

USDA, SCS
Section II-E
Technical Guide
Area 2, Texas

DRAW
RANGE SITE DESCRIPTION
PE 28-33

Land Resource Area HPRR
Location _____
Date _____
Approved by _____

1. PHYSIOGRAPHIC FEATURES: This site occupies narrow, nearly level flood-plains and gently sloping shallow valleys. Slopes are plane to concave with dominant gradients of 0 to 2 percent. Elevation varies from 2500 feet in Briscoe county to 4500 feet in Dallam County.
2. SOILS:
 - a. These are deep, well drained, moderately permeable loamy, alluvial soils. Typically, they have thick, dark colored, calcareous clay loam surface layers and clay loam subsurface layers. These soils have high natural fertility. They take in water readily and have a high water holding capacity. The root zone of these soils is deep and easily penetrated by plant roots.
 - b. Major soils associated with this site:
Spur CL Bippus CL Humbarger L
 - c. Specific site location:

APPROVAL SIGNATURE

DATE

Brent J. Conlin
Area Conservationist

2/23/79

John Davis
Field Specialist-Range

3/2/79

Gary Valentine
Field Specialist-Biology

3/16/79

3. CLIMATE:

See field office climate description.

4. CLIMAX VEGETATION:

- a. The climax plant community is dominated by mid and short grasses. The understory is dominated by western wheatgrass, vine mesquite, sideoats grama and blue grama. Alkali sacaton occurs on saline soils, and may comprise a large percent of the plant composition. Shrubs normally comprise less than ten percent of the total plant cover. Tall trees may occur on the site in small amounts.

Relative Percentage of Total Plant Community (air-dry weight)

<u>Grasses</u>	<u>80%</u>	<u>Woody Plants</u>	<u>10%</u>	<u>Forbs</u>	<u>10%</u>
blue grama	20	cottonwood		prairie clovers	
vine mesquite	)	hackberry		roundhead lespedeza	
buffalograss	) 30	black willow		groundplum milkvetch	
sideoats grama	)	wild plum		Illinois bundleflower	
western wheatgrass	) 20	elm		heath aster	
alkali sacaton	5			scarlet guara	
tall dropseed	)			Baldwin ironweed	
silver bluestem	) 5			Engelmann daisy	
perennial threeawns	)			Louisiana sagewort	
				pitchers sage	
				curlycup gumweed	

- b. As retrogression occurs, the mid grasses give way to short grasses. Grasses such as vine mesquite and sideoats grama begin to be replaced by blue grama and buffalograss.

If the plant community continues to de-generate silver bluestem and perennial threeawn which originally occurred in trace amounts increase considerably. Alkali sacaton will increase under saline conditions with retrogression.

- c. Approximate total annual production of this site in excellent condition ranges from 1800 to 2600 pounds of air-dry vegetation per acre depending upon rainfall and growing conditions.

5. WILDLIFE ADAPTED TO THE SITE: This site is inhabited by mule deer, turkey, dove and quail. Several of the forbs, woody plants and grasses which grow on the site provide cover, browse nesting areas and seeds for game animals and birds. Other small animals and birds feed, nest and raise their young on the site. The coyote is also commonly seen on this site. Occasionally raptors such as hawks and owls or golden eagles will build their nests in the tall trees.
6. ESTHETIC AND RELATED VALUES: Colorful blue, white, yellow and lavender flowered forbs dot the landscape during the spring when moisture is adequate. During the autumn time this site is especially beautiful when the leaves of the cottonwood trees begin to turn yellow. Often windmills are located on this site since ground water is not too deep. Often the beauty of windmills, cattle and colorful trees are captured on canvass by artists.
7. HYDROLOGIC CHARACTERISTICS: The infiltration and transmission rates of these soils, when wet, is moderate. Surface runoff is slow to medium. Under proper management, the sediment potential is low. These soils receive additional runoff from adjacent uplands as well as occasional minor floods which cause no damage to permanent vegetation. Because of the low, variable annual rainfall, there is little ground water recharge. These soils are in wind erodability group 5 and 6. The hazard of soil blowing is slight.
8. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Percent</u>				<u>Acres/AU/yearlong</u>
	<u>Climax vegetation</u>				
Excellent	76-100				14-19
Good	51-75				17-26
Fair	26-50				24-40
Poor	0-25				38+
b. <u>Seeded areas</u>					
	*100-76	75-51	50-26		25-0
sideoats grama	13-20**	20-26	26-38		38+
blue grama	18-23	23-28	28-40		40+
mixture (above)	15-22	22-27	27-39		39+

*Percent Ground Cover
 **Acres/AU/Yearlong

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. For Cattle:

Primary 2/

sideoats grama
vine mesquite
blue grama
western wheatgrass
buffalograss
Illinois bundleflower
Engelmann daisy
roundhead lespedeza

Secondary 3/

silver bluestem
alkali sacaton
prairie clovers
tall dropseed
hackberry
heath aster
Louisiana sagewort
pitchers sage

Low Value 4/

perennial threeawns
groundplum milkvetch
scarlet guara
Baldwin ironweed
curlycup gumweed
cottonwood
black willow
wild plum

b. For Mule Deer:

Illinois bundleflower
Engelmann daisy
roundhead lespedeza
hackberry
elm
heath aster
prairie clovers
groundplum milkvetch
Louisiana sagewort
pitchers sage
annuals

blackwillow
Baldwin ironweed
scarlet guara
curlycup gumweed
western wheatgrass
buffalograss

wild plum
vine mesquite
tall dropseed
blue grama
silver bluestem
perennial threeawns
alkali sacaton
sideoats grama

c. For Dove, Quail and Turkey 5/

sunflowers
crotons
western ragweed
buffalo-bur
Illinois bundleflower
hackberry

broomweed
prairie clovers
groundplum milkvetch
Engelmann daisy
tall dropseed
vine mesquite
wildplum

buffalograss
blue grama
sideoats grama
perennial threeawns
silver bluestem
alkali sacaton
western wheatgrass
cottonwood
black willow
elm

- 1/ This rating system provides general guidance as to animal preference for plant species. It also indicates competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animal, plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect the place of a plant in the range ecosystem.
- 2/ These species generally decrease under prolonged heavy grazing.
- 3/ These plants usually increase initially, then decrease under prolonged heavy use.
- 4/ These plants continue to increase with heavy grazing use.
- 5/ For these wildlife species the terms primary, secondary and low value indicate animal preference only. They do not indicate plant response to feeding pressure; ~~nor do they have any ecological significance.~~

GP