

Animal Enhancement Activity – ANM37 – Prescriptive grazing management system for grazed lands (includes expired CRP grass/legume or tree covered acres converted to grazed lands)



Enhancement Description

Implement a prescriptive grazing management system for all grazed lands and for all eligible land uses in the operation. This includes expired CRP grass/legume or tree covered acres that are now converted to a grazing system. Selection of this enhancement requires the activity to be planned concurrently on all eligible land use acres.

Land Use Applicability

Cropland, Pastureland, Rangeland, Forestland

Benefits

Utilizing a prescriptive grazing management system on all grazed acres regardless of the land use (including expired CRP grass/legume or tree conservation covered acres) will maintain sensitive lands in a valuable soil cover and provide needed wildlife habitat. With perpetual ground cover comes a continued reduction in soil erosion. Managing the forages on the entire operation will provide landscape level enhanced livestock production and critical wildlife habitat for species of interest.

Conditions Where Enhancement Applies

This enhancement applies to all grazed acres designed as crop, pasture, range or forest land use acres (including expired CRP grass/legume or tree covered acres that are now converted to a grazing system) on the entire operation.

Criteria

1. Develop and implement a grazing management plan for the acres where this enhancement applies that defers grazing on 20% of the eligible acres each year. The deferral period for introduced forage species is 90 days of the growing season while the deferral period for native forages is the full grazing season. In riparian buffer settings, flash grazing is allowed; however, the livestock must be excluded for the remainder of the time.
2. Incorporate into the written grazing management plan components that identify the following:
 - a. Wildlife management objectives for grazing land,
 - b. Identified targeted species or suite of species (e.g., Lesser prairie chicken, Greater sage grouse, Bobwhite quail, etc.) described in need of action within the State Wildlife Action Plan or other reputable wildlife conservation plan(s).



- c. Critical nesting and fawning period for targeted species,
 - d. Stocking rates that will allow proper forage utilization and plant health while maintaining proper plant heights for targeted wildlife species' food and shelter,
 - e. The recommended minimum grazing stop and start heights,
 - f. The location and number of acres to be deferred each year (Note: the location of the required amount of deferred acres shall be different each year), and
 - g. A schedule for the year of deferment.
3. Complete both sub-criteria list below on **ALL** open trough watering facilities on the acres where this enhancement applies. The escape structures must meet the following requirements:
- a. Wildlife escape structures for watering facilities must meet the following requirements:
 - i. Extend into the water and meet the inside wall of the watering facility,
 - ii. Reach to the bottom of the watering facility or to the depth of the lowest possible water level,
 - iii. Be firmly secured to the rim of the watering facility so as not to be displaced by livestock
 - iv. Be built of graspable, long-lasting materials, such as painted or coated metal grating, roughened fiberglass, concrete, rock and mortar, or high-strength plastic composites,
 - v. Have a slope no steeper than 45 degrees,
 - vi. Be located to cause minimal interference with livestock drinking, and
 - vii. One structure for every 30 linear feet of watering facility edge.
 - b. Obstruction removal above the watering facility's water surface.
 - i. Fencing material such as wire strands and boards shall not be within a 36" zone above the highest planned water surface (e.g., if a trough is bisected by fencing to provide water between two pastures, remove the lower strands of wires; or if wood bracing is present across the top of the trough, re-brace the tank to create an unobstructed space above the water's surface), or
 - ii. Rearrange the fence line to create an adjustable pivot point thereby removing any obstructions above the water surface while allowing full access to a single trough from two different grazing areas.
4. Modify 50% of **ALL** fencing on the acres where this enhancement applies to be wildlife friendly. The fence modification implemented shall be for the protection and/or benefit of the local species in the area and shall be focused along known wildlife travel corridors. The modified fence should improve passage by either jumping or crawling and be highly visible to prevent collision, entanglement and fatalities.
- a. Improve Passage
Retrofit Existing Fence- openings and crossing to allow wildlife access to food, water and shelter must be created in existing fence. Location and number of openings required will meet NRCS state standards. Methods used included but are not limited to:
 - 1) Lay-down fence
 - 2) Seasonal electric fence
 - 3) Adjustable wire fence
 - 4) Underpass fence with raised wire
 - 5) Pole top fence



b. Improve Visibility

- 1) Increase visibility of ALL fencing using flagging, vinyl markers, PVC pipe or other similar materials that will meet NRCS state standards for spacing, interval and size. A good example of improving visibility for prairie grouse (e.g. prairie chickens, sage grouse, etc.) in rangeland can be found at:
www.suttoncenter.org/pages/fence_marking_instructions
- 2) If no state criteria exist, follow criteria in the Montana Fish, Wildlife & Parks publication "[A Landowner's Guide to Wildlife Friendly Fences.](#)" If a locally applicable publication exists, the local publication should be used.

Note: If no state criteria or local publications exist, the NRCS State Resource Conservation must agree to the proposed fence modification specifications offered.

Additional criteria for silvopasture

1. Inventory the habitat condition of the silvopasture, the operation, and adjoining farms to determine habitat needs for the identified targeted wildlife.
2. Use one or more of the following methods to improve habitat for the identified targeted species.
 - a. Establish additional understory vegetation (e.g., native grass, forbs and shrubs) that will improve habitat conditions for the identified targeted species. Note: introduced species such as Bahiagrass, hybrid Bermudagrass, fescue, etc. shall not be seeded for this purpose.
 - b. Establish clusters of other tree species if needed as a food source (e.g., oaks for mast).
 - c. Manage tree canopy to achieve the desired understory plant community.
 - d. Leave dead or dying trees as snags if cavity nesting wildlife is targeted. Trees left for this purpose must be 10 inch or greater dbh (diameter at breast height). In determining which snags to leave, consider fence maintenance and animal safety.
 - e. Remove trees or invasive plants that do not provide the desired habitat.
 - f. Thin less desirable trees to: 1) encourage the growth of trees, 2) establish additional understory vegetation, and 3) provide the desired wildlife habitat for the target species.

Adoption Requirements

The enhancement is considered adopted when the focused management plan has been fully implemented.

Documentation Requirements

1. A copy of the written grazing management plan.
2. The schedule of when grazing activities occurred documenting that grazing activities were deferred to meet the 20% requirement.
3. A map showing the acreage where these grazing activities were applied.
4. A photograph of each watering facility with a properly installed escape/access device.
5. A map showing where wildlife friendly fence is located with the type (s) of wildlife friendly fencing identified.
6. Photograph of each wildlife friendly fencing method used.



United States Department of Agriculture
Natural Resources Conservation Service

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References

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- Undersander, D., S. Temple, and J. Bartlet, and L. Paine. 2000. Grassland Birds: Fostering Habitats using Rotational Grazing. University of Wisconsin-Extension Publication A3715.
- USDA-NRCS. 2010. Conservation Practice Standard: Prescribed Grazing-Code 528.

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References:

- **NRCS Practice 382 – Fence**
- **NRCS Practice 511 – Forage Harvest Management**
- **NRCS Practice 528 – Prescribed Grazing**
 - **MN Conservation Practice Job Sheet 528**
- **NRCS Practice 645 – Upland Wildlife Habitat Management**
- **“Creating the Wildlife Friendly Fence”** <http://fwp.mt.gov/mtoutdoors/HTML/articles/2009/fencing.htm>
- **“How to Build Fence with Wildlife in Mind”** <http://fwpiis.mt.gov/content/getItem.aspx?id=34461>

Critical nesting/fawning season runs from **May 1 to July 15**.

Following is a table with recommended heights for starting and ending grazing for common forage species.

Species	Initial grazing height in the early spring	Minimum and optimum height of vegetative growth	Minimum stubble height (inches)	Minimum regrowth before killing frost (inches)
Alfalfa	-	Bud Stage	--	6*
Intermediate Wheatgrass	4-5	8-14	4	6
Meadow Bromegrass	4	8-14	4	6
Meadow Fescue	4	6-10	4	6
Orchardgrass	3-4	6-10	3	6
Perennial Ryegrass	3-4	5-7	3	4**
Reed Canarygrass	4-5	8	4	6

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Smooth Bromegrass	4	8-14	4	6
Tall Fescue	4	6-10	3	6
Timothy	4	6-10	4	5
Big Bluestem	-	10-14	6	6
Indiangrass	-	10-14	6	6
Switchgrass	-	12-20	8	10

*The last harvest for alfalfa should be made 35-45 days before the anticipated date of the first killing frost

**Regrowth should be grazed down to 2" after the first killing frost and prior to snowfall.

Use the minimum heights for the key grass species in a grass legume mixture.

Primary recommendations for wildlife-friendly fencing are:

- The top wire or rail should be smooth and 42 in. or less from the ground.
- At least 12 in. should be left between the two top wires.
- The bottom post or wire should be smooth and at least 16 in. off the ground.
- Fence design should be varied, with some lower sections included to allow for easy crossings at some areas.
- For sections of fence that receive added wildlife traffic a high-visibility wire or flagging should be used to provide visual markers for animals.
- Lower the top strand of barbed wire and raise the bottom wire.
- Modify sections of fence so a top rail or wire can be temporarily lowered at deer, elk, and moose trails during seasonal migrations, and a bottom wire can be raised so calves, fawns, or pronghorn can slip underneath.
- Temporarily lay down sections of fence during seasonal elk, deer, and pronghorn migration when livestock aren't present.
- Replace the top strand with highly visible white poly-wire or attach short pieces of white vinyl "undersill" siding strips (available at most home improvement centers) to fence wires in areas where wildlife collisions or entanglements are common.

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