

GUIDE FOR GRAZING WOODLAND

I. Definition

Grazable woodland is forest land on which the understory can be grazed without significantly impairing forest values. The Pine Ridge area consists of a woodland plant community that has an under-story of herbaceous plants (grasses, grass-like plants, and forbs). In some areas the tree canopy is so close that an understory does not grow. These areas are generally small and are included with the Savannah range site.

II. Plant Community

A. Sparse Canopy

Little bluestem, sideoats grama, plains muhly, green needlegrass, western wheatgrass, blue grama, hairy grama, prairie sandreed, prairie junegrass, threadleaf sedge, needleandthread, littleseed ricegrass, and fringed sagewort.

Sparse canopy is defined as having woody plant crown density of 5 to 25 percent. The woody plants are not significantly suppressing growth of other vegetation or interfering with normal use of the land.

B. Medium Canopy

Slender wheatgrass, bearded wheatgrass, Canada wildrye, spikefescue, and Kentucky bluegrass.

Medium canopy is defined as woody plants with crown density of 25 to 65 percent. The woody plant cover is somewhat greater than is normal for the site. The brush is suppressing growth of the more desirable plant community and limits the use of the area by livestock, at least. Some brush stands may be desirable for wildlife.

C. Dense Canopy

Grass plant community is the same as described for medium canopy. The total forage production from grasses and other herbaceous species would be reduced.

Dense canopy is defined as woody plants with crown density of 65 to 100 percent. The woody plant cover considerably exceeds normal for the site. Brush species dominate the plant community, seriously suppress growth of more useful plants for livestock and wildlife, and severely hamper the use of the land.

III. Woodland Site Groups

A. Woodland Site Index - 70 or higher

1. Soils most typical of this plant community are deep, well-drained, and dark-colored to a depth below 20 inches. They occur on very gently slopes and mainly on foot slopes that have north- and east-facing exposures. A few areas are at the head of drainageways and in swales. The soils are loam to silt loam in the surface layer; and loam, silt loam, or silty clay loam in the underlying material. These soils have moderate permeability and high available-water capacity. Ponderosa pine grows better on soils in this group than on soils in other groups.
2. The soil series and type is Duroc loam.

B. Woodland Site Index - 60 to 70

1. Soils most typical of this plant community are deep, well-drained, and moderately-dark. They occur on moderately steep to steep slopes in the uplands and foot slopes that mainly have north-and east-facing exposures. The soils occur mainly in the middle part of the total slope. They range in texture from silt loam to loamy fine sand in the surface layer and underlying material. These soils have a moderate to moderately rapid permeability and high available-water capacity. The soils occurring on steep slopes have moderate limitations for managing and harvesting trees. Ponderosa pine grows well on soils in this group.
2. Soil series and types are:

Bridget very fine sandy loam
Broadwater loamy very fine sand
Busher loamy very fine sand
Creighton very fine sandy loam
Oglala very fine sandy loam
Ulysses silt loam
Vetal fine sandy loam

C. Woodland Site Index - 50 to 60

1. Soils most typical of this plant community are shallow, well-drained, and light-colored. They are steep and very steep, generally have east and north exposures, and occur mainly in the upper part of the total slope. The soils range in texture from gravelly loam to fine sandy loam in the surface layer and underlying material. They

are strongly calcareous and have moderate permeability above the bedrock. Available water capacity is low. Ponderosa pine are mainly sparse and stunted.

2. Soil series and types: Canyon soils (north and east exposure).

IV. Wildlife Associated with Each Woodland Size

A. Woodland Site Index - 70 or higher

Deer are found in association with this group, especially white-tail, as well as turkey, bobcats, squirrels, raccoons, foxes, coyotes, jackrabbits, cottontail rabbits, song birds, and small mammals. The highest populations occur where the greatest understory of shrubs and herbaceous plants exist.

B. Woodland Site Index - 60 to 70

Mule and whitetail deer, along with turkey, are found in association with this group. Other common wildlife species include fox, coyote, cottontail rabbit, jackrabbit, raccoon, other small mammals, song birds, hawks, owls, and eagles.

C. Woodland Site Index - 50 to 60

Mule deer are more common than whitetail. Other kinds of wildlife include bobcat, fox, coyote, porcupine, raccoon, jackrabbit, cottontail, small mammals, hawks, owls, and eagles. There may be some turkey.

V. Total Annual Production of Herbaceous Plants and Suggested Initial Stocking Rates

<u>Canopy Class</u>	<u>Lbs./A (air-dry)</u>	<u>AUMs Per Acre</u>	<u>Acres Per Cow Month</u>
A. Woodland Site Index - 70+			
Sparse	400 to 600	.14 to .2	5 to 7
Medium	200 to 400	.07 to .14	7 to 14
Dense	100 to 200	.04 to .07	14 to 25
B. Woodland Site Index - 60 to 70			
Sparse	650 to 1000	.2 to .3	3 to 5
Medium	350 to 650	.1 to .2	5 to 10
Dense	100 to 350	.03 to .1	10 to 33
C. Woodland Site Index - 50 to 60			
Sparse	800 to 1200	.3 to .4	2 to 3
Medium	400 to 800	.15 to .3	3 to 7
Dense	200 to 400	.07 to .15	7 to 14

VI. Suggested Season of Use

Cool-season grasses: May 1 to July 1 1/

Warm-season grasses: May 15 - June 1 to October 15.

Note: If livestock are fed protein supplements during the dormant season, livestock abortions may be a problem.

1/ If growing conditions are ideal during the summer period, there may be grazing from September 1 to October 15.