

CLAY FLAT  
DESERT SHRUB  
RANGE SITE DESCRIPTION

Land Resource Area: Edwards Plateau'

Location: \_\_\_\_\_

Date: May 1978

1. TOPOGRAPHY AND ELEVATION: This site usually occurs in slight depressions in drainageways and on flats. Elevation varies from 2000 to 3000 feet.
2. SOILS:
  - a. Soils are clay in texture, deep, slowly permeable, with a high water holding capacity. The site receives extra water and surface runoff is slow. This site exhibits gilgai micro-knolls, resulting from high shrink-swell properties of clay minerals. Soils crack strongly upon drying. This can cause a high degree of root-pruning among unadapted plants. Plant-soil-air-moisture relationships are only fair due to these soil characteristics.
  - b. Soil taxonomic units which characterize this site are:

Dalby clay
  - c. Specific site location:
3. CLIMAX VEGETATION:
  - a. The climax vegetation is dominated by strong rooted rhizomatous, stoloniferous, and bunch grasses which are drought tolerant. Annuals are common. Perennial forbs and woody species are scarce in the climax community.

RELATIVE PERCENTAGE

<u>Grasses</u>		<u>Woody</u>		<u>Forbs</u>	
Tobosa	55	Butterflybush	2	Per. bladderpod	1
Vine-mesquite	15	Tarbush	2	Rushpea	1
Cane bluestem		Fourwing saltbush		Threadleaf	
Sideoats grama		Catclaw		groundsel	
Alkali sacaton	10	Wolfberry		Croton	1
Plains bristlegrass		Cacti		Broomweed	
Arizona cottontop		Littleleaf sumac		Annual forbs	4
Trichloris	8				
Whiplas pappus					
Per. threeawn					
Burrograss	5				
Buffalograss					
Halls panicum					
Annual grasses					

- b. As retrogression occurs under continuous heavy grazing, there is an increase of tobosa, threeawns, and burrograss. Retrogression beyond this point usually results in large bare areas in the site with only annuals present following rains. Sideoats grama, Arizona cottontop, plains bristlegrass, vine-mesquite, and cane bluestem decrease. Mesquite, broom snakeweed and lotebush often invade.
- c. Approximate total annual yield of dry herbage in excellent condition ranges from 500 pounds in poor years to 1500 pounds in good years.
4. WILDLIFE NATIVE TO THE SITE: In excellent range condition, this site furnishes little desirable wildlife habitat. However, should mesquite and/or other woody species invade or increase significantly, the site provides some cover for various game species such as deer and quail.
5. ESTHETIC AND RELATED VALUES: The site has a flat grassland aspect in excellent condition due to small amounts of woody plants. Few colorful forbs are found.

6. HYDROLOGIC CHARACTERISTICS: This site is located to receive extra runoff water and surface drainage is slow. When soils are dry and cracked, water is taken in readily. When soils are wet, permeability is very slow. Water holding capacity is high. If unprotected by plant cover, soils are highly erosive.

7. GUIDE TO INITIAL STOCKING RATE:

<u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/YL</u>	<u>AU/Sec/YL</u>
Excellent	76-100	35-45	14-18
Good	51-75	40-60	10-16
Fair	26-50	55-100	6-11
Poor	0-25	75+	6 or less

b. Seeded Areas

	<u>Percentage Ground Cover</u>			
	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>25-0</u>
Mid-grasses Ac/AU	14-18	18-24	24-32	32+
Short grasses Ac/AU	18-22	22-30	30-46	46+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Vine-mesquite	Tobosa	Catclaw
Sideoats grama	Alkali sacaton	Groundsel
Cane bluestem	Fourwing saltbush	Tarbush
Plains bristlegrass	Butterflybush	Wolfberry
Arizona cottontop	Trichloris	
	Whiplash pappus	
	Perennial threeawn	

b. Sheep

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Bladderpod	Littleleaf sumac	Tobosa
Butterflybush	Arizona cottontop	Threeawns
Plains bristlegrass	Annual grasses	Catclaw
Sideoats grama	Alkali sacaton	Wolfberry
Vine-mesquite	Cane bluestem	
Fourwing saltbush	Burrograss	

1/ Definitions of terms and an explanation of interpretations is given on a separate page which is attached with each group of range site descriptions.

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Section II-E  
CF, DS (EP)  
5/78  
Alpine, Sanderson

c. Deer and Goats

Primary

Some annual forbs  
Butterflybush  
Fourwing saltbush  
Wolfberry

Secondary

Littleleaf sumac  
Catclaw  
Sideoats grama  
Plains bristlegrass

Low Value

Tarbush  
Tobosa  
Threeawns  
Burrograss

d. Dove and Quail

Primary

Seed of:  
Croton  
Plains bristlegrass  
Vine-mesquite  
Forbs w/hard seed

Secondary

Mast of:  
Most woody shrubs

Low Value

Most grasses  
w/chaffy seed