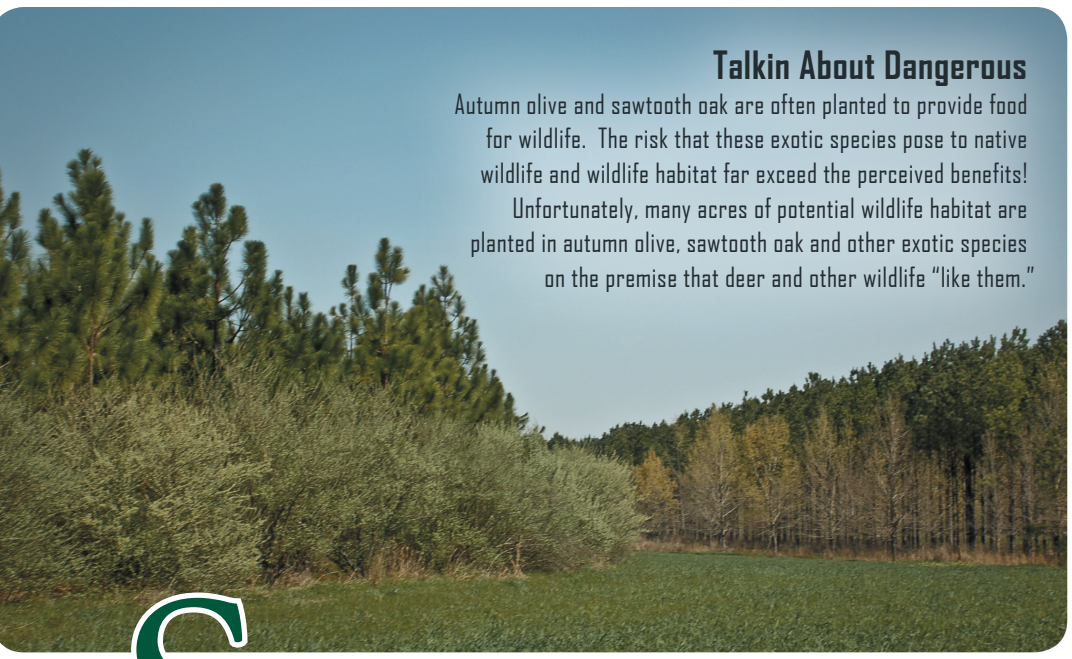
JUST ENOUGH TO BE DANGEROUS

By Mark D. Smith, Alabama Cooperative Extension System, School of Forestry and Wildlife Sciences, Auburn University &
Claude Jenkins, Certified Wildlife Biologist, Alabama Wildlife Federation



Talkin About Dangerous

Autumn olive and sawtooth oak are often planted to provide food for wildlife. The risk that these exotic species pose to native wildlife and wildlife habitat far exceed the perceived benefits! Unfortunately, many acres of potential wildlife habitat are planted in autumn olive, sawtooth oak and other exotic species on the premise that deer and other wildlife "like them."

Sometimes a little information can do more harm than none at all, and this is especially true when it comes to wildlife management. In the previous issue of *Alabama Wildlife* (Winter 2010), we briefly covered the education and training that goes into becoming a wildlife biologist and how managing wildlife necessitates the use of science-based information, and at times the assistance of professionals. In this article, we want to share with you a few of our experiences working with landowners who by all intentions want to do good wildlife management but end up making costly mistakes that could have easily been avoided. A common theme underlying many of these cases of "mismanagement" is incomplete knowledge or rather the gleaning of tidbits of information from television, advertising, books, magazines or hearsay from friends, family, or co-workers and then using that snippet of information without a full understanding of its intent. We bring forth a few examples to illustrate this point.

MISMANAGEMENT IS COSTLY

To provide wildlife food, many landowners elect to plant sawtooth oak (*Quercus acutissima*). "I heard that deer like sawtooth oaks." This simple statement has led to the planting of many acres in sawthooth oaks, acres that could or should be devoted to providing other necessary habitats (remember, wildlife do more than just eat!). Whereas deer do like sawtooth oaks, too much of a "good thing" can actually be bad!

One landowner we worked with in north Alabama replaced a 10-acre stand of 30+ year old white and red oaks with sawtooth because he had heard that deer like sawtooth oaks. This stand of native oaks also included other mast producing species such as persimmon, black cherry and dogwood. So, a mixed stand (at least five different species) of native, mast-bearing trees was replaced with one exotic species! Do white-tailed deer (a native species) not "like" mast from native trees? The mismanagement in this case lies in the fact that the mature, native oak stand was producing more than enough acorns for wildlife while providing roosting habitat for turkeys and denning sites for squirrels—animals the landowner enjoyed hunting. Not to mention the plethora of other wildlife habitat benefits this stand provided. This particular landowner will never be able to make this same mistake again….it takes a long time to create the kind of forest structure and composition that provide benefits to wildlife that were developed in the stand of native oaks… before it was replaced with sawtooth oaks.

TO CULL OR NOT TO CULL

When it comes to deer management, we observe numerous instances in which just a tidbit of information gathered from sources such as the media or hunting buddies, goes a long way in hampering the progress of one's deer management program.

For instance, we find many hunters engaging in the practice of culling; believing that culling spike or small antlered deer will remove these individuals from "the gene pool," or more aptly stated, to prevent them from breeding and subsequently passing along their genetic material to the next generation, thereby enhancing the genetic "quality" of the deer herd. There has been some scientific evidence to suggest this works; however, the devil is in the details. Culling works, to some extent, in small, intensively

> A common theme underlying many cases of "mismanagement" is incomplete knowledge or rather the gleaning of tidbits of information from television, advertising, books, magazines or hearsay from friends, family, or co-workers and then using that snippet of information without a full understanding of its intent.

monitored high-fenced populations. These research findings do not apply to wild, free-ranging populations that the vast majority of landowners are dealing with.

To manipulate population-level genetics, you have to be successful in judging the genetic potential of bucks and does and then increase the reproductive success of those individuals possessing the desired traits. These are tremendous challenges under any management scenario, especially with a free-ranging population. For example, we know from research that bucks born later in the fawning season tend to grow spike antlers at 1.5 years of age and that nutrition will also play a role in the antler growth of yearlings. Furthermore, we know that one half of the genes of all bucks come from the mother. What criteria do you use for culling does? How do you know whether the spike or small antlers are due to a late birth date, nutrition, injury, or genetics? Clearly, the idea of culling is much more complex than meets the eye. Depending on the circumstances, many of these "cull bucks" could turn out to be true "wall hangers" in three to four years. When someone claims success at improving antler quality through a "culling program," what they are really suggesting is that they were able to manipulate the genetic composition of a population by altering gene frequencies. Ask to see their genetics data that documents and supports this claim!

WHAT'S THE PROBLEM

When hunters see fewer numbers of game animals relative to that of the previous year(s), all too often predators are instigated as the cause for the decline. Although it seems intuitively obvious that by removing a predator, game populations will become more abundant, we know this simply is not true. In the Fall 2009 issue of *Alabama Wildlife* we addressed the issue of predator control and bobwhite quail; outlining when, where, and how predator management should be undertaken in order to have a reasonable chance of being successful. The bottom line is that predator management is a very complex endeavor requiring a significant amount of time, money, and persistent effort.

Simply removing a coyote or fox here or there will not result in abundant turkey, quail, or deer populations. For many wildlife species, especially bobwhite quail and turkeys, predation is ***not*** the limiting factor….habitat is. Devoting one's time and resources to predator management, and thus neglecting the true cause of the problem (lack of habitat), only leads to frustration. Simple observations in the field will rarely be able to indicate whether or not predation is the cause for declines in wildlife populations. You must collect data from year to year! Inferences derived from data are more reliable than assumptions derived from simple observations.

NO MANAGEMENT IS COSTLY

No management can be just as costly as mismanagement. Over the past several years, we have encountered an increasing number of landowners who want to enhance their properties for wildlife but adamantly oppose the harvesting of trees. We suspect this reluctance to harvest trees emanates from emotionally driven (i.e., non-scientific) environmentalist media sources.

This presents a conundrum in that a great deal of wildlife habitat management is forest management. Thinning, retention cuts, shelterwood cuts, and yes, ***clearcuts*** are forest management techniques that are used to create wildlife habitat. The "cost" in these instances lies in the fact that the landowner will not be able to attain their management objectives and will experience a significant financial loss from the timber resource (assuming financial return from timber is a landowner concern). In many cases (but not all), some form of forest management needs to be conducted in order to maintain forest health, productivity, and wildlife habitat. Simply put, good forest management oftentimes translates into good wildlife habitat management and vice versa. If you want to take an active role in managing wildlife habitat, you must be willing to harvest trees at some point in time.

DO YOUR HOMEWORK

The above four examples illustrate a few cases of where a little bit of information can be more dangerous than none at all and we hope that you can learn from the mistakes of others we've presented here. It is not always necessary to seek the assistance of a wildlife biologist on each and every wildlife management issue that you may have. However, as evidenced in the above cases of "mismanagement," it is mandatory that you thoroughly do your homework! And when you reach an impasse in your research, a simple phone call, email, or visit with a professional wildlife biologist could save you a significant amount of time, money, and frustration. As Paul Harvey would say, "Now you know the rest of the story!"