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AGFC turkey
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Having trophy gobblers to hunt requires year-round management. Photo by Jason Crader.

Laying the Groundwork for Gobblers

Improved Habitat Key to Reversing Turkey Troubles

BY RANDY ZELLERS

Landowners and hunting clubs go to great lengths every year to enhance their property for turkeys and other game animals. They spend thousands of dollars planting “Monster Tom Mix 2000” and other cleverly marketed sure-fire seed blends and expect instant results. But the food offered by a few small plots plays a small role in turkey management. Food is only a piece of the habitat puzzle.

Managers enhancing the landscape for wildlife must look at more than food plots and corn feeders; they must analyze the entire system.

“Habitat is more than a patch of woods,” said Arkansas Game and Fish Commission Turkey Program Coordinator Mike Widner. “It’s a complex system with a lot of factors affecting it – the most basic being food, water, cover and space.”

Food for Thought

Widner agrees that food plots can enhance the nutrition available to turkeys, but they're not a magic ladder to success. The key to good food is to have many sources available because turkeys eat a variety of foods throughout the year. They eat green vegetation in late winter and spring, acorns and pecans in fall, and insects and other small animals for protein in summer. Although food plots offer excellent sources of nutrition when other foods are gone, sometimes the trees, grasses and shrubs cleared to create them would have offered more benefit.

"A good stand of hardwoods that has been treated with prescribed fire about two to three years prior gives an ideal mix of foods," Widner said. "Oaks and other hardwoods will supply hard mast, while the low-lying grasses and broadleaf plants will offer herbaceous foods and attract insects."

Widner points out that feeders usually are not a good solution for adding to turkey forage. Much of the corn sold as deer corn and wildlife food did not pass inspection for livestock feed and could contain harmful toxins such as aflatoxin, which can reduce reproduction, weaken immune systems and cause severe liver damage and death. Even if the corn is toxin-free, it may attract raccoons and other predators.

Thirst Quenchers

It may be hard to believe that lack of water could be a problem in Arkansas, but that's been the case in the past.

Turkeys get most of their water from the vegetation they eat, but additional water is needed for year-round survival. Seasonal streams can offer some relief for turkeys during dry months, but a permanent water source is critical for year-round survival during drought-stricken years.

"Turkeys don't need a massive amount of water, but it has to be available," Widner said. "Two to four permanent water sources per square mile are enough to keep a flock healthy."

Widner also says that landowners planning to add water sources to their property will be much more effective by building many small water sources instead of one large lake or pond. These smaller potholes must be deep enough to stay wet year-round.

Turkey Flourish

On Greener Pastures

Gene Rush Wildlife Management Area plays a starring role in the success of Arkansas's elk herd. Almost 20,000 acres of rolling hills, forested mountains and stark bluffs bordering the Buffalo River and its tributaries offer good year-round habitat for the elk in a remote setting.

However, Arkansas Game and Fish Commission biologists were challenged with a new twist in land management when the elk program began. Elk are primarily grazers, unlike white-tailed deer, which get most of their food from browsing. With their size and food requirements, elk need much larger food plots than what is generally prescribed for deer and other species. Mark Baron, area manager, recognized this need more than a decade ago and worked with local farmers to clear ridges and establish the plots needed.

"As it turns out, the large, 20-acre food plots were also beneficial to turkeys," said AGFC Turkey Program Coordinator Mike Widner. "The large food plots and native warm-season grass stands are ideal turkey brood habitat."

"During the recent downturn in the Ozark turkey harvest, the birds on Gene Rush seem to be faring much better than surrounding areas."



Prescribed fires keep woodlands open and stimulate the growth of grasses and insect-attracting plants. Photo courtesy of NWF.

Brad Carner, AGFC regional supervisor for wildlife management in the Russellville area, agrees that food plots helped, but he adds that the intensive management of the area has benefited the birds as well.

"(Gene Rush) is one of the most intensively managed areas we have," Carner said. "Not only do we have large food plots, we also conduct prescribed burns on about 3,000 acres of it every year and have intensive timber thinning. While the elk is at the forefront of our management on

that area, many of these practices are beneficial to other animals."

Carner also credits the area's rugged nature and gated interior roads for the lessened impacts to the turkey population.

"The entire area is open to hunting, but we shut down some roads to prevent poachers and lessen hunting pressure. The area gets plenty of pressure, and it's increasing. By locking the gated roads, we're preventing the turkeys from becoming easy targets, but are still offering serious hunters the opportunity to get their bird with a little extra work."

— Randy Zellers

Cover Considerations

Who doesn't love a turkey dinner? Unfortunately, many woodland residents share the sentiment. From egg to adult, a turkey is one big serving of food to wildlife in the woods. Skunks, raccoons and other small animals feast on the eggs; hawks and other avian predators scan from the sky for hens and young poults, and larger carnivores such as bobcats and coyotes can make a meal of the toughest boss gobbler. With so many enemies, turkeys are extremely dependent on cover.

"Cover for turkeys usually makes people think of nesting cover, and that's important, Widner said. "But turkeys also need brood cover, escape cover and roosting cover."



Selective harvest of trees opens the forest and allows sunlight to reach beneficial plants on the forest floor. Photo courtesy of NWTF.

Brood cover should be thin enough for hens and poults to navigate and short enough for hens to see over, yet tall enough to hide their young from avian predators.

"Stands of native warm-season grasses, orchard grass and bahia, cereal grains and row crops or managed vegetation can provide this habitat."

Overgrown fields are excellent sources of cover for ground-oriented birds such as turkey. Woody shrubs and small trees hide them from ground predators and form a maze of tangles that blocks attacks from above. The fields usually are bordered by mature hardwood stands that offer areas for the birds to roost at night.

"Mature pines are also extremely important cover for turkeys," Widner said. "They offer excellent winter roosting cover to shield birds from the cold when hardwoods have dropped their leaves. Pine needles may not seem like much, but they offer more protection than a bare limb."

Looking at the Landscape

Every type of animal needs a different amount of space to find enough food, water and shelter

to survive. While a field mouse or box turtle may need only an acre to prosper, black bears and bull elk require a few square miles. Turkeys need more space than many other Arkansas game animals, especially for their size.

"Turkeys are roamers," Widner said. "They need many types of food and cover throughout the year. The same areas they nest and rear broods in isn't usually preferred fall and winter habitat. They may travel miles between breeding, nesting, brood-rearing and feeding areas. Because of this nomadic nature, biologists have to look at the landscape level to determine suitable habitat."

Widner says that when biologists step back and take in the entire landscape, many areas in Arkansas offer an excellent combination of habitat types.

"What biologists generally like to see in habitat is about 50 percent forested area with plenty of mast-producing hardwoods, 20 percent food plots and other openings, 15 percent overgrown, old-field habitat for nesting and escape cover, and 15 percent row crops to provide alternative foods when acorns are short. Parts of Arkansas fit that description or would with the proper management."

Closed Doors

Even after a landowner has created turkey paradise, he must address the most difficult component of the puzzle – people.

Widner explains that because turkeys are already pressured by other predators, overhunting and poaching can decimate a flock. During his days as a private lands biologist, Widner saw many turkey flocks show immediate improvement on hunting clubs after they installed locked gates on access roads and periodically checked for poachers.

"An unfortunate by-product of creating better habitat and boosting turkey numbers is increased hunting pressure and attention from poachers. All the habitat in the world isn't going to do you any good if you can't manage the human element.

"Look around the state – most of the best turkey populations are on ownerships where access and hunting are tightly controlled. You have to give turkeys good habitat and protect them." **AW**

Privately Prosperous

Buck Hollow Owner Outlines Success

Turkey management is more complicated than popping up a food plot or feeder and waiting for birds to arrive.

Thomas Baker, owner of Buck Hollow Ranch near Pochontas, has found a formula to success he's willing to share.

"I keep reading turkey numbers are declining, and we're covered up in birds," Baker said. "I know we had more than 40 gobblers on our 2,600-acre ranch last year. I thought if I could get the word out about what we're doing here, maybe our success could be repeated across the state."

According to Baker, the first step to Buck Hollow's success was to develop a team to manage the land.

"We had our county extension agent take soil samples and analyze what sort of soils we had and what we needed to do to balance them with our management goals. The University of Arkansas came up with a good seed mix for the land."

Arkansas Game and Fish Commission Private Land Biologist Lynn Fair, agents from the Natural Resource Conservation Service and Myrtle Fertilizers in Myrtle, Mo., also played key roles.

The management team is involved in all aspects of habitat management, from planning food plots and roads to prescribed burning and pasture management.

"If people would take advantage of the government agencies set up to help them, they'd find out that it's very worthwhile," Baker said.

Baker explained that one component he feels

is critical to the ranch's increased turkey production is taller grain species in plots for overhead cover, especially rye. He believes that rye grain offers an excellent combination of cover and food in the same plot. The tall plants shield poult and hens from avian predators and still offer grain and insects for forage.

"One year after planting (rye grain), it was obvious that our turkey poult and quail survival rates were multiple times greater than normal," Baker said. "Several neighbors have asked Keith (Futrell), the area manager, what we are doing at the ranch because they are seeing more turkeys on their property as well."

Word about the ranch's prolific turkeys has spread, and Baker said Futrell stays busy showing people the grounds. They've begun offering trips for photographers and other wildlife watchers.

With the added protection from tall grain crops such as rye, many poults survive to become juvenile and adult birds. Photo courtesy of Thomas Baker.



To learn more about the ranch and the steps to their success, contact Futrell at (870) 926-8446 or visit www.randolphchamber.com and click on the Buck Hollow Ranch logo.

— Randy Zellers