Animal Enhancement Activity – ANM11 – Patch-burning to enhance wildlife habitat

Enhancement Description
Use prescribed burning with livestock grazing to create patches of different vegetation structure and species composition for the benefit of wildlife.

Land Use Applicability
Pasture, Rangeland, Forestland

Benefits
Patch-burning is a management activity for landowners interested in improving habitat for wildlife while still maintaining forage production for livestock, primarily grasslands. This management activity helps create a mosaic of diverse vegetative structure and plant composition in the same pasture. Livestock also benefit as different plant species may be available, especially during mid-and late growing season vegetation slumps. Patches of different vegetation composition can extend and/or supplement livestock during the grazing season.

Conditions Where Enhancement Applies
This enhancement applies to all pasture, range or forest land use acres. This enhancement is not for the purpose of conducting wildfire reduction burns or forest stand improvement burns on forest land use acres.

Criteria
1. Burn at least 10% and not more than 40% of the grazing area in any year
   a. Annual application by burning a different patch each year is acceptable and desirable for many wildlife species.
   b. A minimum of two burn treatments should be applied during a 5 year period.
      - For vegetation types with a historic fire frequency greater than 10-15 years as determined by the NRCS State Office, minimum treatment should be two burns applied during a 10 year period.
2. Avoid burning during peak nesting season for targeted wildlife species.
3. Develop a written grazing management plan that identifies:
   a. Wildlife management objectives describing how patch burning will accomplish those objectives.
   b. Percentage of area planned to be burned by year
   c. Locations, total acres, planned year and season of burns
   d. The desired frequency of burning (example: burn same area once every 4 years) should be stated and based on the desired plant community's adaptation and response to fire.
   e. Stocking rates that will allow for proper forage utilization.

   f. Apply monitoring and adaptive management considerations to address potential multiple years overuse of burned areas, especially for those pastures not receiving some amount of annual burning.
   g. Identify areas where fire is to be excluded for habitat considerations, such as desirable shrub stands, stream sides, etc.
4. Develop a written prescribed burn plan for each prescribed burn that identifies:
   a. Locations to receive burn treatment and level of patchiness desired
   b. Time of burn
   c. Firebreaks locations, if needed
   d. Weather parameters for the burn (temperature, wind speed, relative humidity)
   e. Burn plans must be conducted in accordance with all state laws.

Adoption Requirements

This enhancement is considered adopted when all four of the criteria above have been implemented together in a one year period.

Documentation Requirements

1. Written prescribed burn plan identifying pasture, range or forest acres and dates of prescribed burn.
2. A map showing where the activities are applied.

References

Coppedge, B.R., S.D. Fuhlendorf, W.C. Harrell, and D.M. Engle. 2008. Avian Community Response to Vegetation and Structural Features in Grasslands Managed with Fire and Grazing. Biological Conservation 141:1196-1203.

Fuhlendorf, S.D., and D.M. Engle. 2001. Restoring Heterogeneity on Rangelands: Ecosystem Management based on Evolutionary Grazing Patterns. BioScience Vol. 51, no.8: 625-632.

Fuhlendorf, S.D., W.C. Harrell, D.M. Engle, R.G. Hamilton, C.A. Davis and D.M. Leslie, Jr. 2006. Should Heterogeneity be the Basis for Conservation? Grassland Bird Response to Fire and Grazing. Ecological Applications 16(5): 1706-1716.

USDA-NRCS. 2010. Conservation Practices Standards: Prescribe Burning-Code 338 and Prescribed Grazing-Code 528.

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Mississippi Supplement
ANM11

The nesting and fawning dates in Mississippi are from April 1 to August 15.