NATURAL RESOURCE CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

EARLY SUCCESSIONAL HABITAT DEVELOPMENT / MANAGEMENT

(ACRE)
Code 647

DEFINITION

Management for early plant succession to benefit desired wildlife or natural communities.

PURPOSE

- Increase plant community species and structural diversity.
- Provide wildlife habitat for those species that use early successional stage vegetative habitat.
- Provide habitat for declining species.

CONDITIONS WHERE PRACTICE APPLIES

On all lands that are suitable for the kinds of wildlife and plant species that are desired.

All practices may not be compatible with federal program rules (Wetlands Reserve Program (WRP), Conservation Reserve Program (CRP), Emergency Watershed Protection Program-Floodplain Easement Program (EWP-FEP), and Environmental Quality Incentives Program (EQIP)).

CRITERIA

Managing for early successional plant communities is beneficial if not essential for less mobile animal species. The less mobile the species, the more important to provide all the life cycle habitat requirements of multiple species in a small area (songbirds, quail, and pheasants).

Early successional management will be designed to achieve the desired plant community in density, vertical and horizontal structure, and plant species diversity needed by the targeted wildlife species.

Methods used will be designed to maintain soil and water quality criteria.

Used alone or in combination with other techniques, mechanical methods (prescribed burning, light disking, mowing, grazing, chemical application, or a combination of the above) can successfully manipulate successional stages of habitat.

Early successional management should only be used once every three years on the same location in a field.

Light Disking (2-4" deep) of existing stands (four years and older) may be necessary to increase the amount of open ground and encourage a diverse plant community of annual and perennial plants. Disk between October 1 and April 30. Disk no more than one-third (1/3) of the field every year. Rotate the disked areas, either blocks within the field or strips across the field, every year. Alternate disked strips (less than 75' wide) with buffers strips (two times the disked width) across the field on the contour/cross-slope. (Refer to the Attached Example.) The disked area should provide 50 percent bare ground leaving 50 percent residue to prevent soil erosion.

Extremely sod bound areas may require more than one pass with certain conventional equipment to achieve the desired 50 percent vegetative disturbance.

Areas with light disking can provide food from annual plants or it can be enhanced with the addition of forbs such as ladino or red clovers, black-eyed susans, or partridge pea, etc. Follow seeding dates as per the Conservation Cover Standard (327).

Annual Mowing or mowing of entire stands is discouraged since it greatly decrease the plant diversity and reduces residual cover available for the following nesting season. If mowing is necessary, two options are available. Mow between, August 1 to August 21 to protect ground nesting wildlife and allow residual growth. Mow no more than one-third (1/3) of the field every year. Rotate mowed strips across the field every year. Mow cool season grasses no shorter than six inches. Native warm season grasses should be mowed no shorter than ten inches.

A second option for mowing would be strip mowing in the spring. Mowing can be done March 15 to April 15 to encourage vegetative diversity without greatly impacting ground nesting activities or loss of fall food plants. Mow no more than one-third (1/3) of the field every year. Rotate the mowed strips across the field every year.

If mowing is used as a habitat management practice, residues will be thoroughly shredded to prevent excess litter accumulation.

Use Prescribed Grazing (528A) to manipulate plant succession, reduce ground litter, provide dusting areas, and vegetative structure. Livestock can be beneficial to maintaining the quality of herbaceous cover and controlling invasive plants when managed in accordance with a grazing plan with wildlife habitat management as the primary objective. The technique requires close management supervision to assure the site is not over-grazed.

Use Prescribed Burning (338) to remove excess litter, which can reduce the quality of wildlife habitat. Controlled fire can allow germination of seed bearing annuals, increase plant species diversity, control unwanted woody cover, and open up the stand for movement of small animals and birds. All burns must be done according to Prescribe Burn Plans.

Use selected herbicides to manipulate plant succession and improve habitat diversity. Careful planning and care in application are required in the use of chemicals to improve existing habitat. Strip spraying less than 50 feet or spot spraying should be done to improve plant succession and wildlife habitat. Selection of products should be based on several factors including project effectiveness, non-target species impact, toxicological risks, and off-site movement of chemicals. See Pest Management (595) for recommendations and precautions.

This practice should be applied periodically to maintain the desired early successional plant community. Vegetative manipulation must be done al least once every three years, or more frequently if the site requires treatment as recommended by NRCS biologist or other wildlife technical agency.

Management practices and activities are not to disturb cover during the primary nesting period for grassland species (May 1 to August 1). Exceptions will be allowed for periodic burning or mowing when necessary to maintain the health of the plant community.

Measures must be provided to control outbreaks of noxious weeds and other invasive species in order to comply with state noxious weed laws. Management

measures shall be provided to control invasive species and noxious weeds on the "spot" basis.

To protect forbs and legumes that benefit native pollinators and other wildlife and provide insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis.

CONSIDERATIONS

All habitat manipulations will be planned and managed according to soil capabilities and recommendations for management that will maintain soil loss within tolerable (T) limit.

Early successional treatments should be rotated throughout the managed area to maximize wildlife benefits. It is desirable to treat one-third of the field every year.

Design and install the treatment layout to best facilitate operation of machinery used on the strips or to make easily controlled burning boundaries. Whenever possible, design the blocks or strips to accommodate some multiple or full width passes by all farm implements.

The practice may be used to promote the conservation of declining species, including, threatened and endangered (plant, wildlife, or aquatic) species.

PLANS AND SPECIFICATIONS

Specifications for this practice shall be prepared for each site to meet management objectives. Specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance).

EXAMPLE - Alternating Disking:

Three year rotation