



Kentucky Natural Resources Conservation Service

Programs Help Private Forest Landowners to Increase Early Successional Habitat, Decrease Degraded Forest Stands

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Kentucky is slowly losing early successional habitats to forest succession and lack of proper forest management. The wildlife species that depend on these open habitats are being lost as well. USDA's Natural Resources Conservation Service (NRCS) is committed to improving successional habitat and improving forest stands by partnering with other agencies and private forest landowners across Kentucky.

What is Successional Habitat?

Vigorously growing grasses, forbs, shrubs and trees provide excellent food and cover for wildlife but need disturbances to be maintained. If these habitats are not mowed, brush hogged, burned, cut, grazed or disturbed, they will eventually become mature forest over time. Grasslands, old fields, and young forests are often referred to as early successional habitats, which provide some of the most species-rich habitats.

Many more species are drawn to old fields, thickets, and young forest where there is an abundance of flowering plants, browse, insects and soft mast (fruit). Important soft mast includes species such as raspberry, blackberry, cherry, apple, etc.

Degraded Forest Stands

In addition to the lack of early habitat in Kentucky there is also an unprecedented amount of poor timber harvesting techniques being conducted that lead to degraded stands.

Most landowners do not consult with professional foresters before logging, and in many areas few markets exist for small-diameter trees. Thus, most commercial timber harvests remove only the best quality, saw-timber size trees, but leave lower quality and smaller diameter trees. Many foresters refer to this practice as "cutting the best and leaving the rest". Such high grading reduces the quality and quantity of desirable vegetation and leads to degraded forest stands. This practice leads to the development of forest stands that consist of poorly formed trees that are often more susceptible to insects and disease. In addition, high grading reduces the ability of cut over stands to provide early successional habitat and can hamper the development of desirable species.

Also, improperly designed skid trails may contribute excess sediment to streams, hampering water quality. Both situations degrade forest stands. Unfortunately, these poor timber harvesting techniques often come at the cost of future timber production, future habitat for wildlife, and water quality.

Young Forest Initiative

Targets forest landowners who may have purchased property consisting of degraded forest stands, or who may be considering a commercial timber harvest. The project will provide technical expertise and planning that will result in an increase in both the quantity and quality of both wildlife habitat and timber products through sound forest management techniques.

Through proper forest management techniques, cut forest stands develop thick, young forest vegetation structure for several years after cutting. Such structure constitutes a type of habitat generally in low supply on most private forestlands but is very important for disturbance-depen-



Photo courtesy: Jared Calvert

Early successional habitat in Pulaski County, Kentucky, created through a combination of timber harvesting and prescribed fire.

Species that Benefit

Grassland birds generally need large fields combined with delayed mowing that allows successful nesting. Shrubland birds need low, thick woody cover for nesting, and snakes forage in these productive early successional areas for insects, frogs, and small mammals. Besides declining species, there are a variety of other wildlife that will seek out these areas for the excellent cover and quality of food they provide. Songbirds, turkey, grouse, deer, rabbit, bear, fox, na-

dent wildlife species suffering population declines. Standing snags and downed logs left over from logging activities, or that are created through proper forest management techniques, can provide for grouse drumming logs and desirable roost trees and snags for endangered species such as the Indiana bat.

Through this project, NRCS Kentucky estimates it will provide \$1,191,000 in financial assistance to woodland owners over the next four years. Project partners will also offer in-kind support annually.

Southeast Early Successional Habitat Initiative

In addition to the Young Forest Initiative through the Environmental Quality Incentives Program (EQIP), NRCS has funded more than \$2.5 million in a Southeast Kentucky Early Successional Habitat (SEKESH) Initiative since 2013.

SEKESH is a flexible program. Through this program cost share assistance is available for novel techniques that create early successional habitat, such as the establishment of group openings through timber harvesting, edge feathering of group openings, treating invasive species, and prescribed burning.

Obtaining Assistance

Landowners in Kentucky have multiple ways to receive technical and financial assistance for forest management through NRCS to address the lack of early successional forest and to treat degraded forest stands. NRCS has many programs available that can provide the expertise of a professional forester and potential funding assistance for proper forest management.

Through EQIP, NRCS can provide private landowners with financial resources and one-on-one help to plan and implement conservation practices. Some of these practices include forest stand improvement and site-preparation for the development of desirable species within degraded forest stands. These practices involve the removal of trees through tree cutting to facilitate the development of higher quality forested habitat.

Private landowners who chose to voluntarily implement conservation practices can work with NRCS who may co-invest in these practices with technical and financial assistance to the landowner. Last year, Kentucky NRCS obligated 179 contracts that included forest management activities for nearly \$2 million with EQIP funding.

Photo courtesy: Jared Calvert



A landowner applies herbicide to remove unacceptable growing stock trees that are reducing the availability of early successional habitat and regeneration of desirable species within a degraded forest stand.

In addition, the Conservation Stewardship Program (CSP) helps landowners build on existing conservation efforts while strengthening the forest. NRCS can custom design a CSP plan to help meet forest conservation goals. On non-industrial private forestland, 69 contracts worth over \$1 million in assistance were obligated with conservation practices planned on over 6,500 acres.

Through these programs, over 26,000 acres of woodlands will benefit from planned conservation with another 16,000 acres of planned conservation practices through 2021.

In an ideal framework, the forest landowner should first contact their local NRCS office. A management plan may be obtained through the Kentucky Division of Forestry, Kentucky Department of Fish and Wildlife, or Technical Service Provider. In addition, NRCS works with partnering agencies such as the U.S. Forest Service and National Wild Turkey Federation to employ shared foresters who can assist with developing a plan for your woodland. A shared forester may work with a Kentucky Department of Fish and Wildlife Resource biologist. The biologist and forester will jointly assess the conditions of your woodland and work with you to design a management plan to treat degraded stands and create early seral habitat. Then NRCS funding could be applied for to help defray a portion of the implementation costs.

For more information on any of the programs or information listed above, contact your local NRCS office. USDA is an equal opportunity provider, employer, and lender.



Photo courtesy: Jared Calvert

Woodland owners can receive technical and financial assistance to implement conservation practices on their property through the Environmental Quality Incentives Program (EQIP).