

USDA, SCS
Section II-E
Technical Guide
Area 16W, Texas

GRAVELLY LOAM

RANGE SITE DESCRIPTION

Land Resource Area BL

Location Giddings

Date 1-1-74 11/1/71

1. TOPOGRAPHY AND ELEVATION: This site occurs as nearly level to sloping uplands. Slopes range from 0 to 10 percent, but are mainly less than 5 percent. Elevation ranges from 300 to 800 feet.

2. SOILS:

a. The soils of this site are deep loams or clay loams over mottled clays. The characteristic which exerts the greatest influence on plant growth is the gravel content. The gravel ranges in size from .5 to 3.0 inches in diameter and is dispersed throughout the profile, constituting 35 percent or more of the soil by volume. The gravel greatly reduces the water and fertility holding capacity. These conditions make this a droughty site. Once the native plants have been depleted, they are slow to recover and difficult to re-establish. Many areas of these soils have been mined for gravel.

b. Some soil taxonomic units which characterize the site are:

~~Spackall gravelly fine sandy loam~~

Bonham gravelly soils

Bonham gravelly clay loam

c. Specific site location:

3. CLIMAX VEGETATION:

- a. The potential plant community on this site is a very open savannah consisting of scattered individual trees and motts of live oak. Little bluestem dominates the plant community, making up over 50 percent of the total annual yield. Also occurring, but less frequently or in smaller amounts are Indiangrass, sideoats grama, silver bluestem, tall dropseeds, Texas wintergrass. Forbs and legumes are abundant and add color to the landscape and variety to the diet of animals feeding on the site.

RELATIVE PERCENTAGE

Grasses	85%	Woody	5%	Forbs	10%
Little bluestem	50	Live oak		Hairy sunflower	
Indiangrass	10	Hackberry		Englemann daisy	
		Elm	5	Halfshrub sundrop	
Sideoats grama		Post oak		Penstemon	
Silver bluestem	20	Bumelia		Blacksamson	
Tall dropseeds		Elbowbush		Gayfeather	10
Texas wintergrass		Coralberry		Indian plantain	
		Sumac		Prairieparsley	
				Milkvetch	
Texas cupgrass				Spiderwort	
Low panicums				Bundleflower	
Hairy grama	5			Prairieclover	
Buffalograss				Sensitivebriar	
Fall witchgrass				Yellow neptunia	
Sedges				Gaura	
				Ruellia	
				Trailing ratany	
				Knotweed leafflower	
				Scurfpea	
				Western ragweed	
				Croton	
				Snow-on-the	T
				Prairie	

- b. Little bluestem, Indiangrass, and palatable forbs are the principal decreaseers under prolonged heavy grazing by cattle. Sideoats grama, silver bluestem, tall dropseeds, Texas wintergrass and the less palatable forbs are increaseers on the site.

Likely occupants of the site in a deteriorated condition include hairy grama, hairy tridens, Texas grama, threeawns, poverty dropseed, milkweed, nightshades, beebalm, verbenas, curlycup gumweed, western ragweed, scullcaps, larkspur, croton, broomweed, mesquite, eastern redcedar, cactus, coralberry, bumelia, elbowbush, and sumac.

- c. Approximate total annual yield of this site in excellent condition ranges from 2000 to 4500 pounds of air-dry vegetation per acre, depending on rainfall and growing conditions.

4. WILDLIFE NATIVE TO THE SITE: Quail and dove inhabit this site. Deer numbers are limited by scarcity of cover and browse. The site becomes more habitable for deer when range condition declines and woody plants increase and invade.

5. GUIDE TO INITIAL STOCKING RATE:

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

b. <u>Introduced Species</u>	<u>Percent Ground Cover</u>			
	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>25-0</u>
Common Bermudagrass	10-14	14-18	18-24	24+
KR, Kleberg bluestem	7-10	10-15	15-22	22+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. For Cattle

<u>Primary 2/</u>	<u>Secondary 3/</u>	<u>Low Value 4/</u>
Little bluestem	Sideoats grama	Annuals
Indiangrass	Silver bluestem	Hairy grama
Texas cupgrass	Tall dropseeds	Hairy tridens
Englemann daisy	Texas wintergrass	Texas grama
Halfshrub sundrop	Low panicums	Threeawns
Penstemon	Sedges	Prairieparsley
Gayfeather	Buffalograss	Ragweed
Sensitive briar	Blacksamson	Croton
Knotweed leafflower	Prairie clover	Woollywhite
	Bundleflower	Snow-on-the-Prairie
	Neptunia	Milkweeds
	Scurfpea	Nightshade
	Ruellia	Curlycup gumweed
	Gaura	Other woody plants
	Hackberry	

b. For Quail and Dove 5/

Primary

Ragweeds
Croton
Snow-on-the Prairie
Partridgepea
Sunflowers
Bundelflower
Sensitivebriar
Yellow neptunia
Panicum seeds
Paspalum seeds
Mast

Secondary

Prairieclover
Scurfpea
Trailing wildbean
Gaura

Low Value

Fuzzy seeded
grasses & forbs
Non mast-producing
woody plants

c. For Deer

Primary

Mast
Greenbrier
Hackberry
Elm
Englemann daisy
Sensitivebriar
Bundelflower
Yellow neptunia
Rescuegrass
Low panicums
Annual bromes
Knotweed leafflower
Milk vetch

Secondary

Oak leaves & twigs
Honeylocust
Bumelia
Elbowbush
Sumac
Blacksamson
Gayfeather
Gaura
Prairieclover
Scurfpea
Spiderwort
Ruellia
Trailing ratany
Fall witchgrass
Texas wintergrass
Sedges

Low Value

Mesquite
Pricklypear
Eastern redcedar
Osage-orange
Ragweed
Croton
Partridgepea
Paintbrush
Bluebonnets
Scullcaps
Verbenas
Larkspur
Indianplantain
Prairieparsley
Woollywhite
Snow-on-the-Prairie
Milkweeds
Nightshades