

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD AND SPECIFICATIONS**

EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT

(acre)
CODE 647

DEFINITION

Manage early plant succession to benefit desired wildlife or natural communities.

PURPOSE

- Increase plant community diversity to provide habitat for early successional species.

CONDITIONS WHERE PRACTICE APPLIES

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

CRITERIA

Many species of wildlife prosper at some stage of plant succession preceding the climax condition. To achieve this seral stage, an essential knowledge of the species needs is required prior to management activities.

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 featured wildlife species.

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

Vegetative manipulation to maximize plant and animal diversity can be accomplished by disturbance practices. Used alone or in combination with other techniques, mechanical methods (prescribed burning, light disking, chemical treatment, grazing, or a combination of the above) can successfully manipulate successional stages of habitat.

Light disking (2-4" deep resulting in 30-50% bare ground) of existing stands may be necessary to increase the amount of open ground and encourage a diverse plant community of annual and perennial plants. Disk between July 15 and April 30. Late summer/fall disking tends to favor broadleaves; spring disking tends to favor weedy grasses. Alternate disked strips (less than or equal to 75' wide) with buffer strips (2 times the disked width) across the field on contour/cross-slope. Rotate the disked strips across the field. Other disking patterns can be used (within soil erosion limits) and will be limited to not more than one-third of the acreage treated in a year. See JS-BIOL-24 Light Disking Job Sheet.

Use PRESCRIBED GRAZING (528) to manipulate plant succession, reduce ground litter, and provide dusting areas. 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. This technique requires close management supervision to assure that wildlife habitat objectives are met as a primary concern.

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. See JS-BIOL-15 Job Sheet Prescribed Burning for Wildlife and Patch Burn Grazing Information Sheet.

Use selective 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. Selection of a product should be based on several factors including product effectiveness, non-target species impacts, toxicological risks, and off-site movement of chemicals. See PEST MANAGEMENT (595) to determine a risk assessment. See JS-BIOL-26 Strip Herbicide Application Job Sheet.

Mowing is not an acceptable method for establishing and maintaining early successional habitat since it greatly decreases plant diversity, and reduces residual cover available for the following nesting season.

Mowing is only allowed in conjunction with other management methods/practices. Mowing is only allowed immediately prior to the application of the management method/practice and is limited to the acres on which the management method/practice is applied.

This practice should be applied periodically to maintain the desired early successional plant community. Vegetative manipulation must be done at least once every three years or more frequently if the site requires treatment as recommended by NRCS biologist or other wildlife technical agency. Treatment in strips is recommended where feasible as this provides a greater variety of vegetative structure.

After planned disturbance, interseeding of legumes and forbs into existing vegetation stands can provide a needed food source and add plant diversity to attract beneficial insect populations. CONSERVATION COVER (327), RESTORATION of DECLINING HABITATS (643) and JS-BIOL-20 Native Forb and Non-Native Legume Interseeding Job Sheet will be used for appropriate seeding mixtures/techniques.

Native adapted plant materials will be encouraged through succession whenever possible, but some introduced species may provide adequate value depending upon habitat objectives.

Management practices and activities are not to disturb cover during the primary nesting period for grassland species (May 1 – July 15). Exceptions will be allowed during this period

for periodic application of management methods/practices when necessary to maintain the health of the plant community.

Measures must be provided to control severe 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 a “spot” basis. See JS-BIOL-30 Controlling Undesirable Species Job Sheet.

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

Consider delaying any disturbance activities until after August 15, thus reducing the chance of harming fledgling birds and other young wildlife.

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

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

Treatment may be applied whenever succession has gone past the desired stages as determined by NRCS biologist or other wildlife technical agency.

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 habitat requirements in a small area.

Design and install the treatment layout to best facilitate operation of all machinery used on the strips or to make easily controlled burning boundaries. Whenever possible, lay out strips

to have some multiple or full width passes by all farm implements.

This 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. Specifications shall be recorded using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Actions shall be carried out to insure 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).

Periodic disturbance will be incorporated into the management plan to ensure the intended purpose of this practice.

Any use of fertilizers, pesticides and other chemicals to assure early successional management shall not compromise the intended purpose.