USDA, SCS
Section II-E
Technical Guide
Area 18

SAND HILL
DESERT SHRUB
RANGE SITE DESCRIPTION

Land Resource Area Trans Pecos

Location _____

Date June, 1977

1. TOPOGRAPHY and ELEVATION: This site occurs as rolling sandy plains with many areas of large sand dunes. The elevation ranges from 3,500 to 4,000 feet.

2. SOILS:

   a. The soils of this site are deep, light colored, loamy fine sands that take moisture rapidly. These soils have a good plant-soil-air-moisture relationship, but their ability to hold moisture is limited. If unprotected by plant cover, these soils are highly susceptible to wind erosion and large active dunes occur.

   b. Some soil taxonomic units which characterize this site are:
      Bluepoint loamy fine sand

   c. Specific site location:

3. CLIMAX VEGETATION:

a. The climax plant community consists of drought tolerant mid and short grasses in association with perennial forbs and shrubs. Ephemerials are abundant seasonally and quickly occupy the broad interspaces among the perennials following infrequent desert rains.

Relative Percentage

Grasses 70%		Woody 15%		Forbs 15%	
Mesa dropseed	50	Fourwing saltbush	10	Guara	5
Spike dropseed		Ephedra		Crotons	
Sand dropseed		Yucca spp.		Sundrops	
Giant dropseed				Wildbuckwheat	
		Broom dalea	5	Mentzelia	
Bush muhly	15	Creoaotebush			
Perennial threeawn				Annual sunflower	5
Signalgrass		Wolfberry	T	Sand verbena	
Plains bristlegrass		Sand sage			
				Other annual forbs	5
Annual grasses 5					

b. When retrogression occurs due to livestock grazing, perennial grasses are replaced with annual forbs and woody plants increase. Mesquite will invade and wind erosion is severe causing active dunes. Rodents are active in this community. Due to low rainfall recovery of depleted ranges is extremely slow.

c. Approximate total annual yield of this site in excellent condition ranges from less than 100 pounds per acre in poor years to 500 pounds per acre of air-dry herbage in good years.

4. WILDLIFE NATIVE TO THE SITE: Dove and quail are primary game animals species of this site. Coyotes inhabit the site in various population densities. Rodents are usually numerous. Deer seldom use the area.

5. ESTHETICS AND RELATED VALUE: Colorful forbs quickly decorate the rolling landscape following infrequent late summer rains. The site appears as a sandy desert because of lack of vegetation.

6. HYDROLOGIC CHARACTERISTICS: The sandy soils are well drained and have rapid internal drainage, slow surface runoff, and rapid permeability. Soils give up moisture readily to plants, but soils have little capacity to retain moisture.

7. GUIDE TO INITIAL STOCKING RATE:

Condition Class	Climax Vegetation	Ac/AU/YrL	AU/Sec/YrL
Excellent	76-100	7-70-120	5-9
Good	51-75	90-100	4-7
Fair	26-50	120-200	3-5
Poor	0-25	200+	0-3

Due to low rainfall and wind erosion hazard, site should not be seeded.

RELATIVE FORAGE QUALITY OF SPECIES

a. Cattle

Primary	Secondary	Low Value
Mesa dropseed	Perennial threeawn	Most forbs
Spike dropseed	Annual grasses	Woody plants
Giant dropseed	Signalgrass	
Sand dropseed	Some annual forbs	
Bush muhly	Fourwing saltbush	
Plains bristlegrass		

b. Deer

Primary	Secondary	Low Value
Fourwing saltbush	Sand sage	Creosote
Ephedra	Plains bristlegrass	Yucca
Forbs	Dropseeds	Perennial threeawn
	Wolfberry	

c. Dove and Quail

Primary	Secondary	Low Value
Seeds of:	Seeds of:	Perennial threeawns
Plains bristlegrass	Dropseeds	Ephedra
Signalgrass	Creosote	Sand sage
Sunflower		
Wildbuckwheat		
Croton		
Mentzelia		
Mast of Woody Plants		