GRASSLAND ACTIVITY DATES
Upper Peninsula of Michigan

CONSERVATION MANAGEMENT SHEET - Biology Series 645

Natural Resources Conservation Service

Michigan

WHY DISTURB GRASSLANDS?

Grasslands, such as prairies, savannahs, and old fields, are key habitats for a diverse group of wildlife species, including migratory birds and other wildlife with declining populations.

Many of these species require vigorous and diverse stands of grasses and forbs, with little or no woody vegetation. To maintain this preferred structure, grasslands need to be disturbed occasionally. Without disturbance, woody vegetation, dense, sod-forming grasses, or other invasive species will eventually dominate the site.

Grassland disturbances include haying, grazing, burning, disking, inter-seeding, herbicide application and mowing. To maximize vegetative benefits, the disturbances may have to take place during the growing season.

Disturbance to grasslands during the growing season requires striking a balance between short-term harm to wildlife and long-term benefits from habitat improvement. Disruption of nesting or brood-rearing in one year can be offset with improvements to habitat quality over several subsequent years.

The following activity dates for grassland disturbances consider the goals of the Farm Bill programs and strike a balance between short-term and long-term wildlife and forage needs.

ACTIVITY DATES

A. Establishing the Stand

It is extremely important to establish a diverse and vigorous grassland stand. When establishing the stand after seeding, disturbance activities may be done in the first and second growing season, as needed, to control weeds and promote desired grasses and forbs. Activities can include mowing, herbicide application, and inter-seeding. Herbicides should be applied according to labeled directions. Reseeding or inter-seeding should be done according to the Natural Resources Conservation Service (NRCS) standards and specifications.

B. Periodic Disturbance

To maintain a vigorous and diverse stand for wildlife, periodically the grassland needs to be disturbed. Only prescribed burning, herbicide use, disking, and disking with inter-seeding are recommended for periodic disturbance. The Conservation Reserve Program (CRP) and the Conservation Reserve Enhancement Program (CREP) have specific requirements for mid-contract disturbance. Refer to program guidelines for information.

The maximum size of the area to be treated, and timing for treatment, will depend on field size. For fields less than 10 acres in size, the whole field could be treated in one year. For fields 10 to 40 acres, one-half of the field could be treated each year for two years. For fields greater than 40 acres, one-third of the field could be treated each year for three years.

Prescribed burning, if used, is to be done according to an approved burn plan and conducted between October 1 and May 15 for cool-season grasses (e.g., timothy or orchardgrass) and between October 1 and May 25 for warm-season grasses (e.g., switchgrass or big bluestem).

Herbicides may be applied at any time according to labeled directions.

Disking of cool-season grasses may be done in the spring before May 15, or between August 1 and 15. Disking of warm-season grasses may be done between June 10 and July 5 or between August 10 and May 15.

Disking with interseeding of forbs or grasses for cool-season grass stands may be done in the spring before May 25. For warm-season grass stands, this may be done between May 21 and June 20 or between November 1 and March 1.

C. Long-Term Maintenance of Grass Stands

Long-term maintenance is important for grasslands to control noxious plants, woody vegetation, and maintain a diverse stand. Maintenance may be a voluntary action or required through a program contract. The first five activities listed below are generally done every five to eight years, as needed.

Activities will be done based on field size as noted for Periodic Disturbance unless otherwise noted below.

Prescribed burning, if used, is to be done according to an approved burn plan and conducted between October 1 and May 15 for cool-season grasses (e.g., timothy or orchardgrass) and between October 1 and May 25 for warm-season grasses (e.g., switchgrass or big bluestem). In non-burn years, firebreaks may be disturbed up to three times per year as needed. In burn years, firebreaks should be treated as described in the burn plan.

Herbicides may be applied on up to 5% of the field, as needed, according to labeled directions at any time for spot treatment. If more than 5% of the field needs treatment, then approval from the local NRCS office is required prior to treatment. Herbicide is to be applied according to labeled directions.

Disking may be done as described above under Periodic Disturbance.

Disking with interseeding of forbs or grasses may be done as described above under Periodic Disturbance.

Mowing may be conducted on up to 5% of the field, as needed, at any time for spot treatment of undesirable weeds. If more than 5% of the field needs treatment, then approval from the local NRCS office is required prior to mowing. No more than

one-third of the field may be mowed per year.

Haying or grazing of grasslands *may* be allowed to maintain or improve wildlife habitat and provide some forage value. The extent of allowable haying or grazing varies depending on the goals of the Farm Bill program.

Under the Wildlife Habitat Incentives Program (WHIP) and the Wetland Reserve Program (WRP), haying *may* be allowed as a habitat management tool based on program guidance and individual contracts:

- When allowed, up to one-third of the area may be hayed/grazed between August 15 and September 4.

OR

- For cool-season grass stands, 15% of the acreage may be hayed/grazed before June 1 and 15% may be hayed/grazed between August 15 and September 1.

- For warm-season grass stands, 15% may be hayed/grazed between June 25 and July 10 and a different 15% may be hayed/grazed between July 29 and August 12.

All haying and grazing will be done according to a wildlife-friendly plan.

Under the Grassland Reserve Program (GRP), grazing and haying are allowed to provide high quality forage while maintaining wildlife habitat. For cool-season grasses, up to 50% of the stand may be hayed before June 8 and the same 50% may be hayed again after August 8. For warm-season grasses, up to 50% of the stand may be hayed between June 20 and July 28. All grazing and haying will be done according to a wildlife-friendly plan.

For the Conservation Security Program (CSP), guidance is developed to recognize activities of producers that help to establish and maintain high quality grasslands that provide wildlife habitat.

OTHER MANAGEMENT CONSIDERATIONS

Of the possible disturbances, mowing will generally provide the least benefits for grassland habitat, while burning usually provides the most long-term benefits for the grassland habitat. Each activity is to be done, as needed, to maintain high quality, diverse stands of grasses and forbs.

Wildlife-friendly grazing plans are ones that give additional consideration to providing for the nesting, brood-rearing, and winter cover needs of wildlife, with particular emphasis on grassland birds. Each plan uses refuge paddocks and other considerations, described below, to ensure that a sufficient quantity and density of grassland cover is left throughout the growing season, or the entire year, to meet habitat needs of grassland birds.

Under the plan, the rotational grazing system is managed to maintain an average forage height of 8 inches or more for the entire pasture system throughout the growing season.

To improve habitat for birds, producers will establish refuge paddocks to provide undisturbed habitat during the entire nesting and brood-rearing period. Ten percent of the grazing rotation acres will be set aside and left undisturbed in one or more paddock as a wildlife refuge area. When possible, the refuge area should be away from field edges or woody cover.

Excess forage may be harvested for hay following both the program timing and acreage restrictions, described above, and

according to a wildlife-friendly haying plan, described below.

Warm-season grass paddocks will make up at least 5% of the pasture acres, to diversify the forage base and wildlife cover. Warm-season grasses can provide nutritional forage during the "summer slump" months.

Winter sacrifice area will be reseeded.

Wildlife-friendly haying plans are ones that give additional consideration to avoid and minimize harm to birds and other wildlife. This is done by modifying harvest timing and practices. Restrictions on acreage and harvest dates are described above.

Practices to avoid or reduce harm to wildlife include: mowing during daylight hours; mowing from the inside to the outside of a field, or in adjacent passes; positioning refuge areas away from field edges or woody cover; and maintaining a stand with a diversity of forage plants. In addition, when haying or mowing, flush bars are recommended in front of the mower to reduce wildlife injury and mortality.

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