

*SAND HILL*

~~DEEP SAND~~  
DESERT GRASSLAND  
RANGE SITE DESCRIPTION

Land Resource Area Trans-Pecos

Location \_\_\_\_\_

Date January 1, 1972

1. TOPOGRAPHY AND ELEVATION: This site occurs as nearly level to gently rolling sandy plains, 0 to 3 percent, with a succession of sand dunes, some up to 15 feet high. Elevations range from 2500 to 3000 feet.
2. SOILS:
  - a. Soils of this site are deep, fine sandy, sometimes underlain by indurated caliche. The soils are rapidly permeable, have high available water holding capacity, and a good plant-soil-air-water relationship. If unprotected by plant cover, the soils are highly susceptible to wind erosion and large active sand dunes may be formed.
  - b. A soil taxonomic unit which characterizes this site is:  
Kermit fine sand
  - c. Specific site location: *Penwell fs*
3. CLIMAX VEGETATION:
  - a. This site is an open grassland, with tall and mid grasses dominating the plant community. Grasses are of the bunch and rhizomatous types, with some ecotypes, as sand bluestem, Havard panicum, and sandreed, especially adapted to the deep sandy soils. Frequently shifting sands and irregular dunes produce considerable variation and frequent fluctuations in structure and composition of the plant community. Plants such as Havard oak, sand sagebrush, Havard panicum, and sandreed are well adapted to these environmental conditions and act as principal soil stabilizers. Pioneer species such as annuals and some of the dropseeds dominate the less stable areas within the plant community.

RELATIVE PERCENTAGE

<u>Grasses</u>	75% <u>Woody</u>	10%	<u>Forbs</u>	15%	
Giant dropseed	35	8	Halfshrub	5	
Havard panicum			Sand sagebrush		primrose
Sandreed			Fourwing saltbush		Guara
Sand bluestem	12	2	Heliotrope	1	
Littlebluestem			Yucca		Globemallow
Indiangrass			Ephedra		Mentzelia
Mesa dropseed	20	T	Grassland	1	
Sand dropseed			croton		
Spike dropseed			Sand verbena		
Sand paspalum	5		Gromwell	1	
Signalgrass			Cryptantha		
Perennial threeawns			Trailing		
Annual grasses	3		four-o'clock	8	
			A		
			Annual forbs		

b. As retrogression occurs, the dominant tall grasses such as sand bluestem, giant dropseed, Havard panicum and sandreed are replaced by the mid and short grasses which begin to increase and then dominate the plant community. Pioneer plants such as sand and mesa dropseeds, signalgrass, the annual sandburs and purple sandgrass, and numerous annual forbs increase strongly to become the dominant herbaceous vegetation in the deteriorated plant community. Sand sagebrush and Havard oak also increase strongly and mesquite invades the site, forming low, dense, woody canopies.

c. Approximate total annual herbage yield of this site in excellent condition ranges from 600 pounds per acre, air-dry weight, in poor years to 800 pounds per acre in good years.

4. WILDLIFE NATIVE TO THE SITE: Dove and quail are the principal wild-life species of this site. The climax vegetation produces an abundance of desirable food items and cover is plentiful.

5. GUIDE TO INITIAL STOCKING RATE:

<u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/Yr.L.</u>	<u>AU/Sec/Yr.L.</u>
Excellent	76-100	32-43	15-20
Good	51-75	40-53	12-16
Fair	26-50	53-107	6-12
Poor	0-25	107-320	2-6

RELATIVE FORAGE QUALITY OF SPECIES 1/

## a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Giant dropseed	Mesq dropseed	Mesquite
Sandreed	Spike dropseed	Croton
Havard panicum	Sand paspalum	Mentzelia
Sand bluestem	Sand dropseed	Signalgrass
Little bluestem	Perennial threeawns	Annual grasses
Indiangrass	Havard oak	Annual forbs
Halfshrub primrose	Sand sagebrush	
Gaura	Fourwing saltbush	
	Globemallow	
	Sundrops	

## b. Dove and Quail

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Seed of:	Seed of:	Seed of:
Havard panicum	Dropseeds	Mesquite
Sand paspalum	Sandreed	Threeawns
Croton	Signalgrass	Bluestems
Heliotrope	Fourwing saltbush	Indiangrass
Gaura	Sand sagebrush	
Globemallow	Oak acorns	
Hard-seeded annual forbs		

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.