

GRAY LOAMY UPLAND
RANGE SITE DESCRIPTION
PE 19-31

1. PHYSIOGRAPHIC FEATURES: This site occurs on nearly level to gently sloping uplands. Slopes are predominately 1 to 3 percent, but range from 0 to 5 percent. Elevation ranges from 350 to 700 feet.
2. SOILS:
 - a. These moderately deep to deep soils have calcareous fine sandy loam or sandy clay loam surfaces and lower layers over pack sand, weakly cemented sandstone, or tuffaceous material. Soil fertility and available water-holding capacity are low to medium.
 - b. Soil taxonomic units which characterize this site:
 - Aguilares fine sandy loam
 - Aguilares sandy clay loam
 - Salco fine sandy loam
 - Salco sandy clay loam
 - c. Specific site location:
3. CLIMATE:
 - a. The average annual rainfall ranges from 18 to 24 inches. The greatest amounts fall in the periods April-May-June and August-September-October, with the latter period receiving the greatest amount. November through March is the low rainfall period, with March being the driest month. The relatively low rainfall in July and August, coupled with high temperatures, causes a midsummer slump in the growth curve.
 - b. High winds are common from late February through May, which cause large losses by evaporation from the soil surface, especially where the surface is exposed. Annual evaporation ranges from 60 to 80 inches per year.
 - c. The growing season of warm-season plants ranges from 290 to 320 days. The last killing frost occurs about February 20 and the first frost about December 6. The average January temperature ranges from about 53° F to 58° F and the average July temperature ranges from about 87° F to 88° F. Warm-season plants normally make about 50 to 65 percent of their growth between March 15 and June 30 and most of the remainder in September, October, and early November.

4. CLIMAX VEGETATION:

a. The climax vegetation is an open grassland with scattered brush throughout the landscape. The site is dominated by grasses such as arizona cottontop, pinhole bluestem, pink pappusgrass, plains bristlegrass, and trichloris. The site usually supports some climax forbs, legumes, and woody plants.

Percentage of Total Plant Community (air-dry weight)

Grasses	90%	Woody	5%	Forbs	5%
Trichloris	20	Blackbrush	}	Annual forbs	2
Arizona cottontop	10	Spiny hackberry		Snoutbean spp.	
Plains bristlegrass	10	Vine ephedra		Velvet bundleflower	
Pink pappusgrass	10	Condalia spp.		Sensitivebrier	
Feather bluestem	} 10	Wolfberry		Dalea	} 3
Green sprangletop		Guajillo		Bushsunflower	
Sideoats grama		Guayacan		Orange zexmenia	
Lovegrass tridens		Texas persimmon		Gaura	
Fall witchgrass	5	Paloverde		Skeletonleaf	
Sand dropseed	} 10	Cactus		goldeneye	
Hooded windmillgrass		Desert yaupon			
Curlymesquite	} 5	Texas kidneywood			
Buffalograss		Allthorn			
Perennial threeawn	5	Ceniza			
Slim tridens	5	Coma			
		Mesquite			

b. As retrogression occurs, guajillo dominates and forms a dense canopy together with blackbrush, condalia, wolfberry, pricklypear, texas persimmon, paloverde, ceniza, and coma. Some common herbaceous invaders on this site are croton, ragweed, tumblegrass, perennial broomweed, grassbur, texas bristlegrass, and halls panicum.

c. Approximate total annual yield on this site in excellent condition ranges from 1000 pounds per acre in poor years to 3400 pounds per acre air-dry weight in good years.

5. WILDLIFE ADAPTED TO THE SITE: This site is used by deer, dove, quail, and javalina. Several of the woody plants, forbs, and grasses which grow on the site provide good cover, browse, mast, and seeds for game birds and animals.

6. ESTHETIC AND RELATED VALUES: During above average growing conditions, colorful forbs dot the landscape throughout spring and early summer. In climax conditions, the open grassland aspects, with scattered brush throughout the landscape, give the site the appearance of a vast and relatively open landscape.
7. HYDROLOGIC CHARACTERISTICS: Soils in this site are grouped into hydrologic group B. They have medium runoff and moderate erosion potential. When the hydrologic characteristic of the vegetative cover is good, the hydrologic curve number is about 60. Refer to SCS National Engineering Handbook, Section 4, Chapter 9, to determine runoff quantities from these curves. When the hydrologic characteristic of the vegetation condition is less than good, field investigations are needed to determine hydrologic curve numbers.
8. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Percent Climax Vegetation</u>	<u>Ac/AU/Yearlong</u>
Excellent	76-100	19-23
Good	51-75	22-27
Fair	26-50	26-33
Poor	0-25	33+

b. Introduced Species

<u>Percent Ground Cover</u>	<u>Ac/AU/Yearlong</u>
100-76	16-20
75-51	19-24
50-26	23-33
25-0	32+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Arizona cottontop	Curlymesquite	Annual forbs
Twoflower trichloris	Buffalograss	Whitebrush
Fourflower trichloris	Slim tridens	Condalia
Lovegrass tridens	Pink pappusgrass	Cactus
Sideoats grama	Nash windmillgrass	Cenizo
Plains bristlegrass	Hooded windmillgrass	Blackbrush
Bundleflower		Persimmon
Desert yaupon		Wolfberry
Vine ephedra		
Gaura		

b. Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Spiny hackberry	Texas wintergrass	Most grasses
Most annual forbs	Blackbrush	Whitebrush
Bundleflower	Guajillo	Paloverde
Plains bristlegrass	Wolfberry	Cactus
Desert yaupon	Bumelia spp.	
Vine ephedra		
Guayacan		

c. Javalina

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Texas persimmon	Blackbrush	Most annual forbs
Cactus	Whitebrush	Other grasses
Yucca	Vine-mesquite	
Vine ephedra	Spiny hackberry	
	American snoutbean	

d. Dove and Quail

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
(Seed of the following)		
Western ragweed	Desert yaupon fruit	Other grasses
Bushsunflower	Dropseeds	Blackbrush
Bundleflower	Most grass seed	Whitebrush
Croton		
Bristlegrasses		
Vine-mesquite		

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.

LEGEND AND DEFINITIONS FOR RANGE SITE DESCRIPTIONS

This rating system provides general guidance as to animal preferences for plant species. It also indicates possible competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animals, upon plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community.

The following definitions apply to cattle, sheep, goats, deer, and antelope grazing.

Primary: These species generally decrease when the climax plant community is subjected to continuous heavy grazing pressure by the animals listed.

Secondary: These plants usually increase initially, then decrease when the site is subjected to continuous heavy grazing use by the animals listed.

Low Value: These plants continue to increase or invade with heavy continuous grazing use of the site.

For squirrel, peccary, and birds, the terms primary, secondary, and low value indicate species preference only. They do not indicate plant response to feeding pressure, nor do they have any ecological significance.