PART 1:

Fallacies of Food Plots for growing BIG BUCKS

By Mark Smith, Assistant Professor/Extension Specialist, Alabama Cooperative Extension System, School of Forestry and Wildlife Sciences, Auburn University and
Steve Ditchkoff, Associate Professor, School of Forestry and Wildlife Sciences, Auburn University

About this time of year we usually get a flurry of phone calls and emails from landowners and hunters wanting to know what they should plant for wildlife. Their objective may be to have more quail or turkeys, or perhaps to grow that Boone and Crockett buck. And the answer is usually fairly simple—**don't plant a darn thing**! Usually we get about 10 seconds of silence as the person on the other end tries to digest what they've just heard. Before they can respond, we chime in with the basis for this somewhat odd, and definitely unexpected answer. After a few questions to sort out their wildlife objective, our answer invariably falls to dispelling some of the myths of the wildlife management business; one of the most common myths being that the planting of a food plot is the solution to all of your wildlife needs. So here's the basis, built upon research, for our somewhat shocking answer to the infamous "What do I plant?" question.

Food for Thought

The most challenging aspect of my job is convincing folks that planting food plots for wildlife is a very small, and at times insignificant, component of wildlife management. We have been entranced into believing that the best way we can "help" wildlife is to provide them something to eat. And that by doing so, we'll be rewarded with a dozen mature gobblers or hundreds of quail, or a 150" class B&C buck behind every tree. The more food you make available, the more game you'll have. Sounds logical, doesn't it? Whereas this may seem like a logical path of reasoning to follow, it's a path that leads down a trail of ineffectiveness and frustration, especially for those with sincere hopes of having more wildlife on their properties. For most animals in the Southeast, and on most properties in Alabama, food is very rarely a limiting resource. Furthermore, doesn't wildlife do more than just eat? They sure do! They raise young, need places to escape from predators and bad weather, interact with other individuals, need places to forage year round, make nests, and so on. However, most folks tend not to think of these other needs and often fall into the "rut" of believing that planting a food plot is the "silver bullet" to abundant wildlife. In this article we'll cover why food plots alone are not the "silver bullet" for growing large antlered bucks—a very common misconception among deer hunters, and in the next two issues of *Alabama Wildlife*, we'll take an in depth look at the art and science of managing quail and turkeys, and why planting a food plot is often the last thing you need to worry about!

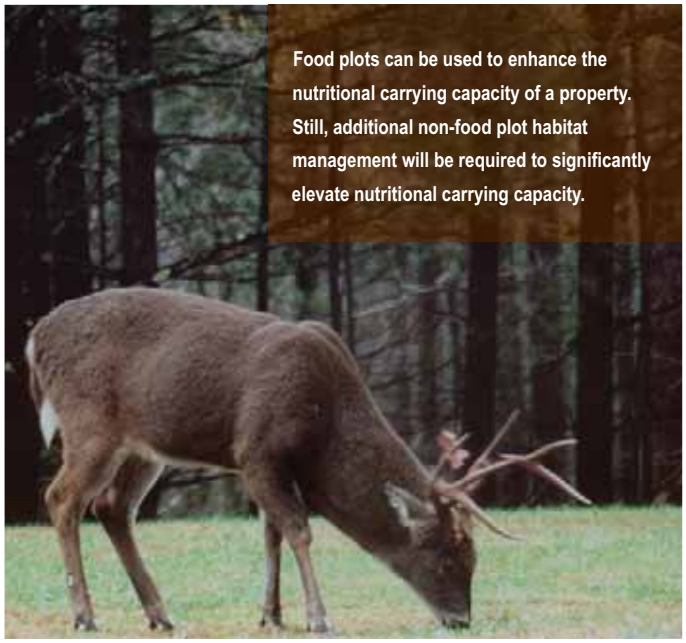
Management Considerations

To be effective (observing measurable results) at **producing** wildlife on your property, there are essentially two primary things you'll need to consider: creating places for animals to live (habitat management) and managing those animals living on your property (population management). Oftentimes, depending on which animals you want to manage for, a combination of the two will be

necessary in order to achieve your objective. Additionally, you'll need to know whether or not a particular animal responds best to either habitat or population management, or some combination of both. Different animals respond differently to the above forms of management. For example, much of deer management, especially for large antlered bucks, is best accomplished through population management, whereas for turkey and quail, the focus must be on habitat management. Let's take a closer look at why one component of population management, mainly deer age, is important when managing for large antlered bucks.

Food Alone is Not Enough

Researchers at Mississippi State University tracked antler growth through the lifetime of 23 bucks raised in captivity and fed an optimum diet. They found that antler size reached its peak when bucks were five to seven years old (full maturity). This research study represents, more or less, the "best case" scenario for antler development and will likely differ somewhat from wild, free-ranging deer. At 1.5 years of age antler size was, on average, about 26 percent of their size at maturity, and increased about 25 percent per year (63 percent at two years, 77 percent at three years, and 92 percent at four years of age to be exact, according to Steve Demarias in his book *Managing for Antler Production: Understanding Age, Nutrition, and Genetic Influences*) until reaching maximum antler size at five years of age. There's a reason for this—physiology! Producing a set of antlers each year is a nutritionally demanding process, and for a deer that still has yet to reach physical maturity, antlers are less important than growth (building body mass, muscle, and bones, developing a good immune system, etc). As a buck approaches physical maturity, more and more nutrients are then allocated toward antler development. No matter how much you feed a 1.5 year old buck, he's **not** going to sprout a 140" B & C set of antlers! Therefore, population management (allowing young bucks to reach maturity) is vitally important because one thing is certain—**a dead 1.5 year old buck will never become a 5.5 year old, 140" class B & C buck!** Simply being selective and patient with regards to which animals you harvest (i.e., mature bucks), you can easily double, if not triple, the average B & C score of deer on your property—without planting a single food plot!



Food plots can be used to enhance the nutritional carrying capacity of a property. Still, additional non-food plot habitat management will be required to significantly elevate nutritional carrying capacity.

JEREMY JOHNSON

Carrying Capacity

By and large, the most effective approach to increasing antler size is by allowing young bucks to reach maturity—to realize their maximum potential in antler size. However, for the majority of properties in Alabama, it is equally important to manage the **number of deer** on your property or hunting lease. Your property or hunting lease can support, nutritionally, only so many deer; this is often referred to as the carrying capacity. As deer numbers increase, the amount of resources available per deer declines. As the amount of resources per deer declines, the ability of that individual to reach its maximum potential in antler size declines. Food plots, both warm and cool season, can be used to **enhance** the nutritional carrying capacity of a property, but only to a limit. Oftentimes however, additional non-food plot habitat management will be required to **significantly elevate** nutritional carrying capacity. Regardless of how much habitat and food plot management you do, you'll still need to take an active, conscious role in managing deer numbers. This can best be accomplished by focusing your population management (harvest) on the reproductive segment of the population—does. It is best to seek the guidance of a competent professional wildlife biologist (not your buddy or Granddaddy) on how many does you should be harvesting relative to your deer management objectives and habitat conditions on your property or hunting lease.

Putting It All Together

Allowing young bucks to reach maturity, and keeping deer numbers in balance with the availability of resources on your property, will have more of an impact on producing large antlered deer than any other trick, gimic, or "silver bullet" solution out there—including food plots. Physiology is fairly simple and straightforward, and something that can't be changed. So what's the most difficult part of deer population management? Humans. Those who determine which deer to harvest and when! Educating yourself and hunting lease members on importance of allowing young bucks to reach maturity, the need to keep deer numbers in balance with available habitat through adequate sustained doe harvest, the importance of elevating carrying capacity through proper habitat management, including food plots, and how to age bucks on the hoof is the most effective path to follow toward producing big bucks. Without these efforts, resources invested in a food plot program will produce limited results. Once you have your herd in balance with existing habitat conditions, then you can use food plots to enhance the nutritional benefits of your property and improve antler development. Be sure to check out the next two issues of *Alabama Wildlife* where we'll be focusing on turkeys and quail!