

USDA-SCS  
Section II-E  
Area I

SAND HILLS  
RANGE SITE DESCRIPTION  
PE-26-38

Land Resource Area High Plains, Rolling Plains  
Canadian, Clarendon, Follett, Memphis,  
Location Miami, Pampa, Stinnett, Stratford,  
Wellington, Wheeler

Date January 31, 1975

1. TOPOGRAPHY AND ELEVATION: This site occurs on hummocky land and stabilized dunes. Near the Canadian River this site is extremely hummocky.
2. SOILS:
  - a. The significant soils that characterize this site are fine sands that are over 20 inches in depth. These soils are rapidly permeable. If unprotected by vegetation the soil is highly susceptible to wind erosion. If vegetation covers this soil, the moisture intake rate is very high and little runoff occurs. This site deteriorates rapidly and will not maintain a turf under heavy grazing. It will respond readily to good grazing management. There may be soils that vary from the characteristics typical of this site, but support the same kinds and amounts of vegetation. (Example - Sandy bottomland soils with infrequent overflow). This site is non-arable.
  - b. A soil taxonomic unit which characterizes this site is:

Tivoli fine sand
  - c. Specific site location:
3. CLIMAX VEGETATION:
  - a. The climax plant community is tall grass dominated by switchgrass, Indiangrass and sand bluestem. A distinct characteristic of this site is the presence of big sandreed. Though this species is low in palatability it occurred in the climax and has a tendency to come and go as influenced by the grazing use of associated climax species.

RELATIVE PERCENTAGE

<u>Grasses</u>	75%	<u>Woody</u>	15%	<u>Forbs</u>	10%
Little bluestem	20	Shin oak	5	Lead plant	5
Sand bluestem	15	Sand sage	5	Mentzelia	5
Indiangrass	10	Sand plum	T	Wild alfalfa	T
Switchgrass	5	Skunkbush sumac	5	Prairie clover	T
Sand lovegrass	5	Small soapweed	T		
Canada wildrye	T	Catclaw sensitive-	T		
Sand dropseed	5	briar			
Giant dropseed	T				
Needle & Thread	T				
Silver bluestem	T				
Texas bluegrass	T				
Big sandreed	5				
Sideoats grama	5				
Hairy grama	T)				
Blue grama	T)				
Threeawns	T) 5				
Sand paspalum	T				

- B. As retrogression occurs, threeawns, sand dropseed, fall witchgrass, red lovegrass, tumble windmill and shin oak will increase. Tall grasses such as sand bluestem and little bluestem decrease.
- C. Approximate total annual yield of this site in excellent range condition ranges from 1400 pounds in low rainfall years to 3400 pounds of air dry vegetation in good rainfall years.

INTERPRETATIVE DATA

- WILDLIFE NATIVE TO THE SITE: The site is inhabited by deer, turkey, prairie chicken, quail and dove. Several of the woody plants, forbs, and grasses which grow on the site provide good cover, browse, and seeds for game birds and animals.
- GUIDE TO INITIAL STOCKING RATE:

A.

<u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/Y1</u>
Excellent	76-100	20-26
Good	51-75	24-34
Fair	26-50	32-46
Poor	0-25	40 <del>7</del>

b. Seeded Areas

Percent Ground Cover

	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>25-0</u>
Mixture of Tall and Mid grasses	18-24	22-30	28-36	34 <del>7</del>

RELATIVE FORAGE QUALITY OF SPECIES

## a. Cattle

Primary \*

Sand bluestem  
 Indiangrass  
 Switchgrass  
 Sand lovegrass  
 Texas bluegrass  
 Needle & thread  
 Canada Wildrye  
 Sideoats grama  
 Blue grama

Secondary \*

Little bluestem  
 Sideoats grama  
 Silver bluestem  
 Sand dropseed  
 Giant dropseed  
 Tall dropseed  
 Hairy grama

Low Value \*

Gummy lovegrass  
 Fall witchgrass  
 Sand paspalum  
 Tumble windmill  
 Red lovegrass  
 Big sandreed  
 Threeawns

## b. Deer

Primary

Skunkbrush sumac  
 Sand plum  
 Prairie clover  
 Wild alfalfa  
 Catclaw sensitivebriar  
 Annual forbs

Secondary

Small soapweed blooms  
 Shinoak acorns  
 Lead plant  
 Canada wildrye  
 Riddell groundsel

Low Value

Scarlet gaura  
 sand sage  
 Most tall grasses

## c. Turkey

Primary \*\*

Sand plum  
 Sand paspalum  
 Switchgrass  
 Shinoak acorns  
 Greens  
 Bundleflower  
 Sunflower  
 Western indigo

Secondary \*\*

Tall dropseed  
 Skunkbush  
 Mentzelia  
 Western ragweed  
 Sand dropseed

Low Value \*\*

Bluestems  
 Other grasses  
 Annuals  
 Indiangrass

## d. Prairie Chicken

Primary \*\*

Shinoak acorns  
 Switchgrass  
 Sand plum  
 Sand paspalum

Secondary \*\*

Western ragweed  
 Wild buckwheat  
 Wild alfalfa  
 Prairie clover  
 Mentzelia

Low Value \*\*

Bluestems  
 Other grasses  
 Sand sage  
 Other annuals

## e. Dove and Quail

Primary \*\*

Switchgrass  
 Mentzelia  
 Western ragweed  
 Sunflower

Secondary \*\*

Scarlet gaura  
 Skunkbush sumac  
 Sand paspalum  
 Wild buckwheat  
 Sunflower

Low Value \*\*

Most perennial  
 grasses  
 Other annuals