

USDA, SCS
Section II-E
Area

R082X4365TX

GRANITE GRAVEL
RANGE SITE DESCRIPTION
PE 31-44

Land Resource Area Central Basin

Location _____

Date 1-1-72

1. TOPOGRAPHY AND ELEVATION: This site occurs on nearly level and gently sloping to undulating upland areas. Slopes range from one to five percent and occasionally steeper. The elevation varies from 820 feet to 1500 feet or more.

2. SOILS:
 - a. The site consists of deep gravelly sandy loam soils. Gravel of granite origin makes up 35 to 80 percent of the soil by volume. Granite outcrops occur on the site. The low available water capacity and moderate fertility limits the density and yield of plants.

 - b. Soil taxonomic units which characterize this site are:

Click gravelly coarse sandy loam
~~Voca gravelly sandy loam~~

 - c. Specific site location:

3. CLIMAX VEGETATION:
 - a. The climax plant community is an open savannah of post oak, black-jack oak and live oak with mid and tall grasses in thin stands.

RELATIVE PERCENTAGE

Grasses	82%	Woody	10%	Forbs	8%
Little bluestem	30	Post oak		Sagewort	
Indiangrass	5	Blackjack	10	Lespedeza	
Switchgrass		Live oak		Dotted gayfeather	
Sandhill lovegrass	5	Elm	T	Heath aster	5
Purpletop		Hackberry	T	Snoutbean	
Arizona cottontop		Greenbrier	T	Orange zexmenia	
Green sprangletop	10	Catclaw	T	Annual forbs	3
Canada wildrye	1	Elbowbush	T		
Sideoats grama	10	Kidneywood	T		
Fringeleaf paspalum					
Scribner panicum	5				
Pinhole bluestem					
Vine mesquite	10				
Hairy grama					
Mourning lovegrass					
Wright threeawn	5				
Sedges					
Annual grasses	1				

b. As retrogression occurs the oaks increase. Mesquite, persimmon, whitebrush, condalia, ashe juniper invade the site. Other invading species are gummy lovegrass, Texas grama, coneflower and basin sneezeweed. Many annual forbs and grasses increase as deterioration continues. Improvement in range condition is slow because of high soil temperatures and soil crusting.

c. Approximate total annual yield per acre of this site in excellent condition ranges from 1200 pounds in poor years to 2000 pounds of air-dry vegetation in good years.

4. WILDLIFE NATIVE TO THE SITE: This site is used by white-tailed deer, quail, squirrel, dove and several species of non-game birds and small mammals. Velvet-horned deer occur in large numbers exclusively on this site usually about two years following a severe drought. Intense research has not produced the answer to this.

5. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/Yearlong</u>
Excellent	76 - 100	14 - 18
Good	51 - 75	16 - 20
Fair	26 - 50	18 - 24
Poor	0 - 25	24 ⁺

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Little bluestem	Sideoats grama	Post oak
Indiangrass	Vine-mesquite	Blackjack oak
Switchgrass	Fall witchgrass	Bursage ragweed
Purpletop	Pinhole bluestem	Coneflower spp.
Sand lovegrass	Arizona cottontop	Greenbrier
Green sprangletop	Texas cottontop	Hairy grama
Engelmann daisy	Scribner panicum	Tumblegrass
	Fringeleaf paspalum	Red lovegrass
	Live oak	Whitebrush
		Persimmon
		Texas croton
		Red grama
		Texas grama
		Mesquite

b. Sheep

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Engelmann daisy	Indiangrass	Post oak
Sand lovegrass	Switchgrass	Blackjack oak
Little bluestem	Vine-mesquite	Basin sneezeweed
Fringeleaf paspalum	Fall witchgrass	Coneflower
Perennial forbs	Pinhole bluestem	Bursage ragweed
Scribner panicum	Sideoats grama	Texas grama
Mourning lovegrass	Snakecotton	Red lovegrass
Annual forbs	Common yarrow	Red grama
	Orange zexmenia	Mesquite

1/ See legend on separate page for definitions of interpretations made for each animal.

c. Goats

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Post oak	Indiangrass	Basin sneezeweed
Blackjack oak	Purpletop	Coneflower spp.
Elm	Elbowbush	Texas croton
Hackberry	Snakecotton	Bursage ragweed
Little bluestem	Pricklyash	Coarse grasses
Sideoats grama	Texas persimmon	
Green sprangletop	Annual forbs	
Kidneywood		
Greenbrier		
Perennial forbs		

d. Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Kidneywood	Snakecotton	Basin sneezeweed
Greenbrier	Pricklyash	Bursage ragweed
Engelmann daisy	Texas persimmon	Coneflower spp.
Elm	Orange zexmenia	Broomweed
Hackberry	Oak	Texas croton
Scribner panicum		Most grasses
Sagewort		
Lespedeza		
Heath aster		
Elbowbush		

e. Quail and Dove

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
(Seed of)	(Seed of)	(Seed of)
Bursage ragweed	Fringeleaf paspalum	Basin sneezeweed
Texas croton	Scribner panicum	Other grasses
Lespedeza	Filly panicum	
Oak mast		
Annual forb		
Annual grass		

f. Squirrel

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Acorns	Grapes	Grasses
Elm buds	Wild plum	Forbs
Hackberry	Berries	

Legend and Definitions for Range Site Descriptions.

1/ This rating system provides general guidance as to animal preference 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.