

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Field Office

LOAMY TERRACE, 5-8" p.z.
RANGE SITE DESCRIPTION

Major Land Resource Unit: D-37A
Site No.: 037AY020NM

Date: **AUG 24 1993**

Approved By: *R. S. Carmichael*

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features

This site occurs on low stream terraces. This site is usually adjacent to washes and intermittent stream drainages. Historically, this site was primarily stream bottoms on flood plains; but through deep gully erosion, they no longer benefit from excess run-in moisture. Slopes range from 0 to 2 percent slopes. Elevations range from 5,500 to 6,000 feet.

2. Soils

a. The soils are very deep and well drained. They formed in alluvium from shale and sandstone. Surface textures include loamy fine sand. The subsoil has textures of loamy sand, fine sandy loam with thin strata of sandy clay loam, and stratified fine sandy loam to clay loam. Permeability is moderately slow. Available water capacity is moderate to high. Runoff is slow and the hazard of water erosion is moderate. The hazard of soil blowing is severe. The soils are mildly to moderately alkaline (pH 7.4-8.4); slightly saline (EC 4-8) and slightly sodic (SAR 5-13).

b. Major soils associated with this site are:

Soil Taxonomic Unit

Shiprock SSA:

190 - Jeddito loamy fine sand

Additional information may be found in Section II of the Field Office Technical Guide.

3. Climatic Features

- a. Mean annual precipitation varies from 5 to 8 inches. About 60 percent of this moisture comes as rain during the months of April through October. May and June are the driest months. Most of the moisture from November through March comes as snow. Winds of high velocity during late winter and early spring are common.
- b. Mean temperatures for the hottest month, July, are about 83^o F. The coldest month is January, when the mean temperature is about 27^o F. Extreme temperatures of 104^o F. for a high and -17^o F. for a low have been recorded. Frost free period ranges from 140 to 160 days.
- c. The cool-season plants start growth in March and end with plant maturity and seed dissemination about mid-June. During June, July, August and September, the warm-season plants make optimum growth taking advantage of the warm temperature and moisture from tropical air out of the Gulf of Mexico. About 40 percent of the total precipitation is received during these summer months. The other 60 percent received during the fall-winter-spring months influence cool-season plants.

4. Native (potential or climax) Vegetation

- a. This range site has a plant community made up primarily of grasses intermixed with shrubs. In the original plant community, there is a mixture of both cool and warm season grasses.
- b. Plant species most likely to invade or increase on this site when it deteriorates are Cheatgrass, sixweeks grama, sixweeks dropseed, Russian thistle, mustard, black greasewood, and fourwing saltbush. Continuous livestock grazing during the winter and spring periods will decrease the cool season grasses, which are replaced by lower forage value grasses and shrubs.
- c. The following is a list of plants that are found in the potential plant community. Range condition of areas within this site is determined by comparing the present plant community with that of this potential plant community. Count as potential no more than the maximum percent shown on the guide for any species. Four condition classes are used to express this degree of comparison of the present plant community to that of the potential:

Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25

Relative percentage of total plant community by weight:

<u>Grasses and Grasslike (60-70%)</u>	<u>Percent</u>
Indian ricegrass (ORHY)	20-30
galleta (HIJA)	15-20
alkali sacaton (SPAI)	5-10
sand dropseed (SPCR)	0-5
bottlebrush squirreltail (SIHY)	1-5
blue grama (BOGR2)	1-5
Fendler threeawn (ARFE4)	0-2
other perennial grasses (PPGG)	0-3

<u>Forbs (1-5%)</u>	<u>Percent</u>
globemallow (SPHAL)	0-2
perennial forbs (PPFF)	0-2
annual forbs (AAFF)	0-1

<u>Shrubs and Trees (15-25%)</u>	<u>Percent</u>
fourwing saltbush (ATCA2)	10-20
broom snakeweed (GUSA2)	0-2
Greene rabbitbrush (CHGR6)	0-3
green rubber rabbitbrush (CHNAG)	0-2
other shrubs (SSSS)	0-3

This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon abnormal precipitation or other climatic factors.

The potential (climax) plant community has been determined by study of range relict areas, or areas protected from excessive grazing. Trends in plant communities going from heavily grazed areas to lightly grazed areas, seasonal use pastures and historical accounts have also been used.

5. Total Annual Production

In excellent condition this site will produce approximately the following amounts of air dry herbage per acre in:

favorable year	<u>600</u> lbs.
normal year	<u>500</u> lbs.
unfavorable year	<u>400</u> lbs.

B. MAJOR USES

1. Livestock

a. Site factors influencing management

This site is suited for yearlong grazing by all classes of livestock and is easily traversed. It will respond quickly to a planned grazing system. This site is susceptible to erosion, particularly overgrazed areas, old roads and concentration areas.

b. Guide to Initial Stocking Rate

The following stocking rates may be used as a guide to establish a safe starting stocking, but should be evaluated and livestock numbers adjusted based on actual use experience and climatic fluctuations.

<u>Condition Class</u>	<u>Percent Climax Vegetation</u>	<u>AC/AUM</u>	<u>AUM/AC</u>
Excellent	76-100	4-6	.16-.25
Good	51- 75	5-7	.14-.20
Fair	26- 50	7-11	.09-.11
Poor	0- 25	13-20	.05-.07

2. Wildlife

a. Site factors influencing wildlife.

Competition with livestock can be high. This site may be used as a wintering area for mule deer.

b. Guide to site plant use by wildlife species.

<u>Plant Species</u>	<u>Selected Wildlife Species</u>		
	<u>Mule Deer</u>	<u>Pronghorn</u>	<u>Mourning Dove</u>
Indian ricegrass	G-Foliage	G-Foliage	G-Seed
galleta	F-Foliage	F-Foliage	
alkali sacaton	X	X	
bottlebrush squirreltail	F-Foliage	F-Foliage	
globemallow	G-Foliage	G-Foliage	G-Seed
perennial forbs	G-Foliage	G-Foliage	G-Seed
fourwing saltbush	F-Foliage	G-Foliage/Seed	

G = Good F = Fair P = Poor X = Used, Extent Unknown

3. Recreation and Natural Beauty

a. Land Form -

Low stream terraces.

b. Landscape Quality -

The general appearance of the site is grassland interspersed with shrubs. The landscape breaks the monotony of the surrounding rolling plains and is aesthetically very pleasing.

c. Climate -

Winters are cold. Spring time is usually windy. The summers are mild with typical Southwest thunderstorms.

d. Activities -

Hunting, horseback riding and wildlife observations are occasional recreation activities on this site.

4. Other Uses -

C. THREATENED OR ENDANGERED PLANTS AND ANIMALS

1. Plants -

None known.

2. Animals -

None known.

D. LOCATION OF TYPICAL EXAMPLE OF THE SITE

1. State location - Sanostee East Quad - 5 miles NE of Sanostee, NM - Sec. 19, T26N, R18W - Navajo Res., NM.

2. Field office site location -

E. FIELD OFFICES

Shiprock, NM; Window Rock, AZ; Aztec, NM; Gallup, NM.