

Animal Enhancement Activity – ANM54 – Prescribed burning for upland birds and other wildlife



Enhancement Description

This enhancement is to encourage the use of prescribed burning to improve rangeland and pastureland habitat by reducing excess plant litter, encouraging the germination and growth of forbs and legumes, suppressing woody plants and retarding the growth of nonnative plants.

Land Use Applicability

Pastureland, Rangeland

Benefits

Prescribed burning is helpful for maintaining brood-rearing habitat for bobwhite quail, wild turkey, migratory wildlife and other early successional grassland wildlife species. The insects associated with annual weed communities provide critical nutrients, including protein, and essential amino acids for growing nestlings and chicks. Reduced plant residue, along with bare ground, are also critical for young chick mobility in grassland areas. The structural diversity that results from burning also improves habitat for a variety of grassland songbirds including dickcissels, Le Conte’s sparrows, and savannah sparrows. Many of these species have experienced population declines over the last several decades. Prescribed burning enhances habitat quality because it inhibits woody growth, promotes favored seed producing plants, reduces plant residue, increases bare ground, and increases insect abundance.

Through a prescribed burn, the wildlife habitat value is enhanced by increasing the amount of bare soil under the grass canopy and by encouraging a diverse forb (any broadleaf plant) /legume community. Forbs and legumes in grasslands are beneficial to birds, insects such as butterflies, and other wildlife. Prescribed burning is an effective management tool that can be utilized where vegetation has become too thick to benefit the target species.

Other noted habitat benefits of prescribed fire are: the creation of open ground for wildlife movement by reducing excess plant litter; allowing sunlight to reach the soil surface, encouraging the germination and growth of forbs and legumes; suppression of woody plants; retarding the growth of nonnative plants; removing naturally occurring wildfire hazards; enhancing the aesthetic appearance of natural landscapes; and providing a low cost maintenance option.

Conditions Where Enhancement Applies

This enhancement applies to pasture and range land use acres.

Criteria

Implement the following:

1. Apply to sites where vegetation has become dense and bare ground is not present.



2. Develop a wildlife habitat management plan for the suite of species targeted.
3. Develop a prescribed burning plan that facilitates the wildlife habitat management plan.
 - a. The landowner is responsible for securing a written burn plan developed by a qualified individual.
 - b. A written prescribed burn plan must be completed before any fires are started. The burn plan will identify suitable weather conditions, needed personnel and equipment, adjacent and in-field hazards, and the safest firing method, in addition to the time of year to conduct the burn for the best management results.
 - c. The landowner is responsible for adhering to the burn plan, as well as all applicable local, state, and federal laws. Landowners are responsible for confining prescribed burns to their lands and are liable for damages and costs to others should the fire escape from the designated area.
 - d. Prescribed burning will not be performed during ground bird nesting season to reduce the chance of harming fledgling birds and other young wildlife.
 - e. Environmentally sensitive areas will be marked on the plan map to ensure activities are avoided on these areas.
 - f. Prescribed burning will be avoided on environmentally sensitive areas including:
 - i. Concentrated flow areas
 - ii. Critical areas
 - iii. Acreage within the first 20 feet of a practice that borders a water resource to avoid water quality resource concerns
 - iv. Other areas where gully erosion is likely
4. Erosion will not exceed tolerable limits.
5. Rotate fields through a three-year burning cycle.
6. Grassland fields must be established for a minimum of three (3) years before initiating a burn.
7. Firebreaks will be constructed according to the specifications stated in the burn plan.
8. Designated filter strips will be left adjacent to all water bodies to maintain water quality.

Adoption Requirements

The enhancement is considered adopted when the above criteria has been applied on the land use acre.

Documentation Requirements

1. Copy of the wildlife habitat management plan
2. Copy of the prescribed burn plan
3. A map showing the dates, size, and location of the burned areas
4. Representative photographic documentation of the burned areas

References

USDOI-USGS. 2013. Effects of fire in the Northern Great Plains: Effect of fire on upland gamebirds. Northern Prairie Wildlife Research Center. www.npwrc.usgs.gov/resource/habitat/fire/upland.htm