclassified (Association "P")	7,855	3.8

[a] See Appendix A for an explanation

Sample locations in good condition were generally located in the central part of the NWHR on the east side of the Kawich Mountain Range (Figure 2). Additionally, two of the four sample locations in poor condition were located at the bottom of Kawich Valley, north of the playa. These general patterns may be due to the distribution of water sources across the NWHR. Sample locations in "fair" condition are scattered throughout the NWHR and did not exhibit any particular spatial pattern.

3.2.3 Appropriate Management Level (AML)

Sixteen (16) springs or other water bodies were identified as having the potential to provide water to wild horses during a poor rainfall year (waters are shown on Figure 2). Based the perennial grass production data collected in 1999, the assumptions and methods listed in Section 2.2.3, and the location of these waters, 2,158,027 pounds of perennial grass would be available to wild horses on the WHMA during a poor rainfall year. Based on this amount of perennial grass production, the AML for the WHMA is 227 wild horses.

Table 7. Perennial Grass Production Used to Calculate Appropriate Management Levels (all values for perennial grass production are in pounds per year)

Association	*Actual Perennial Grass Production*	*Perennial Grass Production - Poor Year*	*Area Near Waters (acres)*		*Perennial Grass Available*
			Within 4 Miles	*Between 4 and 8 Miles*	
A	1,024,229	381,064	13,927.3	258.6	188,817.4
B	1,012,896	380,215	19,045.6	639.4	187,065.8
C	5,708,932	2,547,428	6,323.3	8,623.1	515,854.2
D	330,185	126,781	4,018.1	338.2	60,918.5
E	870,838	338,911	4,760.9	6,570.0	115,399.3
F	1,132,979	560,487	3,300.2	12,413.1	169,547.3
G	1,069,219	502,782	0.0	1,053.9	30,166.9
H	3,014,556	1,400,410	679.4	12,646.4	229,317.1
I	111,378	43,508	0.0	6,468.0	10,006.8
J	48,914	22,349	0.0	2,267.6	5,151.5
K	3,955,204	1,965,902	4,633.1	15,435.9	534,233.9
L	511,904	223,607	2,396.4	12,834.4	53,218.5
M	2,378,380	1,040,833	0.0	324.3	7,806.2
N	423,535	162,833	1,274.3	1,481.3	19,580.7
O	13,406	5,568	0.0	0.0	0.0
P	761,935	327,632	0.0	0.0	0.0
Q	1,069,632	493,120	0.0	1,516.3	30,943.3
Total	*23,438,121*	*10,523,433*	*60,358.8*	*82,870.5*	*2,158,027.4*

3.3 VEGETATIVE TREND

Vegetative trend was not apparent in 58 percent of the WHUA (Table 8). This indicates that there was no visible change in vegetation away from its current seral stage. The vegetation was improving in 13 percent of the WHUA and declining in 17 percent of the WHUA (Table 5). Approximately 8 percent of the area had sample locations with trend that was either not apparent or was declining (Table 8).

Table 8. The Size and Percentage of the Wild Horse Use Area in the Nevada Wild Horse Range in Four Trend Classes[a]

Trend	*Acres*	*Percentage*
Improving	26,209	12.8
Not Apparent	118,134	57.9
Declining	35,072	17.2
Not Apparent to Declining	16,875	8.3
Unclassified (Association "P")	7,855	3.8

[a] See Appendix A for an explanation of the trend classes.

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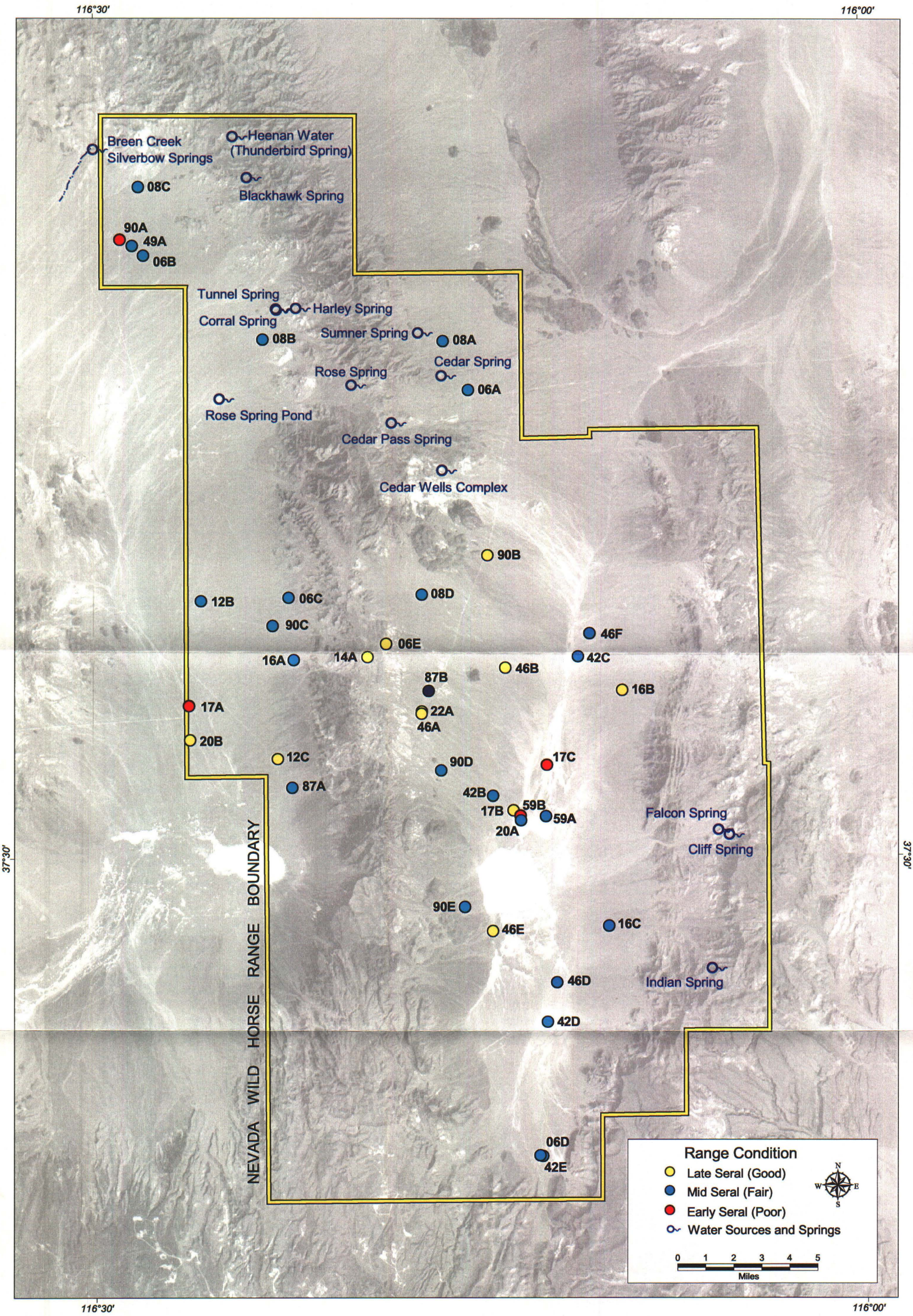

Figure 2. Range Condition on the Nevada Wild Horse Range.

4.0 SUMMARY

Total vegetative production within the WHUA of the NWHR was high, possibly due to precipitation timing and volume during the previous water year. However, 1999 production of forage species favored by wild horses (perennial grasses) was less than 17 percent of the total production of all species. Production of these forage species was generally much lower than their potential production for the sampled range sites, indicating that vegetation in much of the area was in less than ideal condition.

Only 13 percent of the WHUA had vegetation in good condition, 60 percent was in fair condition, and 6 percent was in poor condition. None of the WHUA had vegetation in excellent condition. Condition in approximately 17 percent of the area varied from poor to good.

Based on 1999 perennial grass production data, estimates of grass production in poor years, and location of water, the AML for the NWHR is 227 horses.

The trend of the vegetation was variable. Vegetative trend could not be determined in approximately 58 percent of the sampled area. The condition of the vegetation in approximately 13 percent of the area was improving, while vegetation in approximately 17 percent of the area was declining.

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APPENDIX A

FIELD PROCEDURES USED TO COLLECT RANGE CONDITION DATA ON THE NEVADA WILD HORSE RANGE

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A. FIELD PROCEDURES USED TO COLLECT RANGE CONDITION DATA ON THE NEVADA WILD HORSE RANGE

This procedure describes the methods used to collect data for the Nellis Range Health Survey on the Nevada Wild Horse Range (NWHR), to determine range condition. This document includes procedures for (1) setting up a sample location; (2) collecting range condition data with the double sampling method; and (3) collecting range inventory data and determining range condition. Three forms are used to document the sample location and collect the required data (1) *Study Location and Documentation Data;* (2) *Total Annual Yield and Composition Record;* and (3) *Range Inventory Worksheet.*

A.1 SET UP THE SAMPLE LOCATION

A.1.1 Identify and Label the Sample Location

a. Drive a steel post into the ground at the sample location.

b. Label an aluminum tag with the name of the sample location and attach the tag to the steel post.

c. Paint the steel post.

A.1.2 Complete the Study Location and Documentation Data Form (Illustration 1), using the information provided below:

NOTE: One form is completed for each sample location.

a.	Study Method	List type of data collected at the sample location (condition)
b.	Study Number	List the name of sample location, which is the last two numbers of the NRCS Range Site name and a consecutive letter (example: 90D is the fourth sample location established in the 029XY090NV range site)
c.	Allotment Name and Number	N/A
d.	Pasture	N/A
e.	District	N/A
f.	Resource Area	29
g.	Planning Unit	N/A
h.	Range Site	NRCS Range Site name
i.	Plant Community	N/A
j.	Date Established	The date the sample location was established
k.	Established by	List team members by first initial and last name
l.	Map Reference	List name of USGS 7.5 minute quadrangle map
m.	Elevation	Elevation in meters
n.	Slope	Percent slope
o.	Exposure	Aspect in compass degrees
p.	Aerial Photo Reference	N/A
q.	Location	Location of the sample location in Universal Transverse Mercators (UTMs)

r.	Key Species	List the three key (dominant) species
s.	Distance and Bearing...ref.	N/A
t.	Distance and Bearing...stake	N/A
u.	Transect Bearing	Compass bearing of trend transect
v.	Vertical Distance Between...	Vertical distance between ground and aligned trend transect tape
w.	Length of Transect	100 feet for both condition and trend methods
x.	Plot/Frame Size	9.6 square feet for condition
y.	Sampling Interval	10 feet
z.	Total Number of Samples	10

A.1.3 Take Photographs of the Sample Location

One or two general view color photographs should be taken from the reference (beginning) point of each transect looking down the transect line. Other permanent photo points can be established as deemed appropriate.

A.2 COLLECT RANGE CONDITION DATA

The following equipment is needed to setup the study, collect condition data, and determine a condition class rating.

Forms and Tables

Form - *Study Location and Documentation Data* (Illustration 1)
Form - *Total Annual Yield and Composition Record* (Illustration 2)
Form - *Range Inventory Worksheet* (Illustration 3)
Table - *Ecological Condition Dry Weight and Phenology Factors for Common Plant Species*

Equipment and Materials

Shrub clippers
Spring scale (100 gram capacity)
Paper bags
Plot hoop (9.6 square feet)
Measuring tape (100-foot)
Camera
Print film
Photo Identification Label
Transect stakes (5/8 inch rebar, 2 feet long)
Hammer (2-pound sledge)
Sample location stakes (t-posts)
Aluminum tags
Plant press
Permanent yellow or orange spray paint
Compass
Steel die stamps to create sample location tags
Clipboards
Global Positioning System (GPS) Unit

A.2.1 Setup the Condition Transect and Prepare for Data Collection

a. Identify the transect location with beginning and end stakes

b. Label an aluminum tag using the following convention: "association designation" - Sample location name (example A-90D)

c. Attach the identification tag to the sample location stake with wire

d. Complete the top section of the *Total Annual Yield and Composition Record* with the following information:

1)	Soil	Record the soil type from the *Range Site Description*
2)	Range Site	Record the name of the NRCS Range Site name within which the transect is located
3)	Location	WHMA
4)	Precipitation	Record the average annual precipitation for the sample location (found in the NRCS *Range Site Description Handbook*)
5)	Elevation	Record the elevation of the sample location in meters
6)	Exposure	Record the exposure or aspect of the sample location
7)	Use History	Unknown
8)	Season of Use	All year
9)	Slope	Record the average percent slope of the sample location
10)	Animals	Horse, antelope, rabbits
11)	Last Burn	N/A
12)	Ecological Status	N/A
13)	Plot Size & Shape	9.6 square feet
14)	Brush Control	N/A
15)	Growing Season	Indicate the success of the growing season (Poor, Normal, Good) in terms of plant growth, seed production, annual plant numbers, etc.
16)	SWA Number	Site Write-up Area (SWA) number - record the sample location name (example: 90D)
17)	Canopy	Record percent of sample location covered by tree canopy - this will be zero for this collection effort
18)	SCD	N/A
19)	Collected by	List team members by first initial and last name
20)	Date	Record the date condition data were collected (the date is recorded on the bottom center of the form)

A.2.2 Determine Weight Units for Each Species

a. Find an area away from the transects with vegetation representative of the sample location, where vegetation can be sacrificed.

b. Identify a weight unit for each species. Select common shapes or objects to associate with each weight unit (i.e. hand, softball, etc.). For some species, use the entire plant as the unit. Once a weight unit has been established for each species, estimate the number of weight units for each plant in the sample quadrants of the condition transect.

c. Weigh the current year's growth of the representative weight unit for each species in grams.

d. Record the weight (in grams) of the weight unit in the "species code" column of the form.

e. Production for each species in each sample quadrat is determined by multiplying the estimated number of weight units by the actual weight of the unit.

A.2.3 Collect Estimated Production Data

NOTE: The following data will not be collected and will not be recorded on the form: "Plants % Density"; "Stone % Surface"; and "Litter % Surface".

a. Stretch a 100-foot measuring tape between transect stakes.

b. Beginning at the 10-foot mark on the measuring tape, lay down the first 9.6-square foot hoop on the right side of the measuring tape, with the side of the hoop centered on the 10-foot mark.

c. Identify one species in the hoop.

d. Write the code for that species in column one (*Species/pheno*) of the form.

e. Count all weight units for that species in the hoop and multiply this number by weight of the weight unit for that species.

f. Record the total estimated weight (in grams) of the species in the hoop in the appropriate row for that species and the appropriate column (plot number).

g. Repeat steps "c" through "f" for each species in the hoop.

h. Move the hoop to the next sample location along the transect.

i. Repeat steps "c" through "g" for each the following sample locations on the 100-foot transect: 20, 30, 40, 50, 60, 70, 80, 90, 100.

NOTE: If a species does not have an assigned weight unit, go to a sacrifice area near the sample location and determine the average weight (in grams) of a weight unit for that species.

A.2.4 Collect Clipped and Weighed Production Data

NOTE: All vegetation in two to four of the ten plots for which production was estimated in the section above also will be clipped and weighed to determine actual plant biomass in the sample location.

a. Identify the numbers of the plots to be clipped and weighed. The plots identified should include the dominant plants on the site and those that are the most important forage species.

b. Lay down the hoop on the plots to clipped and weighed. It helps to mark the perimeter of the hoop during the estimation step to ensure the same plants are clipped as were estimated.

c. Clip and weigh all vegetation for one species in the hoop.

d. Record the total weight (in grams) of the species in the hoop in the appropriate row for that species in column "C".

e. Repeat steps "c" and "d" for each species in the hoop.

f. Move the hoop to the next sample location to be clipped along the transect.

g. Repeat steps "c" through "e" for each sample location to be clipped on the transect.

NOTE: All plant material on the plot is clipped as close to the ground as possible. All old woody growth and foreign material should be carefully removed. Sample only current year's growth. Sampling for production should be done as soon as possible after vegetation has attained maximum growth.

A.2.5 Determine the Phenological Stage of Each Species

Referring to Table A-1, record the phenological stage for each species encountered during collection of production data in the "Notes" column.

Table A-1. Numerical Designation for the Phenological Stage of Plants by Lifeform

No. of Pheno. Stage	*Grasses*	*Forbs*	*Shrubs*
8	Regrowth	Regrowth	Dormant
7	Cured	Cured	Leaf fall
6	Seed dissemination	Seed dissemination	Seed dissemination
5	Seed ripe	Seed ripe	Seed ripe
4	Peak flower	Peak flower	Peak flower
3	Start flower	Start flower	Start flower
2	Boot stage	Pre-flower	Fully formed leaf
1	Start growth	Start growth	Initiate leaf growth

A.2.6 Complete the *Total Annual Yield and Composition Record* (Illustration 2)

NOTE: The remainder of the information needed to complete the *Total Annual Yield and Composition Record* can be completed away from the sample location.

a. Calculate the total estimated weight (in grams) for each species from the ten plots and record the number in column "A".

b. Calculate the total estimated weight (in grams) for each species from the plots that were also clipped and weighed and record the number in column "B".

c. Calculate the total clipped weight (in grams) for each species from the plots that were clipped and weighed and record the number in column "D".

d. Calculate the Correction Factor by dividing the total clipped weight for each species (column "D") by the estimated weight of each species (column "B"). Record the result in column "E".

e. Calculate the Total Corrected Green Weight by multiplying the Correction Factor (column "E") by the total estimated weight of each species (column "A"). Record the result in column "F".

f. Determine the Dry Weight Factor for each species from the Dry Weight section of the *Ecological Condition Dry Weight and Phenology Factors for Common Plant Species* table and record the numbers in column "G".

g. Calculate the Dry Weight for All Plots value for each species by multiplying the Dry Weight Factor (column "G") by the Total Corrected Green Weight (column "F"). Record the result in column "H".

h. Determine the Utilization Percentage. Record the result in column "I".

i. Calculate the Sub-total (column "J") for each species by multiplying the Dry Weight for All Plots (column "H") by the Utilization Percentage (column "I"). Record the result in column "J".

j. Determine the Phenology Factor for each species from the Phenology section of the *Ecological Condition Dry Weight and Phenology Factors for Common Plant Species* table, and record the numbers in column "K".

k. Calculate the Total Weight of All Plots for each species by multiplying the Phenology Factor (column "K") by the Sub-total (column "J"). Record the result in column "L".

l. Determine plant biomass (pounds per acre) for each species. If production data were obtained with a 9.6-square foot plot, then plant biomass equals the Total Weight for All Plots (column "L"). Record the result in column "M".

m. Obtain the total weight across all species and plots by calculating the sum of all values in column "M". Record the result at the bottom of column "M".

n. Calculate Percent Composition for each species by dividing the pounds per acre for each species by the sum of column "M".

A.3 RECORD FIELD INFORMATION ON THE *RANGE INVENTORY WORKSHEET* (ILLUSTRATION 3)

A.3.1 Complete the Top Section of the *Range Inventory Worksheet*

a. Write-up No. N/A

b.	Site Name	Sample location Name (must match name on *Total Annual Yield and Composition* and the *Study Location and Documentation Form*)
c.	Major Land Resource Area (MLRA)	29
d.	Ranch or Soil-232 No.	N/A
e.	Soil Taxonomic Unit	N/A
f.	Photo No.	N/A
g.	Field Office	SAIC-Environmental Sciences Department (ESD)
h.	Location	UTMs
i.	Conservationist	First initial and last names of team
j.	Longitude and Latitude	N/A
k.	Date	Date production data were collected

NOTE: Refer to the *Instructions to Range Inventory Worksheet* to complete the following steps.

A.3.2 Complete the *Range Inventory Worksheet*

a. Transfer the list of species from the *Total Annual Yield and Composition Record* to column "3" of the *Range Inventory Worksheet*.

b. Transfer the plant biomass values for each species in column "M" from the *Total Annual Yield and Composition Record* to column "5" of the *Range Inventory Worksheet*.

c. Transfer the percent composition values for each species in column "N" from the *Total Annual Yield and Composition Record* to column "6" of the *Range Inventory Worksheet*.

d. Transfer the total weight across all species and plots recorded at the bottom of column "M" to the "Totals" row at the bottom of column "6".

e. Referring to the NRCS *Range Site Description* for the Sample location, record the appropriate percent of species for each dominant or co-dominant species in column "7".

1) If the species is not listed in the *Range Site Description* no value is recorded.
2) If the species percent-by-weight value is less than the maximum amount allowed in the *Range Site Description*, record the percent-by-weight value calculated from the *Total Annual Yield and Composition Record* data sheet.
3) If the species percent-by-weight value is greater than the maximum amount allowed in the *Range Site Description*, record the maximum amount allowed in the *Range Site Description*.
4) For species that are part of group of species in the *Range Site Description* (example other perennial grasses), ensure the rules stated in the *Range Site Description* regarding these species are followed.

f. Calculate the Plant Group Percent Composition (weight only) for Grasses and Grass-like Plants, Forbs and Trees and Shrubs by calculating the sum of column "5" for each plant group and dividing that value by the total weight value recorded at the bottom of column "6". Repeat for each plant group.

g. Obtain the Total Percent Climax by Weight by calculating the sum of column "7". Record the results in the "Totals" row of column "7".

h. Circle the range class (25-0, 50-26, 75-51, and 100-76) in the % Climax Vegetation column that encompasses the value derived in step "g".

i. In the Species Diversity column, document how many dominant and co-dominant species are missing from the site, based on those species listed in the *Range Site Description*.

j. In the Production % column, document the amount of total annual production (air-dry weight) of native plants present on a site related to the potential production of the climax vegetation for the site. During above or below average years, use the upper or lower production figures, respectively, listed on the *Range Site Description*.

k. Record in the Condition Rating column, the final condition rating based on consideration of the three condition class indicators.

l. Use the following guidance and definitions to rate plant vigor, age class distribution and soil erosion for determining apparent trend at the site.

Plant Vigor is the size of a plant and its parts in relation to its age and the environment in which it is growing. Assign the appropriate value rating for each plant vigor class as indicated. Values intermediate to those stated here may be used.

Decreaser Plants are climax community plant species that respond quickly to misuse by decreasing in relation to other plants in the community.

Increaser Plants are climax community plant species that respond to misuse, at least initially, by increasing relative to other plants in the community. Other plants in the community are called increasers.

Invader Plants are plant species, not considered part of the climax plant community, that move into the community--often becoming prominent and persistent.

Determining Plant Vigor

Decreaser Plants:

Low Vigor (Rating -2) - Plants decadent; bunch grasses having dead crown centers and much of outer crown ring dead; plants short-statured with little new growth; seedstalks few and short; severe hedging apparent on shrubs; sod grasses thinning.

Moderate Vigor (Rating 0) - Moderate amount of new growth and seed stalks; bunch grasses have dead crown centers with healthy but stunted outer crown ring; moderate hedging of shrubs; sod grasses short-statured.

High Vigor (Rating +2) - Grasses robust with numerous leaves, seedstalks tall and numerous; bunch grass crowns full and healthy appearing; shrubs not hedged or high-lined. Plants healthy, producing high yields of new growth and viable seed.

Determining Age Class Distribution

Decreasers - Assign value ratings as: Many young plants > 1 year old = 2; Good representation of all age classes = 1; Mostly mature and some decadent plants = -1. Mostly old and decadent plants = -2.
Increasers/Invaders - Assign value ratings as: Many young plants > 1 year old = 2; Good representation of all age classes = 1; Mostly mature and some decadent plants = -1. Mostly old and decadent plants = -2.

Determining Soil Erosion

None (Rating +4) - Assign class ratings as None = +4; Slight = +1; Moderate = -1; and Severe = -4. No visual evidence of soil movement. Litter is accumulating in place and there is no evidence of pedestalling of plants or rocks. Cryptogamic mat extends into interspaces and has a smooth rounded appearance.

Slight (Rating +1) - Little visual evidence of soil movement. Persistent surface litter where present is accumulating in place. Weather or lichen lines on stones or rock fragments are not apparent. Slight pedestalling of plants and rock is evident in flow patterns. Cryptogamic mat shows early signs of deterioration.

Moderate (Rating -1) - Soil movement is detectable. Persistent surface litter is deposited against obstacles. Weather or lichen lines on stones or rock fragments do not extend to soil surface. Considerable pedestalling of plants and rocks is evident. Cryptogamic mat appears broken and is restricted to protected areas.

Severe (Rating -4) - Soil movement occurs with each runoff or aeolian event. Persistent surface litter and cryptogams are absent. Stones or rock fragments are pedestalled.

Determining Apparent Trend

The sum of Plant Vigor, Age Class Distribution, and Soil Erosion indicates apparent trend. >5 = Improving; 5 to 0 = Not Apparent; <0 = Declining. Negative values indicate declining site condition.

m. Use the following guidance to complete the Site History Section of the *Range Inventory Worksheet*. Complete this section when site is in good or excellent condition, when useful in planning or when specified in resource inventories.

Use History - Show past grazing history of the area: None, slight, moderate, heavy.

Season of Use - Show season(s) when area is grazed: (-) = unknown, spring, summer, fall, winter.

Wildlife Species - Show kinds of wildlife expected or in evidence on the site: deer, badger, quail, etc.

Burning History (-) = unknown; 1 = rarely, if ever, burned; 2 = occasionally burned; 3 = systematically burned; 4 = burned ____ years ago (enter code and years).

Logging History (-) = unknown; 1 = not logged; 2 = logged ____ years ago (enter code and years).

Cropping History (-) = unknown; 1 = not cropped; 2 = cropped ____ years ago (enter code and years).

n. Complete the Site History Section of the *Range Inventory Worksheet*

NOTE: The following parts of the Physiography Section are optional: (1) Depth of Watertable; (2) Drainage Class; (3) Frequency of Flooding or Ponding; and (4) Duration of Flooding or Ponding.

o. Determine present utilization as a percent of the key species being grazed.

NOTE: The following general sections are optional: (1) Treatment Needs; (2) Special Considerations; and (3) Associated Sites.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STUDY LOCATION & DOCUMENTATION DATA

STUDY METHOD		STUDY NUMBER	
ALLOTMENT NAME & NUMBER		PASTURE	
DISTRICT	RESOURCE AREA	PLANNING UNIT	
RANGE SITE		PLANT COMMUNITY	
DATE ESTABLISHED	ESTABLISHED BY (NAME)	MAP REFERENCE	
ELEVATION (m)	SLOPE	EXPOSURE(°)	AERIAL PHOTO REFERENCE

TOWNSHIP RANGE SECTION 1/4 1/4 1/4

LOCATION UTM: Easting Northing

SCALE:_____INCHES EQUALS ONE MILE

KEY SPECIES 1 2 3				
DISTANCE & BEARING BETWEEN REFERENCE POST OR REFERENCE POINT AND THE TRANSECT LOCATION STAKE, BEGINNING OF TRANSECT, OR PLOT				
DISTANCE & BEARING BETWEEN LOCATION STAKE & BEARING STAKE				

TRANSECT BEARING	VERTICAL DISTANCE BETWEEN GROUND & ALIGNED TAPE
LENGTH OF TRANSECT	PLOT/FRAME SIZE
SAMPLING INTERVAL	TOTAL NUMBER OF SAMPLES

NOTES (DESCRIPTION OF STUDY LOCATION, DIAGRAM OF TRANSECT/PLOT LAYOUT, DESCRIPTION OF PHOTO POINTS, ETC. IF MORE SPACE IS NEEDED, USE REVERSE SIDE OR ANOTHER PAGE.)

Illustration 1. Study Location and Documentation Data.

Soil: _____ **Range Site:** _____ **Location:** _____ **S:** _____ **T:** _____ **R:**

Precipitation: _____ **Elev.(m)** _____ **Aspect:** _____ **Use History:** _____ (Light, Medium, Heavy) **Season of Use:** _____ **Slope:** _____

Animals: _____ (kind) **Last Burn:** _____ (Date) **Ecological Status:** _____ **Plot Size/Shp:** _____ **Brush Control:** _____

Growing season: _____ (good, normal, poor) **SWA Number:** _____ **Canopy:** _____ (% Tree shade) **SCD:** _____ **Recorders:**

											A	B	C		D	E	F	G	H	I	J	K	L	M	N
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights												
Plants % density																	Tot. Corr. Green Wt.	Dry Wt. Fact.	Dry Wt. All Plots				Tot. Wt. All Plots		
Stone % surface																									
Litter % surface											Tot. All	Tot. Circ.	plot #		Tot. Green Wt.	Corr. Fact.				Util. %	Sub-Total	Pheno Factor		Lbs/ Acre	% Comp
Species/Pheno.	Weight in grams																								
Yield (grams)											Date					Tot.									

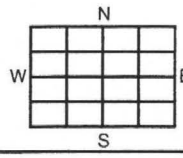
Illustration 2. Total Annual Yield and Composition Record.

NV-ECS-1
4/88 (Rev)

U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name _____ MLRA _____ Write-up No. _____
Ranch or Soil-232 No. _____
Photo No. _____
Soil Taxonomic Unit _____
Field Office _____
Location: Sec _____ T _____ R _____
Long: _____ Lat: _____
Conservationist _____ Date: _____



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants						
% Weight						
% Cover						
Forbs						
% Weight						
% Cover						
Trees & Shrubs						
% Weight						
% Cover						
		Totals				

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators	Apparent Trend (Circle One)
Plant Vigor Decreasers	Improving
Age Class Distribution Decreasers	
Increaser/ Invaders	Declining
Soil Erosion	
Total	Not Apparent

Site History
Use History:
Kind of Animal:
Season of Use:
Wildlife Species:
Burning History:
Logging History:
Cropping History:

Physiography

Elevation (m)	Slope	Azimuth (°)

Major or Component Landform
Slope Component (Circle one) Crest Backslope Summit Shoulder Footslope
Kind of Slope (Circle one) Straight Concave Convex
Microrelief:
Depth of Watertable:
Drainage Class:
Frequency of Flooding or Ponding:
Duration of Flooding or Ponding:

(8) Present Utilization % of (Key Species)

Notes:

Treatment Needs:

Special Considerations (e.g, critical habitat, riparian zone, etc.):

Associated Sites:

Illustration 3. Range Inventory Worksheet.

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APPENDIX B

SAMPLE LOCATION DATA

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Table B-1. Sample Location Data

Association	*Range Site Number*	*Sample Location*	*UTM: easting*	*UTM: northing*	*Elevation (m)*	*Slope (%)*	*Aspect (degrees)*
A	029XY006	06A	565551	4177566	1907	3-4	68
	029XY008	08A	564094	4180388	1950	4-5	84
B	029XY006	06B	546843	4185298	1821	3	211
	029XY008	08B	553716	4180448	1935	3-4	249
	029XY008	08C	546535	4189215	1894	2-3	240
	029XY049	49A	546207	4185851	1823	2-3	191
	029XY090	90A	545502	4186214	1824	1-2	220
C	029XY012	12B	550235	4165379	1615	0-1	227
	029XY012	12C	554645	4156304	1587	2	239
	029XY090	90C	554353	4163953	1713	3	271
E	029XY006	06E	560861	4162930	1909	4-6	134
	029XY008	08D	562914	4165758	1862	3	130
	029XY014	14A	559799	4162179	1972	10	46
	029XY090	90B	566701	4168053	1815	3	131
G	029XY022	22A	562938	4159046	1782	4-5	113
	029XY046	46A	562918	4158919	1777	5	151
	029XY087	87B	563327	4160231	1792	3-5	90
H	029XY042	42B	567025	4154175	1619	0-1	121
	029XY046	46B	567722	4161566	1701	1	117
	029XY090	90D	564057	4155631	1687	3	120
I	029XY017	17B	568216	4153350	1598	0-1	133
	029XY017	17C	570132	4155968	1610	1-2	301
	029XY020	20A	568630	4153050	1595	0	flat
	029XY059	59A	570079	4153009	1599	0	flat
	029XY059	59B	568641	4152773	1597	0	flat
J	029XY042	42C	571921	4162231	1657	0-1	265
K	029XY016	16B	574475	4160301	1710	2-3	285
	029XY016	16C	573717	4146727	1646	2-3	275
	029XY046	46F	572589	4163553	1669	0-1	281
L	029XY042	42D	570199	4141183	1612	0-1	112
	029XY046	46D	570732	4143471	1599	0-1	106
M	029XY046	46E	567041	4146431	1602	0-1	69
	029XY090	90E	565428	4147791	1607	3-4	99

Table B-1. Sample Location Data (Continued)

Association	*Range Site Number*	*Sample Location*	*UTM: easting*	*UTM: northing*	*Elevation (m)*	*Slope (%)*	*Aspect (degrees)*
N	029XY006	06D	569778	4133484	1696	1-3	45
	029XY042	42E	569928	4133446	1696	2-3	315
O	029XY017	17A	549549	4159352	1554	0-1	227
	029XY020	20B	549625	4157383	1551	1-2	270
P	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q	029XY006	06C	555269	4165574	1772	6	276
	029XY016	16A	555567	4161994	1739	4-5	263
	029XY087	87A	555483	4154634	1585	2	273

APPENDIX C

TOTAL ANNUAL YIELD AND COMPOSITION RECORD FORMS

These forms contain production data collected during range condition sampling.

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TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Loamy | **Range Site:** 029XY006NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 8-10 | **Elev.(m)** 1907 | **Aspect:** 68 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 3-4

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 06A | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** K.BLOMQUIST;S.KOZUSKO

Denotes clipped plots		X							X		A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	9	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA	5			8	5	5.5	13	4	2	10	52.5	2		1	1	0.5	26.25	0.38	9.975		9.975	3.64	36.31	36.31	3.2%	2
ACHY		5			T						5	5	5		5	1	5	0.39	1.95		1.95	3.27	6.377	6.377	0.6%	2
SIHY		5	17		5				35		62	40	7	36	43	1.075	66.65	0.37	24.66		24.66	2.55	62.88	62.88	5.6%	3
ASLE										7	7	0			0	1	7	0.2	1.4		1.4	1.18	1.652	1.652	0.1%	4
ERIGERON									T		T															4
KOAMV										T	T															2
ATCO								1			1	0			0	1	1	0.18	0.18		0.18	7.14	1.285	1.285	0.1%	3
CHVI								3		23	26	0			0	1	26	0.32	8.32		8.32	3.9	32.45	32.45	2.9%	2
ARTRW		155	480	217	310	56	136	62	347	3	1766	502	136	240	376	0.749	1323	0.49	648.1		648.1	1.51	978.7	978.7	87.4%	4
CACTUS							T				T															
Yield (grams)											Date	06/07/1999				Tot.								1120	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Loamy | **Range Site:** 029XY006NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 8-10 | **Elev.(m)** 1821 | **Aspect:** 211 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 3

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 06B | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** V. WINKEL;M. MAIN

Denotes clipped plots	X				X						A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	5	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	5	2	T		T			1	1	4	13	5	8		8	1.6	20.8	0.41	8.528		8.528	2.31	19.7	19.7	3.3%	3
SIHY	1	T	T	8	2			T			11	3	1.5	2	3.5	1.167	12.83	0.43	5.518		5.518	1.79	9.878	9.878	1.7%	4
STCO					4	3	3	4	3	1	18	4		4	4	1	18	0.4	7.2		7.2	1.88	13.54	13.54	2.3%	3
HIJA							1				1	0			0	1	1	0.38	0.38		0.38	3.64	1.383	1.383	0.2%	2
MACA	T				T						T														T	2
ARTRW	144	180	144	90	216			30	90		894	360	80	204	284	0.789	705.3	0.49	345.6		345.6	1.51	521.8	521.8	87.8%	4
GRSP	3		8								11	3			0	1	11	0.13	1.43		1.43	2.86	4.09	4.09	0.7%	2
CHVI			4	2	13	1				T	20	13		10	10	0.769	15.38	0.32	4.923		4.923	3.9	19.2	19.2	3.2%	2
ATCA							3				3	0			0	1	3	0.16	0.48		0.48	10	4.8	4.8	0.8%	2
Yield (grams)											Date	06/03/1999				Tot.								594.4	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Loamy		**Range Site:** 029XY006NV		**Location:** NWHR	**S:** NA	**T:** NA	**R:** NA
Precipitation: 8-10	**Elev.(m)** 1772	**Aspect:** 276	**Use History:** Unknown (Light, Medium, Heavy)	**Season of Use:** All year		**Slope:** 6	
Animals: horses,antelope,rabbits (kind)		**Last Burn:** NA (Date)	**Ecological Status:** NA	**Plot Size/Shp:** 9.6 ft		**Brush Control:** NA (Date)	
Growing season: Good (good, normal, poor)		**SWA Number:** 06C	**Canopy:** 0% (% Tree shade)	**SCD:** NA		**Recorders:** V. WINKEL;S.PETERSEN	

Denotes clipped plots				X			X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry					Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.					Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	4	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
SIHY	7.5	12	6	3			T	3	7.5		39	3	3		3	1	39	0.43	16.77		16.77	1.79	30.02	30.02	5.6%	4
HIJA		2	8	5	15		4			2	36	9	6	4	10	1.111	40	0.32	12.8		12.8	2.68	34.3	34.3	6.4%	3
ACHY						T	0.5				0.5	0.5		1.5	1.5	3	1.5	0.39	0.585		0.585	3.27	1.913	1.913	0.4%	2
ASLE	T										T														T	4
CHVI	21		24	18.2	11.2						74.4	18.2	22		22	1.209	89.93	0.32	28.78		28.78	3.9	112.2	112.2	21.0%	2
ARTRW		87.5	170	150			200	40			647.5	350	127	133	260	0.743	481	0.49	235.7		235.7	1.51	355.9	355.9	66.6%	4
EPNE				T			T				T														T	2
KRLA										T	T														T	2
Yield (grams)											Date	06/08/1999				Tot.								534.4	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	Shallow Calcareous Loam			**Range Site:**	029XY008NV	**Location:**	NWHR	**S:** NA	**T:** NA	**R:** NA
Precipitation:	8-10	**Elev.(m)**	1950	**Aspect:**	84	**Use History:**	Unknown (Light, Medium, Heavy)	**Season of Use:**	All year	**Slope:** 4-5
Animals:	horses,antelope,rabbits (kind)			**Last Burn:**	NA (Date)	**Ecological Status:**	NA	**Plot Size/Shp:**	9.6 ft	**Brush Control:** NA (Date)
Growing season:	Good (good, normal, poor)			**SWA Number:**	08A	**Canopy:**	0% (% Tree shade)	**SCD:**	NA	**Recorders:** K.BLOMQUIST;S.KOZUSKO

Denotes clipped plots			X					X			A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	3	8	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA			5	1		1					7	5	6		6	1.2	8.4	0.37	3.108		3.108	3.79	11.78	11.78	1.4%	1
SIHY		3	5		5		12	20	2		47	25	6	23	29	1.16	54.52	0.37	20.17		20.17	2.55	51.44	51.44	5.9%	3
ACHY				T							T														T	2
ASLE		8									8	0			0	1	8	0.19	1.52		1.52	6.83	10.38	10.38	1.2%	2
ARNO		120	130	120	150	12	345	105	155	68	1205	235	154	98	252	1.072	1292	0.48	620.2		620.2	1.28	793.9	793.9	91.2%	3
EPNE										4	4	0			0	1	4	0.38	1.52		1.52	2.12	3.222	3.222	0.4%	2
Yield (grams)											Date	06/08/1999				Tot.								870.7	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Shallow Calcareous Loam **Range Site:** 029XY008NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 8-10 **Elev.(m)** 1935 **Aspect:** 249 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 3-4

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 08B **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** K.BLOMQUIST;S.KOZUSKO;M.HESSING

Denotes clipped plots		X					X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA		2	1	5							8	2	3		3	1.5	12	0.37	4.44		4.44	3.79	16.83	16.83	4.5%	1
SIHY	1.5	2.5		3	2	4	3	3	T		19	5.5	7	8	15	2.727	51.82	0.43	22.28		22.28	1.79	39.88	39.88	10.6%	4
ACHY			3				2				5	2		2	2	1	5	0.39	1.95	1.11	2.165	3.27	7.078	7.078	1.9%	2
BRTE	T								T		T														T	4
SPAM			1								1	0			0	1	1	0.19	0.19		0.19	6.83	1.298	1.298	0.3%	2
ERIGERON			1						1		2	0			0	1	2	0.14	0.28		0.28	1.11	0.311	0.311	0.1%	3
MACA									T		T														T	1
CHVI						T					T														T	2
ATCO					24	30					54	0			0	1	54	0.18	9.72		9.72	7.14	69.4	69.4	18.4%	3
ARNO	58.5	65.5	13	104	15.6	26	78	26		7.8	394.4	143.5	82.5	58	140.5	0.979	386.2	0.48	185.4		185.4	1.28	237.3	237.3	62.8%	3
KOAMV			3.6		1.8	T	T				5.4	0			0	1	5.4	0.39	2.106		2.106	2.7	5.686	5.686	1.5%	2
Yield (grams)											Date	06/07/1999				Tot.								377.7	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	Shallow Calcareous Loam		**Range Site:**	029XY008NV	**Location:**	NWHR	**S:**	NA	**T:**	NA	**R:**	NA
Precipitation:	8-10	**Elev.(m)** 1894	**Aspect:**	240	**Use History:**	Unknown (Light, Medium, Heavy)	**Season of Use:**	All year			**Slope:**	2-3
Animals:	horses,antelope,rabbits (kind)		**Last Burn:**	NA (Date)	**Ecological Status:**	NA	**Plot Size/Shp:**	9.6 ft	**Brush Control:**	NA (Date)		
Growing season:	Good (good, normal, poor)		**SWA Number:**	08C	**Canopy:**	0% (% Tree shade)	**SCD:**	NA	**Recorders:**	K.BLOMQUIST;V.WINKEL		

Denotes clipped plots	X		X								A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	3	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
SIHY	12		3	T	5			2			22	15	28	3	31	2.067	45.47	0.43	19.55		19.55	1.79	35	35	5.2%	4
ACHY				3				T			3	0			0	1	3	0.39	1.17		1.17	3.27	3.826	3.826	0.6%	2
BRTE		T									T														T	
																										2
PHST		T	T		T		T				T														T	2
ARNO	150	45	75	90	112	45	70	60	40	100	787	225	144	144	288	1.28	1007	0.48	483.5		483.5	1.28	618.9	618.9	92.5%	3
CHVI								8			8	0			0	1	8	0.32	2.56		2.56	3.9	9.984	9.984	1.5%	2
KOAMV						1				T	1	0			0	1	1	0.39	0.39		0.39	2.7	1.053	1.053	0.2%	2
Yield (grams)											Date	06/03/1999				Tot.								668.8	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Shallow Calcareous Loam		**Range Site:** 029XY008NV		**Location:** NWHR	**S:** NA	**T:** NA	**R:** NA
Precipitation: 8-10	**Elev.(m)** 1862	**Aspect:** 130	**Use History:** Unknown (Light, Medium, Heavy)	**Season of Use:** All year		**Slope:** 3	
Animals: horses,antelope,rabbits (kind)		**Last Burn:** NA (Date)	**Ecological Status:** NA	**Plot Size/Shp:** 9.6 ft		**Brush Control:** NA (Date)	
Growing season: Good (good, normal, poor)		**SWA Number:** 08D	**Canopy:** 0% (% Tree shade)	**SCD:** NA	**Recorders:** M.HESSING;S.KOZUSKO;K.BLOMQUIST		

Denotes clipped plots	X						X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY		T			1	4	T				5	0			0	1	5	0.39	1.95		1.95	3.27	6.377	6.377	0.9%	2
HIJA			5								5	0			0	1	5	0.37	1.85		1.85	3.79	7.012	7.012	0.9%	1
SIHY										T	T														T	2
ASPU				2	T		2			1	5	2		2	2	1	5	0.19	0.95		0.95	6.83	6.489	6.489	0.9%	2
UNK. FORB										T	T														T	1
ATCO	46										46	46	46		46	1	46	0.22	10.12		10.12	2.63	26.62	26.62	3.6%	4
ARNO	101	56		7	308	7	104	92.4	112	294	1081	205	92	103	195	0.951	1029	0.48	493.8		493.8	1.28	632	632	84.6%	3
CHVI	11										11	11	11		11	1	11	0.32	3.52		3.52	3.9	13.73	13.73	1.8%	2
EPNE						68					68	0			0	1	68	0.38	25.84		25.84	2.12	54.78	54.78	7.3%	2
Yield (grams)											Date	06/08/1999				Tot.								747	100.0%	

C-10

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Sandy **Range Site:** 029XY012NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 5-8 **Elev.(m)** 1615 **Aspect:** 227 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 0-1

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 12B **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** V.WINKEL;S.PETERSEN,J.GELLER

Denotes clipped plots	X							X			A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	8	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	77	2.75	33	22		11	13.8	11		27.5	198	88	69	11	80	0.909	180	0.41	73.8		73.8	2.31	170.5	170.5	34.0%	3
HIJA	7.5	90	45	16.3	22.5						181.3	7.5	5		5	0.667	120.8	0.32	38.67		38.67	2.68	103.6	103.6	20.7%	3
ASLE			6.5		9.75			6.5			22.75	6.5		7	7	1.077	24.5	0.2	4.9		4.9	1.18	5.782	5.782	1.2%	4
SAIB					T	T	5	6	3		14	6		6	6	1	14	0.14	1.96		1.96	88.33	173.1	173.1	34.6%	1
UNK. FORB						T					T														T	1
MACA								5			5	5		5	5	1	5	0.24	1.2		1.2	1	1.2	1.2	0.2%	4
KRLA	24.5					1.4	T				25.9	24.5	34		34	1.388	35.94	0.39	14.02		14.02	2.7	37.85	37.85	7.6%	2
CHVI			T					1.5	9		10.5	1.5		1	1	0.667	7	0.32	2.24		2.24	3.9	8.736	8.736	1.7%	2
Yield (grams)											Date	06/07/1999				Tot.								500.8	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Sandy | **Range Site:** 029XY012NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1587 | **Aspect:** 239 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 2

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 12C | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** K.BLOMQUIST;M.HESSING;S.KOZUSKO

Denotes clipped plots					X			X			A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density Stone % surface Litter % surface Species/Pheno.	Weight in grams										Tot. All	Tot. Circ.	plot # 5	8	Tot. Green Wt.	Corr. Fact.	Tot. Corr. Green Wt.	Dry Wt. Fact.	Dry Wt. All Plots	Util. %	Sub-Total	Pheno Factor	Tot. Wt. All Plots	Lbs/ Acre	% Comp	Notes (Phen. Factor)
ACHY	T	45	1	9	14	2	8	21	7	2	109	35	56	30	86	2.457	267.8	0.44	117.8		117.8	1.79	210.9	210.9	27.5%	4
HIJA			1								1	0			0	1	1	0.38	0.38		0.38	2.46	0.935	0.935	0.1%	4
BRTE								T			T														T	5
CRYPTANTHA	T										T														T	4
SAIB		T	2	3		1	10	T	T		16	0			0	1	16	0.14	2.24		2.24	88.33	197.9	197.9	25.7%	1
STPA							5				5	0			0	1	5	0.21	1.05		1.05	3.94	4.137	4.137	0.5%	2
PSFR	14		26.3		10.5						50.75	10.5	25		25	2.381	120.8	0.26	31.42		31.42	3.26	102.4	102.4	13.3%	3
TEGL					1	16					17	1	1		1	1	17	0.33	5.61		5.61	1.23	6.9	6.9	0.9%	3
ATCA		64.2	107	27				80.3			278.5	80.25		55	55	0.685	190.8	0.18	34.35		34.35	7.14	245.3	245.3	31.9%	3
Yield (grams)											Date	06/08/1999				Tot.								768.5	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	Loamy Upland										**Range Site:**	029XY016NV			**Location:**	NWHR		**S:**	NA	**T:**	NA		**R:**	NA		
Precipitation:	5-8	**Elev.(m)**	1739		**Aspect:**	263					**Use History:**	Unknown (Light, Medium, Heavy)			**Season of Use:**	All year					**Slope:**	4-5				
Animals:	horses,antelope,rabbits (kind)				**Last Burn:**	NA (Date)					**Ecological Status:**	NA			**Plot Size/Shp:**	9.6 ft					**Brush Control:**	NA (Date)				
Growing season:	Good (good, normal, poor)				**SWA Number:**	16A					**Canopy:**	0% (% Tree shade)			**SCD:**	NA	**Recorders:**	V.WINKEL;S.PETERSEN;J.GELLER							

Denotes clipped plots						X		X			A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	6	8	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ERPU	1.5			13.5	9				4.5	19.5	48	0			0	1	48	0.44	21.12		21.12	1.92	40.55	40.55	7.3%	4
ACHY	3.6							7.25			10.85	7.25		9	9	1.241	13.47	0.44	5.926		5.926	1.79	10.61	10.61	1.9%	4
BRTE	20	30	15	10	17	10	3	3	3	4	115	13	10	7	17	1.308	150.4	0.39	58.65		58.65	1.13	66.27	66.27	12.0%	4
SIHY		1.5			4.5						6	0			0	1	6	0.43	2.58		2.58	1.79	4.618	4.618	0.8%	4
HIJA		7.5	9		10.5		60	28.5	30	11.3	156.8	28.5		23	23	0.807	126.5	0.38	48.07		48.07	2.46	118.3	118.3	21.4%	4
SPCR			15								15	0			0	1	15	0.41	6.15		6.15	2.31	14.21	14.21	2.6%	3
DEPI	T								2		2	0			0	1	2	0.24	0.48		0.48	4.04	1.939	1.939	0.4%	4
MACA			4								4	0			0	1	4	0.24	0.96		0.96	1	0.96	0.96	0.2%	4
PHST				T							T														T	4
SPAM									2		2	0			0	1	2	0.18	0.36		0.36	2.68	0.965	0.965	0.2%	3
EPNE	T			2							2	0			0	1	2	0.38	0.76		0.76	2.12	1.611	1.611	0.3%	2
LYAN		140				15					155	15	10		10	0.667	103.3	0.2	20.67		20.67	4.46	92.17	92.17	16.7%	2
GRSP		58.5	52			15.6					126.1	15.6	29		29	1.859	234.4	0.13	30.47		30.47	2.86	87.16	87.16	15.8%	2
ARSP					11		2.6				13.6	0			0	1	13.6	0.3	4.08		4.08	1.88	7.67	7.67	1.4%	3
CACTUS		93	22								115	0			0	1	115	0.21	24.15		24.15	4.38	105.8	105.8	19.1%	3
Yield (grams)											Date	06/08/1999				Tot.								552.8	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Loamy Upland | **Range Site:** 029XY016NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1710 | **Aspect:** 285 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 2-3

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 16B | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** V.WINKEL;K.BLOMQUIST;J.GELLER

Denotes clipped plots		X	X								A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	3	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	7	T	10.5				T	2		8	27.5	10.5		23.5	23.5	2.238	61.55	0.44	27.08		27.08	1.79	48.47	48.47	8.1%	4
HIJA		6.5					6	17	23		52.5	6.5	7		7	1.077	56.54	0.38	21.48		21.48	2.46	52.85	52.85	8.8%	4
DEPI	T		T								T														T	5
SPAM	2	1	2	4	1	T	T		T	5	15	3	1	2	3	1	15	0.26	3.9		3.9	1	3.9	3.9	0.6%	5
MACA	T		T			T	20	7	12	3	42	0			0	1	42	0.24	10.08		10.08	1	10.08	10.08	1.7%	4
ARABIS		6				2	4				12	6	6		6	1	12	0.43	5.16		5.16	1.57	8.101	8.101	1.3%	5
CHST							T				T														T	4
CHVI	T										T														T	2
GRSP	194	25.8	86			86	185				576.2	111.8	20	90	110	0.984	566.9	0.13	73.7		73.7	2.86	210.8	210.8	35.0%	2
ARSP	12	7.2	7.2	33.6	T	30	T		2	24	116	14.4	6	7	13	0.903	104.7	0.3	31.42		31.42	1.88	59.06	59.06	9.8%	3
KRLA	19.5	39	19.5	46.8		26	20.8		28.6	6.5	206.7	58.5	24	32	56	0.957	197.9	0.39	77.17		77.17	2.7	208.4	208.4	34.6%	2
Yield (grams)											Date	06/06/1999				Tot.								601.6	100.0%	

C-14

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: Loamy Upland | **Range Site:** 029XY016NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1646 | **Aspect:** 275 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 2-3

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 16C | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** V.WINKEL;K.BLOMQUIST;J.GELLER

Denotes clipped plots				X	X						A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	4	5	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA		40		30	35			7.5		55	167.5	65	71	60	131	2.015	337.6	0.38	128.3		128.3	2.46	315.6	315.6	61.2%	4
SIHY				8.75	2					T	10.75	10.75	9	3	12	1.116	12	0.49	5.88		5.88	1	5.88	5.88	1.1%	5
BRTE										T	T														T	5
STCO										T	T														T	3
SPAM				36						10	46	36	35		35	0.972	44.72	0.2	8.944		8.944	1.18	10.55	10.55	2.0%	4
ASPU		5								T	5	0			0	1	5	0.26	1.3		1.3	1	1.3	1.3	0.3%	5
CRYPTANTHA		T		T				T		T	T														T	5
LEPIDIUM		T						T			T														T	4
CHST					7		T	T			7	7		7	7	1	7	0.32	2.24		2.24	1.3	2.912	2.912	0.6%	4
HACKELIA					T						T														T	4
ERNI								T		T	T														T	4
SEMU										2.5	2.5	0			0	1	2.5	0.24	0.6		0.6	1	0.6	0.6	0.1%	4
MENTZELIA		T								T	T														T	
HAGL			T	T		T	T	T	T		T														T	
PLANTAGO				T																						
ATCO		27			32		80	T			139	32		28	28	0.875	121.6	0.18	21.89		21.89	7.14	156.3	156.3	30.3%	3
ARSP				4.2	28		T	18			50.2	32.2	6	27	33	1.025	51.45	0.44	22.64		22.64	1	22.64	22.64	4.4%	5
EPNE										T	T														T	2
Yield (grams)											Date	06/04/1999				Tot.								515.8	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SILTY | **Range Site:** 029XY020NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1551 | **Aspect:** 270 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 1-2

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 20B | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** V.WINKEL;S.PETERSEN;J.GELLER

Denotes clipped plots						X				X	A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	6	10	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ERPU	1.5					4.9	5.25			4.5	16.15	9.4	6.8	6.5	13.3	1.415	22.85	0.44	10.05		10.05	1.92	19.3	19.3	4.9%	4
ACHY	T					3					3	3	3		3	1	3	0.44	1.32		1.32	1.79	2.363	2.363	0.6%	4
ASLE	2				2		4			41.5	49.5	41.5		41.5	41.5	1	49.5	0.2	9.9		9.9	1.18	11.68	11.68	3.0%	4
ARSP	T	5.25	31.5	31.5	5.6	4.2	8.75	2.45	14	10.5	113.8	14.7	4	7	11	0.748	85.12	0.29	24.68		24.68	1.58	39	39	9.9%	4
KRLA		38.8	62	6.2	58.1	93				15.5	273.6	108.5	96	9	105	0.968	264.7	0.39	103.3		103.3	2.7	278.8	278.8	71.1%	2
ATCO								32			32	0			0	1	32	0.18	5.76		5.76	7.14	41.13	41.13	10.5%	3
Yield (grams)											Date	06/08/1999				Tot.								392.3	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SODIC HILL **Range Site:** 029XY022NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 5-8 **Elev.(m)** 1782 **Aspect:** 113 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 4-5

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 22A **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** M.HESSING;S.KOZUSKO;K.BLOMQUIST

Denotes clipped plots				X					X		A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	4	9	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA	14		4	43	56	10	35	2	25	17	206	68	30	35	65	0.956	196.9	0.38	74.83		74.83	2.46	184.1	184.1	34.4%	4
BRTE			8	3	5	9	T				25	3	1		1	0.333	8.333	0.49	4.083		4.083	1	4.083	4.083	0.8%	5
ACHY			2			1			22		25	22		32	32	1.455	36.36	0.44	16		16	1.79	28.64	28.64	5.3%	4
SIHY				3							3	3	3		3	1	3	0.43	1.29		1.29	1.79	2.309	2.309	0.4%	4
ASLE		133		15	282	1					431	15	15		15	1	431	0.26	112.1		112.1	1	112.1	112.1	20.9%	5
SPAM			28	T	3	T					31	0			0	1	31	0.2	6.2		6.2	1.18	7.316	7.316	1.4%	4
CRVI			T	24							24	24	24		24	1	24	0.21	5.04		5.04	1	5.04	5.04	0.9%	4
MACA							T			T	T														T	3
CHST							T				T														T	4
ARABIS									2		2	2		2	2	1	2	0.24	0.48		0.48	4.04	1.939	1.939	0.4%	4
SAVEB		24									24	0			0	1	24	0.2	4.8		4.8	4.46	21.41	21.41	4.0%	2
ARSP			2.5	1					39		42.5	40	1	42	43	1.075	45.69	0.29	13.25		13.25	1.58	20.93	20.93	3.9%	4
ATCO				48					17	17	82	65	62	17	79	1.215	99.66	0.18	17.94		17.94	7.14	128.1	128.1	23.9%	3
KOAMV				2		8		1	13		24	15		13	13	0.867	20.8	0.36	7.488		7.488	2.44	18.27	18.27	3.4%	3
CHVI									T	1	1	0			0	1	1	0.32	0.32		0.32	3.9	1.248	1.248	0.2%	2
Yield (grams)											Date	06/07/1999				Tot.								535.4	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	COARSE SILTY										**Range Site:**	029XY042NV				**Location:**	NWHR		**S:**	NA	**T:**	NA	**R:**	NA					
Precipitation:	5-8	**Elev.(m)**	1657		**Aspect:**	265					**Use History:**	Unknown (Light, Medium, Heavy)				**Season of Use:**	All year						**Slope:**	0-1					
Animals:	horses,antelope,rabbits (kind)				**Last Burn:**	NA (Date)					**Ecological Status:**	NA				**Plot Size/Shp:**	9.6 ft				**Brush Control:**	NA (Date)							
Growing season:	Good (good, normal, poor)			**SWA Number:**	42C						**Canopy:**	0% (% Tree shade)				**SCD:**	NA	**Recorders:**	M.MAIN;J.NORMAN;S.KOZUSKO										
Denotes clipped plots						X				X	A	B	C		D	E	F	G	H	I	J	K	L	M	N				
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights																
Plants % density																	Tot.		Dry				Tot.						
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.						
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes			
Species/Pheno.	Weight in grams										All	Circ.	6	10	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)			
ACHY								2	T	7	9	7		7	7	1	9	0.41	3.69	1.11	4.096	2.31	9.462	9.462	1.2%	3			
MACA			7			11					18	11	11		11	1	18	0.22	3.96		3.96	1.62	6.415	6.415	0.8%	3			
SAIB						T			T		T														T	1			
KRLA	78	91	130	91	58.5	78	45.5	78	117	52	819	130	65	39	104	0.8	655.2	0.39	255.5	1.11	283.6	2.7	765.8	765.8	97.3%	2			
CACTUS						4					4	4	4		4	1	4	0.2	0.8		0.8	6.5	5.2	5.2	0.66%	1			
Yield (grams)											Date	06/06/1999				Tot.								786.9	100.0%				

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TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: COARSE SILTY | **Range Site:** 029XY042NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1612 | **Aspect:** 112 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 0-1

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 42D | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** M.MAIN;J.NORMAN;S.KOZUSKO

Denotes clipped plots	X				X						A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	5	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	1				2						3	3	1	2	3	1	3	0.41	1.23	1.43	1.759	2.31	4.063	4.063	0.6%	3
BRTE			T								T														T	4
SPAM	3	1	1	2	1	3		2	1	4	18	4	3	1.5	4.5	1.125	20.25	0.18	3.645		3.645	2.68	9.769	9.769	1.4%	3
SAIB	1	T	T	T			1	T	T	T	2	1	1		1	1	2	0.14	0.28		0.28	88.33	24.73	24.73	3.5%	1
ERMA	T										T														T	1
CRYPTANTHA	1				T						1	1	1		1	1	1	0.23	0.23		0.23	2.31	0.531	0.531	0.1%	2
KRLA	38	85	65	60	90	60	65	80	35	50	628	128	60	96	156	1.219	765.4	0.36	275.5		275.5	2.44	672.3	672.3	94.5%	3
Yield (grams)											Date	06/06/1999				Tot.								711.4	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SANDY LOAM | **Range Site:** 029XY046NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1777 | **Aspect:** 151 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 5

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 46A | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** S.KOZUSKO;K.BLOMQUIST;M.HESSING

Denotes clipped plots	X									X	A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	10	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	11	17	T		13			15		16	72	27	16	42	58	2.148	154.7	0.44	68.05		68.05	1.79	121.8	121.8	7.3%	4
HIJA	25	10	40	7	36	17	33	26	5	22	221	47	18	32	50	1.064	235.1	0.38	89.34		89.34	2.46	219.8	219.8	13.1%	4
SPCR	4.5										4.5	4.5	5		5	1.111	5	0.39	1.95		1.95	3.27	6.377	6.377	0.4%	2
BRTE	5	3	6	22	7	10	8	19	15	8	103	13	23	62	85	6.538	673.5	0.49	330		330	1	330	330	19.6%	5
SIHY		1									1	0			0	1	1	0.49	0.49		0.49	1	0.49	0.49	0.0%	5
STCO										29	29	29		29	29	1	29	0.51	14.79		14.79	1	14.79	14.79	0.9%	5
SPAM	3						T		5		8	3	3		3	1	8	0.2	1.6		1.6	1.18	1.888	1.888	0.1%	4
MACA	12										12	12	12		12	1	12	0.24	2.88		2.88	1	2.88	2.88	0.2%	4
SAIB		T									T														T	1
CHVI		64									64	0			0	1	64	0.32	20.48		20.48	3.9	79.87	79.87	4.8%	2
KRLA			8							11.5	19.5	11.5		14	14	1.217	23.74	0.39	9.258		9.258	2.7	25	25	1.5%	2
ATCA				162					520		682	0			0	1	682	0.18	122.8		122.8	7.14	876.5	876.5	52.2%	3
Yield (grams)											Date	06/07/1999				Tot.								1679	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SANDY LOAM | **Range Site:** 029XY046NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1701 | **Aspect:** 117 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 1

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 46B | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** M.MAIN;J.NORMAN;S.KOZUSKO

Denotes clipped plots					X			X			A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	5	8	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY		55		1	58	T	14	12			140	70	60	13	73	1.043	146	0.44	64.24		64.24	1.79	115	115	17.3%	4
HIJA	23										23	0			0	1	23	0.38	8.74		8.74	2.46	21.5	21.5	3.2%	4
ASLE	60		10		12						82	12	18		18	1.5	123	0.26	31.98		31.98	1	31.98	31.98	4.8%	5
SPAM	1	T					1		T		2	0			0	1	2	0.2	0.4		0.4	1.18	0.472	0.472	0.1%	4
ERMA		T							T		T														T	1
ARABIS					10						10	10	9		9	0.9	9	0.43	3.87		3.87	1.57	6.076	6.076	0.9%	5
ATCA					180		20				200	180	198		198	1.1	220	0.22	48.4		48.4	2.63	127.3	127.3	19.2%	4
KRLA			90	70	25		45	30	25	45	330	55	18	34	52	0.945	312	0.36	112.3		112.3	2.44	274.1	274.1	41.3%	3
ARSP					64			80			144	144	66	70	136	0.944	136	0.44	59.84		59.84	1	59.84	59.84	9.0%	5
GRSP								160			160	160		180	180	1.125	180	0.14	25.2		25.2	1.11	27.97	27.97	4.2%	3
Yield (grams)											Date	06/06/1999				Tot.								664.2	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	SANDY LOAM	**Range Site:**	029XY046NV	**Location:**	NWHR	**S:** NA	**T:** NA	**R:** NA	
Precipitation:	5-8	**Elev.(m)**	1599	**Aspect:**	106	**Use History:**	Unknown (Light, Medium, Heavy)	**Season of Use:**	All year
Slope:	0-1	**Animals:**	horses,antelope,rabbits (kind)	**Last Burn:**	NA (Date)	**Ecological Status:**	NA	**Plot Size/Shp:**	9.6 ft
Brush Control:	NA (Date)	**Growing season:**	Good (good, normal, poor)	**SWA Number:**	46D	**Canopy:**	0% (% Tree shade)	**SCD:**	NA
Recorders:	V.WINKEL;K.BLOMQUIST;J.GELLER								

Denotes clipped plots	X					X					A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	6	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	1										1	1			0	1	1	0.39	0.39		0.39	3.27	1.275	1.275	0.1%	2
HAGL	T		T	T			T		T	T	T														T	1
SPAM	T	T		63	270	54	T	T		T	387	54		100	100	1.852	716.7	0.2	143.3		143.3	1.18	169.1	169.1	9.6%	4
SAIB	21	T	7			T	17.5	T	T	21	66.5	21	12	11	23	1.095	72.83	0.14	10.2		10.2	88.33	900.7	900.7	51.3%	1
ATCA	108		T		3	108	40.5	189		6.75	455.3	216	89	103	192	0.889	404.7	0.18	72.84		72.84	7.14	520.1	520.1	29.6%	3
KRLA	38			4.75		47.5	9.5			95	194.8	85.5	36	46	82	0.959	186.8	0.36	67.24		67.24	2.44	164.1	164.1	9.3%	3
Yield (grams)											Date	06/04/1999				Tot.								1755	100.0%	

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TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SANDY LOAM		**Range Site:** 029XY046NV		**Location:** NWHR	**S:** NA	**T:** NA	**R:** NA
Precipitation: 5-8	**Elev.(m)** 1602	**Aspect:** 69	**Use History:** Unknown (Light, Medium, Heavy)	**Season of Use:** All year		**Slope:** 0-1	
Animals: horses,antelope,rabbits (kind)		**Last Burn:** NA (Date)	**Ecological Status:** NA	**Plot Size/Shp:** 9.6 ft		**Brush Control:** NA (Date)	
Growing season: Good (good, normal, poor)		**SWA Number:** 46E	**Canopy:** 0% (% Tree shade)	**SCD:** NA	**Recorders:** M.MAIN;J.NORMAN;S.KOZUSKO		

Denotes clipped plots				X			X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	4	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY		68									68	0			0	1	68	0.44	29.92		29.92	1.79	53.56	53.56	8.5%	4
SAIB	T							1			1	0			0	1	1	0.14	0.14		0.14	88.33	12.37	12.37	2.0%	1
ERMA	T				T						T														T	1
SPAM	T		4	2	T						6	2	2.5		2.5	1.25	7.5	0.18	1.35		1.35	2.68	3.618	3.618	0.6%	3
ASLE						T					T														T	5
MACA				5		10	T		T	T	15	5	10		10	2	30	0.22	6.6		6.6	1.62	10.69	10.69	1.7%	3
CRYPTANTHA						T			T		T														T	4
ATCA	110			110			120	150	100		590	230	138	130	268	1.165	687.5	0.22	151.2		151.2	2.63	397.8	397.8	62.8%	4
KRLA	25			18		45	35		12	68	203	53	16	28	44	0.83	168.5	0.36	60.67		60.67	2.44	148	148	23.4%	3
ARSP				10		12					22	10	6		6	0.6	13.2	0.44	5.808		5.808	1	5.808	5.808	0.9%	5
GUSA										1	1	0			0	1	1	0.32	0.32		0.32	3.9	1.248	1.248	0.2%	2
Yield (grams)											Date	06/04/1999				Tot.								633.1	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SANDY LOAM | **Range Site:** 029XY046NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 5-8 | **Elev.(m)** 1669 | **Aspect:** 281 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 0-1

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 46F | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** K.BLOMQUIST;V.WINKEL;J.GELLER

Denotes clipped plots	X			X							A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	1	4	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
ACHY	30	T	T	T	T		T				30	30	30		30	1	30	0.44	13.2		13.2	1.79	23.63	23.63	9.1%	4
HIJA			5	26							31	26		33	33	1.269	39.35	0.38	14.95		14.95	2.46	36.78	36.78	14.1%	4
MACA		T					1.5			T	1.5	0			0	1	1.5	0.24	0.36		0.36	1	0.36	0.36	0.1%	4
CYGL								T	T		T														T	1
CHVI	1	82.8	5.75	3	2	2	2	1	51.8	T	151.3	4	1	2	3	0.75	113.5	0.32	36.31		36.31	3.9	141.6	141.6	54.3%	2
KRLA	43.8	T				10					53.75	43.75	36		36	0.823	44.23	0.39	17.25		17.25	2.7	46.57	46.57	17.9%	2
TEGL		8									8	0			0	1	8	0.24	1.92		1.92	6.17	11.85	11.85	4.5%	1
Yield (grams)											Date	06/06/1999				Tot.								260.8	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: SANDY LOAM | **Range Site:** 029XY049NV | **Location:** NWHR | **S:** NA | **T:** NA | **R:** NA

Precipitation: 8-12 | **Elev.(m)** 1823 | **Aspect:** 191 | **Use History:** Unknown (Light, Medium, Heavy) | **Season of Use:** All year | **Slope:** 2-3

Animals: horses,antelope,rabbits (kind) | **Last Burn:** NA (Date) | **Ecological Status:** NA | **Plot Size/Shp:** 9.6 ft | **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) | **SWA Number:** 49A | **Canopy:** 0% (% Tree shade) | **SCD:** NA | **Recorders:** S.PETERSEN;V.WINKEL;J.GELLER

Denotes clipped plots		X	X								A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	3	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
																										1
SIHY		3	1				4		1	0.5	9.5	4	3	1	4	1	9.5	0.43	4.085		4.085	1.79	7.312	7.312	1.2%	4
ACHY	T	1	1.5	2.5	4	1.75		1	3	1.5	16.25	2.5	1	1.75	2.75	1.1	17.88	0.41	7.329	1.11	8.135	2.31	18.79	18.79	3.0%	3
MACA			T								T														T	1
ERIGERON				T							T														T	1
CHVI	9	9	10.5	1.25	5.25	10.5		11.3	7.5	9	73.25	19.5	10.5	12	22.5	1.154	84.52	0.32	27.05		27.05	3.9	105.5	105.5	16.8%	2
ARTRW	192	72	96	8	96		88				552	168	52	136	188	1.119	617.7	0.49	302.7		302.7	1.51	457	457	72.8%	4
GRSP	8	14			22						44	14	24.5		24.5	1.75	77	0.13	10.01		10.01	2.86	28.63	28.63	4.6%	2
ATCA		6									6	6	6.5		6.5	1.083	6.5	0.16	1.04		1.04	10	10.4	10.4	1.7%	2
Yield (grams)											Date	06/07/1999				Tot.								627.7	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: GRAVELLY LOAM **Range Site:** 029XY087NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 5-8 **Elev.(m)** 1585 **Aspect:** 273 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 2

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 87A **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** M.HESSING;S.KOZUSKO;K.BLOMQUIST

Denotes clipped plots		X					X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA		28	5					15	24		72	28	23		23	0.821	59.14	0.45	26.61		26.61	1.32	35.13	35.13	10.9%	5
ACHY		T		3	7	4	3	T			17	3		3	3	1	17	0.48	8.16		8.16	1	8.16	8.16	2.5%	5
ASLE									T		T														T	1
CHST	9	9	15	15	0.3	3.75	3.75	6	7.5		69.3	12.75	10	5	15	1.176	81.53	0.32	26.09		26.09	1.3	33.92	33.92	10.5%	4
UNK FORB1	7										7	0			0	1	7	0.22	1.54		1.54	1.8	2.772	2.772	0.9%	3
SAIB	T										T														T	1
MACA		T	10	6							16	0			0	1	16	0.22	3.52		3.52	1.62	5.702	5.702	1.8%	3
EUAL			4.5	2.2	11	9.5	1.5				28.7	1.5		3	3	2	57.4	0.14	8.036		8.036	1	8.036	8.036	2.5%	4
UNK FORB2						T		T			T														T	1
SAVEB		153					15.3			128	295.8	168.3	126	18	144	0.856	253.1	0.2	50.62		50.62	4.46	225.8	225.8	70.1%	2
ATCO			2								2	0			0	1	2	0.18	0.36		0.36	7.14	2.57	2.57	0.8%	3
CHVI		T									T														T	2
Yield (grams)											Date	06/08/1999				Tot.								322	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: COARSE GRAVELLY LOAM **Range Site:** 029XY090NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 6-10 **Elev.(m)** 1824 **Aspect:** 220 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 1-2

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 90A **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** M.MAIN;J.NORMAN;V.WINKEL;KWB

Denotes clipped plots				X			X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	4	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
SIHY	3	1	1	1		2	2		2		12	3	1	1.5	2.5	0.833	10	0.43	4.3		4.3	1.79	7.697	7.697	1.8%	4
HIJA	2	10	1	6	20	1	3		22	1	66	9	8	3	11	1.222	80.67	0.32	25.81		25.81	2.68	69.18	69.18	16.5%	3
BRTE						T				26	26	0			0	1	26	0.49	12.74		12.74	1	12.74	12.74	3.0%	5
MACA				T			T				T														T	3
ARABIS						T					T														T	1
HAGL										T	T														T	1
ARSP		T		10			9	8			27	19	10	14	24	1.263	34.11	0.44	15.01		15.01	1	15.01	15.01	3.6%	5
CHVI	30	30	35	16		20	23	T	35	45	234	39	18	24	42	1.077	252	0.32	80.64		80.64	3.9	314.5	314.5	75.0%	2
Yield (grams)											Date	06/03/1999				Tot.								419.1	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: COARSE GRAVELLY LOAM **Range Site:** 029XY090NV **Location:** NWHR **S:** NA **T:** NA **R:** NA

Precipitation: 6-10 **Elev.(m)** 1815 **Aspect:** 131 **Use History:** Unknown (Light, Medium, Heavy) **Season of Use:** All year **Slope:** 3

Animals: horses,antelope,rabbits (kind) **Last Burn:** NA (Date) **Ecological Status:** NA **Plot Size/Shp:** 9.6 ft **Brush Control:** NA (Date)

Growing season: Good (good, normal, poor) **SWA Number:** 90B **Canopy:** 0% (% Tree shade) **SCD:** NA **Recorders:** M.HESSING;S.KOZUSKO;K.BLOMQUIST

Denotes clipped plots							X		X		A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density Stone % surface Litter % surface Species/Pheno.	Weight in grams										Tot. All	Tot. Circ.	plot # 7	9	Tot. Green Wt.	Corr. Fact.	Tot. Corr. Green Wt.	Dry Wt. Fact.	Dry Wt. All Plots	Util. %	Sub-Total	Pheno Factor	Tot. Wt. All Plots	Lbs/ Acre	% Comp	Notes (Phen. Factor)
ACHY	45						23				68	23	24		24	1.043	70.96	0.41	29.09		29.09	2.31	67.2	67.2	10.5%	3
SIHY	33		77		30						140	0			0	1	140	0.49	68.6		68.6	1	68.6	68.6	10.8%	5
BRTE	3	5	1	6	6	4	6	10	1	6	48	7	7	3	10	1.429	68.57	0.49	33.6		33.6	1	33.6	33.6	5.3%	5
HIJA				35	14	3	2			31	85	2	2		2	1	85	0.32	27.2		27.2	2.68	72.9	72.9	11.4%	3
ERPU					27	9	9	1	3		49	12	7	1.5	8.5	0.708	34.71	0.44	15.27		15.27	1.92	29.32	29.32	4.6%	4
SPCR							3		4		7	7	2	5	7	1	7	0.41	2.87		2.87	2.31	6.63	6.63	1.0%	3
ASLE					T	T			5		5	5		5	5	1	5	0.2	1		1	1.18	1.18	1.18	0.2%	4
SPAM		38		T	4	6	100	230			378	100	111		111	1.11	419.6	0.2	83.92		83.92	1.18	99.02	99.02	15.5%	4
MACA						4			5		9	5		5	5	1	9	0.22	1.98		1.98	1.62	3.208	3.208	0.5%	3
ATCO		35	400	66	50		50	100	150		851	200	30	55	85	0.425	361.7	0.22	79.57		79.57	2.63	209.3	209.3	32.8%	4
ARSP		15	T	38		4	19	6	33	10	125	52	22	20	42	0.808	101	0.29	29.28		29.28	1.58	46.26	46.26	7.3%	4
EPNE							T				T														T	1
Yield (grams)											Date	06/07/1999				Tot.								637.2	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil:	COARSE GRAVELLY LOAM										**Range Site:**	029XY090NV			**Location:**	NWHR	**S:**	NA	**T:**	NA	**R:**	NA				
Precipitation:	6-10	**Elev.(m)**	1713	**Aspect:**	271						**Use History:**	Unknown (Light, Medium, Heavy)			**Season of Use:**	All year			**Slope:**	3						
Animals:	horses,antelope,rabbits (kind)			**Last Burn:**	NA (Date)						**Ecological Status:**	NA			**Plot Size/Shp:**	9.6 ft			**Brush Control:**	NA (Date)						
Growing season:	Good (good, normal, poor)			**SWA Number:**	90C						**Canopy:**	0% (% Tree shade)			**SCD:**	NA	**Recorders:**	V.WINKEL;S.PETERSEN;J.GELLER							

Denotes clipped plots		X					X				A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density																	Tot.		Dry				Tot.			
Stone % surface															Tot.		Corr.	Dry	Wt.				Wt.			
Litter % surface											Tot.	Tot.	plot #		Green	Corr.	Green	Wt.	All	Util.	Sub-	Pheno	All	Lbs/	%	Notes
Species/Pheno.	Weight in grams										All	Circ.	2	7	Wt.	Fact.	Wt.	Fact.	Plots	%	Total	Factor	Plots	Acre	Comp	(Phen. Factor)
HIJA	29.8	7	21	28	26.3	42	10.5	21	24.5	52.5	262.5	17.5	12	10.5	22.5	1.286	337.5	0.38	128.3		128.3	2.46	315.5	315.5	31.3%	4
ACHY		34	8.5		25.5		21.3				89.25	55.25	42	29	71	1.285	114.7	0.44	50.46		50.46	1.79	90.33	90.33	9.0%	4
SIHY		3									3	3	3		3	1	3	0.43	1.29		1.29	1.79	2.309	2.309	0.2%	4
BRTE	1	T		4	T	3		11	14	2	35	0			0	1	35	0.39	13.65		13.65	1.13	15.42	15.42	1.5%	4
MACA	26	24	3	7	8	17	2	5	5	6	103	26	24	2	26	1	103	0.22	22.66		22.66	1.62	36.71	36.71	3.6%	3
ARABIS		3									3	3	3		3	1	3	0.43	1.29		1.29	1.57	2.025	2.025	0.2%	5
CRYPTANTHA				T							T														T	4
ATCO		116						160			275.5	116	169		169	1.457	401.4	0.18	72.25		72.25	7.14	515.8	515.8	51.1%	3
ARSP		18.8	11.3		12.5		25				67.5	43.75	22	22	44	1.006	67.89	0.29	19.69		19.69	1.58	31.11	31.11	3.1%	4
Yield (grams)											Date	06/08/1999				Tot.								1009	100.0%	

TOTAL ANNUAL YIELD AND COMPOSITION RECORD

Soil: COARSE GRAVELLY LOAM		**Range Site:** 029XY090NV		**Location:** NWHR	**S:** NA	**T:** NA	**R:** NA
Precipitation: 6-10	**Elev.(m)** 1687	**Aspect:** 120	**Use History:** Unknown (Light, Medium, Heavy)	**Season of Use:** All year		**Slope:** 3	
Animals: horses,antelope,rabbits (kind)		**Last Burn:** NA (Date)	**Ecological Status:** NA	**Plot Size/Shp:** 9.6 ft		**Brush Control:** NA (Date)	
Growing season: Good (good, normal, poor)		**SWA Number:** 90D	**Canopy:** 0% (% Tree shade)	**SCD:** NA	**Recorders:** M.MAIN;J.NORMAN;S.KOZUSKO		

Denotes clipped plots								X	X		A	B	C		D	E	F	G	H	I	J	K	L	M	N	
Plot number	1	2	3	4	5	6	7	8	9	10	Estimated		Clipped weights													
Plants % density Stone % surface Litter % surface Species/Pheno.	Weight in grams										Tot. All	Tot. Circ.	plot # 8	9	Tot. Green Wt.	Corr. Fact.	Tot. Corr. Green Wt.	Dry Wt. Fact.	Dry Wt. All Plots	Util. %	Sub-Total	Pheno Factor	Tot. Wt. All Plots	Lbs/ Acre	% Comp	Notes (Phen. Factor)
HIJA	3	4		30	55	75	30	8	56	22	283	64	8	45	53	0.828	234.4	0.38	89.06		89.06	2.46	219.1	219.1	13.6%	4
ACHY						3		T			3	0			0	1	3	0.44	1.32		1.32	1.79	2.363	2.363	0.1%	4
SPAM	17	T	50	T			17	2	1		87	3	2	1	3	1	87	0.2	17.4		17.4	1.18	20.53	20.53	1.3%	4
SAIB	T										T														T	1
ASLE		15					6	7		4	32	7	7		7	1	32	0.18	5.76		5.76	2.68	15.44	15.44	1.0%	3
HAGL		5	T	T							5	0			0	1	5	0.14	0.7		0.7	88.33	61.83	61.83	3.8%	1
ERMA			T	T							T														T	1
ATCO	200	45	275					270	22	38	850	292	244	15	259	0.887	753.9	0.18	135.7		135.7	7.14	969	969	59.9%	3
KRLA	20			75			50	120	15		280	135	106	10	116	0.859	240.6	0.36	86.61		86.61	2.44	211.3	211.3	13.1%	3
ARSP						T		1	48		49	49	1	24	25	0.51	25	0.44	11		11	1	11	11	0.7%	5
CHVI								T	T	85	85	0			0	1	85	0.32	27.2		27.2	3.9	106.1	106.1	6.6%	2
Yield (grams)											Date	06/06/1999				Tot.								1617	100.0%	

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APPENDIX D

RANGE INVENTORY WORKSHEETS

These worksheets were used to determine the condition of the vegetation at the sample locations.

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Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
Final Report

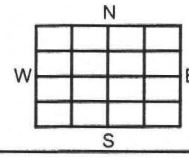
NV-ECS-1
4/88 (Rev)

U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 06A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist K. Blomquist, M. Hessing, S.Kozusko Date: June 7, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants						
		ACHY		6.4	0.6	0.6
		SIHY		62.9	5.6	3.0
		HIJA		36.3	3.2	3.0
% Weight 9.4						
% Cover						
				105.6	9.4	6.6
Forbs		ASLE		1.7	0.1	
		ERIGERON				
% Weight 0.1						
% Cover						
				1.7	0.1	0.0
Trees & Shrubs		ARTRW		978.7	87.4	35.0
		CHVI		32.5	2.9	3.0
		KOAMV				
		ATCO		1.3	0.1	
% Weight 90.4						
% Cover						
				1012.5	90.4	38.0
		Totals		1119.7	100.0	44.6

(8) Present Utilization % of N/A (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating: Mid Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -1	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders +1	Declining
	Soil Erosion +1	
	Total 0	(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	All Year
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1907	Slope 3-4	Azimuth (°) 68
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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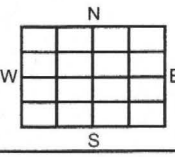
Range Inventory Worksheet

Site Name 06B MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist V. Winkel, M. Main Date: June 3, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		19.7	3.3	3.3
		HIJA		1.4	0.2	0.2
		SIHY		9.9	1.7	1.7
		STCO		13.5	2.3	2.3
% Weight 7.5						
% Cover						
				44.5	7.5	7.5
Forbs		MACA				0.0
% Weight 0.0						
% Cover						
				0.0	0.0	0.0
Trees & Shrubs		ARTRW		521.8	87.8	35.0
		GRSP		4.1	0.7	0.7
		CHVI		19.2	3.2	3.2
		ATCA		4.8	0.8	0.8
% Weight 92.5						
% Cover						
				549.9	92.5	39.7
		Totals		594.4	100.0	47.2

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	(100-76)	Excellent (PNC)
75-51	(1-2)	75-51	Good (Late Seral)
(50-26)	3-4	50-26	(Fair (Mid Seral))
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	+1	Improving
Age Class Distribution Decreasers	+1	
Increaser/ Invaders	+1	Declining
Soil Erosion	+1	
Total	+4	(Not Apparent)

Site History

Use History:	Moderate
Kind of Animal:	Wild horse
Season of Use:	YEAR LONG
Wildlife Species:	N/A
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1821	3	211

Major or Component Landform		fan Piedmont
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
Kind of Slope (Circle one)	Straight	Concave Convex
Microrelief:		N/A
Depth of Watertable:		N/A
Drainage Class:		N/A
Frequency of Flooding or Ponding:		N/A
Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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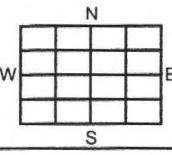
Soil Conservation Service

Range Inventory Worksheet

Site Name 06C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist J. Geller, V. Winkel, S. Petersen Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY		30.0	5.6	3
		HIJA		34.3	6.4	3
		ACHY		1.9	0.4	0.4
% Weight 12.4						
% Cover				66.2	12.4	6.4
Forbs		ASLE		T		
% Weight 0.0						
% Cover				0.0	0.0	0
Trees & Shrubs		CHVI		112.2	21.0	3
		ARTRW		355.9	66.6	35
		EPNE		T		
		KRLA		T		
% Weight 87.6						
% Cover				468.1	87.6	38
		Totals		534.3	100.0	44.4

(8) Present Utilization 0 % of ORHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)
Final Condition Rating			MID SERAL	

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 0	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders +1	Declining
	Soil Erosion +1	
	Total +1	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	all year
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m)	Slope	Azimuth (°)	
1772	6	276	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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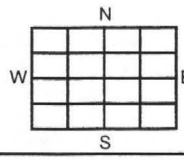
Soil Conservation Service

Range Inventory Worksheet

Site Name 06D
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist Main, Norman, S. Kozusko Date: June 4, 1999

MLRA 29 Write-up No. 06D



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY			1	1
		SIHY			1	1
		HIJA			7	3
		BRTE			T	
% Weight 9						
% Cover						
					9	5
Forbs		ASLE			2	2
		EROV			T	
		SPAM			T	
		MACA			T	
		Cryptantha			T	
% Weight 2						
% Cover						
					2	2
Trees & Shrubs		ARTRW			89	35
		KRLA			T	
		CHVI			T	
% Weight 89						
% Cover						
					89	35
		Totals		700	100	42
(8)		Present Utilization		% of	-	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID

Trend Indicators			Apparent Trend (Circle One)
	Plant Vigor Decreasers	+1	
	Age Class Distribution Decreasers	0	Improving
	Increaser/ Invaders	0	Declining
	Soil Erosion	+3	
	Total	+4	(Not Apparent)

Site History	
Use History:	Mod Heavy
Kind of Animal:	Horses
Season of Use:	Year long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1696	Slope 1-3	Azimuth (°) 45
	Major or Component Landform		Fan Peidment
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	(Concave) Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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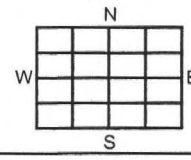
Soil Conservation Service

Range Inventory Worksheet

Site Name 06E
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M., Main, Norman, S. Kozusko Date: June 6, 1999

MLRA 29 Write-up No. 06E



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ORHY			4	4
		SIHY			2	2
		STCO			T	
		HIJA			3	3
% Weight 9						
					9	9
% Cover						
Forbs		ASLE			2	
		ASTRA			2	
		CASTI			1	
		BRASS2			T	
% Weight 5						
					5	
% Cover						
Trees & Shrubs		ARTRW			69	35
		GRSP			T	
		EPNE			4	4
		CHVI/GUSA			9	3
		ATCO			4	
% Weight 86						
					86	42
% Cover						
		Totals		750	100	102

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating: Late Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +2	
	Age Class Distribution Decreasers +1	Improving
	Increaser/ Invaders +1	Declining
	Soil Erosion +3	
	Total +7	Not Apparent

Site History	
	Use History: Light
	Kind of Animal: Horses
	Season of Use: yearlong
	Wildlife Species: Antelope, Rabbits, Deer
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1909	Slope 4-6	Azimuth (°) 134
	Major or Component Landform		Fan
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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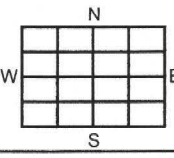
Soil Conservation Service

Range Inventory Worksheet

Site Name 08A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist K. Blomquist, S. Kozusko Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		HIJA		11.78	1.4	1.4
		ACHY		T		
		SIHY		51.44	5.9	3
% Weight 7.259807						
% Cover				63.22	7.3	4.4
Forbs		ASLE		10.38	1.2	
% Weight 1.191977						
% Cover				10.38	1.2	0
Trees & Shrubs		ARNO		794	91.2	35
		EPNE		3.222	0.4	0.4
% Weight 91.54822						
% Cover				797.22	91.5	35.4
		Totals		870.82	100.0	39.8

(8) Present Utilization 0 % of ORHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)
Final Condition Rating			Mid Seral	

Trend Indicators			Apparent Trend (Circle One)
	Plant Vigor Decreasers	0	
	Age Class Distribution Decreasers	0	Improving
	Increaser/ Invaders	-1	Declining
	Soil Erosion	2	
	Total	1	(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	YEAR LONG
Wildlife Species:	Horses, rabbit, antelope
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1950	Slope 4-5	Azimuth (°) 84
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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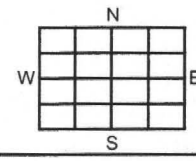
Soil Conservation Service

Range Inventory Worksheet

Site Name 08B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist J. Geller, S.Petersen, V.Winkel Date: June 7, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		HIJA		16.8	4.5	4.5
		SIHY		39.9	10.6	3.0
		ACHY		7.1	1.9	1.9
		BRTE		T		
% Weight 16.9						
% Cover						
				63.8	16.9	9.4
Forbs		SPAM		1.3	0.3	0.3
		Erigeron		0.3	0.1	0.1
		MACA		T		
% Weight 0.4						
% Cover						
				1.6	0.4	0.4
Trees & Shrubs		CHVI		T		
		ATCO		69.4	18.4	3.0
		ARNO		237.0	62.8	35.0
		KOAMV		5.7	1.5	
% Weight 82.7						
% Cover						
				312.1	82.7	38.0
		Totals		377.51	100.0	47.8

(8) Present Utilization SLIGHT % of ORHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating: Mid Seral

Trend Indicators		
	Plant Vigor Decreasers	-1
	Age Class Distribution Decreasers	0
	Increaser/ Invaders	+1
	Soil Erosion	+2
	Total	+2

Apparent Trend (Circle One)
Improving
Declining
(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	Year long
Wildlife Species:	Horeses, Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m)	Slope	Azimuth (°)
	1935	3-4	249
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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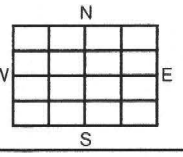
Soil Conservation Service

Range Inventory Worksheet

Site Name 08C MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist K. Blomquist, J.Norman, M.Main, V.Winkel Date: June 3, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY		35.0	5.2	3.0
		ACHY		3.8	0.6	0.6
		BRTE		T		
% Weight 5.8						
% Cover						
				38.8	5.8	3.6
Forbs		PHST		T		
% Weight 0.0						
% Cover						
				0.0	0.0	0.0
Trees & Shrubs		ARNO		618.9	92.5	35.0
		CHVI		10.0	1.5	1.5
		KOAMV		1.1	0.2	
% Weight 94.2						
% Cover						
				629.9	94.2	36.5
		Totals		668.8	100.0	40.1

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	(100-76)	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
(50-26)	3-4	50-26	(Fair (Mid Seral))
25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating MID SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	+1	
Age Class Distribution Decreasers	+1	Improving
Increaser/ Invaders	-1	Declining
Soil Erosion	+1	
Total	+2	(Not Apparent)

Site History

Use History:	moderate
Kind of Animal:	wild horse
Season of Use:	all year
Wildlife Species:	wild horse, antelope, rabbit
Burning History:	Unknown
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1894	2-3	240

Major or Component Landform: fan piedmont

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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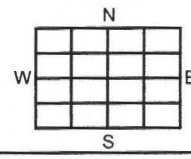
Range Inventory Worksheet

Site Name 08D
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist S. Kozusko, M.Hessing, K.Blomquist Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		6.4	0.9	1.5
		HIJA		7.0	0.9	0.9
		SIHY		T		
% Weight 1.8						
% Cover						
				13.4	1.8	2.4
Forbs		ASPU		6.5	0.9	
		UNK.FORB		T		
% Weight 0.9						
% Cover						
				6.5	0.9	0.0
Trees & Shrubs		ATCO		26.6	3.6	3.0
		ARNO		632.0	84.6	35.0
		CHVI		13.7	1.8	1.8
		EPNE		54.8	7.3	5.0
% Weight 97.3						
% Cover						
				727.1	97.3	44.8
		Totals		747.0	100.0	47.2
(8)		Present Utilization	0	% of	ORHY	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID SERAL

Trend Indicators			Apparent Trend (Circle One)
	Plant Vigor Decreasers	-1	
	Age Class Distribution Decreasers	1	Improving
	Increaser/ Invaders	-1	(Declining)
	Soil Erosion	0	
	Total	-1	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m)	Slope	Azimuth (°)
	1862	3	130
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
Final Report

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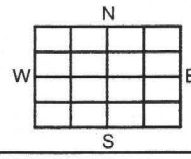
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 12B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist J. Geller, V, Winkel, S. Petersen Date: June 7, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		170.5	34.0	34.0
		HIJA		103.6	20.7	5.0
% Weight 54.7						
% Cover						
				274.1	54.7	39.0
Forbs		ASLE		5.8	1.2	
		SAIB		173.1	34.6	
		MACA		1.2	0.2	
		UNK.FORB		T		
% Weight 36.0						
% Cover						
				180.1	36.0	0.0
Trees & Shrubs		KRLA		37.9	7.6	7.6
		CHVI		8.7	1.7	1.7
% Weight 9.3						
% Cover						
				46.6	9.3	9.3
		Totals		500.8	100.0	48.3

(8) Present Utilization 0 % of ORHY, CELA, ATCA, STCO (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 0	
	Age Class Distribution Decreasers +1	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion +2	
	Total +2	Not Apparent

Site History	
	Use History: N/A
	Kind of Animal: N/A
	Season of Use: Year long
	Wildlife Species: Horses, antelope, rabbits
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1615	Slope 0-1	Azimuth (°) 227
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
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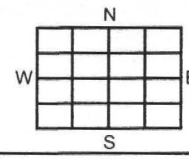
Soil Conservation Service

Range Inventory Worksheet

Site Name 12C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M. Hessing, K. Blomquist Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		210.9	27.5	27.5
		HIJA		0.9	0.1	0.1
		BRTE		T		
% Weight 27.6						
% Cover						
				211.8	27.6	27.6
Forbs		CRYPTANTHA		T		
		SAIB		197.9	25.8	
		STPA		4.1	0.5	
% Weight 26.3						
% Cover						
				202.0	26.3	0.0
Trees & Shrubs		ATCA		245.0	31.9	25.0
		TEGL		6.9	0.9	0.9
		PSFR		102.4	13.3	
% Weight 46.1						
% Cover						
				354.3	46.1	25.9
		Totals		768.2	100.0	53.5

(8) Present Utilization 0 % of ATCA, ORHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	(75-51)	1-2	75-51	(Good (Late Seral))
	50-26	(3-4)	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +2	
	Age Class Distribution Decreasers +1	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion +2	
	Total +4	(Not Apparent)

Site History	
	Use History: N/A
	Kind of Animal: N/A
	Season of Use: Year long
	Wildlife Species: Horses, antelope, rabbits
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m)	Slope	Azimuth (°)
	1587	2	239
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
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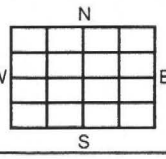
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 14A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M. Main, J. Norman, S. Kozusko Date: June 6, 1999

MLRA 29 Write-up No. 14a



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY			5	5
		SIHY			2	2
% Weight 7					7	7
% Cover						
Forbs		PHLOX2			T	
		BRASS2			1	
		CASTI			1	
		ASLE			T	
% Weight 2					2	
% Cover						
Trees & Shrubs		ARARN			75	45
		EPNE			3	3
		BUCKWHEAT			1	
		GUSA			12	
		ATCO			T	
% Weight 91					91	48
% Cover						
		Totals		425	100	110

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating: Late Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +1	
	Age Class Distribution Decreasers +1	Improving
	Increaser/ Invaders +1	Declining
	Soil Erosion +3	
	Total 6	Not Apparent

Site History	
	Use History: Light
	Kind of Animal: Horses
	Season of Use: year long
	Wildlife Species: Antelope, Rabbit, Deer
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1972	Slope 10	Azimuth (°) 46
	Major or Component Landform		Rolling Hills
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
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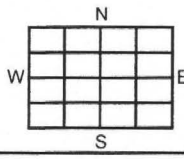
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 16A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist J. Geller, V. Winkel, S. Petersen Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		10.6	1.9	1.9
		SIHY		4.6	0.8	0.8
		HIJA		118.3	21.4	15.0
		SPCR		14.2	2.6	2.6
		ERPU		40.6	7.3	
		BRTE		66.3	12.0	
% Weight 46.0						
% Cover						
				254.6	46.0	20.3
Forbs		SPAM		1.0	0.2	0.2
		ANNUALS				0.6
		DEPI		1.9	0.4	
		MACA		1.0	0.2	
		PHST		T		
% Weight 0.7						
% Cover						
				3.9	0.7	0.8
Trees & Shrubs		EPNE		1.6	0.3	0.3
		LYAN		92.2	16.7	5.0
		GRSP		87.2	15.8	15.8
		ARSP		7.7	1.4	1.4
		CACTUS		105.8	19.1	
% Weight 53.3						
% Cover						
				294.4	53.3	22.5
		Totals		552.8	100.0	43.6

(8) Present Utilization 0 % of ORHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	(1-2)	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 0	
	Age Class Distribution Decreasers 0	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion +2	
	Total +1	(Not Apparent)

Site History	
	Use History: N/A
	Kind of Animal:
	Season of Use: Year long
	Wildlife Species: Horses, antelope, rabbits
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1739	Slope 4-5	Azimuth (°) 263
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
Final Report

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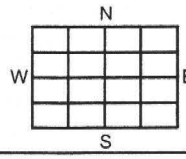
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 16B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist J. Geller, V. Winkel, K. Blomquist Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		48.5	8.1	8.1
		HIJA		52.9	8.8	8.8
% Weight 16.8						
% Cover				101.3	16.8	16.9
Forbs		SPAM		3.9	0.6	0.6
		ANNUALS				3.0
		DEPI		T		
		MACA		10.1	1.7	
		ARABIS		8.1	1.3	
		CHST		T		
% Weight 3.7						
% Cover				22.1	3.7	3.6
Trees & Shrubs		CHVI		T		
		GRSP		210.8	35.0	30.0
		ARSP		59.1	9.8	5.0
		KRLA		208.4	34.6	5.0
% Weight 79.5						
% Cover				478.3	79.5	40.0
		Totals		601.7	100.0	60.5

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	~~100-76~~	Excellent (PNC)
	75-51	~~1-2~~	~~75-51~~	~~Good (Late Seral)~~
	50-26	~~3-4~~	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +1	
	Age Class Distribution Decreasers +1	Improving
	Increaser/ Invaders 0	Declining
	Soil Erosion +2	
	Total +4	Not Apparent

Site History	
	Use History: N/A
	Kind of Animal: N/A
	Season of Use: Year long
	Wildlife Species: Horses, antelope, rabbits
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1710	Slope 2-3	Azimuth (°) 285
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
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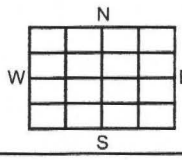
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 16C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist V. Winkel, J. Geller, K. Blomquist Date: June 4, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		HIJA		315.6	61.2	15.0
		SIHY		5.9	1.1	1.1
		BRTE		T		
		STCO		T		
% Weight 62.3						
% Cover						
				321.5	62.3	16.1
Forbs		SPAM		10.6	2.0	2.0
		ASPU		1.3	0.3	
		CRYPTANTHA		T		
		LEPIDIUM		T		
		CHST		2.9	0.6	0.6
		HACKELLIA		T		
% Weight 3.0		ERNI		T		
		SEMU		0.6	0.1	0.1
% Cover		MENTZELIA	T			
				15.4	3.0	2.7
Trees & Shrubs		ATCO		156.3	30.3	3.0
		ARSP		22.6	4.4	4.1
		EPNE		T		
% Weight 34.7						
% Cover						
				178.9	34.7	7.1
		Totals		515.8	100.0	25.9
(8)		Present Utilization		% of		(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating: Mid Seral

Trend Indicators		Apparent Trend (Circle One)
Plant Vigor Decreasers	-1	
Age Class Distribution Decreasers	-1	Improving
Increaser/ Invaders	-1	(Declining)
Soil Erosion	+1	
Total	-3	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1646	Slope 2-3	Azimuth (°) 275	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
Final Report

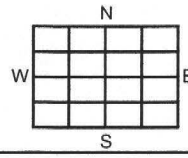
NV-ECS-1
4/88 (Rev)

U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 17A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist Main, Norman, Kozusko Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		HIJA			T	
% Weight 0						
% Cover						
Forbs		HAGL			89	
		SPAM			3	2
% Weight 92					92	2
% Cover						
Trees & Shrubs		ATCO			5	5
		ARSP			2	2
		KOAMV			1	
% Weight 8					8	7
% Cover						
		Totals		300	100	9

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	(25-0)	(>4)	25-0	(Poor (Early Seral))

Final Condition Rating: Poor early Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -2	
	Age Class Distribution Decreasers -2	Improving
	Increaser/ Invaders -2	(Declining)
	Soil Erosion +3	
	Total -2	Not Apparent

Site History	
Use History:	Heavy
Kind of Animal:	Horses
Season of Use:	year long
Wildlife Species:	antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1554	Slope 0-1	Azimuth (°) 227
	Major or Component Landform		Lake Plain
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes:

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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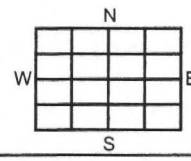
Range Inventory Worksheet

Site Name 17B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist Main, Norman, Kozusko Date: June 4, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ORHY			5	5
		BRTE			T	
		HIJA			2	2
		SPCR			T	
% Weight 7					7	7
% Cover						14
Forbs		MACA			1	1
		CHST			3	2
		SAKA			5	
		HAGL				
% Weight 9					9	3
% Cover						
Trees & Shrubs		ATCO			64	35
		ARSP			20	15
% Weight 84					84	50
% Cover						
		Totals		450	100	134
(8)		Present Utilization		% of		(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	(75-51)	(1-2)	75-51	(Good (Late Seral))
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating: Late Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +1	
	Age Class Distribution Decreasers 0	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion +3	
	Total +3	(Not Apparent)

Site History	
	Use History: N/A
	Kind of Animal: Horses
	Season of Use: Year long
	Wildlife Species: Antelope, rabbit, horse
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1598	Slope 0-1	Azimuth (°) 133
	Major or Component Landform		Fan piedment
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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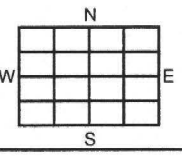
Range Inventory Worksheet

Site Name 17C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist MAIN,NORMAN,KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants						
% Weight 0%						
% Cover						
Forbs		HAGL			97	
		BRASS			T	
% Weight 97%					97	
% Cover						
Trees & Shrubs		ATCO			3	3
		KRLA			T	
% Weight 3%					3	3
% Cover						
		Totals		325	100	3
(8)		Present Utilization	0	% of	N/A	

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Early Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -2	
	Age Class Distribution Decreasers -2	Improving
	Increaser/ Invaders -2	Declining
	Soil Erosion +1	
	Total -5	Not Apparent

Site History	
Use History:	Heavy
Kind of Animal:	Horses, antelope, rabbits
Season of Use:	Year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1610	Slope 1-2	Azimuth (°) 301
	Major or Component Landform		Lake Plain
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
(Key Species)	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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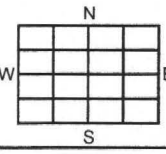
Soil Conservation Service

Range Inventory Worksheet

Site Name 20A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist MAIN, NORMAN, KOZUSKO Date: June 4, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants						
% Weight						
% Cover						
Forbs		HAGL			60	
		SAKA			T	
% Weight 60%					60.0	
% Cover						
Trees & Shrubs		KRLA			35	35
		ATCO			5	3
% Weight 40%					40	38
% Cover						
		Totals		400	100	38
(8)		Present Utilization		% of	N/A	

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Mid Seral

Trend Indicators		Apparent Trend (Circle One)
Plant Vigor Decreasers	-2	Improving
Age Class Distribution Decreasers	-2	
Increaser/ Invaders	-2	(Declining)
Soil Erosion	0	
Total	-6	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	HORSES
Season of Use:	Year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1595	Slope 0-1	Azimuth (°) flat	
Major or Component Landform		lake lpain	
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

(Key Species)

Notes:
Early seral because lack of desirable grass species and increase in undesirable species

Treatment Needs:
N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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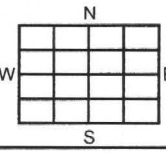
Soil Conservation Service

Range Inventory Worksheet

Site Name 20B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist GELLER, WINKEL, PETERSEN Date: June 8, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		2.4	0.6	0.6
		ERPU		19.3	4.9	2.0
% Weight 5.5						
% Cover				21.7	5.5	2.6
Forbs		ASLE		11.7	3.0	
% Weight 3.0						
% Cover				11.7	3.0	0.0
Trees & Shrubs		ARSP		39.0	9.9	8.0
		KRLA		278.8	71.1	70.0
		ATCO		41.1	10.5	3.0
% Weight 91.5						
% Cover				358.9	91.5	81.0
		Totals		392.2	100.0	83.6

(8) Present Utilization 0 % of ORHY,KRLA (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	(100-76)	0	(100-76)	Excellent (PNC)
	75-51	(1-2)	75-51	(Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Late Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -1	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders -1	(Declining)
	Soil Erosion +2	
	Total -1	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	Year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1551	Slope 1-2	Azimuth (°) 270
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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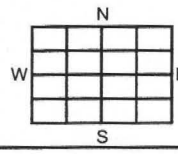
Soil Conservation Service

Range Inventory Worksheet

Site Name 22A MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist BLOMQUIST, HESSING, KOZUSKO, REGAN Date: June 7, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		HIJA		184.1	34.4	15.0
		ACHY		28.6	5.3	5.3
		SIHY		2.3	0.4	0.4
		BRTE		4.1	0.8	
% Weight 40.9						
% Cover						
				219.1	40.9	20.7
Forbs		SPAM		7.3	1.4	1.3
		ASLE		112.1	20.9	
		CRVI		5.0	0.9	0.9
		MACA		T		
		CHST		T		
		ARABIS		1.9	0.4	1.1
% Weight 23.6						
% Cover						
				126.4	23.6	3.3
Trees & Shrubs		ATCO		128.1	23.9	23.9
		ARSP		20.9	3.9	3.9
		SAVEB		21.4	4.0	4.0
		KOAMV		18.3	3.4	
		CHVI		1.2	0.2	
% Weight 35.5						
% Cover						
				190.0	35.5	31.8
		Totals		535.5	100.0	55.8
(8)		Present Utilization		% of	N/A	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers +1	
	Age Class Distribution Decreasers 0	Improving
	Increaser/ Invaders +1	
	Soil Erosion +1	Declining
	Total +3	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	Year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m)	Slope	Azimuth (°)
	1782	4-5	113
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes:
NO GRAZING EVIDENCE

Treatment Needs:
N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Range Inventory Worksheet

Site Name 42B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY			1.0	1.0
		BRTE			T	
		HIJA			1.0	1.0
% Weight 2.0						
% Cover				0.0	2.0	2.0
Forbs		SAIB			25.0	
		MACA			5.0	
		LEPIDIUM			3.0	
		ASLE			2.0	
% Weight 35.0						
% Cover				0.0	35.0	0.0
Trees & Shrubs		KRLA			60.0	30.0
		ATCO			T	
		ARSP			3.0	3.0
% Weight 63.0						
% Cover				0.0	63.0	33.0
		Totals		500.0	100.0	35.0
(8)		Present Utilization		% of	N/A	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	-1	
Age Class Distribution Decreasers	-2	Improving
Increaser/ Invaders	-2	Declining
Soil Erosion	3	
Total	-2	Not Apparent

Site History

Use History:	HEAVY
Kind of Animal:	HORSES
Season of Use:	Year long
Wildlife Species:	ANTELOPE; RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1619	0-1	121

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief: N/A
Depth of Watertable: N/A
Drainage Class: N/A
Frequency of Flooding or Ponding: N/A
Duration of Flooding or Ponding: N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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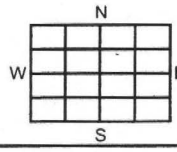
U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 42C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		9.5	1.2	1.2
% Weight 1.2						
% Cover				9.5	1.2	1.2
Forbs		MACA		6.4	0.8	0.8
		SAIB		T		
% Weight 0.8						
% Cover				6.4	0.8	0.8
Trees & Shrubs		KRLA		765.8	97.3	30.0
		CACTUS		5.2	0.7	
% Weight 98.0						
% Cover				771.0	98.0	30.0
		Totals		786.9	100.0	32.0
(8)		Present Utilization		% of	N/A	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 0	
	Age Class Distribution Decreasers 1	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion 0	
	Total 0	(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	Year long
Wildlife Species:	Horses, antelope, rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1657	Slope 0-1	Azimuth (°) 265	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Range Inventory Worksheet

Site Name 42D MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		4.1	0.6	0.6
		BRTE				
% Weight 0.6						
% Cover						
				4.1	0.6	0.6
Forbs		SPAM		9.8	1.4	1.4
		SAIB		24.7	3.5	
		ERMA		T		
		CRYPTANTHA		0.5	0.1	0.1
% Weight 4.9						
% Cover						
				35.0	4.9	1.5
Trees & Shrubs		KRLA		672.3	94.5	35.0
% Weight 94.5						
% Cover						
				672.3	94.5	35.0
		Totals		711.4	100.0	37.1

(8) Present Utilization 30 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	(100-76)	Excellent (PNC)
75-51	(1-2)	75-51	Good (Late Seral)
(50-26)	3-4	50-26	(Fair (Mid Seral))
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	0	
Age Class Distribution Decreasers	-1	Improving
Increaser/ Invaders	-1	Declining
Soil Erosion	2	
Total	0	(Not Apparent)

Site History

Use History:	HEAVY
Kind of Animal:	HORSES
Season of Use:	Year long
Wildlife Species:	ANTELOPE;RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1612	0-1	112

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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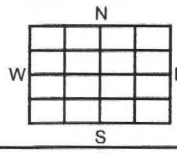
Range Inventory Worksheet

Site Name 42E MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 4, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY			1.0	1.0
		BRTE			T	
		ACHY			1.0	1.0
		HIJA			T	
% Weight 2.0						
% Cover						
					2.0	2.0
Forbs		SPAM			1.0	1.0
		DEPI			1.0	1.0
		UNK FORB			1.0	1.0
% Weight 3.0						
% Cover						
					3.0	3.0
Trees & Shrubs		KRLA			90.0	35.0
		CHVI			T	
		ARSP			T	
		ATCA			3.0	3.0
		ARTRW			2.0	2.0
% Weight 95.0						
% Cover						
					95.0	40.0
		Totals		700.0	100.0	45.0
(8)		Present Utilization		% of	N/A	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	(0)	(100-76)	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
(50-26)	3-4	50-26	(Fair (Mid Seral))
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Mid-Seral

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	1	
Age Class Distribution Decreasers	0	Improving
Increaser/ Invaders	1	(Declining)
Soil Erosion	3	
Total	5	Not Apparent

Site History

Use History:	N/A
Kind of Animal:	HORSES
Season of Use:	Year long
Wildlife Species:	ANTELOPES;RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1696	2-3	315

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

Notes:
APPROXIMATELY 100 YARDS EAST OF OCULAR ESTIMATE 06D -

Treatment Needs:
N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 46A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist S.KOZUSKO;K.BLOMQUIST;M.HESSING Date: June 7, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		121.8	7.3	7.3
		HIJA		219.8	13.1	8.0
		SPCR		6.4	0.4	0.4
		BRTE		330.0	19.7	
		SIHY		0.5	0.0	
		STCO		14.8	0.9	0.9
% Weight 41.3						
% Cover						
				693.3	41.3	16.6
Forbs		SPAM		1.9	0.1	0.1
		MACA		2.9	0.2	0.2
		SAIB		T		
% Weight 0.3						
% Cover						
				4.8	0.3	0.3
Trees & Shrubs		CHVI		79.9	4.8	3.0
		KRLA		25.0	1.5	1.5
		ATCA		876.5	52.2	30.0
% Weight 58.4						
% Cover						
				981.4	58.4	34.5
		Totals		1679.4	100.0	51.4

(8) Present Utilization 30 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE-SERAL

Trend Indicators		
	Plant Vigor Decreasers	1
	Age Class Distribution Decreasers	0
	Increaser/ Invaders	-1
	Soil Erosion	2
	Total	2

Apparent Trend (Circle One): Improving / Declining / Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	N/A
Season of Use:	N/A
Wildlife Species:	N/A
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1777	Slope 5	Azimuth (°) 151
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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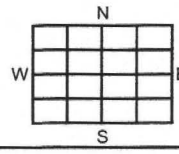
Soil Conservation Service

Range Inventory Worksheet

Site Name 46B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		115.0	17.3	17.3
		HIJA		21.5	3.2	3.2
% Weight 20.5						
% Cover						
				136.5	20.5	20.5
Forbs		ASLE		32.0	4.8	2.0
		SPAM		0.5	0.1	0.1
		ERMA		T		
		ARABIS		6.1	0.9	1.0
% Weight 5.8						
% Cover						
				38.5	5.8	3.1
Trees & Shrubs		ATCA		127.3	19.2	19.2
		KRLA		274.1	41.3	20.0
		ARSP		59.8	9.0	8.0
		GRSP		28.0	4.2	4.2
% Weight 73.6						
% Cover						
				489.2	73.6	51.4
		Totals		664.2	100.0	75.0

(8) Present Utilization 30 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 2	
	Age Class Distribution Decreasers 2	Improving
	Increaser/ Invaders 1	Declining
	Soil Erosion 3	
	Total 8	Not Apparent

Site History	
Use History:	LIGHT
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE,RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1701	Slope 1	Azimuth (°) 117
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 46D MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist V.WINKEL;K.BLOMQUIST;J.GELLER Date: June 4, 1999

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		1.3	0.1	0.1
% Weight 0.1						
% Cover				1.3	0.1	0.1
Forbs		HAGL		T		
		SPAM		169.1	9.6	3.0
		SAIB		900.7	51.3	
% Weight 60.9						
% Cover				1069.8	60.9	3.0
Trees & Shrubs		ATCA		520.1	29.6	29.6
		KRLA		164.1	9.3	9.3
% Weight 39.0						
% Cover				684.2	39.0	38.9
		Totals		1755.3	100.0	42.0

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	-1	
Age Class Distribution Decreasers	-1	Improving
Increaser/ Invaders	-1	Declining
Soil Erosion	2	
Total	-1	Not Apparent

Site History

Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1599	0-1	106

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

(8) Present Utilization 30 % of ACHY (Key Species)

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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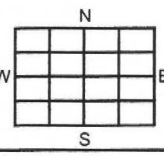
Range Inventory Worksheet

Site Name 46E
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 4, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		ACHY		53.6	8.5	8.5
% Weight 8.5						
% Cover						
				53.6	8.5	8.5
Forbs		SAIB		12.4	2.0	
		ERMA		T		
		SPAM		3.6	0.6	0.6
		ASLE		T		
		MACA		10.7	1.7	2.0
		CRYPTANTHA		T		
% Weight 4.2						
% Cover						
				26.7	4.2	2.6
Trees & Shrubs		ATCA		397.8	62.8	30.0
		KRLA		148.0	23.4	20.0
		ARSP		5.8	0.9	0.9
		GUSA		1.2	0.2	
% Weight 87.3						
% Cover						
				552.9	87.3	50.9
		Totals		633.1	100.0	62.0

(8) Present Utilization 30 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -1	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion 2	
	Total -1	Not Apparent

Site History	
	Use History: N/A
	Kind of Animal: N/A
	Season of Use: N/A
	Wildlife Species: N/A
	Burning History: N/A
	Logging History: N/A
	Cropping History: N/A

Physiography			
	Elevation (m) 1602	Slope 0-1	Azimuth (°) 69
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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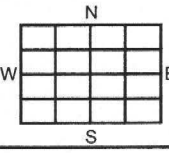
Range Inventory Worksheet

Site Name 46F
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist K.BLOMQUIST;V.WINKEL;J.GELLER Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		23.6	9.1	9.1
		HIJA		36.8	14.1	8.0
% Weight 23.2						
% Cover				60.4	23.2	17.1
Forbs		MACA		0.4	0.1	0.1
		CYGL		T		
% Weight 0.1						
% Cover				0.4	0.1	0.1
Trees & Shrubs		CHVI		141.6	54.3	7.0
		KRLA		46.6	17.9	17.9
		TEGL		11.9	4.5	3.0
% Weight 76.7						
% Cover				200.0	76.7	27.9
		Totals		260.8	100.0	45.1

(8) Present Utilization 30 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -1	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders -1	(Declining)
	Soil Erosion 2	
	Total -1	Not Apparent

Site History	
Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1669	Slope 0-1	Azimuth (°) 281	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 49A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist S.PETERSEN;V.WINKEL;J.GELLER Date: June 7, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY		7.3	1.2	1.2
		ACHY		18.79	3.0	3.0
% Weight 4.2						
% Cover				26.09	4.2	4.2
Forbs		MACA		T		
		ERIGERON		T		
% Weight						
% Cover						
Trees & Shrubs		CHVI		105.5	16.8	2.0
		ARTRW		457	72.8	30.0
		GRSP		28.6	4.6	2.5
		ATCA		10.4	1.7	0.9
% Weight 95.8						
% Cover				601.5	95.8	35.4
		Totals		627.59	100.0	39.6

(8) Present Utilization 10 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (~~Late~~ Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators		Apparent Trend (Circle One)
Plant Vigor Decreasers	1	
Age Class Distribution Decreasers	1	Improving
Increaser/ Invaders	-1	Declining
Soil Erosion	2	
Total	3	(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m)	Slope	Azimuth (°)	
1823	2-3	191	
Major or Component Landform			
Slope Component (Circle one)	Crest	Backslope	Summit Shoulder Footslope
Kind of Slope (Circle one)	Straight		Concave Convex
Microrelief:			N/A
Depth of Watertable:			N/A
Drainage Class:			N/A
Frequency of Flooding or Ponding:			N/A
Duration of Flooding or Ponding:			N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
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Soil Conservation Service

Range Inventory Worksheet

Site Name 59A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY		T	T	
		ACHY		T	T	
% Weight						
% Cover					0.0	0.0
Forbs		HAGL			10.0	
		LEPIDIUM			2.0	2.0
		ERMA		T	T	
		ARABIS		T	T	
% Weight 12.0						
% Cover					12.0	2.0
Trees & Shrubs		ATCO			38.0	38.0
		KOAMV			45.0	2.0
		ATCA			5.0	2.0
% Weight 88.0						
% Cover					88.0	42.0
		Totals		575	100.0	44.0

(8) Present Utilization 10 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -2	
	Age Class Distribution Decreasers -2	Improving
	Increaser/ Invaders -2	Declining
	Soil Erosion 1	
	Total .5	Not Apparent

Site History	
Use History:	HEAVY
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE;RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1599	Slope 0-1	Azimuth (°) flat	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 59B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist S.PETERSEN;V.WINKEL;J.GELLER Date: June 4, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants						
% Weight						
% Cover						
Forbs		HAGL			96.0	
% Weight 96.0						
% Cover					96.0	
Trees & Shrubs		KRLA			1.0	1.0
		ATCO			3.0	3.0
% Weight 4.0						
% Cover					4.0	4.0
		Totals		250	100.0	4.0

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating EARLY-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	-2	Improving
Age Class Distribution Decreasers	-2	
Increaser/ Invaders	-2	Declining
Soil Erosion	0	
Total	-6	Not Apparent

Site History

Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1597	0-1	flat

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief: N/A
Depth of Watertable: N/A
Drainage Class: N/A
Frequency of Flooding or Ponding: N/A
Duration of Flooding or Ponding: N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

Range Condition Survey
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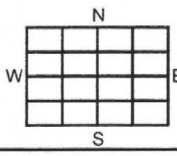
Soil Conservation Service

Range Inventory Worksheet

Site Name 87A MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.HESSING;S.KOZUSKO;K.BLOMQUIST Date: June 8, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		HIJA		35.1	10.9	8.0
		ACHY		8.2	2.5	2.5
% Weight 13.4						
% Cover						
				43.3	13.4	10.5
Forbs		ASLE		T		
		CHST		33.9	10.5	1.0
		UNK FORB 1		2.77	0.9	1.0
		SAIB		T		
		MACA		5.7	1.8	0.5
		EUAL		8.036	2.5	0.5
% Weight 15.7		UNK FORB 2		T		
% Cover						
				50.406	15.7	3.0
Trees & Shrubs		SAVEB		225.8	70.1	35.0
		ATCO		2.57	0.8	0.8
		CHVI		T		
% Weight 70.9						
% Cover						
				228.4	70.9	35.8
		Totals		322.1	100.0	49.3

(8) Present Utilization 10 % of ACHY (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	(Fair (Mid Seral))
	25-0	(>4)	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 1	
	Age Class Distribution Decreasers 1	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion 2	
	Total 3	(Not Apparent)

Site History	
Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1585	Slope 2	Azimuth (°) 273	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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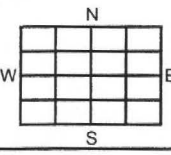
Soil Conservation Service

Range Inventory Worksheet

Site Name 87B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		SIHY			3.0	3.0
		ORHY			5.0	5.0
		HIJA			12.0	8.0
		BRTE			T	
		SCAR			T	
% Weight 20.0						
% Cover						
					20.0	16.0
Forbs		ARABIS			2.0	2.0
		ASLE			4.0	2.0
		SPAM			1.0	1.0
		MACA			T	
		PHACELIA				
% Weight 7.0						
% Cover						
					7.0	5.0
Trees & Shrubs		SAVEB			59.0	35.0
		GUSA			T	
		ARSP			5.0	5.0
		GRSP			8.0	3.0
		ATCO			1.0	1.0
		EPNE			T	
		OPUNTIA			T	
% Weight 73.0		KRLA			T	
% Cover						
					73.0	44.0
		Totals		750	100.0	65.0
(8)		Present Utilization	10	% of	ACHY	(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating LATE-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	2	Improving
Age Class Distribution Decreasers	2	
Increaser/ Invaders	1	Declining
Soil Erosion	3	
Total	8	Not Apparent

Site History

Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1792	3-5	90

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 90A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;V.WINKEL;BLOMQUIST Date: June 3, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass-Like Plants		SIHY		7.69	1.8	1.8
		HIJA		69.18	16.5	5.0
		BRTE		12.74	3.0	
% Weight 21.4						
% Cover				89.61	21.4	6.8
Forbs		MACA		T		
		ARABIS		T		
		HAGL		T		
% Weight 0.0						
% Cover				0	0.0	0.0
Trees & Shrubs		ARSP		15	3.6	3.0
		CHVI		314.5	75.0	3.6
% Weight 78.6						
% Cover				329.5	78.6	6.6
		Totals		419.11	100.0	13.4

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	100-76	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	50-26	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating EARLY-SERAL

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers -1	
	Age Class Distribution Decreasers -1	Improving
	Increaser/ Invaders -2	Declining
	Soil Erosion 2	
	Total -2	Not Apparent

Site History	
Use History:	MODERATELY HEAVY
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE,RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
Elevation (m) 1824	Slope 1-2	Azimuth (°) 220	
Major or Component Landform			
Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope	
Kind of Slope (Circle one)	Straight	Concave Convex	
Microrelief:		N/A	
Depth of Watertable:		N/A	
Drainage Class:		N/A	
Frequency of Flooding or Ponding:		N/A	
Duration of Flooding or Ponding:		N/A	

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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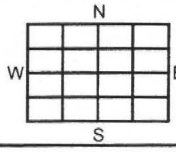
Soil Conservation Service

Range Inventory Worksheet

Site Name 90B
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.HESSING;S.KOZUSKO;K.BLOMQUIST Date: June 3, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY		67.2	10.6	10.5
		SIHY		68.6	10.8	5.0
		BRTE		33.6	5.3	
		HIJA		72.9	11.4	5.0
		ERPU		29.3	4.6	
		SPCR		6.63	1.0	1.0
% Weight 43.7						
% Cover						
				278.25	43.7	21.5
Forbs		ASLE		1.18	0.2	
		SPAM		99.02	15.5	5.0
		MACA		3.208	0.5	
% Weight 16.2						
% Cover						
				103.4	16.2	5.0
Trees & Shrubs		ATCO		209	32.8	30.0
		ARSP		46.3	7.3	5.0
		EPNE		T		
% Weight 40.1						
% Cover						
				255.26	40.1	35.0
		Totals		636.9	100.0	61.5

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	~~Excellent (PNC)~~
75-51	1-2	75-51	~~Good (Late Seral)~~
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Late-Seral

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	1	
Age Class Distribution Decreasers	0	Improving
Increaser/ Invaders	-1	Declining
Soil Erosion	1	
Total	1	Not Apparent

Site History

Use History:	N/A
Kind of Animal:	Horses
Season of Use:	Year Long
Wildlife Species:	Antelope, Rabbits
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1815	3	131

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief:	N/A
Depth of Watertable:	N/A
Drainage Class:	N/A
Frequency of Flooding or Ponding:	N/A
Duration of Flooding or Ponding:	N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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Soil Conservation Service

Range Inventory Worksheet

Site Name 90C
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist V.WINKEL;S.PETERSEN;J.GELLER Date: June 8, 1999

MLRA 29 Write-up No. N/A

N / W / E / S — Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		HIJA		315.5	31.3	5.0
		ACHY		90.3	9.0	9.0
		SIHY		2.3	0.2	0.2
		BRTE		15.4	1.5	
% Weight 42.0						
% Cover						
				423.6	42.0	14.2
Forbs		MACA		36.7	3.6	
		ARABIS		2.0	0.2	
		CRYPTANTHA		T		
% Weight 3.8						
% Cover						
				38.7	3.8	0.0
Trees & Shrubs		ATCO		515.8	51.1	30.0
		ARSP		31.1	3.1	3.1
% Weight 54.2						
% Cover						
				546.9	54.2	33.1
		Totals		1009.2	100.0	47.3

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators

% Climax Vegetation	Species Diversity	Production %	Condition rating
100-76	0	100-76	Excellent (PNC)
75-51	1-2	75-51	Good (Late Seral)
50-26	3-4	50-26	Fair (Mid Seral)
25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating MID-SERAL

Trend Indicators

		Apparent Trend (Circle One)
Plant Vigor Decreasers	1	
Age Class Distribution Decreasers	0	Improving
Increaser/ Invaders	1	Declining
Soil Erosion	2	
Total	4	Not Apparent

Site History

Use History:	MODERATELY HEAVY
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE,RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography

Elevation (m)	Slope	Azimuth (°)
1713	3	271

Major or Component Landform

Slope Component (Circle one): Crest Backslope Summit Shoulder Footslope

Kind of Slope (Circle one): Straight Concave Convex

Microrelief: N/A
Depth of Watertable: N/A
Drainage Class: N/A
Frequency of Flooding or Ponding: N/A
Duration of Flooding or Ponding: N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

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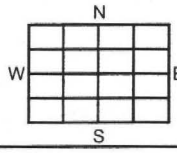
Soil Conservation Service

Range Inventory Worksheet

Site Name 90D
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 6, 1999

MLRA 29 Write-up No. N/A



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		HIJA		219.1	13.6	5.0
		ACHY		2.363	0.1	0.1
% Weight 13.7						
% Cover						
				221.463	13.7	5.1
Forbs		SPAM		20.53	1.3	1.3
		SAIB		T		
		ASLE		15.44	1.0	
		HAGL		61.83	3.8	
		ERMA				
% Weight 6.0						
% Cover						
				97.8	6.0	1.3
Trees & Shrubs		ATCO		969	59.9	30.0
		KRLA		211.3	13.1	10.0
		ARSP		11	0.7	0.7
		CHVI		106.1	6.6	3.0
% Weight 80.3						
% Cover						
				1297.4	80.3	43.7
		Totals		1616.7	100.0	50.1

(8) Present Utilization % of (Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	(1-2)	75-51	Good (Late Seral)
	(50-26)	3-4	50-26	Fair (Mid Seral)
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Mid-Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 1	
	Age Class Distribution Decreasers 1	(Improving)
	Increaser/ Invaders 1	Declining
	Soil Erosion 3	
	Total 6	Not Apparent

Site History	
Use History:	MODERAT
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE,RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1687	Slope 3	Azimuth (°) 120
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

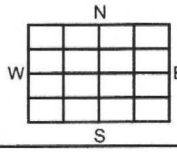
Range Condition Survey
Nevada Wild Horse Range, Nye County, Nevada
Final Report

NV-ECS-1
4/88 (Rev)

U.S Department of Agriculture
Soil Conservation Service

Range Inventory Worksheet

Site Name 90E MLRA 29 Write-up No. N/A
Ranch or Soil-232 No. N/A
Photo No. N/A
Soil Taxonomic Unit N/A
Field Office N/A
Location: Sec ____ T ____ R ____
Long: ____ Lat: ____
Conservationist M.MAIN;J.NORMAN;S.KOZUSKO Date: June 4, 1999



Location in section

(1) Plant Group % Comp.	(2) Phenology	(3) Symbol or Common Plant Name	(4) % Cover	(5) Weight (lb/ac)	(6) % Present by Weight	(7) % Climax by Weight
Grasses & Grass Like Plants		ACHY			1.0	1.0
		SIHY			T	T
		HIJA			60.0	5.0
		BRTE			T	
		ARPU			T	
		SPCR				
% Weight 61.0						
% Cover						
					61.0	6.0
Forbs		SPAM			2.0	2.0
		MACA			1.0	1.0
		ASLE			2.0	2.0
		CHST			8.0	2.0
		CRYPTANTHA			T	
		ERMA			1.0	1.0
% Weight 14.0		LEPIDIUM			T	
% Cover						
					14.0	8.0
Trees & Shrubs		ATCO			10.0	10.0
		ARSP			15.0	5.0
		KRLA			T	
		EPNE			T	
% Weight 25.0						
% Cover						
					25.0	15.0
		Totals		450	100.0	29.0
(8)		Present Utilization		% of		(Key Species)

Evaluate each indicator in relation to climax for the site (circle those that apply)

Conditions Class Indicators	% Climax Vegetation	Species Diversity	Production %	Condition rating
	100-76	0	(100-76)	Excellent (PNC)
	75-51	1-2	75-51	Good (Late Seral)
	(50-26)	(3-4)	50-26	(Fair (Mid Seral))
	25-0	>4	25-0	Poor (Early Seral)

Final Condition Rating Mid-Seral

Trend Indicators		Apparent Trend (Circle One)
	Plant Vigor Decreasers 0	
	Age Class Distribution Decreasers 0	Improving
	Increaser/ Invaders -1	Declining
	Soil Erosion 2	
	Total 1	(Not Apparent)

Site History	
Use History:	MODERATELY-HEAVY
Kind of Animal:	HORSES
Season of Use:	YEARLONG
Wildlife Species:	ANTELOPE,RABBITS
Burning History:	N/A
Logging History:	N/A
Cropping History:	N/A

Physiography			
	Elevation (m) 1607	Slope 3-4	Azimuth (°) 99
	Major or Component Landform		
	Slope Component (Circle one)	Crest Backslope	Summit Shoulder Footslope
	Kind of Slope (Circle one)	Straight	Concave Convex
	Microrelief:		N/A
	Depth of Watertable:		N/A
	Drainage Class:		N/A
	Frequency of Flooding or Ponding:		N/A
	Duration of Flooding or Ponding:		N/A

Notes: N/A

Treatment Needs: N/A

Special Considerations (e.g, critical habitat, riparian zone, etc.): N/A

Associated Sites: N/A

APPENDIX E

SAMPLE LOCATION PHOTOGRAPHS

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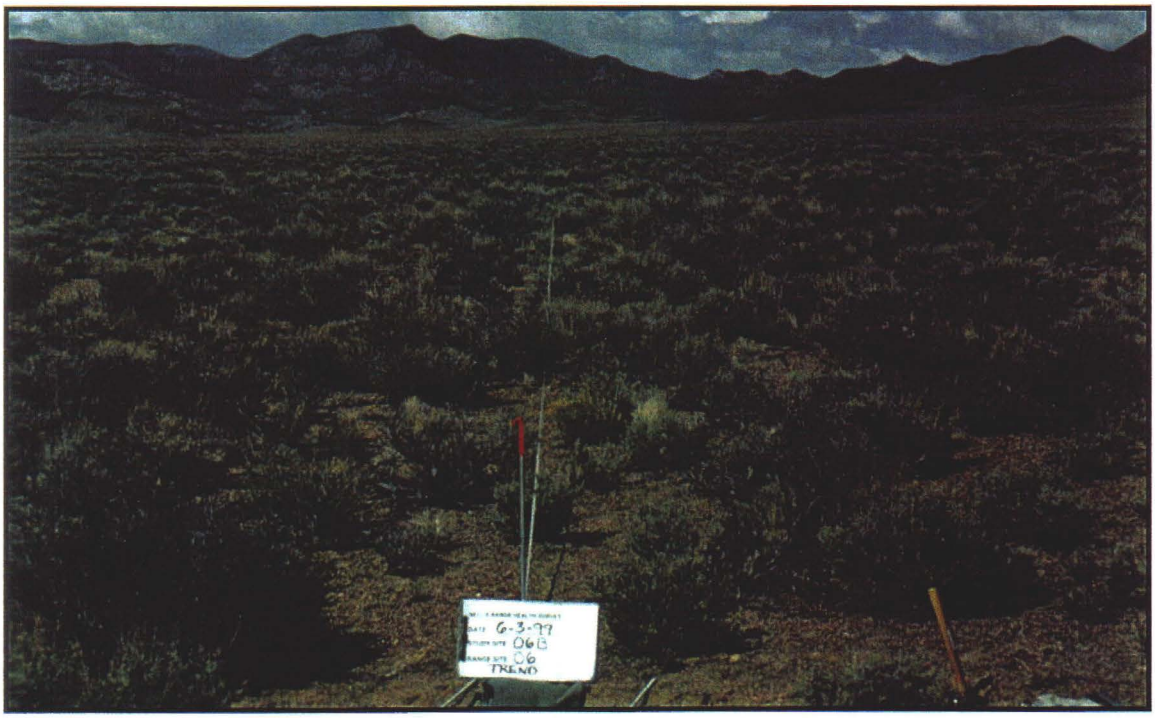
E. SAMPLE LOCATION PHOTOGRAPHS

Sample Location 06A

Sample Location 06B



Sample Location 06C

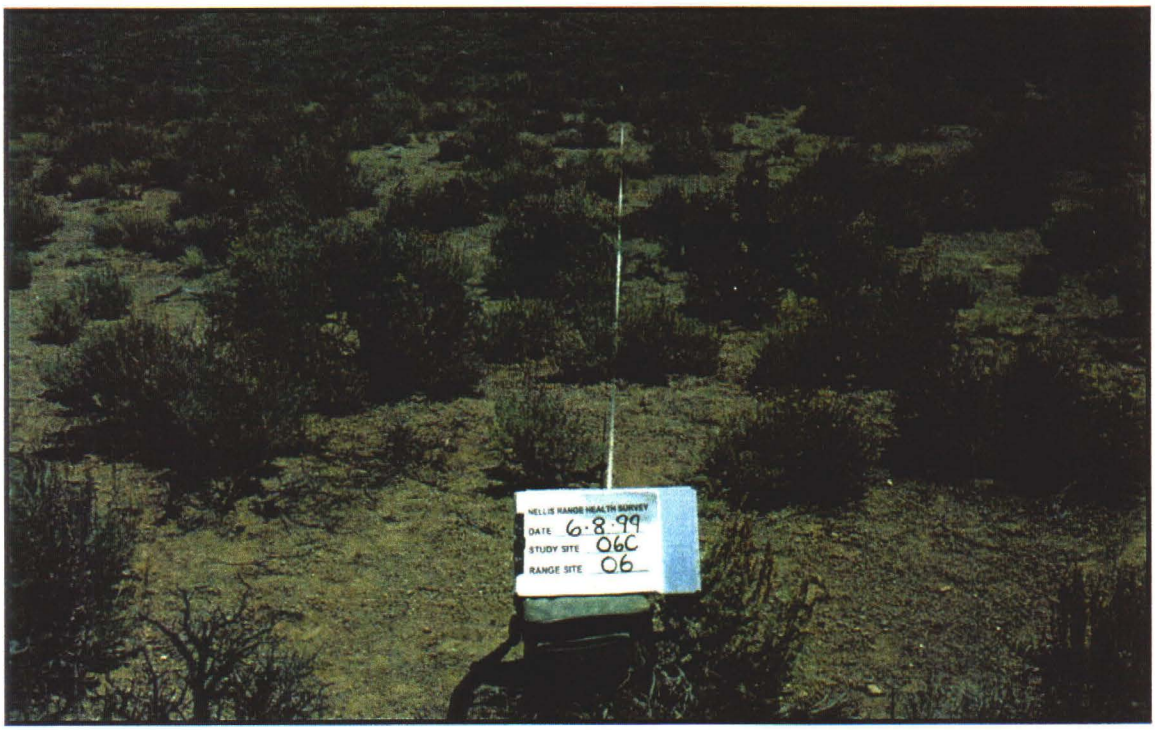
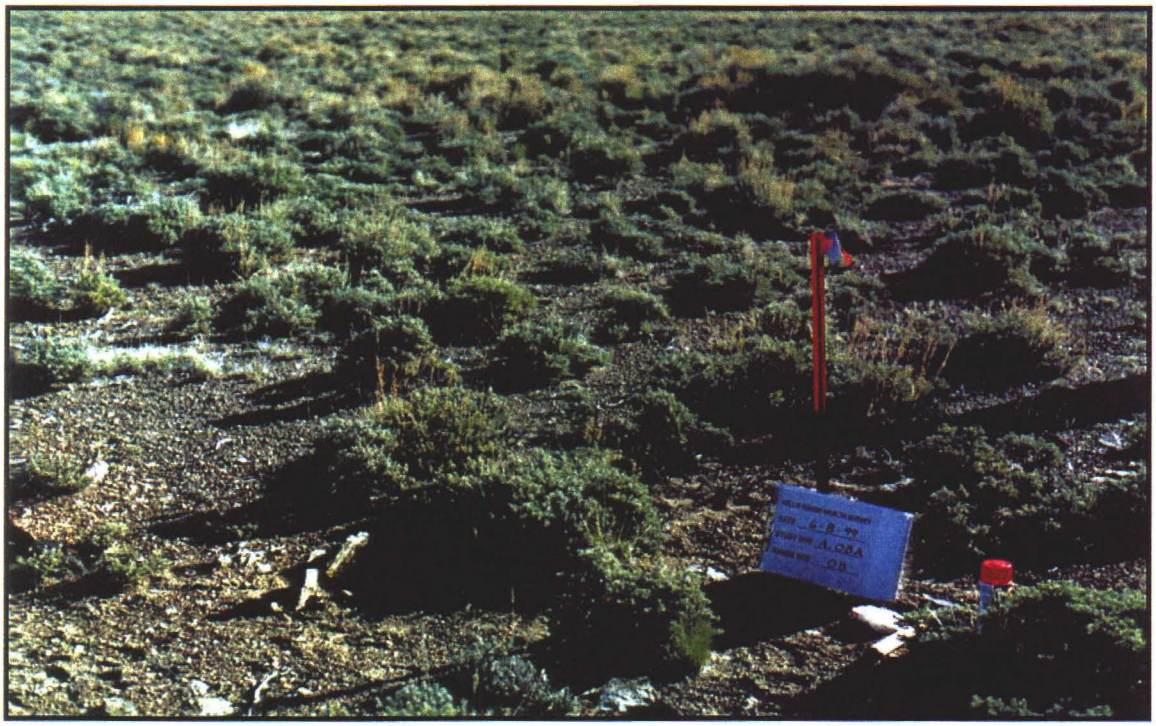


Photo not available for Sample Location 06D

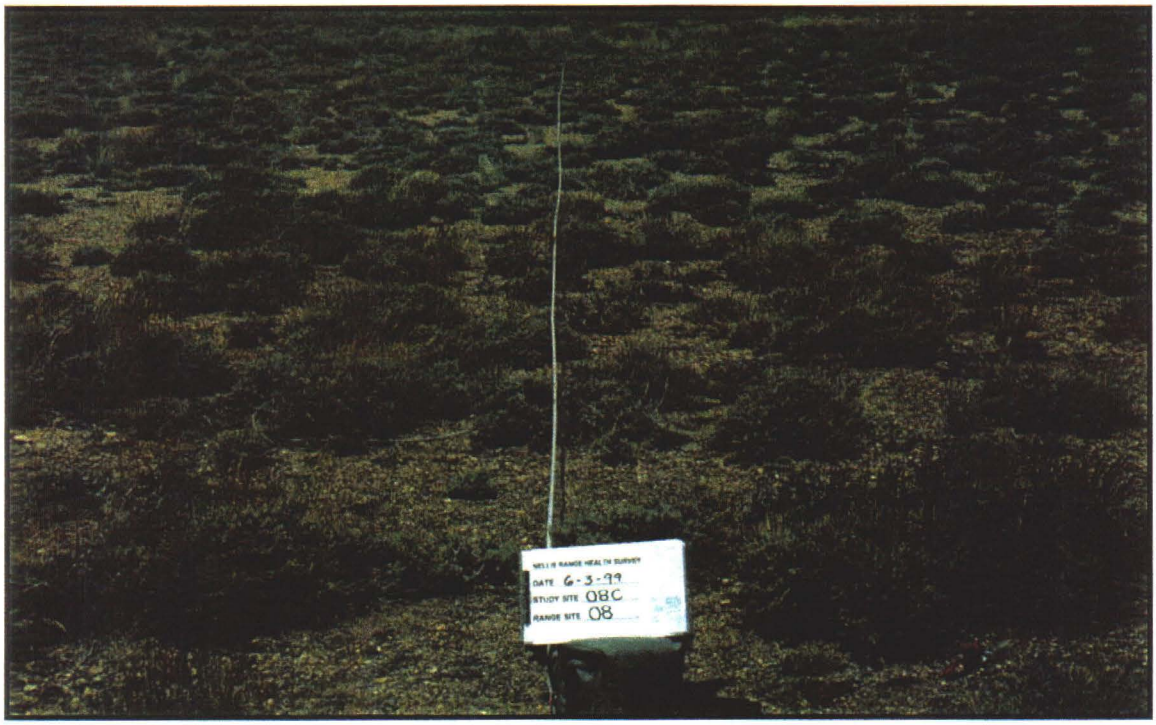
Sample Location 06E

Sample Location 08A

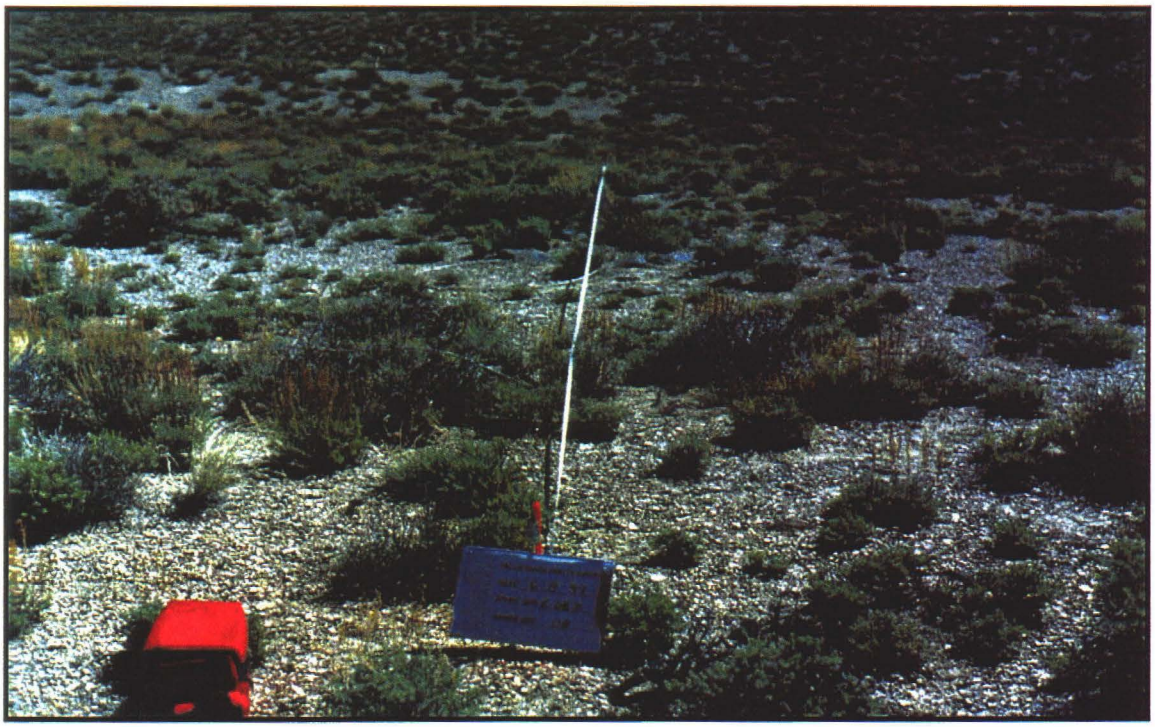


Sample Location 08B

Sample Location 08C

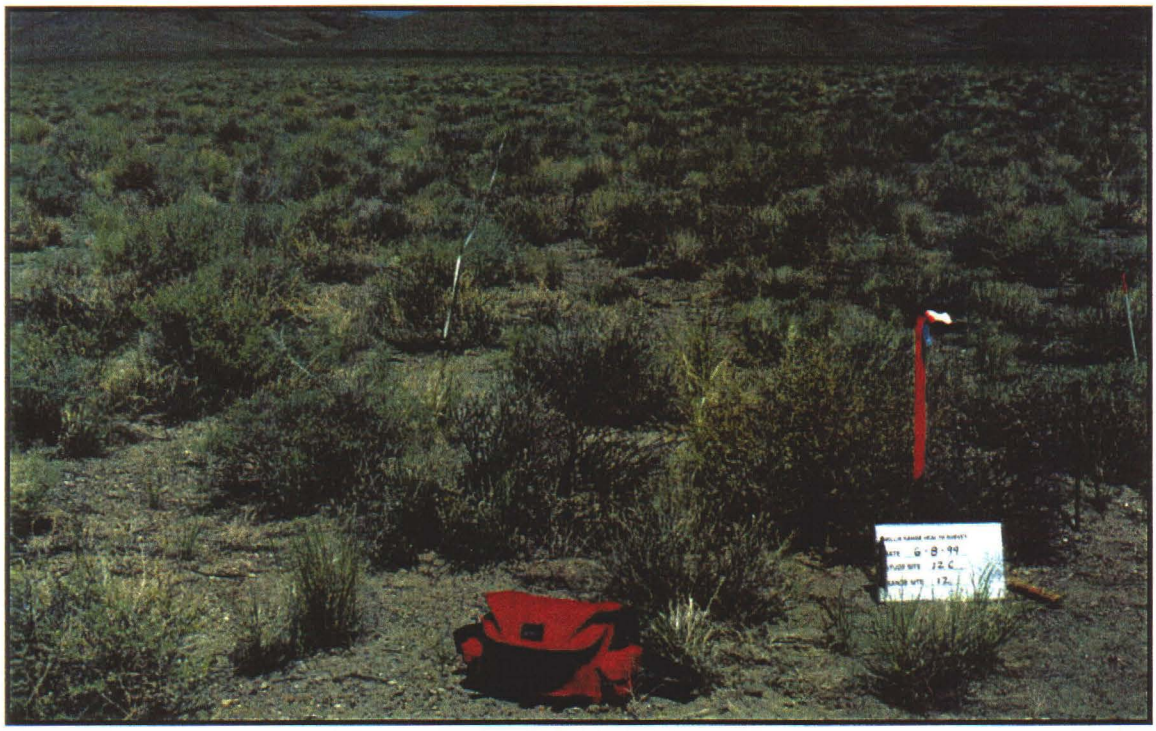


Sample Location 08D



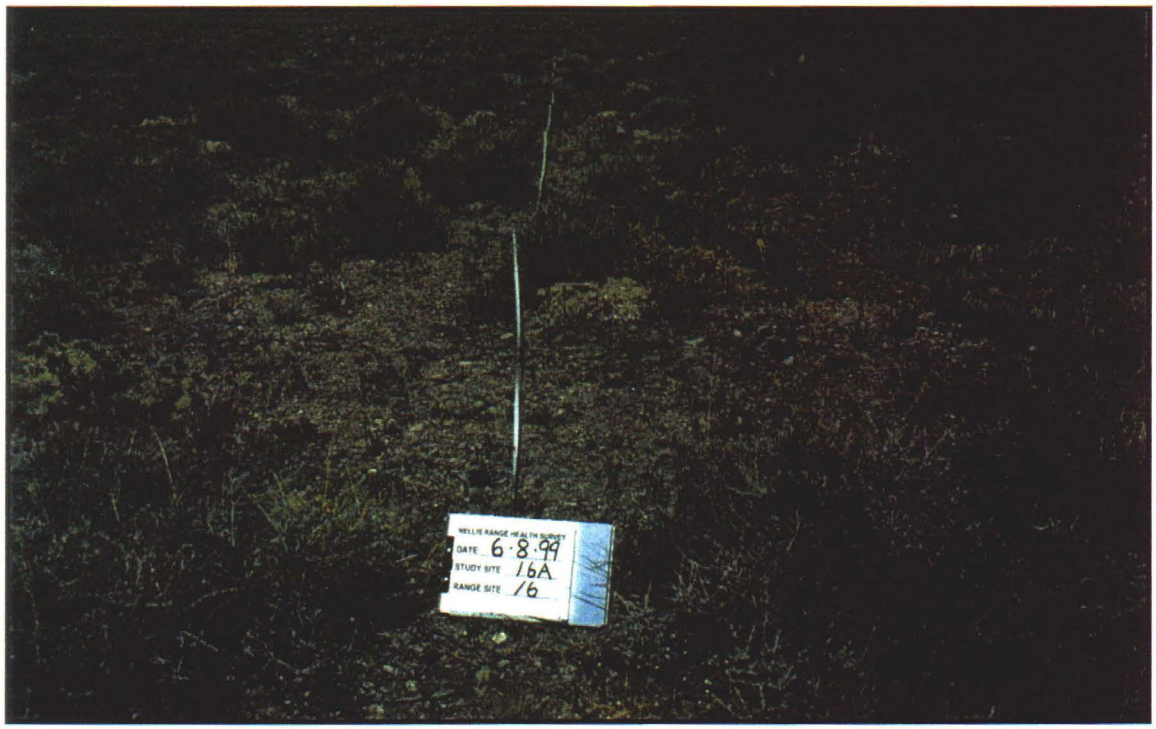
Sample Location 12B

Sample Location 12C



Sample Location 14A

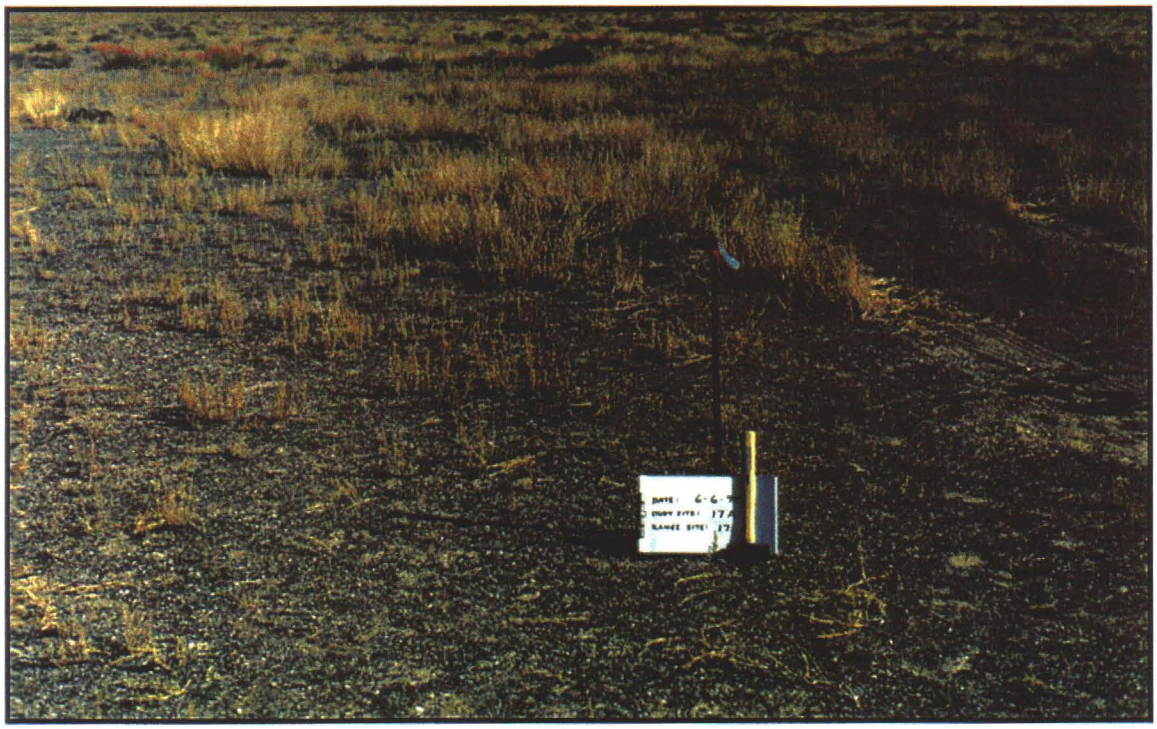
Sample Location 16A



Sample Location 16B

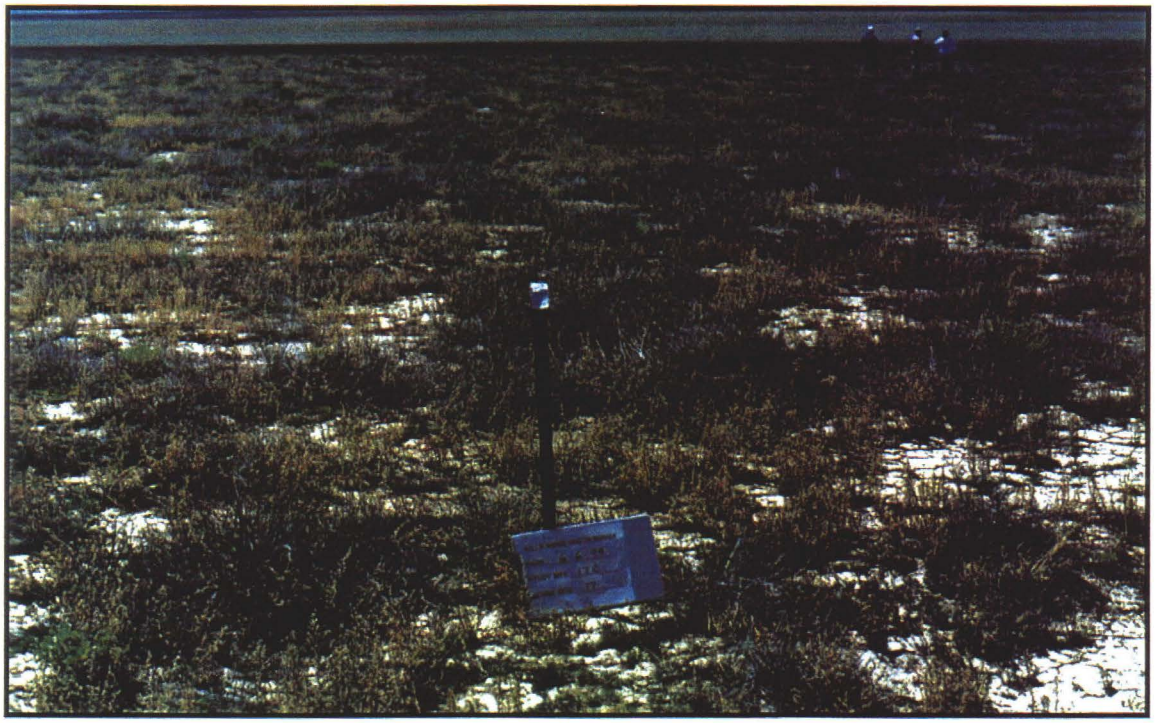
Sample Location 16C

Sample Location 17A

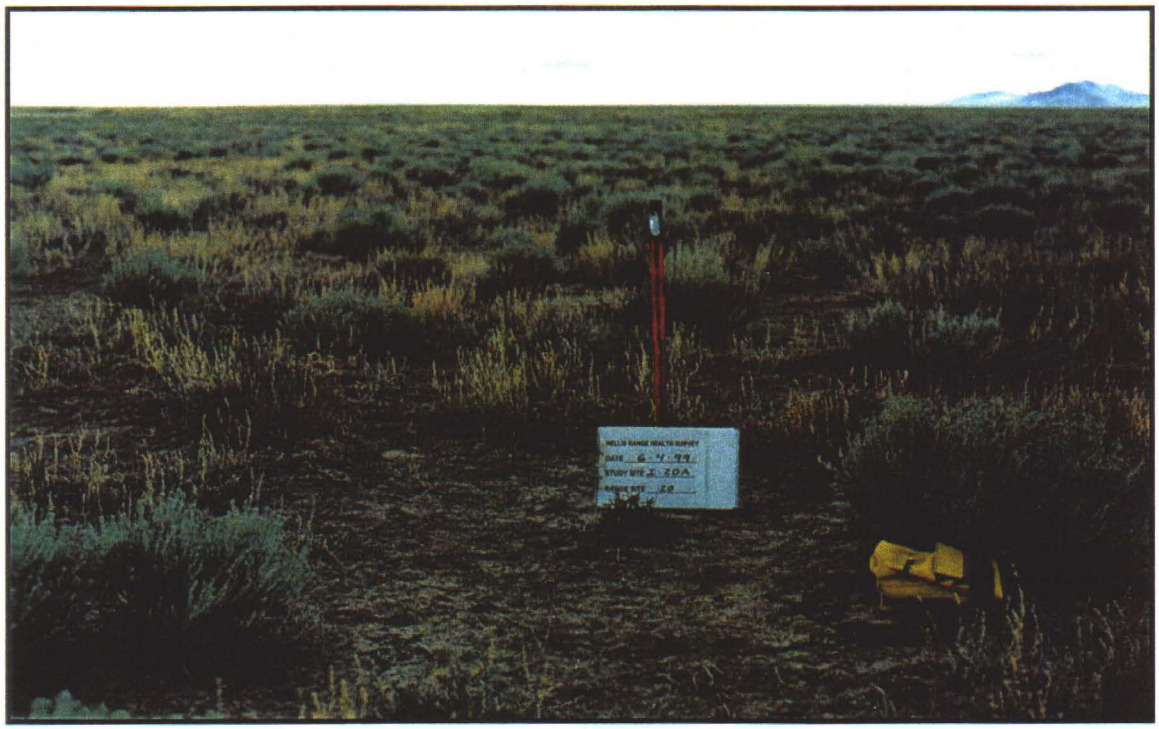


Sample Location 17B

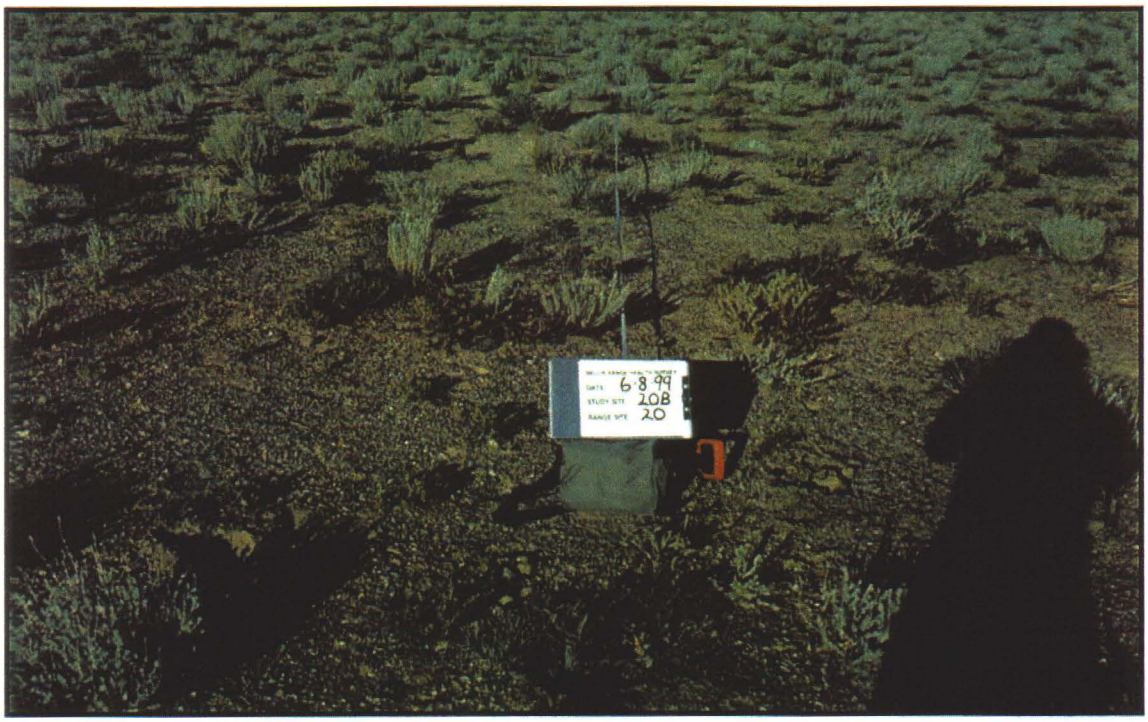
Sample Location 17C



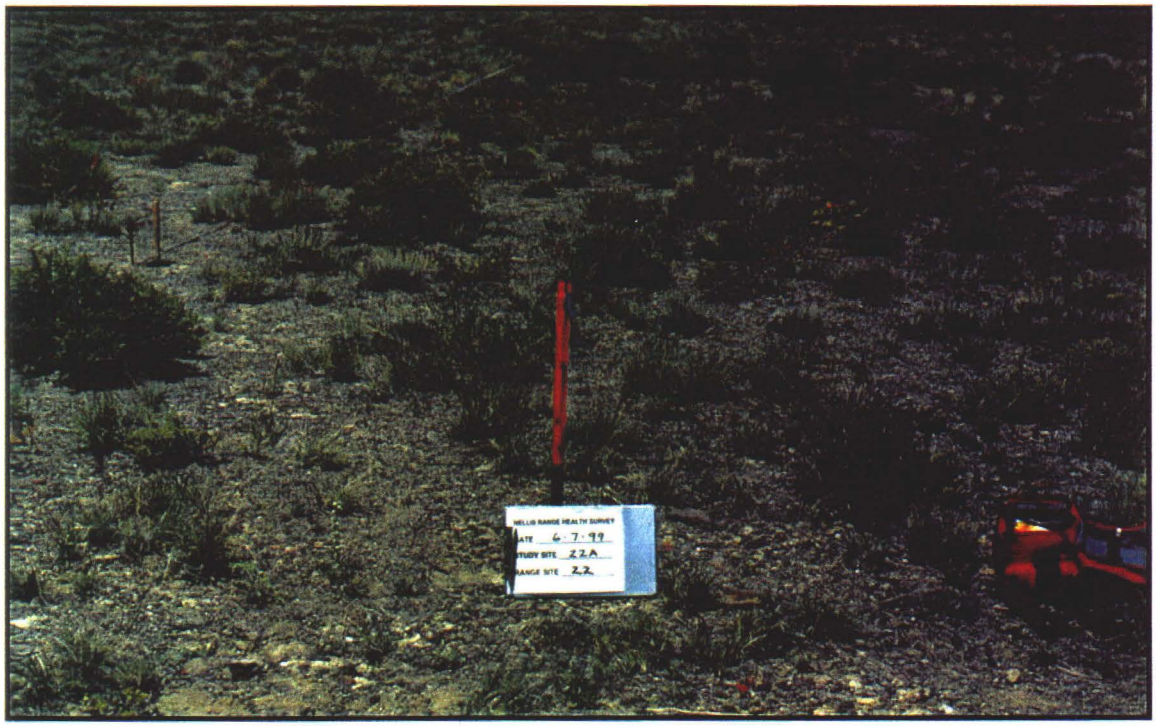
Sample Location 20A



Sample Location 20B



Sample Location 22A



Sample Location 42B

Sample Location 42C

Sample Location 42D

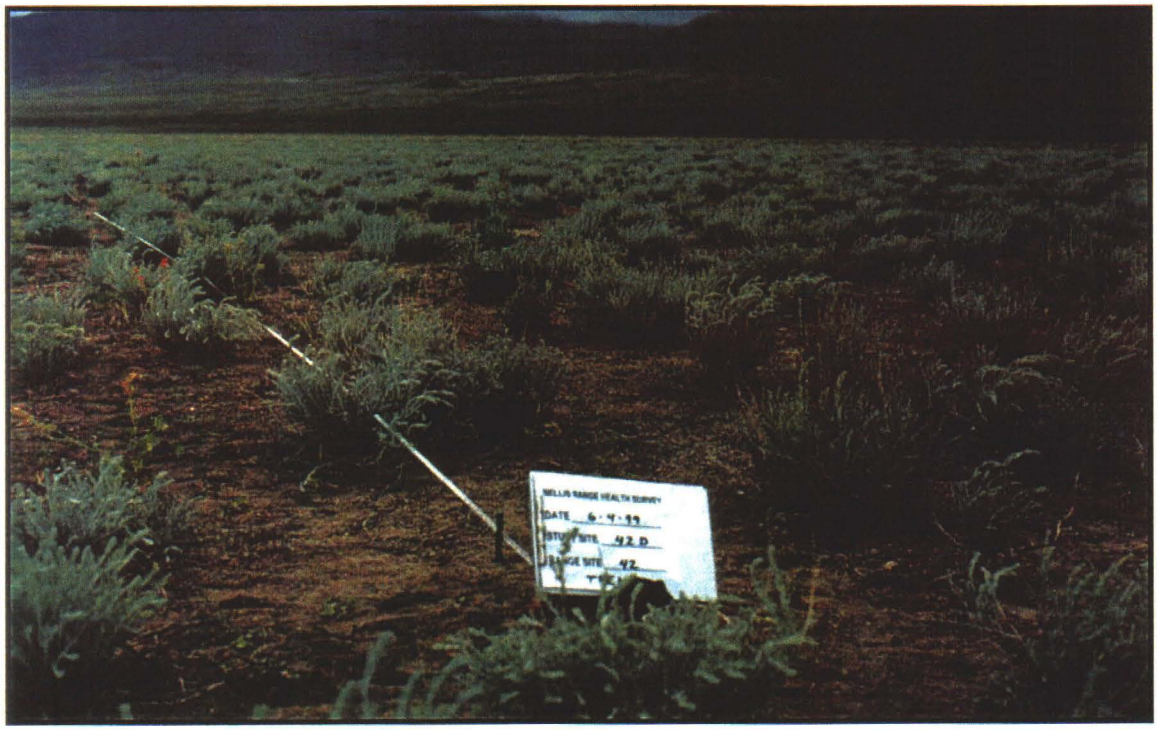
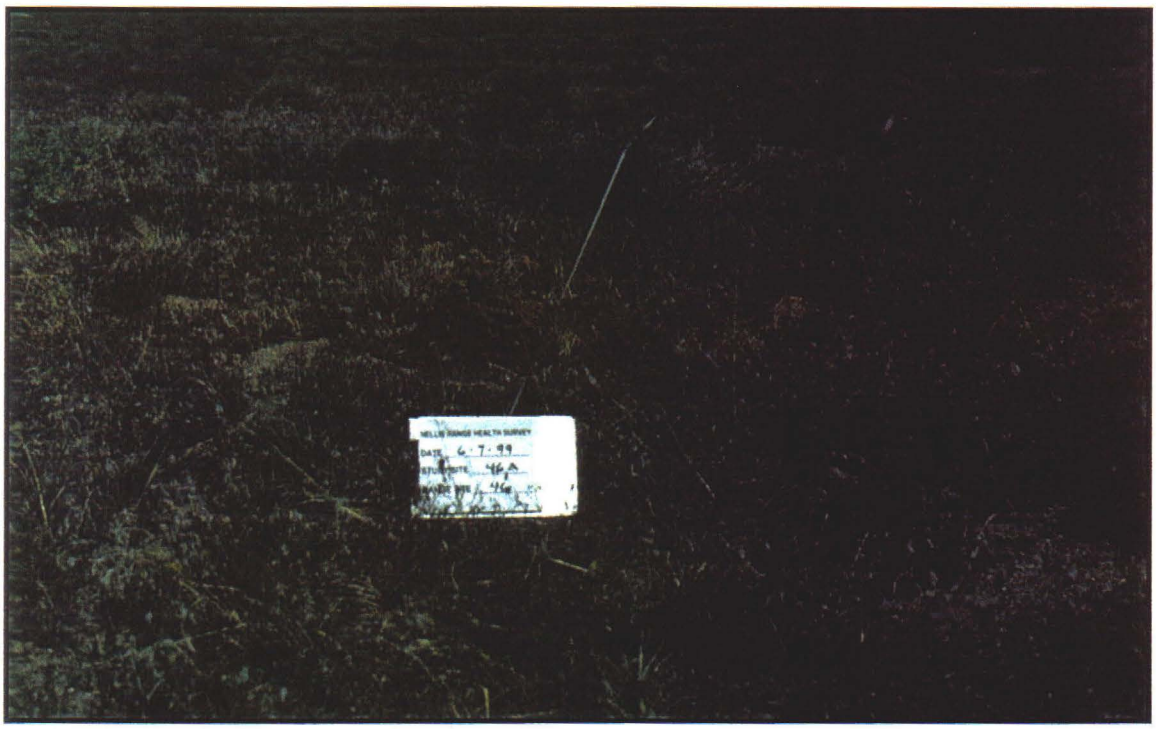


Photo not available for Sample Location 42E

Sample Location 46A

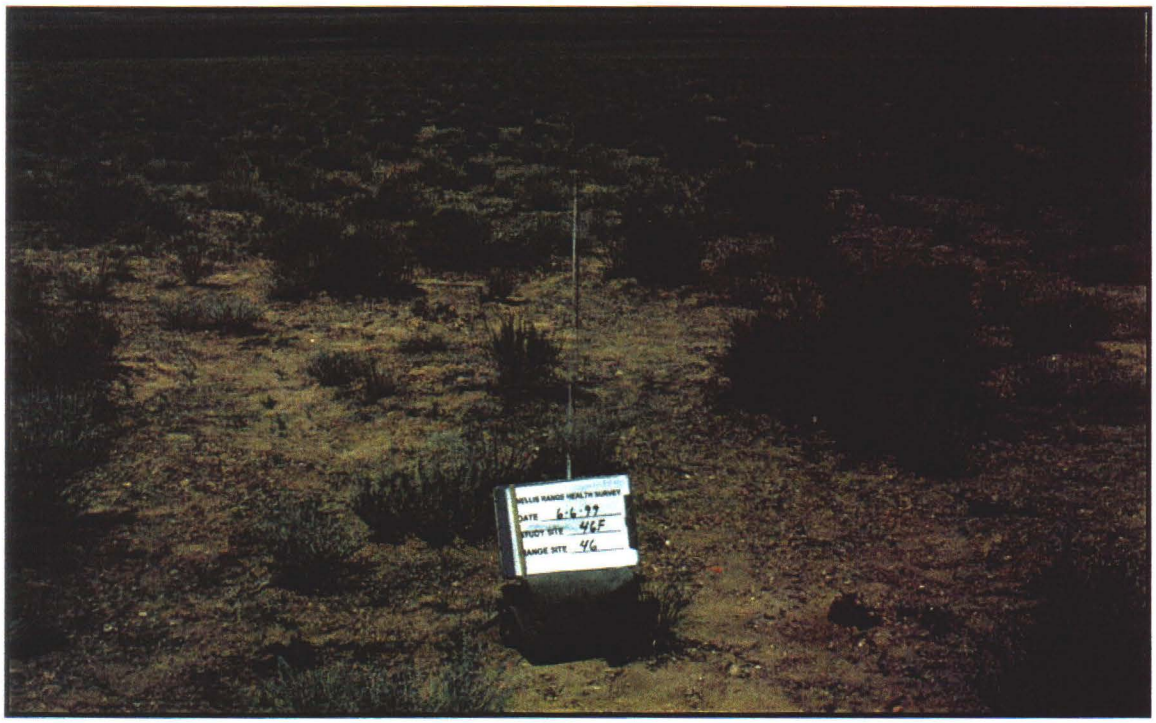


Sample Location 46B

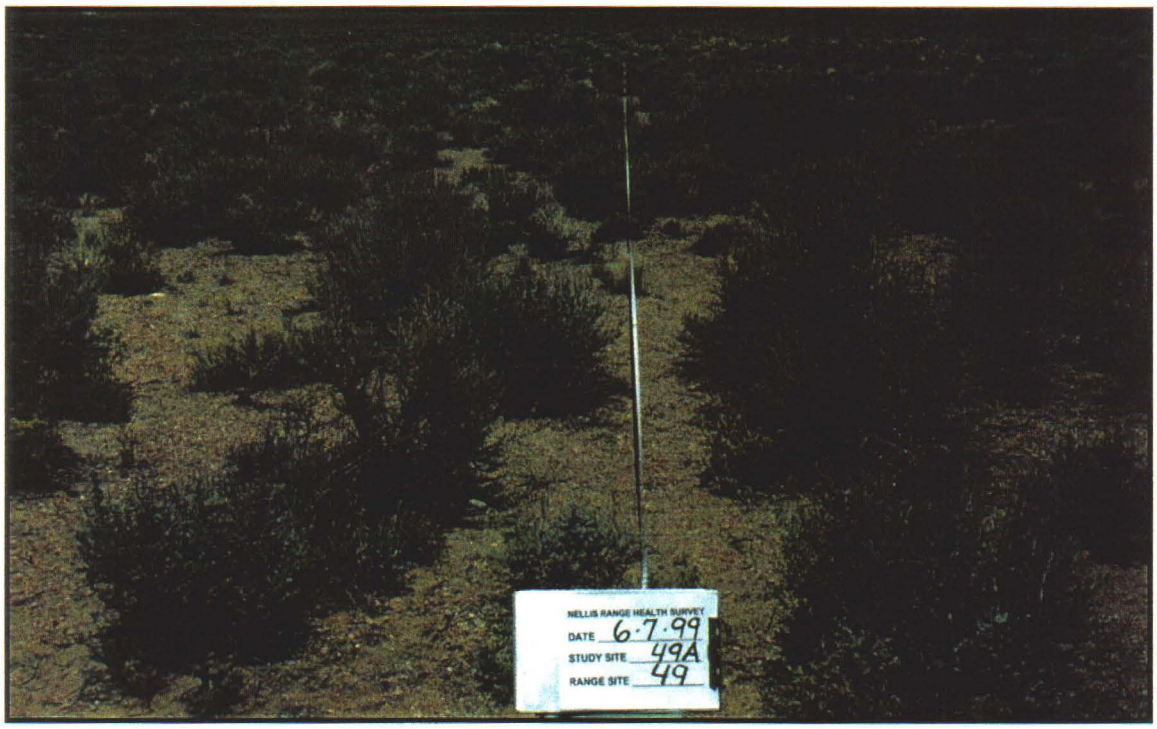
Sample Location 46D

Sample Location 46E

Sample Location 46F



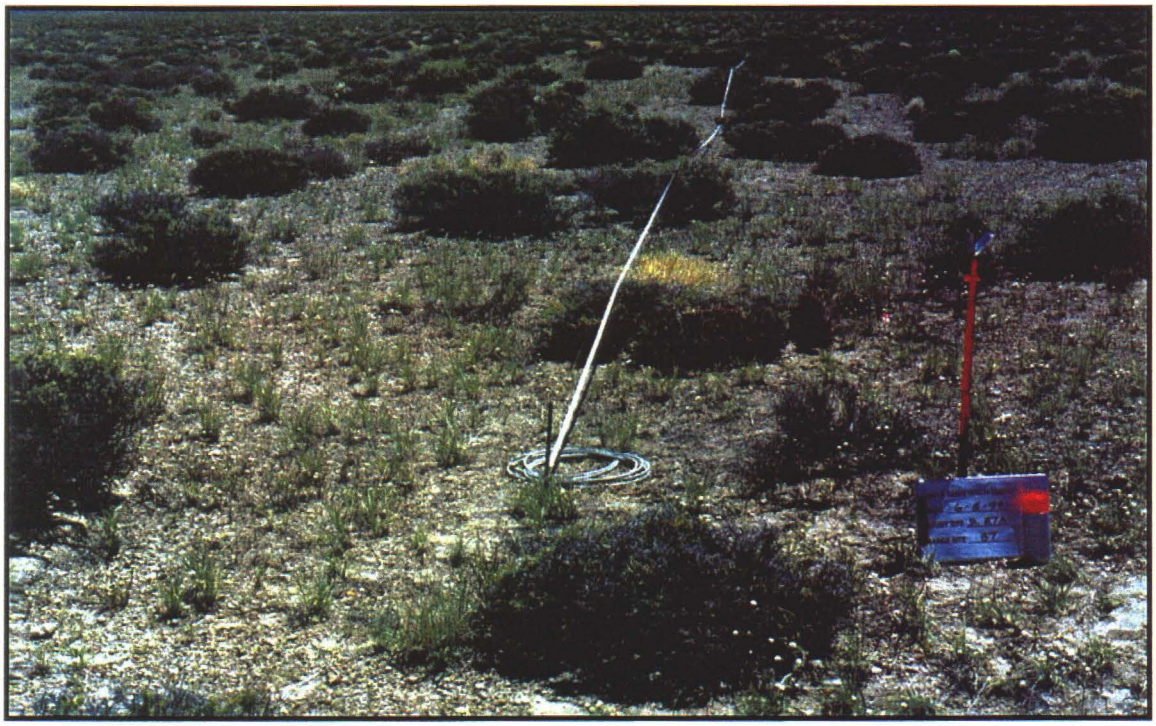
Sample Location 49A



Sample Location 59A

Sample Location 59B

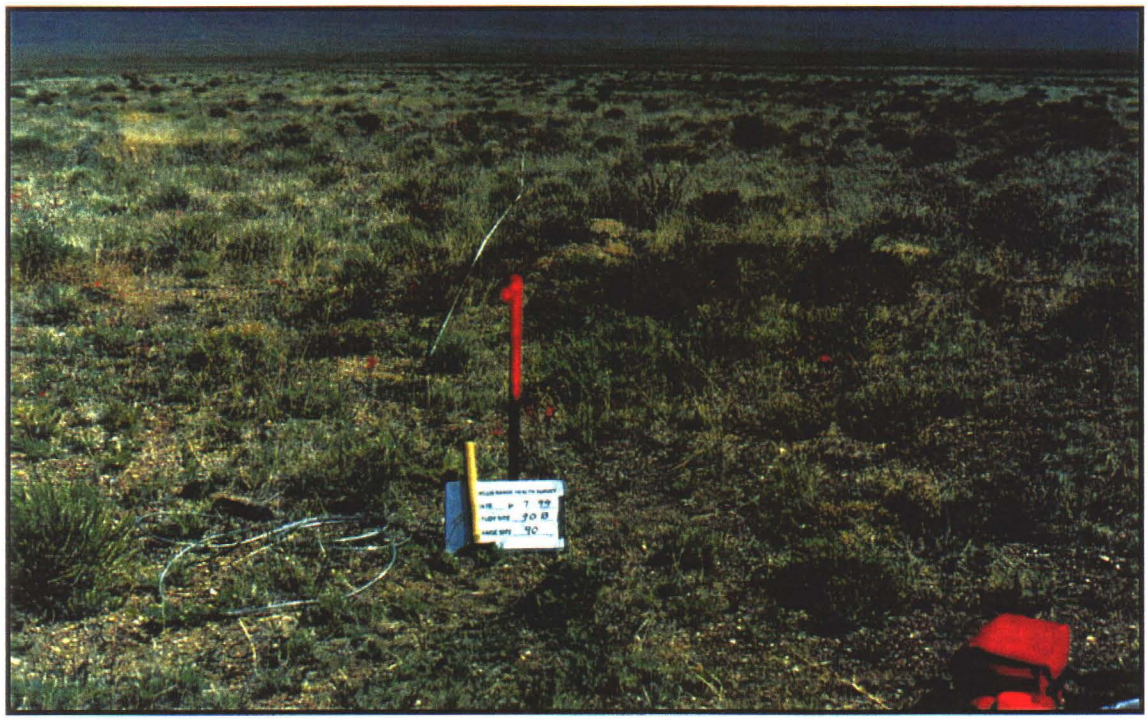
Sample Location 87A



Sample Location 87B

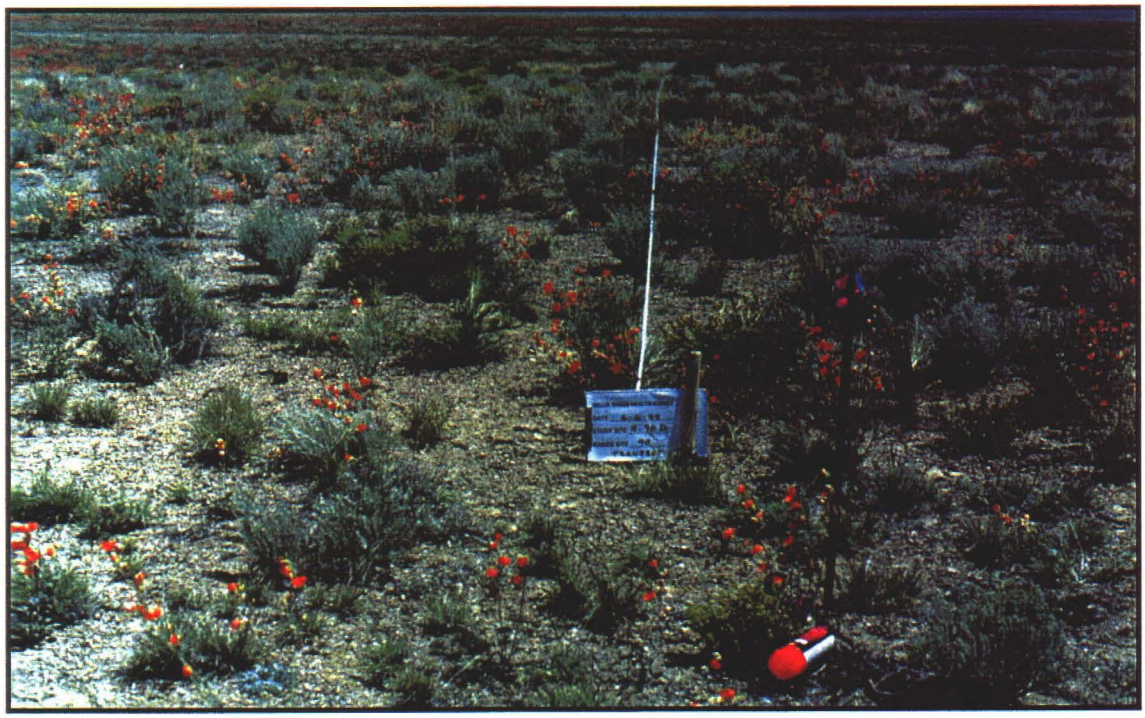
Sample Location 90A

Sample Location 90B



Sample Location 90C

Sample Location 90D



Sample Location 90E

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APPENDIX F

PLANT SPECIES DOCUMENTED DURING RANGE CONDITION SAMPLING ON THE NEVADA WILD HORSE RANGE

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Table F-1. Plant Species Documented during Range Condition Sampling on the Nevada Wild Horse Range

	Spp Code	*Scientific name*	*Common name*
Grasses			
	ACHY	Achnatherum hymenoides	Indian ricegrass
	BRTE	Bromus tectorum	cheatgrass
	ERPU	Erioneuron pulchellum	low woolleygrass
	HIJA	Hilaria jamesii [Pleuraphis jamesii]	
	SIHY	Sitanion hysterix [Elymus elymoides var elymoides]	wildrye
	PLANTAGO	Plantago spp.	Plantain
	SPCR	Sporobolus cryptandrus	sand dropseed
	STCO	Stipa comata	needleandthread
Forbs			
	ARABIS	Arabis spp.	rockcress
	ASLE	Astragalus lentiginosus	speckledpod milkvetch
	ASPU	Astragalus purshii	woolypod milkvetch
	CHST	Chaenactis stevoides	Steve's dustymaiden
	CRYPTANTHA	Cryptantha spp	cryptantha
	CRVI	Cryptantha virginensis	Virgin River catseye
	CYGL	Cymopterus globosus	globe springparsely
	DEPI	Descurainia pinnata	western tansymustard
	ERIGERON	Erigeron spp	fleabane
	ERMA	Eriogonum maculatum	spotted buchwheat
	ERNI	Eriogonum nidularium	birdsnest buckwheat
	EUAL	Euphorbia albomarginata [Chamaesyce albomarginata]	whitemargin sandmat
	HACKELIA	Hackelia spp	stickseed
	HAGL	Halogeton glomeratus	halogeton
	LEPIDIUM	Lepidium spp	pepperweed
	MACA	Machaeranthera canescens	hoary aster
	MENTZELIA	Mentzelia spp	blazingstar
	PHST	Phlox stansburyi	colddesert phlox
	SAIB	Salsola iberica	Russian thistle
	SEMU	Senecio multilobatus	lobeleaf groundsel
	SPAM	Sphaeralcea ambigua	desert globemallow
	STPA	Stephanomeria pauciflora	brownplume wirelettuce
	UNK FORBS	Unknown forb	forb
Shrubs			
	ARNO	Artemisia nova	black sagebrush
	ARSP	Artemisia spinescens	bud sagebrush
	ARTRW	Atremisia tridentata wyomingensis	Wyoming big sagebrush
	ATCA	Atriplex canescens	fourwing saltbush
	ATCO	Atriplex confertifolia	Shadscale saltbush
	CACTUS	Cactus spp	cactus

Table F-1. Plant Species Documented During Range Condition Sampling on the Nevada Wild Horse Range (Continued)

	Spp Code	*Scientific name*	*Common name*
Shrubs (cont'd.)			
	CHVI	Chrysothamnus viscidiflorus	green rabbitbrush
	EPNE	Ephedra nevadensis	Nevada jointfir
	GRSP	Grayia spinosa	spiny hopsage
	GUSA	gutierrezia sarothrae	broom snakeweed
	KOAMV	Kochia americana vestita	greenmolly
	KRLA	Krascheninnikovia lanata	winterfat
	LYAN	Lycium andersonii	Anderson's wolfberry
	PSFR	Psorothamnus fremontii	Fremont's dalea
	SAVEB	Sarcobatus vermiculatus baileyei	greasewood
	TEGL	Tetradymia glabrata	littleleaf horsebush

APPENDIX G

ACRONYMS

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G. ACRONYMS

AML	Appropriate Management Level
AU	Animal Unit
BLM	Bureau of Land Management
DOI	U.S. Department of the Interior
DRI	Desert Research Institute
ESD	Environmental Sciences Department
°F	Degrees Fahrenheit
GPS	Global Positioning System
MLRA	Major Land Resource Area
NAFR	Nellis Air Force Range
NRCS	Natural Resources Conservation Service
NWHR	Nevada Wild Horse Range
PHPS	Preferred Horse Population Size
PNC	Potential Natural Climax
SAIC	Science Applications International Corporation
SWA	Site Write-up Area
TM	Thematic Mapper
USAF	U.S. Air Force
USDA	U.S. Department of Agriculture
USGS	U.S. Geologic Survey
UTM(s)	Universal Transverse Mercator(s)
WHUA	Wild Horse Use Area

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