

THIN SANDS RANGE SITE

1. TOPOGRAPHY

- a. This site is on nearly level to rolling glacial outwash plains and wind worked lake plains. Slopes are commonly from one to 15 percent.

2. SOILS

- a. These are deep, excessively drained, coarse textured soils having a thin A horizon. Permeability is rapid and available water capacity is low. These soils are highly susceptible to wind erosion and require careful management.

- b. Soil taxonomic units common to this site are:

Claire loamy sand and loamy fine sand
Serden fine sand and loamy fine sand

Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

- a. Both cool and warm season midgrasses dominate this site, Principal plants are prairie sandreed, needleandthread, and sand bluestem. Other species are green needlegrass, western wheatgrass, prairie junegrass, blue grama, Canada wildrye, Kentucky bluegrass, and upland sedges. A variety of forbs make up about 15 percent of the total herbage production. Woody plants are about 10 percent of the herbage production.
- b. Continued heavy grazing by cattle results in a decrease of sand bluestem, green needlegrass, western wheatgrass, prairie junegrass, and little bluestem, Needleandthread initially increases and then decreases under heavy grazing. Species that increase are blue grama, prairie sandreed, sand dropseed, Kentucky bluegrass, and upland sedges.

Further deterioration of this site results in a dominance of short grasses, upland sedges, and undesirable forbs. "Blow-outs" commonly occur on steeper slopes.

- c. Approximate total annual production of this site in excellent condition is from 1800 to 2400 pounds of air-dry herbage per acre, depending on growing conditions.

2--Thin Sands Range Site

d. A detailed description of the vegetation in excellent condition is as follows:

Relative Percent Composition of the Potential Vegetation

	Mean Productivity	
	lbs/acre	% composition
Grasses		
Prairie sandreed	735	35
Needleandthread	315	15
Sand bluestem	105	5
Canada wildrye	105	5
Green needlegrass		
Western wheatgrass		
Prairie junegrass		
Little bluestem	105	5
Blue grama		
Sand dropseed		
Kentucky bluegrass		
Other grasses	105	5
Grasslikes		
Penn sedge		
Needleleaf sedge	105	5
Other sedges		
Forbs		
Green sagewort		
Lemon scurfpea		
Hairy goldaster		
Rush skeletonplant		
Ground cherry	315	15
Prairie spidewort		
Missouri goldenrod		
Other forbs		
Shrubs and half-shrubs		
Fringed sagebrush		
Woods rose		
Leadplant amorpha	210	10
Sandcherry		
Other shrubs		
Total	2100	100

3--Thin Sands Range Site

4. DOMESTIC LIVESTOCK GRAZING VALUE

- a. This site is suitable for cattle and sheep due to the variety of plants produced on it. The best season of grazing is summer; however, the site has spring and fall grazing value. An adequate plant cover must be maintained since the soils are easily eroded by wind under barren conditions.

5. WILDLIFE NATIVE TO THE SITE

- a. This site is used by antelope and white-tailed deer for forage. Small mammals include the skunk, badger, jackrabbit, and red fox. Upland birds commonly found on this site are sharp-tailed grouse, mourning dove, and meadowlark. Songbirds that use this site are the lark bunting, Brewer's sparrow, and chestnut-collared longspur.

6. ESTHETIC AND RELATED VALUES

- a. This site is part of the rolling prairies and produces many species of flowering plants in spring and summer. Recreational activities associated with this site are hunting, plant study, and hiking.

7. HYDROLOGIC CHARACTERISTICS

- a. Runoff from this site in good to excellent condition is slow. Rate of water transmission is high.

8. A TYPICAL SITE LOCATION IN THIS AREA IS AS FOLLOWS

