

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

PRESCRIBED GRAZING
(Ac.)

CODE 528

DEFINITION

Managing the harvest of vegetation with grazing and/or browsing animals.

PURPOSE

Apply this practice as part of a conservation management system to achieve one or more of the following:

- Improve or maintain desired species composition and vigor of plant communities.
- Improve or maintain quantity and quality of forage for grazing and browsing animals' health and productivity.
- Improve or maintain surface and/or subsurface water quality and quantity.
- Improve or maintain riparian and watershed function.
- Reduce accelerated soil erosion, and maintain or improve soil condition.
- Improve or maintain the quantity and quality of food and/or cover available for wildlife.
- Manage fine fuel loads to achieve desired conditions.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all lands where grazing and/or browsing animals are managed.

CRITERIA

General Criteria Applicable to All Purposes

Remove forage in accordance with site

production limitations, rate of plant growth the physiological needs of forage plants and the nutritional needs of the animals.

Supply adequate quantity and quality drinking water at all times during period of occupancy.

Adjust intensity, frequency, timing and duration of grazing and/or browsing to meet the desired objectives for the plant communities and the associated resources, including the grazing and/or browsing animal.

Manage kind of animal, animal number, grazing distribution, length of grazing and/or browsing periods and timing of use to provide grazed plants sufficient recovery time to meet planned objectives.

Provide rest from grazing or browsing to ensure the success of prescribed fire, brush management, seeding or other conservation practices that cause stress or damage to key plants.

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

Manage livestock movements based on rate of plant growth, available forage, and allowable utilization target.

Develop contingency plans to deal with expected episodic disturbance events e.g. insect infestation, drought, wildfire, etc.

Additional Criteria to Improve or Maintain the Health and Vigor of Plant Communities

Plan periodic rest from grazing and/or browsing to maintain or restore the desired plant community following episodic events such as wildfire or severe drought.

Maintain a minimum score of 35 from the Pasture Condition Score (PSC) sheet on all grazing units (with exception to the designated sacrifice lot).

Soil test and maintain adequate nutrient and pH levels based on soil test results to improve or maintain desired forage species composition, plant vigor, and persistence.

Additional Criteria to Improve or Maintain Quantity and Quality of Forage for Animal Health and Productivity

Plan grazing and/or browsing to match forage quantity and quality goals of the producer within the capability of the resource to respond to management.

Enhance diversity of pasture plants to optimize delivery of nutrients to the animals by planning intensity, frequency, timing and duration of grazing and/or browsing.

Provide supplemental feed and/or minerals based on seasonal forage availability and consumption to meet the desired nutritional level for the kind and class of grazing and/or browsing livestock.

Base dietary needs of livestock on the National Research Council's Nutrient Requirements of Domestic Animals or similar scientific sources with appropriate adjustments made for increased energy demand required by browsing or grazing animals foraging for food including travel to and from pasture site.

Practice biosecurity safeguards to prevent the spread of disease between on-farm classes of livestock and between livestock farm units.

Use shelter in the form of windbreaks, sheds, shade structures, and other protective features where conditions warrant protecting livestock from severe weather, intense heat/humidity, and predators.

Additional Criteria to Improve or Maintain Surface and/or Subsurface Water Quality and Quantity and Riparian Watershed Function

Minimize concentrated livestock areas to enhance nutrient distribution and improve or maintain ground cover.

Locate infrastructure to promote uniform grazing and manure distribution.

Locate feeding and sacrifice areas away from environmentally sensitive areas such as wetlands, streams/creeks and adjacent riparian areas and drainage swales.

Plan intensity, frequency, timing and duration of grazing and/or browsing to:

- Minimize deposition or flow of animal wastes into water bodies.
- Minimize animal impacts on stream bank or shoreline stability.
- Provide adequate ground cover and plant density to maintain or improve infiltration capacity and reduce runoff.
- Provide adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation.
- Maintain adequate riparian community structure and function to sustain associated riparian, wetland, floodplain and stream species.

Additional Criteria to Reduce Soil Erosion and Maintain Soil Condition

Minimize concentrated livestock areas, trailing, and trampling to reduce soil compaction, excess runoff and erosion.

Plan intensity, frequency, timing and duration of grazing and/or browsing to provide adequate ground cover, litter and canopy to maintain or improve infiltration and soil condition.

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

Identify species of concern in the objectives of the prescribed grazing plan.

Plan intensity, frequency, timing and duration of grazing and/or browsing to provide for the development and maintenance of the plant structure, density and diversity needed for the desired fish and wildlife species of concern.

Additional Criteria for Management of Fine Fuel Load

Plan intensity, frequency, timing and duration of grazing and/or browsing to:

- Reduce hazardous fuel loads.

- Manage fuel continuity, load and other conditions to facilitate prescribed burns.

CONSIDERATIONS

Plan for no more than 30% of the total annual herd forage needs (documented by forage-livestock balance) to be met by supplemental feed or hay from external non-grazed land, unless weather conditions do not allow adequate production of grazing forage.

Design and install livestock feeding and handling facilities in a manner to improve and/or maintain animal distribution.

Design and install watering facilities or access points so livestock have to travel no more than approximately 800 feet to water for improved forage utilization and manure distribution.

Utilization of stubble height target level is a tool that can be used in conjunction with monitoring to help ensure that resource conservation and producer objectives are met.

When weeds are a significant problem, implement prescribed grazing and/or browsing in conjunction with other pest management practices to promote plant community resistance to invasive species and protect desired plant communities.

Extend the grazing season by stockpiling tall fescue and using warm and cool season forage species in the pasture system.

Consider the needs of other enterprises utilizing the same land, such as wildlife and recreational uses.

PLANS AND SPECIFICATIONS

The prescribed grazing plan shall conform to all applicable federal, state and local laws. Seek measures to avoid adverse effects to endangered, threatened, and candidate species and their habitats.

Prepare a prescribed grazing plan for all planned management units where grazing and/or browsing will occur according to state standards and specifications.

CHECK DATA

Record and maintain the following check data:

1. Livestock producer's goals and objectives.

2. A map showing farm, tract, field numbers, soil mapping units, grazing unit layout, lanes (if any), acres, fencing, shade (if any), shelter (if any), watering system, and sacrifice areas.
3. Resource Inventory that identifies:
 - existing resource conditions and concerns
 - soil type, productivity group, and yield potential
 - opportunities to enhance resource conditions
4. Forage inventory of the expected forage quality, quantity and species in each management unit (include Pasture Condition Score Sheet).
5. Number, kind, class and average weight of livestock throughout the grazing system.
6. Forage-Animal Balance developed for the pre-planned grazing system and for the expected balance after plan implementation, which ensures forage produced or available meets forage demand of livestock and/or wildlife.
7. Grazing plan developed for livestock that identifies periods of grazing and/or browsing, rest, and other treatment activities for each management unit.
8. Contingency plan developed that details potential problems (i.e., severe drought, flooding, insects) and serves as a guide for adjusting the grazing prescription to ensure resource management and economic feasibility without resource degradation.
9. Monitoring plan developed with appropriate records to assess whether the grazing strategy is resulting in a positive or upward trend and is meeting objectives. Identify the key areas and key plants that the manager should evaluate in making grazing management decisions. (Use Grazing Record Sheet or pre/post Pasture Condition Score Sheet.)

OPERATION AND MAINTENANCE

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

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

Maintenance. Monitoring data and grazing records will be used on a regular basis within the prescribed grazing plan to insure that objectives are being met or to make necessary changes in the prescribed grazing plan to meet objectives.

Move livestock to a sacrifice area, feedlot, or previously designated pasture, in times of drought or very wet soil conditions, to protect the integrity of the grazing system.

Renovate and/or re-seed pastures if the stand is undesirable or unable to meet system needs.

Soil test all pastures and hay fields (minimum every 2-3 years) and maintain adequate nutrient and pH levels based on soil test results to achieve expected forage productivity and persistence.

All facilitating and accelerating practices (e.g. *Fence* (382), *Pest Management* (595), *Brush Management* (314), *Pasture Planting* (512)

(etc.) that are needed to affect adequate grazing and/or browsing distribution as planned by this practice standard will be maintained in good working order and operated as intended.

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