



# Wildlife 101

## *The Value of a Wildlife Management Plan*

by Matthew Springer

Whether you would like to include wildlife in a woodland management plan that focuses on timber production or develop a plan that only focuses on wildlife, a healthy ecosystem is always the goal. There are practices, such as invasive species removal, that work for all objectives and can be a solid way to start a woodland or wildlife management plan. The two plans can take different tracks depending on your objectives for your property. Several wildlife management strategies that benefit specific or numerous wildlife species would not be found within a woodland management plan for many reasons, the most obvious is managing your property that is not wooded. In many cases the non-wooded areas can be more important for some wildlife species. Some are less obvious, as they may be a small addition to an area of your property, such as building a 30 square foot vernal pool designed to hold a little water after rain storms in your woodland. This type of habitat has nothing to do with managing your trees for timber, but can be included to help many wildlife species that live within your woodland.

### ***How are wildlife and woodland management plans similar?***

The simplest way to put it, and the most important thing to keep in mind, is that good hardwood management is good wildlife management. A large, healthy, diverse woodland will produce adequate food and cover for any of its native wildlife species. The key word here is “diverse.” A healthy woodland for wildlife should have a diverse age structure and a diverse number set of tree species. The age structure is more difficult to work into smaller properties as more area is required to establish all the different ages of woodland stands in sizes that are meaningful to wildlife. We will discuss this in a little more detail in the next few sections.

### ***More importantly, how are wildlife and woodland management plans different?***

One of the big ways a wildlife management plan differs from a woodland management plan is that it can incorporate more habitat types outside of woodlands. Wildlife-friendly habitat practices that are not woodland management practices may occur within the woodland, next to a woodland, or completely unrelated to a woodland in the middle of a grass field. Other ways a wildlife management

plan can differ include practices that may not always be advantageous for creating the most timber down the road, for example refer to hinge cutting below or think of the creation of snags (standing dead trees). Some strategies commonly used for wildlife will be covered in the next section. Keep in mind that one or all of these strategies may be used on a property, depending on the size and composition of the property along with the goals of the landowner.

### ***Increase the amount of early successional habitat***

There is one phrase that wildlife managers in hardwood woodlands say frequently when talking about timber harvests and wildlife, “Cut it hard!” In many cases, har-



*Early successional forest habitat surrounded by older forest created by a small group opening.*

vests often remove scattered trees, and lack areas where the woodland is allowed to regenerate. The lack of young woodlands, 15 years old or less, is a limiting factor for many wildlife species and throughout most of the hardwood region there is a limited number of young regenerating stands. The easiest way to produce this habitat is to make sure that large openings are created in the woodland when a harvest occurs. Young woodlands are pivotal habitat to species such as ruffed grouse, but also provide

Photo courtesy: Brian Lockhart, USDA Forest Service, Bugwood.org



benefits to other species, for example migrating songbirds, deer, elk, and turkeys, just to name a few. Ideally you want to put one large (10+ acres) or several small (1-5 acre) openings on the property to maximize the benefit. For many wildlife species, we need to approach this on a larger landscape scale—think in terms of 1,000-plus acres.

Photo courtesy: Jeff Springer



*Group openings in close proximity to each other are a great strategy to use to increase early successional habitat without putting in one large opening.*

A good rule of thumb for wildlife species that rely on this type of woodland is to have about 20 percent of your woodland habitat be less than about 15 years old within a larger managed habitat. Most landowners of course do not have large acreages, so landowners should consider what types of habitats are present on neighboring properties to assess potential wildlife needs.

Another option to increase early successional habitat for properties that may have fields or roads includes edge feathering your woodlands along those borders. Edge feathering creates a transition of habitat from grasses, to bushes and young trees, to the larger trees of the woodland. This action creates younger structure immediately adjacent to fields or roads. The practice helps increase the amount of woody cover available on the ground, something that is usually limited in the fields but needed for species such as songbirds, quail, and rabbits. The strategy has multiple benefits, including increasing browse and soft mast availability and creating scrub habitat that species such as the grouse,



*Edge feathering creates varying levels of cover from the ground to the canopy by transitioning from low level cover up to mature trees in a 30 – 60 foot band along the entire forest edge. It can be used to help create early successional habitat along field and forest borders with great success.*

wild turkey, a long list of songbirds, and even fawns use for nesting, cover, and shelter.

### ***Native Grasslands***

Native warm-season grasses (NWSG) occur within grassland/prairie habitat and typically a woodland management plan would not include management of this type of habitat. NWSG provide vital food, cover, and nesting habitat for pollinator species, many of our migrating song and game birds, mammals such as rabbits and voles, and—for those deer hunters—they act as an excellent food source, bedding area, and fawning habitat for white-tailed deer. These areas require some form of disturbance every few years to help prevent them from turning into a monoculture or young woodland. Part of your wildlife management plan will cover when and how that should be accomplished, be it fire, mowing, disking, or chemical.

Photo courtesy: Brian Lockhart, USDA Forest Service, Bugwood.org



*Though group openings may not look appealing after the initial harvest, these areas quickly create excellent wildlife habitat after one or two growing seasons.*

Photo courtesy: Matthew Springer



*Native grasslands provide valuable food and cover for many wildlife species. Consistent disturbance through fire, mowing, disking, or herbicide creates a field that has a diverse plant composition and vegetative structure, making excellent habitat for many wildlife species.*



## Hinge Cutting (Browse Cut)

Hinge cutting is a tool used often in Northern states to help increase the availability of woody browse and cover for wildlife in winter. Basically a tree, usually softer wood species such as red maple, is cut in a manner that leaves it partially connected to its stump, causing the top to fall on the ground, but still allowing a minimal flow of nutrients to the tree top, keeping it alive for an extended period of time. The stress causes the tree to throw off additional nutritious sprouts as well as making the tree top available as cover and browse for many wildlife species.



Photo courtesy: Quality Deer Management Association

*Hinge cutting can be a useful tool to reduce small undesirable timber species while providing browse and cover for many wildlife species at the same time as the trees will continue to grow for several years after being cut.*

## Food Plots

Food plots are a management strategy that has grown in popularity over the last decade and has multiple benefits for wildlife, but it is important to remember that they should only be a part of a larger wildlife-habitat management strategy. There are many different options for both placement and planting, and talking with a wildlife biologist on how to include these in a wildlife management plan will help you use this strategy most effectively. Small decisions, such as plant selection, can have huge benefits for many wildlife species over the long term. Conversely, a food plot not well planned can become a headache with time spent fighting weeds or dealing with lackluster growth, not meeting the cover or nutritional needs of the wildlife you planted it for.

## Vernal Pools or Water Holes

Vernal pools or water holes can be made for the same purpose or completely separate reasons. A vernal pool basically is a shallow, less than three feet deep, usually no more than 20 feet in diameter, temporary wetland that holds water during wet periods of the year. These areas are vital for many of our amphibian species who use them for breeding purposes. Water holes are similar to vernal pools in that they are usually small in size, but are designed to be deeper

than a vernal pool, four feet or more in many cases. The reason being, water holes are meant to hold water the entire year and act as a water source for wildlife species during the dry periods of summer. Deer, elk, bear, turkeys, quail, a multitude of smaller songbirds, amphibians, and reptiles will all use this water source if available. Water holes have gained attention recently by deer hunters, who will take advantage of their wildlife value by hunting near them during the hot and dry early archery season. Placing a vernal pool or water hole on your property does not require much space. However, if you have a permanent water body already on or close to your property, then a water hole may not be necessary. Even if another water source is present, adding a vernal pool will still help increase wildlife diversity and the survival of our sometimes-overlooked wildlife species.

## Other Resources

This was a very brief introduction to multiple strategies that exist for wildlife. By no means did this article go into the detail needed to really understand the implementation or strategies relating to them. There are also several other strategies that can be incorporated into your property that were not covered, so if you are looking for more information relating to wildlife habitat and habitat-management techniques please visit the "Habitat How-To's" publication series (<https://fw.ky.gov/Wildlife/Pages/Habitat-How-To%27s.aspx>) available from the Kentucky Department of Fish and Wildlife Resources (KDFWR). This series covers most types of management used within Kentucky for wildlife and a healthy ecosystem. In addition, KDFWR employs private land biologists ([https://fw.ky.gov/Wildlife/Documents/privateland\\_biotologists.pdf](https://fw.ky.gov/Wildlife/Documents/privateland_biotologists.pdf)) to work with private woodland owners. These private land biologists will visit your property and work with you to develop a wildlife management plan based on your goals free of charge as long as your property is 25 acres or larger. Financial support may be available through Farm Bill programs to help implement or maintain some of these wildlife-management strategies. These programs are dependent on many factors, such as previous land practices, location, or availability of funds. However, it is well worth asking your local state forester or wildlife biologist if there are any programs to help you implement your wildlife plan.

### About the Author:

**Matthew Springer, Ph.D.**, Assistant Extension Professor of Wildlife Management with the University of Kentucky Department of Forestry works on a variety of wildlife management needs for private landowners, farmers, and governmental agencies.

Cooperative Extension Service, Department of Forestry, University of Kentucky, 209 Thomas Poe Cooper Building, Lexington, KY 40546; E-mail: [mattspringer@uky.edu](mailto:mattspringer@uky.edu); Phone: 859.257.8633; Fax: 859.323.1031.