SAVANNAH RANGE SITE

1. TOPOGRAPHY

   a. This site occurs on nearly level to hilly glacial till uplands along the edge of the Turtle Mountains. Slopes are commonly from one to 25 percent.

2. SOILS

   a. These are deep, well drained, medium and moderately fine textured soils. Permeability of these soils is moderately slow and available water capacity is high.

   b. Soil taxonomic units common to this site are:

      Bottineau loam and clay loam

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

3. POTENTIAL VEGETATION

   a. This site occurs along the margin of a forest climate where moisture is insufficient to support a forest but adequate to support intermingled patches of woody plants and open grassland. Woody plants are shrubs and small trees. Principal plants of grassed areas are green needlegrass, needleandthread, western wheatgrass, and little bluestem. Principal plants of woody areas are bur oak, quaking aspen, green ash, juneberry, chokecherry, and hazelnut. Other species are blue grama, big bluestem, Canada wildrye, Kentucky bluegrass, and upland sedges. A variety of forbs make up about 10 percent of the total herbage production. Total annual growth from trees and shrubs amounts to about 25 percent of the total herbage produced on the site.

   b. Continued heavy grazing by cattle results in a decrease of plants such as green needlegrass, western wheatgrass, little bluestem, bearded wheatgrass, big bluestem, and Canada wildrye. Needleandthread initially increases and then decreases under heavy use. Plants that increase are blue grama, Kentucky bluegrass, upland sedges, woods rose, and western snowberry.

      Further deterioration of the site results in additional amounts of woody plants and a dominance of short grasses, sedges, and undesirable forbs.

c. Total annual production of this site in excellent condition is about 2450 to 3300 pounds of air-dry herbage per acre, depending on growing conditions.

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		
Green needlegrass	290	10
Needleandthread	290	10
Western wheatgrass	290	10
Little bluestem	145	5
Blue grama	145	5
Bearded wheatgrass	145	5
Prairie junegrass Prairie sandreed Big bluestem Canada wildrye	145	5
~~Kentucky bluegrass~~ Other grasses	290	10
Grasslikes		
Penn sedge Threadleaf sedge Other sedges	145	5
Forbs		
American vetch Veiny peavine Meadow anemone Cottonweed Northern bedstraw Blackeyedsusan Other forbs	290	10
Trees and shrubs		
Bur oak Quaking aspen Green ash	290	10
Juneberry Chokecherry Woods rose Hazelnut Western snowberry Round-leaved hawthorn Other shrubs	435	15
Total	2900	100

Openings
Smooth Brome
K. blue
Syoc
Bottlebrush
Sedges

3--Savannah Range Site

4. DOMESTIC LIVESTOCK GRAZING VALUE

a. This site is suitable for both cattle and sheep grazing. The best season of grazing is summer; however, the site also has spring and fall grazing value. Sites grazed during the spring need a periodic rest to improve and maintain plant composition.

5. WILDLIFE NATIVE TO THE SITE

a. This site provides excellent forage and cover for the white-tailed deer. Small mammals commonly found are the red squirrel, porcupine, snowshoe rabbit, and cottontail rabbit. Upland birds that use this site are the ruffed grouse, sharp-tailed grouse, and mourning dove. Songbirds attracted to the site are the brown thrasher, robin, clay-colored sparrow, and least fly catcher. A common bird of prey is the long-eared owl.

6. ESTHETIC AND RELATED VALUES

a. The range of topography and diversity of vegetation offer a wide range of scenery to the observer. Color is added to the landscape from flowering plants in spring and summer and colors from the turning of leaves on deciduous trees and shrubs in the fall. Recreational activities associated with this site are hiking, horseback riding, hunting, and bird watching.

7. HYDROLOGIC CHARACTERISTICS

a. Runoff from this site is slow and water transmission rate of the soil is moderate.

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