Maintaining quantity and quality of forage for animal health and productivity

Conservation Practice 528: Prescribed Grazing

APPLICABLE LAND USE: Pasture, Range, Associated Ag Land

RESOURCE CONCERN ADDRESSED: Livestock Production Limitation

PRACTICE LIFE SPAN: 1 year

Enhancement Description

Managing the harvest of vegetation with grazing and/or browsing animals for the purposes of maintaining desired pasture composition/plant vigor and improving/maintaining quantity and quality of forage for the animals' health and productivity.

Criteria

• A written plan matching the forage quantity and quality produced with the grazing and/or browsing demand will be followed.

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

• Deferments will be planned and implemented for critical periods of plant needs (such as post-planting or renovation, severe drought, etc.).

• Manage grazing and/or browsing animals to maintain adequate cover on sensitive areas (such as riparian areas, wetlands, habitats of concern, karst areas, etc.).

• Manage livestock movements based on rate of plant growth, available forage, and allowable utilization target. Develop and follow contingency plans to deal with episodic disturbance events.
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. Plan the intensity, frequency, timing, and/or browsing to reduce animal stress and mortality from toxic and poisonous plants.

Supplemental feed and/or minerals will be balanced with the forage consumption to meet the desired nutritional level for the kind and class of grazing and/or browsing livestock.

Dietary needs of livestock will be based on the National Research Council's Nutrient Requirements of Domestic Animals and appropriate adjustments made for increased energy demand required by browsing or grazing animals foraging for food including travel to and from pasture sites.

**Documentation Requirements**

- Pasture/herd in/out records.
- Forage utilization job sheet (528-Prescribed Grazing) annually certified by NRCS.
- Documentation of protein and energy of consumed forages/browse based on a land grant university laboratory analysis. The analysis may be based on collected sample of the forage available to the livestock or fecal samples analyzed with appropriate Near-infrared spectroscopy (NIRS). This analysis needs to illuminate shortfalls and/or excessive amounts of protein and energy. Samples must be submitted in a timely manner to allow for appropriate adjustments in management and/or supplementation.
- Documentation of initial target livestock performance goals and mediation steps/actions taken to meet livestock nutrition needs and management nutritional goals including reasons for no action.
SOUTH DAKOTA SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY

E528140Z1

Maintaining quantity and quality of forage for animal health and productivity

Additional Criteria for South Dakota

In addition to the criteria specified in the National job sheet E528140Z1 the following additional criteria apply in South Dakota:

- GANLAB for fecal samples web site: http://cnrit.tamu.edu/ganlab/
- Minimum 6 samples per year with sample report.
- Analyzing the results from a clipped forage sample: Forage samples usually report energy as TDN (total digestible nutrients). To convert TDN to DOM (digestible organic matter), take the TDN number and divide by 1.06. This will result in an estimated DOM value. Divide DOM by CP (crude protein), and the result is the DOM/CP ratio.

Requirements

1. Maximum 50% utilization. Ocular methods on key or representative areas are adequate, but utilization methods such as landscape appearance or key species should be used to calibrate field estimates. Exceptions include dormant season grazing (60% utilization) and grazing prescriptions on rangeland that are designed to alter the present plant community through intensive grazing by livestock (i.e., suppression of invasive species). In these cases, the desired degree of use of management species should be documented within the grazing plan and/or assistance notes.

2. Adequate plant recovery periods must be provided. On rangelands provide a minimum of 45 days of growing season recovery between grazing events during the growing season. On pasture provide a minimum of 30 consecutive days of growing season recovery between grazing events. The growing season is approximately April 1st through October 1st.

3. Alter timing of grazing in each pasture by at least two weeks from year to year.
4. For additional information see the South Dakota Prescribed Grazing Standard (528) and the appropriate South Dakota Range Technical Note.

**Additional Documentation Requirements for South Dakota**

In addition to the documentation requirements specified in the National job sheet E528140Z1 the following additional documentation requirements apply in South Dakota:

- Complete the South Dakota Range Tool (SD-CPA-39 Forage/Animal Inventory, Grazing Schedule using the SD-CPA-15 or similar form, and SD-CPA-16).
- Complete a drought contingency plan using the South Dakota Drought Tool or provide the participant with a copy of the example drought contingency plan located within the South Dakota Prescribed Grazing Technical Note.
- Review the report(s), and record any decisions that will be implemented based on the results. The decision may be to continue current management if there is no need to change. Keep the reports and your written decisions in a file to review at a later time.
- Look on the standard report for the DOM/CP ratio. A number between 4 and 8 means the cattle are likely on a positive plain of nutrition, and should gain weight. The lower the number the higher the forage quality. If the DOM/CP ratio is higher than 8, and the crude protein is lower than about 7%, it is likely that protein is deficient and will need to be supplemented if cattle weight loss is not desired. If the DOM/CP ratio is higher than 8, but the crude protein is higher than 7%, it is likely that the animals are short on energy.