



Natural Resources Conservation Service
CONSERVATION PRACTICE STANDARD
EARLY SUCCESSIONAL HABITAT DEVELOPMENT-MGT
CODE 647
(ac)

DEFINITION

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

PURPOSE

This practice is used to accomplish one or more of the following purposes—

- To provide habitat for species requiring early successional habitat for all or part of their life cycle

CONDITIONS WHERE PRACTICE APPLIES

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

CRITERIA

General Criteria Applicable to All Purposes

Additional requirements are found in the habitat specific Implementation Requirements.

Specifications and site design for this practice shall be transmitted to clients using approved Vermont NRCS 647 Implementation Requirements.

Management will be designed to achieve the desired plant community structure (e.g., density, vertical and horizontal cover) and plant species diversity.

Where planting is needed, regionally adapted plant materials will be used.

Site preparation, planting dates, and planting methods shall optimize survival.

Planting of noxious weeds and invasive species is prohibited.

Measures must be provided to control noxious weeds and invasive species.

If using chemical methods of control, Pesticide Screening Tool (WinPST) shall be used to assess risks, and appropriate mitigation to reduce known risks shall be employed.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds will be in a targeted manner through the use of spot spraying, mechanical or hand wick applicators, or other approved methods to protect grasses, forbs and legumes that benefit native pollinators and other wildlife.

Management will be timed to minimize negative impacts to wildlife. Disturbance to habitat shall be restricted during critical periods (e.g., wildlife nesting, brood rearing, fawning or calving seasons).

Mowing or brush hogging will not disturb cover during the primary nesting season of April 15 - August 1. Exceptions will be allowed for:

- **Periodic management activities when necessary to maintain the health of the plant community (e.g. mowing mid-July to limit flowering of wild parsnip)**
- **Implementing a delayed 2nd cut scenario on intensively used hayland for grassland birds. First cut, and all associated management including raking, baling and spreading of manure, must be completed by May 31st. Early completion, prior to May 31st, is strongly encouraged. The next cutting is allowed after 65 days. If manure is to be spread on the field, it must be within 3 days of the harvest. Follow-up harvests are allowed later in season.**

Young Forest Habitat: Minimum size is 2 or more acres where no early successional habitat exists. Canopy cover will be reduced to 10% or less and at least 90% of all woody stems down to 1" d.b.h. will be cut to maximize stems/acre in regeneration and intolerant plants for soft mast.

Other Requirements for Young Forest Habitat:

- **A minimum of four snags (>6" d.b.h.) will be maintained or created per acre**
- **A minimum of four logs per acre, from the largest material cut, will be left on site**
- **Tree tops will be left on site for at least half of all cut trees. Tops will be distributed across the treatment area and not concentrated in a few areas.**

Minimize soil disturbance in natural communities where soil integrity is essential, on steep slopes, on highly erodible soil, and where establishment of invasive species is likely.

When grazing is used as a management tool, a prescribed grazing plan developed to specifically meet the intent and objective(s) of this practice standard is required.

CONSIDERATIONS

General Considerations

Vegetative manipulation to maximize plant and animal diversity can be accomplished by disturbance practices that include, but are not limited to: selected herbicide techniques, brush management prescribed burning, light disking, mowing, prescribed grazing, or a combination of these.

This practice should be applied periodically to maintain the desired early successional plant community and rotated throughout the managed area.

Early successional forest management and manual and mechanical cutting of woody material in old field and pasture settings should occur outside the primary nesting season of April 15-August 1. Mechanical cutting of woody saplings in pastures and old field settings should not be confused with brush hogging.

Where wood turtles, rat snakes or other reptiles of concern are known to occur, consider mowing after October 1st with a mower height of 6 inches or greater.

Wildlife habitat purposes often require lighter seeding rates than specified to prevent soil erosion.

Design and install the treatment layout to facilitate:

- operation of machinery
- use of natural firebreaks or development and maintenance of bare soil firebreaks when prescribed burning.

When prescribed grazing, consider setting aside a paddock near the center of the pasture and defer grazing until after the critical nest and brood rearing period. Many grassland birds require more than 40 days to fledge their young.

When selecting plants and designing management for this practice, consider the needs of pollinators and incorporate to the maximum extent practicable.

PLANS AND SPECIFICATIONS

Written specifications, application schedules and maps shall be prepared for each site. Specifications shall identify the amounts and kinds of habitat elements, locations and management actions necessary to achieve management objectives.

Specifications shall be transmitted to clients using approved **Vermont NRCS 647 Implementation Requirements**, and customized practice narratives or by other written documentation approved by **Vermont NRCS**.

OPERATION AND MAINTENANCE

The following 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).

Occasional disturbance may be incorporated into the management plan to ensure the intended purpose of this practice.

Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose.

REFERENCES

Best, L. B., K. E. Freemark, J.J.Dinsmore and M. Camp. 1995. A review and synthesis of bird habitat use in agricultural landscapes of Iowa. *Am. Midl.Nat.* 134:1-29.

Burger, L.W. 2002. Quail management: Issues, concerns, and solutions for public and private lands-a southeastern perspective. *Proceedings of the National Quail Symposium* 5.

DeGraaf, R.M., M. Yamasaki. 2003. Options for managing early-successional forest and shrubland bird habitats in the northeastern United States. *Forest Ecology and Management* 185: 179-191.

Hamrick, R.G., and J.P. Carroll. 2002. Response of northern bobwhite populations to agricultural habitat management in south Georgia. *Proceedings of the 9th Annual Conference of the Wildlife Society* 9:129.

Oehler, J.D. et al. 2006. Managing grasslands, shrublands, and young forest habitats for wildlife – a guide for the northeast. *Northeast Upland Habitat Technical Committee, Massachusetts Division of Fish and Wildlife*. 104pp.

Roseberry, J.L. 1992. Cooperative upland research. Effects of emerging farm practices and practices on habitat quality for upland game: Upland game habitat associations. *Illinois Department of Conservation*

Sepik, G. F., R. B. Owen, Jr., and M. W. Coulter. 1981. A landowner's guide to woodcock management in the Northeast. *Maine Agricultural Experiment Station, Miscellaneous Report* 253.23 pp.

Shepherd, M. D., S. L. Buchmann, M. Vaughan, S. H. Black. 2003. *Pollinator Conservation Handbook: A Guide to Understanding, Protecting, and Providing Habitat for Native Pollinator Insects*, 145 pp. Portland: The Xerces Society.