What Has Happened to Farmland Wildlife Populations?

This is a question often asked by agricultural landowners and is usually followed by the statement:

We have not changed what we did years ago when wildlife were abundant. We still graze livestock, grow citrus, etc. as we always did. Forty years ago, we had abundant quail, rabbits, songbirds, etc., but they are not here today.

The Answer

While many factors have changed outside of our agricultural areas affecting wildlife populations on farms and ranches, there have also been many subtle changes in agricultural lands that have had profound effects on many wildlife species.

One of the most important of these is what has happened to the fences and fencerows. Fencerows are simply the areas, usually linear, along fences. Fences are used extensively in agricultural lands to delineate fields and manage grazing livestock. Historically, due to less efficient and more cumbersome mechanical equipment, lower stocking rates, and less used and effective herbicides, abundant vegetation often grew along fences. Today, most fences in agricultural lands are “clean,” devoid of any vegetation (Figure 1). This simple and over-looked fact is at least partially responsible for declines in numerous wildlife species. For example, population declines in bobwhite quail throughout much of its range since the 1950s has been directly linked to similar declines in fencerows.

Figure 1. A typical fence, lacking vegetation, in Florida.
Fences: Let'em Grow

Fencerows are one of the most important wildlife habitat components in agricultural lands. If properly vegetated, they provide food and cover for a variety of birds, mammals, reptiles, and amphibians in areas that are often lacking such habitat. They also provide protected travel corridors for these same species as they move throughout a farm or ranch. The benefits provided by fencerows depend on how open the land is and how much similar habitat is available. In heavily forested or overgrown areas, fencerows will not be as crucial as in open range or croplands.

Wildlife That Use Fencerows

Fencerows are essential for at least 15-20 vertebrate species and preferred habitats for more than 74 more. The type of vegetation and the width of a fencerow will affect what species use it. Species using fencerow habitat include bobwhite quail, ring-necked pheasants, screech owls, red-tailed hawks, red-headed woodpeckers, bluebirds, buntings, cardinals, various sparrows, white-tailed deer, cottontail rabbits, squirrels, woodchucks, red and gray fox, box turtles, skinks, rat snakes, king snakes, and many others.

What to Do

If you have properly vegetated fencerows, leave them in place. If your fences are “clean” (Figure 1), reestablish the fencerows. While you can replant vegetation along fences to create ideal habitat for wildlife, often simply allowing natural plant succession to occur will create a fencerow. This will require removing or reducing grazing, mowing or other mechanical treatments, herbiciding, and fire.

The best fencerows consist of a combination of trees, shrubs, and herbaceous plants (native, warm-season bunchgrasses and forbs, particularly legumes such as partridge pea, are especially beneficial; Figure 2). This provides the greatest diversity of wildlife food and cover. Typically, there would be a central line of trees along the fence itself, mixtures of shrubs underneath the trees and along the sides, and grasses and forbs in and along either side of the shrubs. Ideally, fencerows would be 40-50 feet wide, but any vegetation along a fence is helpful. In addition, the best fencerows are not monotypic in species composition or structure; meaning trees, shrubs, and herbaceous plants vary in type, height, etc. As fencerows mature, some trees will die, forming snags. This adds another valuable habitat component and such trees should not be removed. As fencerows age, trees will often dominate the area, shading-out shrubs and herbaceous plants. To maintain the value of these fencerows, good management will require the periodic removal of trees. Other management, including light grazing, mechanical treatments, the selective use of herbicides, prescribed fire, and planting, will also be necessary periodically to maintain maximum plant structural and compositional diversity.

Figure 2. Fencerows with abundant trees, shrubs, and herbaceous plants are very beneficial to wildlife. Credits: W.M. Giuliano. (2005).

If you want to benefit many wildlife species on your property, build or improve your fencerows. No matter how big or small, let'em grow!