

R082 XY371 TX

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SANDSTONE HILL
RANGE SITE DESCRIPTION

PE-31-44

Land Resource Area Central Basin

Location _____

Date 1-1-72

1. TOPOGRAPHY AND ELEVATION: This site occurs on undulating to steep low hills or ridges above deeper soil areas. Slopes are generally 1 to 20 percent and are convex. Elevation varies from 1200 to 1400 feet.
2. SOILS:
 - a. The soils are shallow, reddish brown fine sandy loams less than 20 inches deep over sandstone. The soil above sandstone ranges from 4 to 14 inches thick. The low water holding capacity and moderate fertility limits the production on the site. Sandstone rock and boulders cover from 10 to 40 percent of the surface.
 - b. Some soil taxonomic units which characterize this site are:
Nebgen stony fine sandy loam
 - c. Specific site location:
3. CLIMAX VEGETATION:
 - a. The climax plant community is made up of a canopy of post oak, blackjack oak, live oak, and hickory trees with an understory of mid and tall grasses. The understory is dominated by grasses such as little bluestem, sideoats grama, indiagrass, cane and pinhole bluestems.

RELATIVE PERCENTAGE

| Grasses | 85% | Woody | 10% | Forbs | 5% | |
|-----------------------------|-----|---------------|-----|-------------------|----|---|
| Little bluestem | 40 | Post oak | 7 | Orange zexmenia | 3 | |
| Sideoats grama | 10 | Blackjack oak | | Sensitive briar | | |
| Indiangrass | 5 | Live oak | 3 | Perennial legumes | 2 | |
| Pinhole bluestem | 10 | Bumelia | | Engelmann daisy | | |
| Green Sprangletop | | Elm | | Sagewort | | |
| Purpletop | 10 | Pricklyash | | Knotweed | | |
| Sand lovegrass | | Hickory | | leafflower | | |
| Plains lovegrass | 10 | Hackberry | | Arrowleaf sida | | |
| Canada wildrye | | Greenbrier | | Annuals | | |
| Fringeleaf paspalum | 5 | | | | | T |
| Hairy dropseed | | | | | | |
| Texas wintergrass | 5 | | | | | |
| Hooded windmillgrass | | | | | | |
| Buffalo & curly mesquite | | | | | | |
| Fall witchgrass | 5 | | | | | |
| Cottontop | | | | | | |
| Plains bristlegrass | | | | | | |
| Vine mesquite | | | | | | |

- b. As retrogression occurs, hickory, oak, juniper and persimmon may form a dense canopy. Some common invaders on the site are pricklypear, tasajillo, catclaw, juniper, persimmon, prairie-coneflower, red lovegrass, croton, tumble lovegrass, sand dropseed, tumble windmillgrass, tumblegrass, threeawn, gummy lovegrass, mesquite and cenchrus.
- c. Approximate total annual yield of this site in excellent condition ranges from 1700 pounds in poor years to 3500 pounds of air dry vegetation in good years.
4. WILDLIFE NATIVE TO THE SITE: The site is used by deer, turkey, quail, dove and squirrel.

5. GUIDE TO INITIAL STOCKING RATE:

| <u>Condition Class</u> | <u>Climax Vegetation</u> | <u>Ac/AU/Yearlong</u> |
|------------------------|--------------------------|-----------------------|
| Excellent | 76 - 100 | 16 - 20 |
| Good | 51 - 75 | 18 - 22 |
| Fair | 26 - 50 | 20 - 30 |
| Poor | 0 - 25 | 30 + |

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|-------------------|----------------------|----------------------|
| Little bluestem | Pinhole bluestem | Purple threeawn |
| Indiangrass | Hairy dropseed | Sandbur |
| Sideoats grama | Hooded windmillgrass | Tumble windmillgrass |
| Green sprangletop | Texas wintergrass | Gummy lovegrass |
| Wildryes | Buffalograss | Tumble lovegrass |
| Sand lovegrass | Curlymesquite | Tumblegrass |
| Plains lovegrass | Cottontops | Red lovegrass |
| Purpletop | Fringeleaf paspalum | Hairy tridens |
| | Scribner panicum | Coneflower |
| | Arrowleaf sida | Greenbrier |
| | Knotweed leafflower | Oak |
| | Sagewort | Persimmon |
| | Hackberry | Croton |
| | | Prickly pear |
| | | Mesquite |
| | | Tasajillo |
| | | Whitebrush |
| | | Snakecotton |

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

b. Sheep

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|----------------------|------------------|----------------------|
| Sideoats grama | Little bluestem | Purple threeawn |
| Green sprangletop | Indiangrass | Sandbur |
| Wildryes | Pinhole bluestem | Coneflower |
| Plains lovegrass | Dropseeds | Oak |
| Hooded windmillgrass | Buffalograss | Persimmon |
| Texas wintergrass | Curlymesquite | Tumblegrass |
| Cottontops | Bumelia | Tumble windmillgrass |
| Fringeleaf paspalum | Greenbrier | Gummy lovegrass |
| Arrowleaf sida | Grape | Tumble lovegrass |
| Sagewort | Elm | Red lovegrass |
| Orange zexmenia | | Croton |
| Engelmann daisy | | Pricklypear |
| Vine mesquite | | Juniper |
| Plains bristlegrass | | Mesquite |

c. Goats

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|---------------------|------------------|------------------|
| Hackberry | Most grasses | Persimmon browse |
| Sagewort | Juniper | Croton |
| Knotweed leafflower | Whitebrush | Pricklypear |
| Arrowleaf sida | Hickory | Coarse grasses |
| Orange zexmenia | Sedges | |
| Elm | Persimmon mast | |
| Greenbrier | Oak | |
| Engelmann daisy | Sideoats grama | |
| Bumelia | Little bluestem | |
| Grape | Indiangrass | |
| Dewberry | Canada wildrye | |

d. Deer

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|---------------------|------------------|------------------|
| Knotweed leafflower | Live oak browse | Most grasses |
| Arrowleaf sida | Hickory | Persimmon browse |
| Elm | Sedges | Mesquite |
| Greenbrier | Whitebrush | Juniper |
| Bumelia | Juniper | |
| Grape | Orange zexmenia | |
| Hackberry | Post oak | |
| Dewberry | | |
| Persimmon mast | | |
| Sagewort | | |
| Oak mast | | |
| Post oak | | |
| Blackjack oak | | |
| Engelmann daisy | | |
| Perennial legumes | | |

e. Quail and Dove

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|-------------------|------------------|------------------|
| Croton seed | Dropseeds | Other grasses |
| Panicum seed | Paspalums | |
| Persimmon mast | Legumes | |
| Grape mast | | |
| Dewberries | | |
| Annual weed seed | | |
| Annual grass seed | | |

f. Turkey

| <u>Primary</u> | <u>Secondary</u> | <u>Low Value</u> |
|------------------------|------------------|------------------|
| Tender grasses & forbs | Other grasses | Other forbs |
| Acorns | Tasajillo fruit | Annual weeds |
| Dewberries | Legumes | |
| Grapes | | |
| Panicums | | |
| Juniper berries | | |
| Paspalum | | |
| Hackberry | | |
| Persimmon mast | | |

g. Squirrel

Primary

Hickory nuts
Acorns

Secondary

Grapes
Dewberries

Low Value

Grasses
Forbs

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.