



# Wild Know-How

Spring 2017

A Private Lands Newsletter from the Division of Wildlife



Cow grazing native warm season grasses. Gary Price photo

## Using Cattle to Manage Quail

By Tom Edwards, Wildlife Biologist

From 1940 to 1975 the number of cattle in Kentucky increased dramatically from 1 million to 3.7 million. Today, the peak number of cattle has stabilized to around 2 million. Kentucky now has twice as many cattle and twice as much pasture land than in the 1940s.

More acres of cattle pasture have resulted in less grassland dependent wildlife like bobwhite quail. Quail require various stages of grass for nesting, brood rearing, and roosting. Rather than a diversity of habitat, intensive

cattle grazing can result in large areas of short grass. There are places, however, where cattle are being managed to the benefit of quail by cattlemen who like having both.

In 2013, KDFWR, the University of Tennessee, and the Blue Grass Army Depot (BGAD) initiated a cattle grazing and bobwhite quail research project on the Depot near Richmond. The study began with the establishment of 150 acres of indiangrass and big bluestem. These species of native

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KENTUCKY  
QUAIL  
PROJECT



### SPRING CHECKLIST

#### March - Mid April

- \_\_\_ Prescribe burn in preparation to eradicate fescue.
- \_\_\_ Strip disk to promote bare ground and new forb growth.
- \_\_\_ Sow clover or lespedeza.
- \_\_\_ Sow cool season grasses.
- \_\_\_ Apply lime and fertilizer per soil test to wildlife food plots.



*"The central thesis of game management is this: game can be restored by the creative use of the same tools which have heretofore destroyed it – ax, plow, cow, fire, and gun..." – Aldo Leopold, in Game Management, 1933*

# Edible and Medicinal Forest Fungi

By Joe Lacefield  
Private Lands Wildlife Biologist

The emerald ash borer has decimated the white and green ash component of most of Kentucky's woodlands. This "natural" thinning in and of itself can have a positive spin. Dead trees are beneficial to many wildlife species. Some bats utilize the sloughing bark for roost or maternity sites. Woodpeckers create nest cavities and forage on insects that feed on the dying trees. Once fallen they can become escape cover for small game and as fungi break down the cells and the wood becomes soft, it will create nesting substrate for reptiles and cover for salamanders and frogs.

The dead standing trees can be very dangerous especially in high winds and should be considered when recreating in the woods.

Almost immediately after dying, ash trees in particular become colonized by several species of mushrooms. The first and most commonly seen is turkey tail (*Trametes versicolor*). It is brown to grayish in color and has alternating bands of light and dark on the upper surface and a white porous underside. It is a medicinal fungi used in teas and tinctures thought to boost the immune system and potentially fight cancer. It will flush and fruit multiple times during the year.

The mushrooms one sees are merely the fruiting bodies of a much larger

organism. Mycelium, a web of fungal "roots," penetrates and grows throughout the wood and sometimes into the soil. When conditions are right the organism fruits by constructing mushrooms which produce millions of spores spread by wind and carried by wildlife.

When spring arrives and the first week of nightly temperatures staying in the 50° range or higher, watch for morels. This is likely the most well-known wild fungus. It grows in soil, not wood, and has a distinct wrinkled appearance and is hollow. It tends to associate with the roots of ash, elm, hickory, poplar, and sycamore. They can be difficult to see but where there is one, there are usually many. It's a great



Chanterelles of different species. Joe Lacefield photo

way to kill time waiting on a turkey to gobble in April!

A highly overlooked abundant choice edible is the chanterelle. These colorful soil growing fungi tend to associate with oak tree roots and can be found mostly in July a few days after a good rain. They are generally funnel or fan shaped and have ridges resembling gills that run down the stem. They also have a slight apricot smell. These are much easier to spot than the more well-known morel, and in some forager's opinion, have a better taste.

Some considerations in collecting and eating mushrooms:

Get a good field guide, always cook them well (cooking chemically alters compounds allowing them to become digestible), and try a small sample first to "test" for allergic reactions. The most important consideration is to **never** consume a fungus when you are unsure of its identity. "When in doubt, throw it out!"



Turkey tail. Joe Lacefield photo

# Hinge Cutting

By J.J. Baker

Private Lands Wildlife Biologist

**H**inge cutting can be an alternative to simply cutting down a tree when utilizing timber stand improvement techniques (TSI). After gaining popularity over the past several years, hinge cutting has broken through as a way to not only effectively create woodland openings, but also create cover and browse habitat. It has even been used as a means to soften edges during edge feathering and promote early succession in edge areas.

Hinge cutting is simply using a machete, handsaw, or chainsaw to cut partially through a tree to leave the bark, cambium layer, and a little sapwood connected. The connection that is left will allow the tree to produce stump sprouts that will not only enhance the horizontal cover that has been provided by felling the trees, but will also provide browse for species such as deer. Hinge cut trees may live for years providing cover and browse for the duration of the trees life.

When using the hinge cut method on trees that have been prescribed for removal for TSI, trees with a 3-8" diameter at breast height (DBH) are generally utilized. There are, however, instances where larger trees can be targeted. Hinge cutting larger trees is fine



Hinge cut.  
*Brian Beauchamp photo*



Above: Sprouting on a hinge cut tree. Left: T-cut.

*Jeff Jackson photos*

The T-cut is characterized by a vertical plunge cut with a chainsaw a little more than half way to center on the side you want the tree to fall and a horizontal cut that connects the "T." Wedges can then be used to fell the tree.

Most commonly trees such as maple, sassafras, and cedar can be targeted for TSI. In the instances of

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*For a video demonstration visit [www.youtube.com/watch?v=7V3whHTBIrc](http://www.youtube.com/watch?v=7V3whHTBIrc)*

# Managing for Monarch Butterflies

By **Sunni Carr**  
KDFWR Biologist

Nearly everyone has had a memorable experience with a monarch butterfly. Who could forget the butterfly that landed on our arm, probing its way along, enjoying salty sweat during warm summer days. Whether seeing the bright orange and black reminder of our youth land on a flower to feed on nectar or seeing them float through the air on their journey to their wintering grounds, the Monarch Butterfly is undoubtedly one of the most recognizable sentinels of nature. We often associate it with pictures of healthy meadows, streams, or gardens.

The truth is monarchs are in grave danger. Since 1995, their populations have plummeted by more than 80%. This decline is due to a number of factors, among them severe habitat loss/degradation. Monarchs must have native milkweed species to complete their life cycle. Throughout their long journey from the wintering grounds, they will pause multiple times along the way to complete this cycle. From laying eggs, to emerging as an adult butterfly, habitat remains critical. There are a number of things you can do whether in your backyard, farm, or community garden that can help to quickly reverse that trend.

As a landowner, managing for monarchs can be on a small garden scale or on a larger landscape scale. If you choose a garden plot, make sure you include at least 10 milkweed plants of at least 2 different species. Common milkweed should be included in every planting, as it is preferred by the



monarch. Other species included could be swamp, butterfly, purple, prairie, whorled, or poke milkweed.

In addition to host plants needed for reproduction, a variety of plants from May through October are needed for feeding, or “nectaring.” Many forbs that landowners are familiar with such as bergamot, blackeyed Susan, various coneflowers species, and Joe pye weed make excellent food sources. However, many folks don’t realize that shrubs such as witch-hazel, serviceberry, spicebush, pussy willow, and sumac, make excellent food sources throughout the season.

During the latter part of the season, landowners are often anxious to “clean up” fields and areas before winter. However, those late blooming asters, goldenrod, ironweed, and sneeze-weed offer valuable food for the journey south. So, be patient and let those late season flowering plants stand until completely spent. With our first heavy frost being delayed this fall, we had monarchs moving through the state late in October.

If you are interested in helping to save the monarch, please visit:

[monarchwatch.org](http://monarchwatch.org)  
[www.learner.org/jnorth/monarch](http://www.learner.org/jnorth/monarch)  
[lexington.wildones.org](http://lexington.wildones.org)



## SPRING & SUMMER CHECKLIST

### April - May

- \_\_\_ Begin preparation of dove fields.
- \_\_\_ Plant tree and shrub seedlings.
- \_\_\_ Spray herbicide to eradicate fescue.
- \_\_\_ Conduct timber stand improvements and create brush piles.
- \_\_\_ Establish wildlife mineral licks.

### May - June

- \_\_\_ Plant annual grain food plots/ dove fields (do not plant in same location as last year).
- \_\_\_ Sow warm season grasses and wildflowers.
- \_\_\_ Hinge-cut cedar trees for living brush piles.

### July - August

- \_\_\_ Create wildlife waterholes when the soil is dry enough.
- \_\_\_ Perform exotic/invasive species removal.
- \_\_\_ Mark trees for Timber Stand Improvement.
- \_\_\_ Manipulate dove fields for season opener.
- \_\_\_ Plant winter wheat in late August.

**REPORT A  
POACHER!**

**1-800-25ALERT**

(1-800 252-5378)

**to report wildlife  
violations**

## “Cattle,” continued

warm season grasses are recognized as excellent cattle forage. They are also grasses that KDFWR has encouraged landowners to plant for wildlife habitat. One complaint when these grasses are planted for wildlife is unmanaged stands become too dense. A concern when used for livestock forage is these grasses require close monitoring to avoid overgrazing. The key to success would be careful management.

The native grass fields on BGAD were fenced into six pastures, each 25 acres in size. Half of those pastures were each fenced into three smaller pastures for rotational grazing. The other three were managed without additional fencing, using a lesser known practice called patch-burn grazing. A third of each patch-burn grazing field was burned in late winter before cattle were stocked. Cattle were stocked on all fields in mid-May after the native grasses had grown to about a foot tall.

The idea behind patch-burn grazing is that burned portions of fields produce succulent new growth that is attractive to cattle. The result is that cattle spend the majority of time in the burned areas and lightly graze the unburned pasture. This leaves unburned areas with higher potential to serve as nesting areas for bobwhite.

Two years of grazing on BGAD has shown that both rotational and patch-burn grazing produced average daily weight gain of 2 pounds per day over 100-day grazing periods. The cattlemen participating in this study say weight gains during this study exceeded what they experienced when their animals were grazed on their home pastures. The wildlife benefits were impressive as well. Bobwhites were regularly heard calling in the pastures and along field edges. Broods of quail were most commonly seen along edges of fields near fenced woodlands. These trees and shrubs serve as quality woody cover for quail and much needed shade for cattle.

There is great opportunity to promote quail recovery where cattle farming is practiced. Conversion of a portion of fescue pastures to native warm season grasses, protection of woody cover, and careful management can mean success in terms of beef production and restoration of that remarkable gamebird, the bobwhite quail.



## “Hinge Cutting,” continued

overcrowding, mast producers such as oaks can be targeted in order to thin and open the canopy. You can also use hinge cutting as a means to remove misshaped or older, less productive trees. Targeting these types of oaks can provide preferred browse for deer. Hinge cutting in areas like this will also promote natural regeneration of preferred browse species such as oak, blackberry, and elderberry.

By setting back succession you

will not only be promoting ideal habitat for game species such as deer, turkey, quail, and grouse but also gaining valuable non-game habitat as well. Species such as the indigo bunting, red-cockaded woodpecker, and rose-breasted grosbeak are species that are dependent on early successional habitat and numbers have been on the decline. In areas of higher elevation species such as golden winged warblers may also benefit from the practice.

Habitat management work can be fun! It is important to remember that even though the work is fun, safety comes first. Plan your work, use personal protection equipment (PPE), and work with someone. PPE and equipment for hinge cutting should include leather gloves, parachute cord, light chainsaw, hand saw, safety helmet, hearing protection, eye protection, chainsaw chaps, tree wedges, 3-5lb hammer, and leather boots.



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### PRIVATE LANDS BIOLOGISTS

