

USDA-SCS  
Section II-E  
Area \_\_\_\_\_

CLAY FLAT  
RANGE SITE DESCRIPTION  
PE 31-44

Land Resource Area Rio Grande Plain.

Location \_\_\_\_\_

Date 1/1/72

1. TOPOGRAPHY AND ELEVATION: This site occurs on broad planes or slightly depressed areas. Slopes are usually less than 0.5 percent, but may range up to 3 percent near large drainage ways.
2. SOILS:
  - a. The soils are deep, with calcareous, clayey surfaces and subsoils. The soils are moderately well drained, runoff is slow to very slow and permeability is very slow. These soils crack when dry. Water holding capacity is high and coupled with the slow runoff make this site very productive.
  - b. Some soil taxonomic units which characterize this site are:  
  
Mercedes clay  
Montell clay
  - c. Specific site location:
3. CLIMAX VEGETATION:
  - a. The climax plant community is an open grassland with sparsely scattered mesquite throughout the landscape. This site is dominated by mid grasses such as: twoflower trichloris, Arizona cottontop, and silver bluestem. This site usually supports some climax forbs and woody shrubs.

RELATIVE PERCENTAGE

<u>Grasses</u>	<u>95%</u>	<u>Woody</u>	<u>T</u>	<u>Forbs</u>	<u>5%</u>
Alkali Sacaton	5	Mesquite		Annual forbs	
Twoflower trichloris	30	Huisache		Perennial legumes	5
Fourflower trichloris		Spiny hackberry		Bushsunflower	
Arizona cottontop	10	Condalia sp	T	Hairy ruellia	
		Whitebrush			
Pink pappusgrass	10	Hackberry			
		Guayacan			
Pinhole & silver bluestem	10				
White tridens	5				
Bristlegrass	5				
Vine-mesquite	10				
Plains lovegrass	5				
Fall witchgrass					
Perennial threeawns	T				
Buffalograss & curly- mesquite	5				

- b. As retrogression occurs, buffalograss initially increases and then mesquite, and scattered plants of spiny hackberry, condalias and whitebrush increase. Some common invaders on the site are red threeawn, Hall's panicum, red grama, and huisache. Annuals increase and dominate in poor condition.

This site responds noticeably to extreme changes in rainfall. During dry weather, these soils crack severely. Under these conditions it is difficult for plant roots to maintain a bond with the soil. There is a high death loss to mesquite and other woody plants when drouth conditions exists.

- c. Approximate total annual yield of this site in excellent condition ranges from 3000 pounds per acre in low production years to 5500 pounds per acre of air-dry vegetation in good production years.

4. WILDLIFE NATIVE TO THE SITE: This site is used by deer, dove, quail, whitewing,, and javelina. Several of the grasses, forbs, and woody plants which grow on the site provide good cover, browse, mast and seeds for birds and animals where the site is reduced in condition.

5. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Percent</u>		<u>Ac/AU/Yearlong</u>
	<u>Climax Vegetation</u>		
Excellent	76 - 100		10 - 13
Good	51 - 75		12 - 16
Fair	26 - 50		15 - 20
Poor	0 - 25		18+

  

b. <u>Introduced Species</u>	<u>Percent of the Area Established</u>			
	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>25-0</u>
Introduced grasses	8-12	11-15	14-19	18+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. For Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Twoflower trichloris	Bristlegrass	Annual forbs
Arizona cottontop	Buffalograss	Whitebrush
Pinhole and silver bluestem	Curlymesquite	Condalia sp
White tridens	Pink pappusgrass	Mesquite
Vine-mesquite	Spiny hackberry	
Bushsunflower	Perennial legumes	
Hackberry		

b. For Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Annual forbs	Spiny hackberry	Most grasses
Low panicums	Vine-mesquite	Huisache
Bushsunflower	Texas wintergrass	Mesquite
Perennial legumes	Bristlegrass	
Desert yaupon	Whitebrush	
Hackberry		
Hairy ruellia		

c. Javelina

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Pricklypear pads and fruit	Succulent forbs and grasses	Mesquite
Yucca roots	Whitebrush	Huisache
Mesquite beans		
Hackberry		

d. Dove(Mourning & whitewing) and Quail

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Panicum grass seeds	Sensitivebriar	Other grasses
Bundleflower seeds	Dropseeds	Greenthread
American snoutbean seeds	Milkpea	Thistle
Hackberry fruit		
Bristlegrass seeds		
Croton seeds		
Western ragweed seeds		
Tender vegetation(quail)		

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