

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT

(Ac.)

CODE 647

DEFINITION

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

PURPOSE

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

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, native local ecotype, 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 prior to application of this practice.

If using chemical methods of control, refer to the Pest Management Practice Standard (595). 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 "spot

treatment" 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). In South Carolina the critical nesting period is April 1 – September 1.

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. Refer to the Prescribed Grazing Practice Standard (528).

CONSIDERATIONS

Confer with other agencies (South Carolina Department of Natural Resources, the United States Fish and Wildlife Service) and organizations (The Nature Conservancy, the Audubon Society, and National Wild Turkey Federation) to develop guidelines and specifications for conserving declining habitats. Also consider local, state and regional references when identifying rare and declining habitat. Refer to the SC Department of Natural Resources "Comprehensive Wildlife Conservation Strategy" which can be found at: <http://www.dnr.sc.gov/cwcs/index.html>.

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,

SC NRCS

January 2015

mowing, prescribed grazing, or a combination of these. Use caution when disking, as this disturbance often promotes the growth of competitive less desirable weed species.

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

Wildlife habitat purposes often require lighter seeding rates than typically specified to prevent soil erosion in plantings for "Critical Area."

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.

Managing for early successional plant communities is beneficial if not essential for less mobile animal species. The less mobile the species, the more important it is to provide all the habitat requirements in a small area.

PLANS AND SPECIFICATIONS

All necessary local, state, and federal permits shall be obtained by the landowner (or designee) prior to the restoration.

Written specifications, application schedules and maps shall be prepared for each site. Specifications shall identify the following:

- Amounts and kinds of habitat elements,
- Site Preparation, Planting dates, and planting methods,
- Measures to control noxious weeds and invasive species prior to application of practice,

- Locations and management actions necessary to achieve management objectives.

Specifications shall be transmitted to clients using approved specification sheets, job sheets, and customized practice narratives or by other written documentation approved by 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.

Operation and maintenance activities should not disturb cover during the primary nesting period for grassland species in South Carolina (April 1 – September 1). Exceptions can be allowed for periodic growing season burning, light disking, selected herbicide techniques, selected mechanical removal or mowing when necessary to maintain the health of the plant community. Mowing may be needed during the plant establishment period to control weeds and growth of woody vegetation.

Rotational disturbance will occur on a 3 year cycle, where 1/3 of the site is disturbed annually while the remaining 2/3s remain untouched.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds will be in a targeted "spot treatment" 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.

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.

Kohlsaatt, T, L. Quattro, and J. Rinehart. 2005. South Carolina Comprehensive Wildlife Conservation Strategy 2005-2010. SC Department of Natural Resources.

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.