

Prescribed Grazing

Prescribed Grazing for Wildlife

Conservation Practice WV Job Sheet

Code 528



Definition

Managing the controlled harvest of vegetation with grazing animals.

Purpose

The purpose of this practice is to increase plant diversity, maintain an early successional stage of vegetation and improve or maintain the quantity and quality of food and/or cover available for wildlife.

Conditions Where Practice Applies

This practice applies to all lands where grazing animals are managed and where wildlife is an objective.

To achieve the proper vegetative stage, it is essential to understand the daily and seasonal requirements of the wildlife species prior to the implementing these techniques. Refer to the NRCS conservation practice standard (645) Upland Wildlife Habitat Management for more information regarding the daily and seasonal habitat requirements for various species of wildlife. This practice should be established concurrently with other practices as part of a wildlife resource management system.

Grassland management practices are usually directed toward the maximum production of forage for livestock. However, they can be performed with a timing and intensity that are wildlife friendly and productive

agriculturally. The timing and intensity of harvesting grass is probably the most critical of all the factors that can affect the value of grasslands for both wildlife and livestock.

Domestic livestock may be effectively utilized to manipulate plant succession. This may be beneficial to maintaining the quality of herbaceous cover and controlling woody vegetation. In some instances this method may provide the most benefits with the least amount of impacts to wildlife.

Considerations for Establishment

The management of grasslands to produce both livestock forage and wildlife food and cover is a compatible use of the land. However, **it is extremely difficult to have wildlife management and livestock forage production as equal primary objectives.** For grazing systems to benefit wildlife, an individual grazing management plan with wildlife as the primary objective is required. When using the methods outlined in this document there are trade-offs in production and habitat; and compromises must be made to items such as livestock carrying capacity, amount of acceptable habitat disturbances, decrease in production of livestock or forage and the quality of that forage. Managers must be aware of potential compromises and take them into consideration when contemplating livestock grazing and wildlife management plans.

A. GENERAL

Grazing, as opposed to haying or mowing, removes the vegetation over a longer period of time. In some instances this provides the most wildlife benefits with the least amount of direct wildlife impacts.

The development of a wildlife-friendly grazing plan should be accomplished first. The primary objective of the grazing plan should be wildlife oriented with livestock production as a secondary concern. This grazing plan must include the grazing period and target grass height based on the carrying capacity of a particular species of livestock.

Some general criteria for grazing and wildlife strategies are as follows:

- Rotational grazing is usually more beneficial to wildlife than a continuously grazed system.
- Depending on the management scheme, fescue dominated grasslands offer little or no value for wildlife and are an overall poor habitat for grassland dwelling species. It should be replaced with a more wildlife-friendly species where practicable.
- Managers and planners should ensure that there is adequate infrastructure for implementation (water, minerals, fence, etc) and the layout of the operation should be planned to best facilitate grazing. The methods outlined in this job sheet should only be utilized in circumstances where the operator fully understands the principles of a grazing management system and has demonstrated a high level of management skill.
- The rate of removal of forage is determined mainly by how many head of livestock are placed on the grazing unit (stocking rate) and how long they are allowed to graze (grazing period). The stocking rates for wildlife are much less intense than for livestock and forage production. As a general rule, stocking rates should be based at one-third of the carrying capacity of the pasture.
- Good grazing management practices that will improve forage production generally also benefit wildlife if managed properly. Practices such as legume introduction, proper grazing heights as well as grazing intensities will improve production as well as wildlife habitat.
- Each grazing system has unique characteristics for operation. However, as a general rule, livestock should graze no more than 1/3 of an entire grassland stand in any given year while the remainder of the stand is fallow. This may be accomplished by harvesting only 1/3 of a single field; or no more than 1/3 of the entire acreage of a grassland stand of multiple fields in a year. (See figure 1).

- Grazing will not usually interfere with nesting grassland wildlife (i.e. songbirds) unless too much cover is removed too quickly, or the stocking density is very high and trampling occurs.

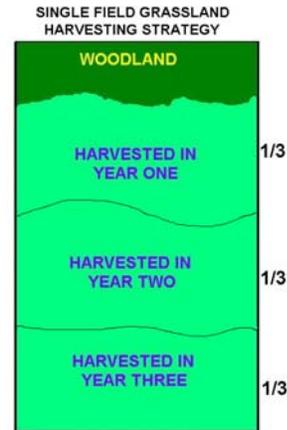


Figure 1. This figure illustrates a simplified grazing strategy by grazing 1/3 of a single field per year.

Vegetation heights during the nesting season and through the winter months are critical elements of a wildlife management plan. Heights of grasses will vary depending on targeted wildlife species. Differing heights within fields, paddocks or grassland stands is desirable. Some specifics are:

- Most wildlife will readily use all **cool-season grasses**, however tall fescue is the least desirable. Cool-season grasses should be grazed no closer than an average height of 4 inches. Grazing below this height will result in lower production, may increase soil erosion and reduce wildlife use. These grasses are normally at their peak quality and palatability during the height of the nesting period for many ground nesting birds (March 15 to July 15). There must be sufficient residue for nest initiation, nest building, foraging and reproduction before livestock return to the paddock. This usually requires a minimum of 35 days.
- When managing **warm season grasses** in a pasture situation, rotational grazing should always be used. The ideal rest period between rotations in paddocks or fields is 42 to 49 days.
- **Warm season grasses** should only be grazed to a maximum of 12 inches or no more than one-half of the above ground height. This ensures that ample amounts of cover, insects, and seeds are available for wildlife and it keeps the grass healthy. Some examples of the grasses that are used in grazing systems are big bluestem, Indiangrass, side-oats gramma, little bluestem and switchgrass.
- Warm season grasses probably should not be grazed 30 days prior to the first killing frost and a minimum of 8-10 inches of growth should be present in the fall in order for plants to build root reserves for wintering and initiating spring growth. This residual growth may be used as winter cover and nesting the

following spring. As with cool season grasses, the value of the cover increases exponentially with grass height.

B. CONTINUOUS GRAZING

Continuous grazing allows livestock in one grazing unit to graze selectively for a long period of time. This is probably the most common method of grazing in West Virginia due to the average size of farm, management expense and topography. With proper grazing height management and stocking densities this method can be beneficial to wildlife, livestock, and the soil and plant resources.

If managed poorly, continuous grazing may result in the near elimination of the most palatable plants for livestock and allows the introduction and spread of plants that are not as favorable to livestock or beneficial to wildlife. Poor management of continuously grazed systems often results in reduced forage production and elimination of wildlife cover and food. Over-stocked amounts of livestock can also destroy nests and nesting habitat due to trampling. Years of continuous overgrazing will produce less forage over time and if over-grazed for long durations will drastically change the composition of a grassland.

C. ROTATIONAL GRAZING

Overall, rotational grazing is a better management choice in terms of wildlife. Rotational systems may be elaborate permanent fencing and watering systems; to a single field divided by temporary portable fence and watering troughs.

Rotational grazing provides the grasses a needed recovery period. These undisturbed units serve as wildlife habitat. When grasses are rested or the grazing unit is left idle (fallow) between grazing periods, the vigor of the plants increases, giving them a chance to grow and multiply. This results in increased forage, increased livestock production and improved wildlife food and cover.

Rotational grazing systems vary widely. They may be as simple as switching livestock between two grazing units or pastures periodically. Whereas “Management Intensive Grazing” (MIG), require movement of livestock every 1-3 days through elaborate fencing and water networks. This type of rotational grazing system requires more management on the part of the operator and is not the ideal grazing system for wildlife management.

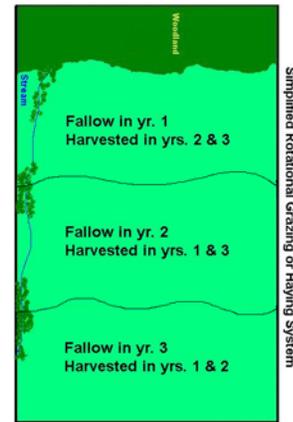


Figure 2. This figure illustrates a simplified example of a three field rotationally grazed system and grazing (harvesting) schedule. Each field will not be grazed (fallow) for a one year period over three years. Note that only 1/3 of the entire stand is harvested in a single year.

D. FLASH GRAZING

Flash grazing is a method that allows for brief grazing at low intensities to remove grass height, residue and maintain a successional stage of vegetation. Usually this grazing period is quite brief. It may be utilized by operators that wish to maintain an area in grass or forbs for wildlife but is not normally accessible such as odd areas of hayland or crop fields or around waterbodies. If utilizing this practice for pollinator habitat disturbance regimes the rotation period should be 40 days or more. Also refer to the (528) Prescribed Grazing – Riparian Grazing Supplement.

Flash grazing should be utilized outside the primary nesting season (March 15 – July 15) where possible; and used with caution around waterbodies to avoid water quality concerns.

Operation and Maintenance

Grasslands are dynamic communities that require frequent disturbance to maintain the desired composition. An extended schedule is required beyond the installation period.

To maintain the health and vigor of grasslands it may require the periodic application of lime and/or fertilizer. This should be done according to recommendations from a soil test that is performed on a regular basis. Nutrients should be applied outside the primary ground nesting season (March 15 – July 15).

When utilizing long rotational grazing cycles, it is possible that some grasslands may start to develop brush and woody vegetation. An herbicide may be spot sprayed to eliminate undesirable vegetation.

Additional practices such as fencing and water developments may also be necessary. Maintain those individual practices as they require, ensuring the function of the grazing system.

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If needed, an aerial view, map or a sketch of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Additional Specifications and Notes: (i.e. herbicide application, operation and maintenance specifics, etc.)

Questions regarding the operation, harvest schedule or establishment of this practice should be directed to:

_____ at _____

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