Manage Your CRP Pine Plantations for Wildlife

Jeff Jackson, Extension Forest Resources
D.B. Warnell School of Forest Resources
The University of Georgia

Introduction

Beginning about 10 years ago (1985) the Conservation Reserve Program (CRP) paid landowners to convert cropland to planted pines. Now these pines are approaching the size where they will benefit from timber management practices such as thinning and fire. If you have such pines, you can improve habitat for certain favorite wildlife by making some modifications in your timber management plan.

Pine plantations established on former cropland are often poor wildlife habitats for many species. That’s because the land where pines were planted had much of its natural vegetation removed from the previous land use. Management for wildlife can restore some of that lost vegetation.

Pine plantation edge habitat -- where the forest meets the field -- has extra value for certain game such as deer, quail and rabbits, as well as some songbirds like the indigo bunting, the yellow breasted chat and numerous others. Small mammals like the cotton rat and deer mouse are also abundant along such edges. Fox and bobcats hunt these edges where they find an abundance of prey. The action is on the edge.

The extra value of pine plantation edges does not come from the pines, rather it comes from the greater diversity of associated vegetation that grows along the edge of the field. This variety of edge vegetation results from the extra sunlight energy that edge plants soak up as compared to understory plants in the interior of the stand where the pines shade out much of the low growing competition.

Valuable edge vegetation includes fruit producing small trees like dogwoods, hawthorns, crab apples, persimmons, wild cherry, red mulberry, wild plum and others. Most of these trees will be mature enough to provide fruit by age 10 years. Along the edge, you may also have saplings of larger trees such as oaks, honey locust and hickories which will produce food for wildlife later on. Of course, these children of forest giants will grow up doing what forests do -- ever taking over the inside edge, advancing the edge outward. Shrubs with special wildlife value for edges include bicolor lespedeza, blackberries, autumn olive, beautyberry, sumac, blueberry, wax myrtle and many others. Some landowners got paid to include many of these species in their original CRP planting plan. If there are no such trees and other plants volunteering in along the edge of your pines, you can plant them. There are also dozens
of kinds of smaller herbaceous plants that add diversity to your pine plantation edges.

Manage Edge Vegetation

Do not farm right to the edge of the pines. Allow the edge to advance somewhat into the field to make a border. Manage this border by mowing, disking, thinning, planting, and cutting. Consider the following ideas.

- Allow trees to volunteer in among the pines along the edge. Remove unwanted trees in the edge so as to put the growth on preferred ones. For example, you may wish to remove some male mulberries or persimmons. These produce pollen but no fruit. The extra space will allow the remaining trees to grow bigger. If sweet gums or other less desirable species become overly abundant, you may wish to remove some to favor scarcer trees. You can cut unwanted trees or use certain herbicides.
- Allow the vegetation to grow tall next to the the pines. Mow or disk a strip of this medium height vegetation every 2 to 3 years. Do not mow this strip all at once. Put this mowing on a rotation, so as to skip sections each year. This setup provides nesting and hiding cover.
- Mow or disk a second strip of vegetation along the edge of the field 15 to 20 feet out from the edge of the pines. Do this each year to maintain tender young plants for wildlife forage.
- Plant preferred wildlife forages and seed plants in the mowed or disked strip. Ask your county agent for advice on plantings for wildlife. Get a soil test first.
- Plant fruit and nut trees for wildlife along the edge.
- Half-cut some trees. If you want to instantly thicken the edge vegetation, cut half through the trunk and bend the tree over. The tree them becomes a long bush.
- Thin pines heavily along the edge of the plantation to broaden the edge. An abrupt edge where a dense forest meets open field is called a "high contrast" edge. A feathered edge with scattered pines produces a more gradual change from dense to open over a wider zone. This is called a "low contrast" edge. Low contrast edges are better for edge wildlife species.
- Do not burn your managed edges. Fire may kill desirable hardwood trees. When your pine plantation is ready for prescribed fire to control weed trees, put the fire break between the edges and the interior of your plantation.

The Interior of the Plantation

The interior of dense, shady pine plantations can be improved for many species of wildlife by getting more light to the forest floor and by creating islands of diversity in the pine stand. Generally speaking, a ground cover of bare pine needles isn't nearly as good for wildlife as a dense understory of blackberries, lespedezas, beggarweeds and other wildlife food and cover plants. Thinning and the use of prescribed fire can open
the stand to enough sunlight to support cover plants. Create edges in the interior by clearing small openings.

As the plantation matures, allow some hardwood trees to grow within the stand. Scattered large pines interspersed with various species of hardwoods should gradually increase richness of wildlife species that inhabit the plantation. If you manage your CRP pines for wildlife, you will, in general, have better hunting and more of certain kinds of wildlife than if you manage it exclusively for timber.