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Prescribed Grazing

Wyoming Fact Sheet

Natural Resources Conservation Service
www.nrcs.usda.gov

Contact your local Wyoming NRCS Office for assistance

What is Prescribed Grazing?

Prescribed grazing is the controlled harvest of vegetation with grazing or browsing animals and managed with the intent to achieve one or more of the following purposes:

- To improve or maintain the health and vigor of the selected plant(s)
- To maintain a stable and desired plant community
- To provide or maintain food, cover, and shelter for animals of concern
- To improve or maintain animal health and productivity
- To maintain or improve water quality and quantity
- To reduce accelerated soil erosion and maintain or improve soil conditions for the sustainability of the resource

Simply put, prescribed grazing management is balancing the needs of the key forage producing plants (adequate leaf area and healthy root systems) with the needs of the grazing animal (adequate quantity and quality of forage).

Benefits of Prescribed Grazing

When properly applied, this practice has the potential to maintain or improve:

- Forage quality and quantity
- Plant diversity
- Grazing animal health and condition
- Water quality and quantity
- Wildlife habitat
- Economic viability

In addition to these benefits, soil erosion may be reduced and the short-term impacts of drought on forage production may be reduced due to increased moisture infiltration, healthier and deeper plant root systems, and reduced evapotranspiration rates.

Keys To A Grazing Plan

Resource Inventory

Proper identification of current or potential resource concerns is critical for long-term productivity and health of pasture and range land uses. A properly designed and implemented grazing plan may resolve many resource concerns such as plant health, plant composition, and soil erosion. To resolve some resource concerns, it may also require the implementation of practices such as livestock water systems or fence that complement the prescribed grazing plan management efforts.

Forage Balance

One crucial factor to consider is the amount of leaf area removed from key forage plants within pastures. Plant productivity and health of the range and pasture forage species is typically a predominate resource concern. There are many factors that may affect this such as environmental factors, adequate soil moisture, grazing pressure, pest pressure, etc. The proper degree of use for your pastures varies by which plants are grazed and the time of the year they are grazed. When it comes to forage management, the adage “take half and leave half” best describes the degree of use that will meet most range and pasture health management goals. Also, rotating pasture use and leaving at least half of a plant’s leaf area after each grazing event helps insure adequate leaf surface for photosynthesis and plant growth for recovery. Determining proper stocking rates is critical to ensure that proper use of your pastures is met.

Season Of Use

When grazing two or more pastures during the growing season, plan the grazing sequence to avoid grazing the same pasture during the same portion of the growing season in consecutive years. This provides plants a longer period of growth for over-all benefits to plant root and production.

Plant Recovery

Grazing removes leaf area from plants and reduces the plants’ ability to photosynthesize. Once this leaf area is removed, the plant needs adequate recovery time to regrow its leaf area and replace stored food reserves it used to regrow leaf area. The amount of time it takes for a plant to recover varies depending upon how much leaf area was removed, soil moisture, the time of year, etc. Generally, under normal climatic conditions, less recovery time is needed during the fast growth period and more time is needed to recover from a grazing event during the slow growth period. The following guidance is an estimated recovery period for developing the prescribed grazing schedule. To be most effective, these recovery periods should be adjusted in response to changes in actual growing conditions.

- Fast-Growth Minimums - Cool-season/ Tame Pastures: 30 to 40 days
- Slow Growth Minimums - Cool-season/ Tame Pastures: 45 to 65 days

The time grazing animals are in a pasture should be kept as short as practical provided adequate recovery periods are maintained. This will minimize the opportunity for the animals to graze plant regrowth prior to plant recovery.

Monitoring

This might be the most important part of a grazing plan because how you graze/manage each pasture will mostly be on visual observations and/or measurable metrics. A grazing plan is never static and should continuously be evaluated to ensure the range and pasture health objectives are being achieved in a continuously changing natural environment and a solid monitoring plan is key to grazing management. Monitoring is often done more often during the first few years and less often once a good understanding of the grazing management is achieved.

Monitoring may include:

- Estimated forage utilization
- Photo point observations
- Species composition (monitoring for change in vegetation)
- Management observations (weather conditions, livestock condition, weeds, pests, livestock distribution, etc.)

Contingency Plan

It is important to have a detailed backup plan for your grazing operation in case of events such as drought, hail, pests and/or wildfires that can affect your original grazing strategies. When drought conditions occur, timely drought mitigation actions such as reducing stocking rates, providing supplemental feed, or leasing additional pasture are critical to maintain the long-term productivity and health of the grazing resource.

The Inventory Process To Develop A Grazing Plan

An NRCS conservationist will collaborate with you to collect the following information:

- **Client goals and objectives:** Most importantly is the recognition that a grazing is plan is developed WITH you thus it is important to capture the short and long-term goals and objectives so they can be integrated into the grazing plan.
- **Pasture and/or Range Health Inventory:** This will provide on-site data and observations that aid in the determination of resource concerns and over-all pasture and/or range condition.
- **Forage Inventory:** This will identify the type, production, key forage species, key grazing locations, best season of use, location of noxious weeds, and locate where grazing distribution problems occur on pastures.
- **Physical Inventory:** This will identify grazing distribution patterns, water sources, fence locations, mineral, salt, supplements, heavy impact areas, soil erosion concerns, and insect control device locations.
- **Animal Inventory:** This will identify the numbers, breeding dates, calving dates, and turn in/out dates of each type of livestock for each grazing unit.
- **Water Resources Inventory:** This inventory is to evaluate adequate quality and quantity of water for the number of livestock, time, and duration they will be in each grazing unit.
- **Wildlife Resources Inventory:** This inventory is to evaluate if grazing will improve or maintain habitats and will consider the amount of forage needed for wildlife when balancing forage available and animal numbers.
- **Natural/Sensitive Area Resources Inventory:** This inventory includes evaluation of riparian areas, wetlands, cultural resources, natural areas, etc., that may need additional management to maintain or enhance them.

The Grazing Plan

An NRCS conservationist will compile the information from the inventory process for the grazing plan development. A comprehensive plan will be developed that will include:

- A summary of identified resource concerns and over-all pasture and range health assessment as well as recommendations to address specific resource or conservation objectives.
- A map that will show the grazing operation including, fence lines, corrals, water development locations, key grazing areas, identified sensitive areas, identified weed areas, etc.
- A feed and forage balance that shows current and proposed feed and forage resources.
- A grazing schedule that demonstrates adequate rotations based on average forage production.
- A monitoring plan tailored to your specific grazing system and operation.
- A record keeping form to aid in the monitoring of the grazing rotation.

Just as no one year is the same as another, flexibility is an important element to any grazing management plan to adjust for changes in forage production, availability of water for livestock, drought, fire, flood, pests, and other natural events; thus, animal numbers and/or grazing periods may need to be adjusted to achieve the goals of prescribed grazing. Successful grazing management is dependent on plant response and not calendar dates.

Once the draft grazing plan is developed, and before it is finalized, it will be discussed with you by an NRCS conservationist to be sure it addresses your goals and objectives.

Contact your local NRCS Office if you are interested in learning more about the benefits of a grazing plan