

Plant Enhancement Activity PLT10 - Intensive management of rotational grazing enhancement



Enhancement Description

This enhancement is for the intensive management of livestock grazing to increase production, and improve forage quality and livestock health. The grazing system is managed to produce high quality, nutritious forage and maintain plants with sufficient energy reserves to recover quickly when adequate soil moisture is available for regrowth. Generally, livestock are rotated through pastures in the grazing system based on their daily dry matter intake and nutritional requirements, and the physiological growth and nutritional stage of the forage plants. This enhancement is for rotational

grazing systems that consist of multiple paddocks and frequent rotations (e.g. grazing period 3-10 days).

Land Use Applicability

Pasture and rangeland

Benefits

The main benefits of Intensive Management of Rotational Grazing are efficient resource use with increased forage utilization, improved manure distribution, and nutrient cycling throughout the grazing acreage, and increased carbon sequestration resulting from greater forage production. Optimal environmental conditions are achieved by maintaining healthy, actively growing forage plants that protect the soil surface from erosion, thereby reducing risks to ground or surface water quality.

Criteria

A prescribed grazing plan is developed and implemented to address the following requirements.

1. Manage vegetation to provide sufficient forage intake for the type and class of livestock, ensuring that sufficient vegetative material remains after a grazing event that the plants can recover and regrow. This is accomplished by dividing pastures into multiple units and using intense grazing periods followed by periods of non-grazing for regrowth of grazed vegetation. The length, intensity and frequency of grazing will vary depending upon livestock species, location and vegetation and will be determined by NRCS at the state level. In addition, the grazing system must also ensure that plants are left in condition to survive the winter or dormant periods of the year. Manage grazing and rest periods to follow NRCS Prescribed Grazing practice standard (528).



2. Use a fencing system that is flexible enough to control the amount and location of grazing and confine the livestock.
3. Provide a sufficient quantity of high quality drinking water based on livestock requirements
4. Manage livestock access to riparian areas to prevent pollution of surface and ground waters and to ensure the livestock are not exposed to poor quality drinking water, disease-causing insects and bacteria, and/or injury-prone physical conditions.
5. For pastureland, manage soil nutrients to ensure the grazing vegetation has sufficient nutrients for adequate production and plant health. Frequent rotation of pastures will provide better distribution of manure and urine. However, supplemental fertilization may be needed. Apply additional nutrients based on soil test results, realistic forage yield goals and land grant university recommendations.

Documentation Requirements

- 1) Provide a prescribed grazing plan that addresses the criteria for this enhancement
- 2) Provide a map or aerial photo showing the pastures/paddocks making up the rotational grazing system

PLANT RESOURCE ENHANCEMENT ACTIVITY

PLT10 – OR Intensive Management of Rotational Grazing

The criteria and references listed here are to be used in Oregon and are in addition to those listed on the national activity sheet.

Criteria

- 1) Length of grazing time in any grazing unit will be less than the grazing season, typically less than 60 days.
- 2) Measurements of key species will be done in key grazing areas which reflect the grazing management over the entire grazing unit.
- 3) Intensity of grazing will be based on stubble height of the key grazing species. Minimum stubble heights for introduced pasture species is 3-4 inches. Minimum stubble heights for native bunchgrasses is 4 inches. Livestock will be removed from the grazing unit when the minimum stubble height is reached.
- 4) Frequency of grazing will be based on regrowth of the key grazing species. Introduced pasture grasses can be grazed when they regrow to a height of 6 to 10 inches tall. Native bunchgrasses can be grazed when they regrow to a height of 8 to 12 inches tall.
- 5) Native forage species will not be grazed during the critical period (boot to seed set) at least one year every three years.

References

Fraser, D. A. 2003. Applying best stubble heights on rangelands. Forest Practices Branch, British Columbia Ministry of Forests, Victoria, B.C. Rangeland Health Brochure 6.

Kinney, John W.; Clary, Warren P. 1994. A photographic utilization guide for key riparian graminoids. Gen. Tech. Rep. INT-GTR-308. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 13 p.

Kingery, J.L., C. Boyd, and P.E. Kingery. 1992. The grazed-class method to estimate forage utilization on transitory forest rangelands. University of Idaho Forest, Wildlife and Range Experiment Station Bulletin Number 54. 21pp.