



# Wild Know-How

Spring 2019

A Private Lands Newsletter from the Division of Wildlife



## Grazing Native Warm-Season Grasses

By Cody M Rhoden  
Small Game Biologist KDFWR

The Northern Bobwhite was once a prominent feature of Kentucky's landscape. Its popularity as a gamebird and attractive appearance made it a favorite to the hunter and non-hunter alike. Bobwhite in Kentucky are not doing well, we have observed a 74% decrease statewide in bobwhite over the past 58 years. These declines are due to the change in landscape observed in the Commonwealth over those years. Small farms have given way to larger operations and "clean" farming practices. Widespread mowing for appearance has also played a role. One of the most devastating changes at the

landscape level for quail has been the widespread use of cool season forage on the roughly 6 million acres of pasture and hay land in the state, namely KY31 fescue.

The occurrence of this widespread sod-forming grass is a challenge for bobwhite, but also a wonderful opportunity. The open working lands in Kentucky can be altered slightly, with the benefits on the landscape scale potentially great. One way to alter these cool season forages for the benefit of bobwhite and working lands is changing a portion of the current forage system to native warm-season grasses (NWSG).

There are many myths about the

**Continued on page 5**



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.



*"Conservation is a state of harmony between men and land."*

— Aldo Leopold

# Wild Pigs Can Wreak Havoc on Kentucky Crops

By Terri Brunjes  
KDFWR Wildlife Biologist

**W**ild pigs are a highly intelligent invasive species that can wreak havoc on Kentucky's agricultural crops. They can destroy acres of corn, soybeans, or alfalfa in a single night. They are opportunistic omnivores, eating anything in their path. It can be difficult for farmers to tell exactly which wildlife species is responsible for crop damage. Oftentimes, landowners don't realize pigs are present until the damage is widespread. The best thing a farmer can do is to learn to recognize wild pig sign.

*So, how can you differentiate between raccoon, skunk, white-tailed deer, and wild pig damage?*

The most obvious sign of pigs is rooting. Wild pig rooting looks similar to the work of a garden tiller. "Area rooting" is the most common type of rooting. It is deep, continuous, and covers an entire area. Pigs also practice "trench rooting", creating a ditch often three or more feet in length. In addition to crop losses, rooting can create holes and ruts in fields that can damage farm equipment, cause soil erosion, and lead to stream sedimentation.

Skunks dig cone-shaped holes in fields looking for grubs and earthworms. Damage from skunks is usually much less extensive than damage from



other species. Raccoons roll up chunks of sod while searching for earthworms and larvae. Although, they can roll up large areas of sod, they generally do not create the widespread damage that pigs do. When corn matures, raccoons climb the stalks, often breaking them a couple feet off the ground. In contrast, pigs will trample large swaths of corn.

White-tailed deer also damage soybeans, corn, and alfalfa. Most deer damage occurs when plants first emerge from the ground. Deer nip the buds from new lush growth, essentially killing the plant. Older plants depredated by deer will have a rough appearance. A deer's lack of upper incisors causes them to grab the stem and pull rather than bite cleanly through the stem. While deer can certainly knock entire corn stalks down, they generally cause little damage to the stalk once it is mature. Deer also eat corn on field edges, while pigs prefer to eat corn from the interior of the field, staying hidden from view.

Other signs of wild pigs include tracks, wallows, and tree or post rubs. Pigs create wallows in areas with creeks, ponds, depressions, or any wet area that can give them relief from biting insects and heat from the sun. Wal-

lows are most often visited in the hot summer months, but can be used year-round. Mud rubs can be found 1-2 feet high on trees or posts. Pigs use these rubs to remove the excess mud off their skin. Wild pig tracks are very similar to white-tailed deer. Deer tracks are spear-shaped with their dewclaws directly in line with the hoof print. Pig tracks are about as wide as they are long. Their dewclaws are angled on the outside of their hoof print.

*Now that you have determined pigs are the culprits, how can you alleviate the damage?*

Although hunting is probably the first thing that comes to mind, it is not an effective means of control. Due to pig's high reproductive rate, 70% of the population must be killed annually to reduce the population. This is very difficult to do with hunting alone. Trapping catches the whole sounder of pigs at once. KDFWR in partnership with USDA Wildlife Services offers free professional trapping services to anyone in Kentucky experiencing damage from wild pigs. If you are experiencing crop, pasture, or forest damage from wild pigs, please contact KDFWR wildlife biologist, Terri Brunjes at 502-892-4548.

# Farm Pond Management: Stocking and Harvesting

**Jeremy Shiflet**  
**KDFWR Fisheries Biologist**

Some of the most often asked questions regarding pond management relate to stocking. Stocking is often thought of as a cure-all when it comes to small ponds and lakes. However, stocking is not always necessary and additional stocking can sometimes negatively affect a pond. There are several things to consider before moving forward with stocking.

## *What type of fishing do you want?*

The first step to building a fishery is determining what you want to get out of it. Do you want a place for kids/grandkids to catch many fish in a short period or watch fish feed? Do you want to catch trophy fish, fish to eat a few times per year, or whatever bites just for fun? Do you want a little bit of everything, numbers and size? Most scenarios are achievable with the appropriate commitment of time and money.

## *Does the pond have fish in it now?*

Are you looking to start fresh with a new or renovated pond or are you supplementing an existing population? Ponds with no fish present can be stocked with fingerlings (1-2 inches), while ponds containing fish may need to be stocked with advanced fingerlings or adults to avoid predation. Fingerling stocking is the cheapest recommended stocking strategy. It is not recommended to catch fish from another location and move them to an empty pond. This strategy has a risk of disease and parasite transmission and usually results in an unbalanced or undesirable



fish population. KDFWR recommends purchasing fish from a commercially licensed fish supplier and following the stocking ratios presented in the Stocking and Harvesting section of our Pond Management website ([fw.ky.gov](http://fw.ky.gov)).

## *What species should you stock?*

The most common stocking combination includes largemouth bass, bluegill, and channel catfish (100, 400, 50, respectively). Pond owners wishing to add an additional species to that combination can do so by replacing 25% of the bluegill with redear sunfish. Ponds smaller than ½ acre are difficult to manage for multiple species. Channel catfish and hybrid sunfish are recommended for these situations. Species NOT recommended for stocking in small ponds include crappie, green sunfish and other sunfishes, blue and flathead catfish,

smallmouth bass, white and striped bass, walleye, and common carp.

## *Harvesting fish*

Fish will grow quickly the first few years following stocking as the pond reaches its carrying capacity (total pounds of fish it can support). On average, largemouth bass will reach 12 inches and weigh one pound in their third or fourth year. The pounds of fish a one-acre pond can support may range from 50 pounds in an unfertile pond to as much as 400 or more pounds per acre in a fertile pond. Annual harvest is critical to maintaining healthy fish populations. Too little harvest can lead to overpopulation and stunting, while too much harvest can wipe out a fishery. At minimum, five pounds of bass and 20 pounds of bluegill should be harvested per acre, per year!



# Big Results on Small Acreage

By Chris Mason  
Private Lands Wildlife Biologist

According to the most recent USDA farm statistics, only 2% of farm owners in Kentucky own more than 1,000 acres and over half (57%) of the farm owners in Kentucky own less than 100 acres. If you are a landowner, these numbers indicate what you probably already know; most private lands wildlife management takes place on small farms. Even though you might not be able to manage for everything a deer or turkey needs in a home range that can cover over a square mile, you can still maximize habitat improvement benefits on small acreage by remembering some basic wildlife management principles.

The three essential ingredients needed to sustain any wildlife population are food, cover, and water. Get the most benefit from your habitat improvements by making sure you are meeting

one of these key habitat components. If you are in an area that is surrounded by pasture or hay fields that offer very little cover, try creating cover by establishing native warm season grasses, trees, or shrubs; especially if you can connect your habitat improvements to any existing habitat such as overgrown fence rows or stream corridors. Even on small farms, do not overlook your woodlands when managing for wildlife. Timber stand improvements can improve the food value of your woodland by favoring good nut producers such as white oak and increasing understory browse. In areas with no adequate water resources in the form of ponds, streams, or springs, creating wildlife water holes might be a critical first step in improving missing key habitat features.

Whether you own the Ponderosa or just piece of it, your wildlife management strategy should focus on improv-

ing the quantity and or quality of food, cover, and water for the species you are interested in targeting. Private lands wildlife biologists are available across the state to help you identify any missing key habitat ingredients and provide you with the wild know-how for improvements. Call 1-800-858-1549 and ask how to contact the biologist for your county.



## 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.

**“Grazing,” continued**

potential benefit of NWSG in the forage system.

**Myth 1:** NWSG takes a long time to establish.

**Reality:** If weather conditions are right, you may graze your NWSG planting one year after planting. You would need to wait a similar amount of time for most cool season forage options.

**Myth 2:** NWSG is too expensive to establish.

**Reality:** See the table below assessing the cost of fescue planting vs. NWSG.

**Myth 3:** NWSG require more management

**Reality:** Grazing pressure should be monitored in any forage system. It is recommended to keep NWSG heights no less than 8 – 12 inches. Attaining these heights is no different than attaining the recommended 4 inch height when grazing fescue.

Along with the benefits of grazing NWSG listed above, research in Kentucky has shown animals grazed on NWSG attain weight gains at or above 2lbs per day during the time of year animals on fescue are gaining 0.5 to 1 pound per day. NWSG as a part of your forage system can also offset the effects of endophyte infected fescue. Fescue



can become infected with a fungus that decreases weight gains, milk production, and reproductive performance. Endophyte infected fescue is most toxic during the warmer months, which is when native warm-season grasses put up their highest gains.

Historically, quail were an abundant byproduct of farming in the Commonwealth. With a few changes on farms today, namely less mowing, more fencerows and shrubby areas, and less cool season forage, there is no reason bobwhite could not reach historic levels again. The largest benefit to

these practices will be to the working lands and the cattle and farmers that use them!

More resources on grazing NWSG can be found at:

National Bobwhite Conservation Initiative:  
<https://bringbackbobwhites.org/>

Center for Native Grasslands:  
<http://nativegrasses.utk.edu/>

Or by contacting your local Private Lands Biologist:  
[https://fw.ky.gov/Wildlife/Documents/privatelands\\_biologists.pdf](https://fw.ky.gov/Wildlife/Documents/privatelands_biologists.pdf)

Material	Recommended seeding rate	Unit cost	N fertilizer	End-cost range
Estancia tall fescue	20 – 25 lbs/ac	\$3.50 bulk lb	\$21.00	\$91 - \$108.50
Big bluestem	8 – 10 lbs/ac	\$8.00 PLS lb	\$0	\$64 - \$80
Indiangrass	8 – 10 lbs/ac	\$14.50 PLS lb	\$0	\$116 - \$145
Switchgrass	4 – 8 lbs/ac	\$10.00 PLS lb	\$0	\$40 - \$80

\*Table modified from National Bobwhite Conservation Initiative <https://bringbackbobwhites.org/2016/06/01/native-grass-gazette-fescue-toxicosis-and-native-grasses/>



Kentucky Dept. of Fish & Wildlife Resources  
 Wild Know-How  
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### PRIVATE LANDS BIOLOGISTS

