

GRAY SANDY LOAM
RANGE SITE DESCRIPTION
PE 31-44

Land Resource Area: Rio Grande
Plains

Location: _____

Date: 1/1/72

1. TOPOGRAPHY AND ELEVATION: This site occurs on nearly level to gently sloping upland areas. Slopes range from 0 to 5 percent, but mostly less than 2 percent.
2. SOILS:
 - a. The soils are deep with calcareous fine sandy loam or sandy clay loam surfaces and highly calcareous sandy clay loam or clay loam subsoils. The soils are well drained, runoff is medium, and permeability is moderate. Available water holding capacities are moderate. Due to the high lime content, this site appears to be droughty.
 - b. Some soil taxonomic units which characterize this site are:
 - Hidalgo fine sandy loam and sandy clay loam
 - McAllen fine sandy loam and sandy clay loam
 - c. Specific site location:
3. CLIMAX VEGETATION:
 - a. The climax plant community is an open grassland with scattered mesquite and underbrush throughout the landscape. The understory is dominated by mid grasses such as trichloris and plains bristlegrass. The site usually supports some climax forbs and legumes and some woody plants.

RELATIVE PERCENTAGE

| <u>Grasses</u> | 90% | <u>Woody</u> | 5% | <u>Forbs</u> | 5% |
|-----------------------------|-----|------------------|-----|--------------------|-----|
| Two & fourflower trichloris | 20 | Mesquite | T | Annual forbs |) |
| Arizona cottontop | 5 | Whitebrush |) | American snoutbean |) |
| Feathery bluestems | 5 | Blackbrush |) | Bundleflower |) |
| Green sprangletop |) | Spiny hackberry |) | Sensitivebriar |) 5 |
| Lovegrass tridens |)15 | Vine ephedra |) | Snoutbean |) |
| Plains lovegrass | 5 | Condalia |) | Bushsunflower |) |
| Plains bristle-grass | 10 | Lime pricklyash |) 5 | Orange zexmenia |) |
| Nash & hooded windmillgrass | 10 | Texas persimmon |) | Dalea |) |
| Curlymesquite |) | Cactus |) | | |
| Buffalograss |) 5 | Texas kidneywood |) | | |
| Vine-mesquite |) | Guajillo |) | | |
| Pink pappusgrass | 10 | Texas ebony |) | | |
| Knotroot bristle-grass |) | Desert yaupon |) | | |
| Slim tridens |) 5 | | | | |
| Knotroot panicum |) | | | | |
| Sand dropseed |) | | | | |

- b. As retrogression occurs, whitebrush, blackbrush, mesquite, spiny hackberry, and cactus may form a dense canopy. Some common invaders on the site are threeawns, croton, sneezeweed, ragweed, tumblegrass, perennial broomweed, and grassbur. Huisache, an introduced species, comes in strongly.
- c. Approximate total annual yield of this site in excellent condition ranges from 2500 pounds per acre in low production years to 4500 pounds per acre of air-dry vegetation in high production years.
4. WILDLIFE NATIVE TO THE SITE: This site is used by deer, dove, quail, and javelina. 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.
5. GUIDE TO INITIAL STOCKING RATE:

a.

| <u>Condition Class</u> | <u>Climax Vegetation</u> | <u>Ac/AU/Yr.L.</u> |
|------------------------|--------------------------|--------------------|
| Excellent | 76-100 | 12-16 |
| Good | 51-75 | 17-20 |
| Fair | 26-50 | 21-24 |
| Poor | 0-25 | 25 † |

b. Seeded Areas

| | <u>Percent Ground Cover</u> | | | |
|--------------------|-----------------------------|--------------|--------------|-------------|
| | <u>100-76</u> | <u>75-51</u> | <u>50-26</u> | <u>25-0</u> |
| Introduced species | 12-16 | 15-20 | 19-24 | 24 † |

RELATIVE FORAGE QUALITY OF SPECIES ^{1/}

a. Cattle

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|--------------------------------|--------------------------------|------------------|
| Feathery bluestem | Curlymesquite | Annual forbs |
| Arizona cottontop | Buffalograss | Mesquite |
| Two & fourflower trichloris | Slim tridens | Whitebrush |
| Lovegrass tridens | Pink pappusgrass | Condalia |
| Sideoats grama | Sedges | Cactus |
| Plains bristlegrass | Low panicums | |
| Bundleflower | Nash & hooded windmillgrass | |
| Desert yaupon | | |
| Vine ephedra | | |

b. Deer

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|---------------------|-------------------|-------------------|
| Most annual forbs | Texas wintergrass | Most grasses |
| Bundleflower | Sedges | Annual sneezeweed |
| Low panicums | Blackbrush | Whitebrush |
| Plains bristlegrass | Calliandra | Mesquite |
| Desert yaupon | Lime pricklyash | Paloverde |
| Texas kidneywood | Spiny hackberry | |
| Vine ephedra | | |

c. Javelina

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

c. Dove and Quail

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|--------------------------|---------------------|-------------------|
| (Seed of the following:) | | |
| Western ragweed | Desert yaupon fruit | Other grasses |
| American snoutbean | Dropseeds | Annual sneezeweed |
| Panicums | Calliandra | Blackbrush |
| Bushsunflower | Most grass seed | Whitebrush |
| Bundleflower | | Mesquite |
| 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.

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.