

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

PRESCRIBED GRAZING

(Ac.)

CODE 528

DEFINITION

Managing the controlled harvest of vegetation with grazing animals.

PURPOSES

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

- Improve or maintain the health and vigor of plant communities.
- Improve or maintain quantity and quality of forage for livestock health and productivity.
- Improve or maintain water quality and quantity.
- 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.
- Promote economic stability through grazing land sustainability.

CONDITIONS WHERE PRACTICE APPLIES

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

CRITERIA

General Criteria Applicable for all Purposes

Removal of herbage will be in accordance with site production limitations, rate of plant growth, and the physiological needs of forage plants. The managed goals applied in accordance to Sections I & II of the Colorado FOTG and other reference guides.

Manage kind of animal, animal number, grazing distribution, length of grazing and rest/recovery periods, and timing of use to provide sufficient deferment from grazing during the growing period.

Protect soil, water, air, plant, and animal resources when locating livestock feeding, handling, and watering facilities.

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

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

Duration and intensity of grazing, and opportunity for regrowth after grazing, will be based on desired plant health and expected productivity of key forage specie(s) to meet management unit objectives.

Adjust grazing and rest/recovery periods and/or stocking rates to meet the desired objectives for the plant communities and the associated resources, including the grazing animal.

Schedule livestock movements based on rate of plant growth, available forage and utilization, not calendar dates.

<p>Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.</p>
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Meet the needs of the plant communities and associated resources, including the grazing animal and not on calendar dates.

Periodic rest from grazing may be needed to maintain or restore the desired plant community following episodic events, such as grasshopper defoliation, wildfire or severe drought.

Promote ecological and economic stable plant communities on both uplands and bottomlands that meet management objectives, maintain or improve carbon sequestration, and minimize ecological desertification.

Fertilize to meet the needs of the plant and to meet the production objectives of the operator. Refer to Nutrient Management (590) conservation practice for further guidance.

Guidance will be provided so that the operator develops a balanced supply of growing forage during the period when it is needed.

Harvesting, either by grazing or cutting, will be controlled so enough residue and/or growing crop remains throughout the year to control water erosion and soil blowing. Harvesting during the dormant period will be limited so the above requirements are met. For maintenance of soil tilth the wind and water erosion will be minimized using the Conservation Crop Rotation Standard (328) as the basis for residue amounts specified.

Grazing height will not be less than the grazing height established for the desired production level and no less than the minimum required for soil protection.

Plan grazing systems so that irrigation water is applied as soon as feasible after livestock are removed from the pasture or grazing unit. Some fields may require more than one irrigation before the next grazing rotation.

Match the period of rotation to the periods of irrigation thereby minimizing soil compaction.

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

Plan grazing to match forage quantity and quality with goals of the livestock producer.

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. Forage quality should be monitored using available tools such as NUTBAL and or forage quality sampling. The plan should match with the goals of the livestock producer.

Additional Criteria to Improve or Maintain Water Quality and Quantity

Maintain adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation resulting in a healthy hydrologic cycle.

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

Additional Criteria to Reduce Accelerated Soil Erosion and Maintain or Improve Soil Condition

Maintain adequate ground cover, litter, and canopy to maintain or improve infiltration and soil condition. Control grazing to achieve a healthy mineral cycle and optimal energy flow through the ecosystem.

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

Protect stream banks from erosion.

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

Manage for diverse plant communities. Manage plant height, structure and density for desired wildlife habitat. Manage ecological succession to achieve optimal biological diversity.

Provide rest (deferment) from grazing during critical nesting periods.

Maintain or improve sensitive areas such as riparian, wetland, habitats of concern, and upland area vegetation.

Additional criteria to promote economic stability through grazing land sustainability.

Evaluate the economics of the forage system and associated infrastructure.

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

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

Reduce the loss of livestock from toxic and poisonous plants.

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 prescribed fire, brush control, seeding or other conservation practices.

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.

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.

PLANS AND SPECIFICATIONS

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

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

Guidelines for developing a prescribed grazing plan include:

1. Goals and Objectives clearly stated.
2. Resource Inventory (i.e. Field numbers with acreages and map or sketch, resource condition or similarity indices, existing structures, facilities, soil).
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 or available meets forage demand of livestock and/or wildlife of concern. Supplemental feed will be addressed if demand exceeds timely production.
5. Grazing Plan developed for livestock that identifies periods of grazing, rest, and other treatment activities for each management unit.
6. Contingency plan developed that details potential problems (i.e., severe drought, flooding) and serves as a guide for adjusting the grazing prescription to ensure resource management and economic feasibility without resource degradation.

7. Monitoring plan developed with appropriate records to assess whether the grazing strategy is meeting objectives. Identify the key area(s) and key plant(s) that the manager should evaluate in making grazing management decisions. In pastureland the designated key specie(s) and minimum leaf length to begin and end grazing and leaf length at the end of the growing season (prior to the first killing frost) will be identified.

OPERATION AND MAINTENANCE

Operation. 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.

Maintenance. All facilitating practices (i.e. Fence, Watering Facilities, Pest Management) that are needed to effect adequate grazing distribution as planned by this practice standard will be maintained in good working order.

REFERENCES

Dietz, Harland E., Range Conservationist (Retired) Soil Conservation Service. Special report: GRASS: The stockman's crop, How to harvest more of it. 1988, 1989 Sunshine Unlimited, Inc., Lindsborg, KS

Grazing Lands Technical Institute. National Range and Pasture Handbook. USDA, NRCS. 1997. Fort Worth, TX.