

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

PRESCRIBED GRAZING

(Acre)

CODE 528A

management goals using Sections I & II of the FOTG and other references as guidance.

DEFINITION

The controlled harvest of vegetation with grazing or browsing animals, managed with the intent to achieve a specified objective.

Frequency of defoliations and season of grazing will be based on the rate and physiological conditions of plant growth.

PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

Duration and intensity of grazing will be based on desired plant health and expected productivity of key forage species to meet management unit objectives.

Maintain enough vegetative cover to prevent accelerated soil erosion due to wind and water.

- Improve or maintain the health and vigor of selected plant(s) and to maintain a stable and desired plant community.
- Provide or maintain food, cover and shelter for animals of concern.
- Improve or maintain animal health and productivity.
- Maintain or improve water quality and quantity.
- Reduce accelerated soil erosion and maintain or improve soil condition for sustainability of the resource.

Application of this practice will manipulate the intensity, frequency, duration, and season of grazing to:

- Insure optimum water infiltration,
- Maintain or improve riparian and upland area vegetation,
- Protect stream banks from erosion,
- Manage for deposition of fecal material *so as to comply with state law on contamination of water bodies, away from water bodies, and-*
- Promote ecologically and economically stable plant communities on both upland and bottom land sites which meet landowner objectives.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on all lands where grazing and/or browsing animals are managed.

Grazing use on range or grazeable woodland grasses and grass-like species will not remove more than 50 percent by weight of the current year's growth of the designated key species when grazed during the growing season. When grazed during the dormant season or in a grazing schedule that allows for short grazing periods followed by long rest periods of 30 days during fast growth to 60 or more days during slow growth, grazing use will not remove more than 60 percent. The utilization gauge developed by the U.S. Forest Service, Rocky Mountain Forest & Range Experiment Station,

CRITERIA

General Criteria Applicable For All The Purposes Stated Above.

Removal of herbage will be in accordance with production limitations, plant sensitivities and

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resource Conservation Service.

may be used to determine the percent of weight removed of common forage grasses by estimating the percent of the plant height removed.

Grazing use on range browse or grazeable woodland browse species may be utilized at 65 percent of the current years' growth of the designated key browse species. Degree of use on browse species is based on the amount of current years' growth removed.

Grazing utilization on pasturelands will be based on leaf length. Attachment 1 for pasturelands provides the minimum leaf lengths at which to initiate and end grazing, as well as the leaf length needed for plant health prior to the first killing frost.

Degraded grazing lands can benefit from one to two years of deferment during the growing season. Deferment will be from spring green-up to seed maturity of the key species.

Complete year long rest is generally not required to restore vigor to depleted grazing lands and, over time, can become detrimental to plant vigor and species composition.

Additional criteria for the development of intensive grazing programs.

Grazing and rest periods shall be scheduled to meet the desired objectives for the plant communities and the associated resources in each pasture including the grazing animals.

Livestock movements shall be based on plant growth and utilization and not calendar dates.

The planned grazing sequence shall provide significant periods of rest at least every other year during the primary growing season of the key plant species.

Grazing sequences will be changed or adjusted when significant changes in plant vigor or composition, animal kinds and classes, or management objectives occur.

Grazing sequences will be such that the same pasture is not grazed year after year during the same period of the growing season. Rest periods on dryland grazing areas shall be a minimum of 30 days during fast growth up to 60+ days during slow growth. On irrigated grazing lands rest shall range from 20 to 40+ days depending on plant growth rate.

The grazing manager shall be encouraged to initiate a monitoring program to document actual grazing dates, livestock performance, climatic conditions, vegetation utilization and changes over time in order to analyze results and to develop the following years grazing schedule.

Additional Criteria For Improved Animal Health And Productivity.

Movement of animals will be in a manner to improve and/or maintain animal health and performance, and to reduce or prevent spread of disease, parasites, and contact with harmful insects.

Grazing should be applied in accordance with forage quality and quantity criteria that best meets the production requirements for the kind and/or class of animal.

Additional Criteria For Water Quality.

Duration, intensity, frequency, and season of grazing in or near surface waters will be applied to comply with state laws and regulations. ~~in such a manner that the impacts to vegetative and water quality will be positive.~~

Duration, intensity, frequency, and season of grazing will be applied to enhance nutrient cycling by better manure distribution and increased rate of decomposition.

Additional Criteria For Soil Erosion and Condition.

Duration, intensity, frequency, and season of grazing shall be managed to minimize soil compaction or other detrimental effects.

Duration, intensity, frequency, and season of grazing shall be applied to sustain vegetative cover to minimize soil erosion.

CONSIDERATIONS

Supplemental feed may be necessary to meet the desired nutritional levels for animals of concern. Placement of supplemental feed should be considered to reduce negative impacts to soil, water, air, plant, and animal resources.

Use of natural or artificial shelter will be included as part of this practice when conditions demand.

Animal husbandry requirements which may affect the design of the grazing prescription will be considered.

Prescribed Grazing should consider the needs of other enterprises utilizing the same land, such as wildlife and recreational uses.

Water supply must be adequate to meet the demands of the livestock over the specified grazing period in each pasture.

Every grazing program must be tailored to the cooperator's goals and resources. Such things as animal husbandry requirements (breeding programs, etc.) may affect the success or failure of the grazing prescription and must be considered.

PLANS AND SPECIFICATIONS

A Prescribed Grazing schedule will be prepared for all fields and pastures incorporating any additional feed supplementation for the operating unit or portion of an operating unit being addressed. Grazing schedules will be recorded in a manner that is readily understood and useable by the decision maker in their daily operations. The manner of documentation will depend upon the size and complexity of the operating unit and the details required for a grazing prescription.

A prescribed grazing schedule will include the following information:

1. *Location - Field numbers, and Map or Sketch.*
2. *Acres and how determined.*
3. *Erosion predictions if primary purpose was erosion control.*
4. Documentation of the expected forage quantity and quality for each management unit(s), i.e., pastures during the grazing season.
5. Supplemental feed requirements needed to meet the desired nutritional level for the kind and class of livestock and grazing/browsing wildlife of concern in the management unit(s).
6. Documentation of the number of domestic livestock by kinds and class, and the number of grazing/browsing wildlife of concern anticipated within the management unit(s) *or a statement that the producer prefers to keep this private.*

7. Documentation of nutritional surpluses and deficiencies from the forage resources for each kind and class of livestock and grazing/browsing wildlife of concern in the management unit(s).

8. *A monitoring method that is readily understood and useable by the operator in their daily operations that, as a minimum, identifies key areas, key species and % use for range and grazeable woodland management units or, in pasture management units, key species and minimum leaf length to begin, end and re-grow by killing frost.*

9. *Other useful comments.*

Prescribed Grazing Schedules for intensive grazing programs will include the following additional information:

Development of a planned grazing schedule for livestock which identifies periods of grazing, resting, and other treatment activities for each management unit(s) *until the cooperator is able to make schedules independently.*

A contingency plan that details potential problems, i.e., drought, and a guide for adjusting the grazing prescription to insure resource management and economic feasibility without resource degradation will be developed *as situations arise and the cooperator requests it.*

OPERATION AND MAINTENANCE

Operation: The manager will apply Prescribed Grazing on a continuing basis, making adjustments as needed to insure that the concept and objectives of its application are met.

Maintenance: The Prescribed Grazing schedule will specify when evaluations of the current feed and forage supply should be made. If an imbalance is determined the prescription should be adjusted accordingly or other harvesting techniques applied.

ATTACHMENT NUMBER ONE: 528A - PRESCRIBED GRAZING, PASTURELAND

Approximate minimum leaf lengths, in inches, for pasture management, animal health, and animal productivity.

<u>SPECIES</u>	<i>Begin Grazing</i>	<i>Grazed Stubble Height</i>	<i>Regrowth before Killing* Frost</i>
<i>GRASSES:</i>			
<i>bluegrass, big</i>	6	4	8
<i>bluegrass, Kentucky</i>	4	3	3
<i>bromegrass, smooth</i>	6	4	4
<i>bromegrass, meadow</i>	6	4	4
<i>canarygrass, reed</i>	8	7	8
<i>fescue, tall</i>	6	4	5
<i>foxtail, creeping</i>	5	4	5
<i>foxtail, meadow</i>	5	4	5
<i>needlegrass, green</i>	6	4	5
<i>orchardgrass</i>	6	4	6
<i>timothy</i>	6	4	6
<i>wheatgrass, beardless</i>	7	5	7
<i>wheatgrass, bluebunch</i>	7	5	7
<i>wheatgrass, crested (standard)</i>	4	3	3
<i>wheatgrass, Fairway</i>	4	2	2
<i>wheatgrass, FairXstand</i>	4	3	3
<i>wheatgrass, intermed.</i>	8	4	7
<i>wheatgrass, pubescent</i>	8	4	7
<i>wheatgrass, Siberian</i>	3	2	3
<i>wheatgrass, slender</i>	6	4	6
<i>wheatgrass, streambank</i>	4	3	3
<i>wheatgrass, tall</i>	8	7	8
<i>wheatgrass, thickspike</i>	4	4	4
<i>wheatgrass, western</i>	5	4	4
<i>wildrye, Altai</i>	6	5	
<i>wildrye, beardless</i>	5	4	
<i>wildrye, Russian</i>	6	3	4
<i>LEGUMES:</i>			
<i>alfalfa</i>	6	6	7
<i>clover, alsike</i>	4	3	6
<i>clover, ladino</i>	3	3	6
<i>clover, red</i>	6	5	6
<i>clover, white</i>	3	3	3
<i>milkvetch, cicer</i>	4	3	5
<i>sainfoin</i>	8	4	6
<i>sweetclover, white</i>	8	3	4
<i>sweetclover, yellow</i>	8	3	4
<i>trefoil, birdsfoot</i>	8	3	5
<i>vetch, hairy</i>	8	4	4

OTHER:

Grass-Legume (base on legume)

* Minimum stubble height for grazing after killing frost is 3 inches. Remove animals prior to spring green-up.