

Wildlife Conservation Land Priority Habitat Management Guidelines

Early Successional Habitat



Protected species associated with early successional habitat include Bachman's sparrow, Henslow's sparrow, loggerhead shrike, painted bunting, star-nosed mole, Eastern diamondback rattlesnake, Northern pine snake, Coleman's oldfield mouse, vesper sparrow, golden-winged warbler, Southern rock vole, timber rattlesnake, and Eastern smooth green snake.



North Carolina Wildlife Resources Commission

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Habitat Description

Early successional habitat is represented best by land where most trees have been removed either through natural means or by human activity. This habitat type requires frequent disturbance that suppresses tree growth.

The land must be managed with periodic disturbances such as timber harvest, disking, mowing, burning, and/or herbicide treatments to maintain this condition. Common types of early successional habitat include recently abandoned farm fields, clearcuts, field borders, savannas, prairies, and meadows.

Early successional habitat can be a mix of grasses, legumes, wildflowers, vines, shrubs and saplings. To qualify for the Wildlife Conservation Land Program, at least 20% of the ground cover must consist of native grasses and forbs (non-woody flowering plants) beneficial to wildlife. In general, sod-forming grasses such as fescue and orchard grass provide minimal wildlife value; while grasses that grow in individual clumps, such as switch grass and broomstraw, provide greater value for wildlife. Small patches of vines or shrubs contribute to habitat value, but woody vegetation should not shade out the grasses and forbs.

Tree density within this habitat type must be 50 basal area or lower. Early successional habitat in a degraded condition can be revived with proper management.

Note that early successional wildlife habitat differs from other open land by the vegetative component represented. Although pastures, hayland, agriculture crops, lawns and golf courses may be considered early successional *lands*, they should only be considered early successional *habitat* if they are composed of vegetation that is beneficial to wildlife and the land is managed for that purpose. An example would be a native warm season grass field where forbs are present and the landowner uses a wildlife compatible management strategy.

The North Carolina Wildlife Action Plan identifies 31 priority wildlife species associated with early successional habitat. Northern bobwhite, cottontail rabbits, whip-poor-wills, eastern meadowlark, and painted buntings are some of the most well known early successional species.

Management Strategies – Wildlife Conservation Land Program (WCLP)

Mountain balds, piedmont prairies, and coastal pine savannas are examples of open habitats in NC that have become very rare. These habitats are a high priority for inclusion in the WCLP and landowners are strongly encouraged to permanently protect these sites through conservation easements or other conservation programs.

The WCLP will consider other types of open land such as abandoned farm fields, meadows, and old fields as long as they are managed for a diversity of grasses and forbs native to the eco-region. Newly planted pine stands and open forest stands may qualify for the WCLP if the landowner is willing to manage these areas for maximum wildlife benefits rather than for maximum return from timber products. Stands with tree cover must be thinned to <50 BA and the understory must be composed of at least 20% native grasses or forbs. Young forest stands like clearcuts may qualify for the WCLP if the landowner is willing to use management practices to keep the site from reverting back to forest and shading out the beneficial understory.

Without periodic disturbance open land will revert to forest. All acreage enrolled under the early successional habitat category will require active management.

Management practices that mimic the natural disturbance regime are preferred. Most if not all of the habitats across NC will respond favorably to prescribed fire. Landowners are encouraged to look at using fire on a two or three-year rotation before resorting to chemical or mechanical methods of vegetation control.

If burning cannot be used, woody vegetation can be sprayed with herbicide on a two to three-year rotation. Chemicals are a more expensive method of plant control and herbicides and surfactants should be of low toxicity to wildlife and should be applied according to label instructions.

Mechanical methods will suffice if no other means are available to the landowner. Light disking with a farm tractor every two to three years will stimulate a variety of annual plants beneficial to wildlife.

Mowing is the least preferred method for controlling woody vegetation. Mowing generally selects for grass over forbs and will likely produce a less diverse habitat over time. Disking the first year then every third year is recommended. This method should be applied in late winter to early spring (late February through mid-April) to avoid disturbance of nests and young wildlife and to maintain winter cover.

NOTE - participants who do not follow the planned management activities outlined in their agreement will be subject to the recapture provision in the statute. For this reason, landowners are cautioned not to sign up for management practices that are incompatible with their capabilities or management philosophies. Resource professionals are available to discuss management options and help select the most practical method that will benefit wildlife.

More information on this habitat may be found in the NC Wildlife Action Plan at www.ncwildlife.org/fs_index_07_conservation.htm.

