

USDA  
NATURAL RESOURCES  
CONSERVATION SERVICE  
  
DELAWARE CONSERVATION  
PRACTICE STANDARD  
  
**PRESCRIBED GRAZING**  
  
CODE 528  
(Reported by Acres)

**DEFINITION**

Managing the controlled harvest of vegetation with grazing animals.

**PURPOSES**

1. Improve or maintain the health and vigor of plant communities.
2. Improve or maintain quantity and quality of forage for livestock health and productivity.
3. Improve or maintain water quality and quantity.
4. Reduce accelerated soil erosion and maintain or improve soil condition.
5. Improve or maintain the quantity and quality of food and/or cover available for wildlife.
6. Promote economic stability through grazing land sustainability.

**CONDITIONS WHERE PRACTICE  
APPLIES**

This practice applies to all lands where grazing animals are managed.

**CONSIDERATIONS**

Utilization or stubble height target levels are tools that can be used in conjunction with

monitoring to help ensure that resource conservation and producer objectives are met.

When needed, rest areas for a period of time to ensure the success of brush control, seeding, or other conservation practices.

Consider developing a grazing system that provides forage for as much of the year as possible to minimize supplemental feed costs.

Where practical, start the grazing sequence in a different management unit each growing season.

When weeds are a significant problem, prescribed grazing should be implemented in conjunction with pest management to protect desired plant communities.

Livestock feeding, handling, and watering facilities should be designed and installed in a manner to improve and/or maintain animal distribution. These facilities should also be designed and installed to minimize stress, the spread of disease, parasites, contact with harmful organisms, and toxic plants. Hay rings, water supply, mineral feeders, and other supplements should be spaced out individually in each pasture to avoid creating single multi-use areas frequented by animals.

Supplemental feed and/or mineral requirements should be balanced with the forage consumption to meet the desired nutritional level for the kind and class of grazing livestock.

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

Consider improving carbon sequestration in biomass and soils through management of grazing to produce the desired results.

**CRITERIA**

**Criteria Applicable to All Purposes**

Removal of herbage will be in accordance with site production limitations, rate of plant growth, and the physiological needs of forage plants.

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

Manage the kind of animal, animal number, grazing distribution, length of grazing periods, and timing of use to provide sufficient deferment from grazing during the growing period. Plan grazing to match forage quantity and quality, with goals of the livestock producer.

Protect soil, water, air, plant, and animal resources when locating livestock feeding, handling, and watering facilities. Minimize concentrated livestock areas to enhance nutrient distribution, and to reduce soil compaction, excess runoff, and erosion.

Maintain adequate ground cover and plant density to sustain or improve filtration and soil condition and to filtering capacity of the vegetation.

Manage grazing animals to maintain adequate vegetative cover on sensitive areas (i.e. riparian, wetland, habitats of concern).

Control toxic and poisonous plants to reduce the loss of livestock.

Develop a contingency plan to ensure resource management and economic feasibility without resource degradation.

**Additional Criteria to Improve or Maintain Food and/or Cover for Wildlife Species of Concern**

Provide rest from grazing during critical nesting periods. When wildlife habitat is identified as a resource concern, prescribed grazing shall be used to manage the plant community so that it provides the necessary species composition, plant height, structure, and density for the desired wildlife species. For most wildlife, a mixed stand of grasses (especially native grasses), forbs, and legumes will provide optimum food and/or cover.

During the nesting season (April 15 to August 15), use only light grazing pressure and do not graze below 6 inches to maintain habitat for ground-nesting birds. Where feasible, graze only one-third of the stand each year or leave ungrazed strips at least 35 feet wide along field edges to provide undisturbed nesting habitat. To provide winter cover, allow sufficient recovery time in the fall so that the stand is at least 8 inches in height before dormancy.

**Additional Criteria to Promote Economic Stability through Grazing Land Sustainability**

Evaluate the economics of the forage system and associated infrastructure. Various farm management computer programs are valuable resources in this evaluation process.

Develop a grazing system that provides forage for as much of the year as possible to minimize supplemental feed costs.

**PLANS AND SPECIFICATIONS**

Plans and specifications for this practice shall be prepared in accordance with the previously listed criteria. Plans and specifications shall contain sufficient detail to ensure successful implementation of this practice. Documentation shall be in accordance with the section "Supporting Data and Documentation" in this standard.

The following components shall be included in the prescribed grazing plans.

1. Goals and objectives clearly stated.
2. Resource Inventory including but not limited to buildings and existing forage (complete Pasture Condition Score), working facilities, fences, and existing water system.
3. Forage Inventory of the expected forage quality, quantity, and species of forage in each management unit(s) during the grazing period.
4. Forage-Animal Balance developed as a sustainable grazing plan for the management unit(s), which insures forage produced meets forage demand of livestock. Use C-Graz or method approved by the State Resource Conservationist.
5. Management activities that identifies periods of grazing, rest, and other treatment activities for each management unit. Refer to Tables 1 and 2. Describe the plans for providing water for each paddock. Record management plans to extend the grazing season.
6. Contingency plan developed that details potential problems (i.e., severe drought, flooding, and/or freezing conditions) and serves as a guide for adjusting the grazing prescription to ensure resource management and economic feasibility without resource degradation.

7. Identify fields or sources for hay.
8. Monitoring plan developed with appropriate records, to assess the effectiveness of the grazing strategy in meeting objectives. Identify the key areas and key plants that the manager would evaluate in making grazing management decisions.

### **OPERATION AND MAINTENANCE**

The producer/client is responsible for the operation and maintenance of the practice. Operation and maintenance activities address the following:

Prescribed grazing will be applied on a continuing basis throughout the occupation period of all grazing units.

Adjustments will be made as needed to ensure that the goals and objectives of the prescribed grazing strategy are met.

All facilitating practices that are needed to effect adequate grazing distribution as planned by this practice will be maintained in good working order.

The goal is to allow animals to graze available forage to a target height that will allow for maximum regrowth. Refer to Table 1 and 2 regarding guidelines for beginning and ending grazing heights and usual days of rest for several pasture crops.

Clip pastures as needed to initiate vegetative regrowth and/or control undesirable plant species.

Renovate pastures as necessary to introduce desired forage species.

### **Record Keeping**

Producer must maintain records to allow the certifying individual to document plan implementation. As applicable, records include:

1. Prescribed Grazing Plan.
2. Animal groups/types, numbers, and weights of animals grazing in paddocks.
3. Record forage type and condition.

4. Document the starting and ending grazing heights and period of grazing dates.
5. Management following the grazing period (clipping, dragging, fertilization).
6. Length of rest period.
7. Record any supplemental feeding.

### **SUPPORTING DATA AND DOCUMENTATION**

The following is a list of the minimum data and documentation to be recorded in the case file:

1. Location of the practice on the conservation plan map.
2. Assistance notes. The notes shall include dates of site visits, name or initials of the person who made the visit, specifics as to alternatives discussed, decisions made, and by whom.

### **REFERENCES**

1. College of Agriculture and Natural Resources, University of Maryland. Grazing Management, FS 786 2002.
2. Department of Agricultural and Natural Resources, Delaware State University, Year Round Grazing on the Delmarva Peninsula, Bulletin No. A-111, May 1999.
3. North Carolina Cooperative Extension Service, Horse Feeding Management, Nutrient Requirements for Horses, Robert A. Mowrey AG – 558-1.
4. Penn State University Four Steps to Rotational Grazing, Agronomy 43 1994.
5. Potash and Phosphate Institute, Forage Crop Pocket Guide, Third Printing, October 2001.
6. Purdue Extension, Forage Field Guide Purdue University ID – 317 2004.
7. Virginia State University, Virginia Cooperative Extension, Controlled Grazing of Virginia's Pastures, Publication Number 418-012 July 1996.

<b>TABLE 1: Guidelines for Adjusting Rest Period</b>			
<b>Season</b>	<b>Weather Conditions</b>	<b>Growth Rate Cool Season Forages</b>	<b>Rest Period</b>
Spring	Cool, Moist	Fast	14 days
Spring	Warm, Dry	Medium	20 days
Summer	Hot, Moist	Slow	30 days
Summer	Hot, Dry	Very Slow	60 days

<b>TABLE 2: Guidelines for Beginning and Ending Grazing Heights and Usual Days of Rest</b>			
<b>Crop</b>	<b>Begin Grazing In Inches</b>	<b>End Grazing In Inches</b>	<b>Usual Days of Rest</b>
Alfalfa	10 -16	2-4	35-40
Bermudagrass	4-8	1-2	7-15
Kentucky Bluegrass	8-10	1-3	7-15
Clover, White	6-8	1-3	7-15
Reed Canarygrass	7 - 8	3 - 4	15-30
Clovers, all others	8-10	3-5	10-20
Eastern Gamagrass	18-22	10-12	30-45
Tall Fescue	4-8	2-3	15-30
Festulolium	4-8	2-3	15- 30
Orchardgrass	8-12	3-6	15-30
Annual Ryegrass	6-12	3-4	7-15
Cereal Rye	8-12	4	7-15
Sorghum Sudangrass Hybrids	20-24	8-12	10-20
Switchgrass	18-22	8-12	30-45