

Animal Enhancement Activity – ANM29 – On-farm forage based grazing system



Enhancement Description

A forage based grazing system that supplies all roughage (forage and supplemental hay) requirements for a livestock operation.

Land Use Applicability

Pastureland, Rangeland, Forestland

Benefits

Forage based grazing systems reduce the time that livestock are confined resulting in less manure to store and allows manure to become a fertilizer instead of a pollutant. Management of perennial grass and forbs ground cover improves nutrient and water cycling, soil structure and increases organic matter. Energy conservation is achieved by reducing annual cropping, transport of feed and less reliance on synthetic nitrogen.

Conditions Where Enhancement Applies

This enhancement applies to all pasture, range or forest land use acres.

Criteria

1. Develop a grazing management plan with a forage based grazing system that provides **ALL** livestock feed and nutrient needs for the duration the animals are on the participant’s land.
2. Livestock operations include those that produce cattle, sheep, goats, etc.
3. Manage pasture grazing and rest periods to follow NRCS Prescribed Grazing practice standard (528) criteria for recommended maximum (begin) and minimum (end) grazing heights by forage species or Ecological Site Description interpretations. Begin and end grazing heights are followed to maximize forage quality and palatability, as well as to promote rapid recovery and forage regrowth.
 - a. Maintain a livestock watering system that accommodates an appropriate grazing strategy through several different pastures or paddocks during the grazing season.
 - b. Follow NRCS practice standard criteria for Prescribed Grazing (528), Watering Facility (614), Pipeline (516), or other related standards for appropriate supply and travel distance to water.
 - c. Use fencing that is permanent, semi-permanent, and/or temporary to facilitate pasture rotation and/or livestock distribution improvement. Follow the NRCS Fence practice standard (382).

Adoption Requirements

This enhancement is considered adopted when no external forage or hay is utilized in the grazing operation.



United States Department of Agriculture
Natural Resources Conservation Service

2013 Ranking Period 1

Documentation Requirements

1. Provide a copy of the written grazing plan, and
2. Include time and timing of grazing, minimum and maximum grazing heights, season of use, grazing records and monitoring plan of pastures/paddocks in the grazing plan, as appropriate for the land use.

Note: NRCS Pasture Notes, grazers' notebooks, or other record keeping systems for pasture livestock operations can be used to facilitate record-keeping.

References

Ball, D. M., E. N. Ballard, M. L. Kennedy, G. D. Lacefield, and D. J. Undersander. 2008. Extending Grazing and Reducing Stored Feed Needs. Grazing Lands Conservation Initiative Publication 8-01, Bryan TX.

Parish, J. A., J. D. Rivera, H. T. Boland, and R. Lemus. 2010. Beef Cattle Grazing Management. Mississippi State University Extension Service. Publication 2629.

Rayburn, E. B. (editor). 2007. Forage Utilization for Pasture Based Livestock Production. NRAES – Book 173. PALS Publishing, Ithaca, New York.

USDA-NRCS. 2011. Conservation Practice Standard: Livestock Pipeline-Code 516.

USDA-NRCS. 2010. Conservation Practice Standards: Fence-Code 382, Forage Harvest Management-Code 511, Prescribed Grazing-Code 528 and Watering Facility-Code 614.

USDA-NRCS. 2006. Watering Systems for Serious Grazers. NRCS-Missouri Publication, Columbia, Mo.

USDA-NRCS. 2005. Electric Fencing for Serious Grazers. NRCS-Missouri Publication, Columbia, Mo.

Indiana CSP Enhancement Supplemental Information

ANM 29 – On-Farm Forage Based Grazing System:

- Minimum (end) grazing heights vary by species. The following table outlines minimum heights *required* to be maintained by species (see “Remove Livestock Height”):

Species	Start Grazing	Start Grazing Regrowth	Remove Livestock Height	Rest Period	When to Cut for Hay, Silage or Balage	Over-Wintering Height	Approximate Date to begin Rest for Winter Protection ³	
	(inches)	(inches)	(inches)	(days)		(inches)	(North)	(South)
Kentucky Bluegrass, Perennial Ryegrass	4-6	4-5	2-3	14-30	Boot	2-3	N/A	N/A
Orchardgrass, and other non-jointed grasses	6-8	6-8	3-4	14 spring 30--45 summer	Boot & Peak re-growth	3-4	4	4
Tall Fescue (See restrictions in General and Fish & Wildlife Criteria before using)								
Smooth brome, Timothy, and other jointed grass	8	8	4	14 spring 30--45 summer	Boot & Peak re-growth	5-6	9/1-10/1	9/20-10/20
Reed Canarygrass (See restrictions in General and Fish & Wildlife Criteria before using)								
Alfalfa	12	8-10	3-4	24-32	Late bud to early bloom	6	9/1-10/1	9/20-10/20
Birdsfoot Trefoil	10-12	10-12	5-6	24--45	¼ bloom to full bloom	5	9/1-10/1	9/20-10/20
White Clover	6-10	8-10	2	24-32	Early to ½ bloom	4	9/1-10/1	9/20-10/20
Red & Alsike Clover	10-12	8-10	3-4	24-45	Early to ½ bloom	5	9/1-10/1	9/20-10/20
Sudangrass	18-20	18	8-10	14-30	Boot	N/A	N/A	N/A
Sorghum-Sudangrass Hybrid	24-30	24	8-10	14-30	Boot	N/A	N/A	N/A
Pearl Millet	8-10	8-10	4-6	14-30	Boot	N/A	N/A	N/A
Japanese Millet	12-18	12-18	4-6	14-30	Boot	N/A	N/A	N/A
Small Grains	8-10	8	2-3		Early head	4-6	10/15-11/1	11/1-11/15
Switchgrass, Big Bluestem and Indiangrass	12-18	12-18	8 ¹	21--45	Boot to early head	8-12	9/1-10/1	9/20-10/20
Little Bluestem & Sideoats Grama	12-14	12-14	6-8 ^{1,5}	21--45	Boot to early head	6-10	9/1-10/1	9/20-10/20
Brassicas	12-14	12	4-6	14--45	N/A	N/A		
Annual Lespedeza	6-8	6-8	3-4	14-30	Early bloom	²	9/1-10/1	9/20-10/20
N/A – Not Applicable								
¹ Leave an 8-10 inch stubble at end of season until after killing frost.								
² Allow to set seed during season.								
³ Protection from fall grazing is recommended. WSG's can have limited grazing after killing frost when applicable.								
⁴ No restrictions with fescue and orchardgrass.								
⁵ 4 inches above lowest node best indicator.								

- Minimum grazing heights shall be maintained on a minimum of 80% of the grazing system.

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