

# WILDLIFE TRENDS

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## Mast Trees

### Part I in a Series: The Permanent Food Plot

by Wayne Bassett and Wallace Whatley

If you plant for wildlife every spring and fall and maintain a property with that in mind, you know the pleasure of seeing the first young poults following along behind a turkey hen in the springtime. It's a lot like seeing the first spotted fawn looking back at you in late summer. Suddenly, you know that you are probably doing something right.

For people like us there is a similar pleasure at finding the first handful of acorns under a young oak we have planted, cultivated and watched very carefully. In the past ten to twenty years, the sawtooth oak has practically become a requirement among those who are serious about their deer hunting. But the informed land manager is discovering that there are some other "acorn trees" as well, and that it makes sense to add these other varieties.

There are more than 30 species of oaks in the Eastern U.S. including parts of the midwest, Texas and Oklahoma, and a list of oaks, with their common and Latin names, accompanies this article. This series of articles, however, will only discuss those oaks found in the Southeast and those recently being planted with success.

Like a number of articles that have appeared in *Wildlife Trends* before, this one is authored by two associates who speak from their own experience. These writers have been planting for habitat improvement for many years and learning from other land owners who are doing the same. This series of articles – covering the hard- and soft-mast trees of value to wildlife – reports on what they have discovered to work for them.

Hard mast includes acorns, beechnuts, chestnuts, hickory nuts and pecans, and among these annual crops, the acorn is most critical in the diet of white-tailed deer. Acorns are especially important in areas of poor soil, which does not otherwise provide quality browse. And often in the South, it is the fall of acorns that relieves the stress of late summer heat, drought, and reduced forage, which results from these conditions. The carbohydrates in acorns provide the fat and energy which will be needed by all deer



Sawtooth oaks are used extensively in wildlife plantings. They produce acorns at an early age compared to many native oak species.

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A large open grown oak will have a well developed canopy and can be fertilized to produce more acorns.

of breeding age in the upcoming rut. In addition, the acorn's fibrous component prepares the whitetail's digestive system for the leaner, more fibrous browse, which is often the only browse available in the winter ahead.

It is common knowledge that acorns are preferred by deer and turkeys in the fall. Turkey hunters know that turkeys will scratch the leaves of a white oak grove until insects return to the meadows in the spring. Still, acorns are probably most associated with deer. This is because acorns can comprise more than 75% of the deer's diet during November and December. And it appears that the white oak acorn is the whitetails' favorite. For these reasons, Quality Deer Management writers recommend that a property be at least 20% hardwoods, and those trees preferably oaks. They also recommend that these oaks be a mixture of red oaks and white oaks.

All oaks are either white oaks or red oaks. What is commonly called the white oak is indeed a white

oak, and the Southern red oak is a red oak. But the black oak – or *Quercus velutina* – is also a red oak. Until you get this straightened out – and to be sure you are getting trees you want when you order trees – it is advisable to use the scientific or Latin name when purchasing by phone or mail. You don't have to know how to pronounce it – only identify it.

In the woods, the two are easily distinguishable. The leaves of all white oaks have rounded lobes, while the leaves of red oaks end in points. The acorns of white oaks are usually larger than those of red oaks, and because they have less tannic acid, white oak acorns are sweeter. American Indians ate white oak acorns and used the oil and meal in cooking. Also, the acorns of white oaks mature and fall in one year, while it takes two years for the red oak acorn to mature and ripen. For this and other reasons, including frost times and different chill-hour requirements in winter, a mix of oaks is necessary to guarantee an acorn crop every year.

If you have any land in the South with hardwoods on it, you very likely already have a mix. You'll certainly have water oaks, and in all likelihood you'll have some Southern red oaks, also known as Spanish oak. If you hunt at all, you've probably already identified your white oaks.

And you may have some black oaks. Land in the Deep South may have swamp white oak, also known as swamp chestnut oak, and piedmont land and land farther north may have Northern red oak, as well as true chestnut oak and chinkapin oak. These are all excellent, native, acorn bearing trees whose mast provides for wildlife. Live oaks, water oaks, willow oaks, laurel oaks, and pin oaks are all red oaks, and thus have smaller, less palatable acorns, which hardly compete with the acorns of

*Every good hunter knows where his, or her, white oaks are located. What more and more hunters are discovering is that this tree can be manipulated for greater, increased harvests.*

the white oaks; therefore, we will not be discussing them. Wildlife will eat these acorns, but it has been our experience that deer will concentrate on the preferred acorns until they are gone.

Every good hunter knows where his, or her, white oaks are located. What more and more hunters are discovering is that this tree can be manipulated for greater, increased harvests. Any oak can be manipulated or “managed for wildlife,” but it is the white oak that usually gets the attention. First of all, it is helpful to thin around the producing, mature tree. You should take away any undesirable trees competing for sunlight, water and soil nutrients. This thinning will open the canopy and get more sunlight to the top of the tree and result in a larger crown – and eventually a larger trunk diameter. In addition, a complete fertilizer, such as 13-13-13 applied around the drip line from the middle of February to the middle of March will show its results in a year or two. Often it takes a couple of years for a fertilized tree to add the branches needed to support these extra acorns.

A lot of patience is required when you get into this subject of wildlife trees. But be assured, a regular fertilizer program will get you the extra acorns. A good rule of thumb is to apply one pound of a fertilizer to every inch of trunk diameter. Some people do this twice a year, after Thanksgiving when the growing season is over, and again in February or March before the next growing season begins, because roots are never dormant. Roots grow year round.

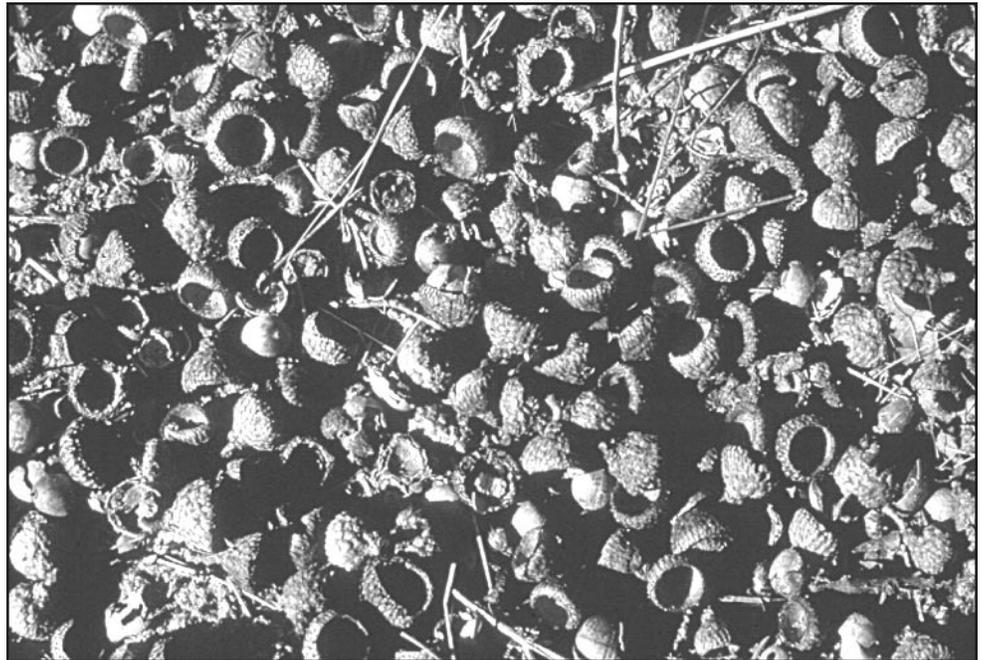
But fertilizing trees is probably best done in late winter when the acorns are gone. Then the danger of nitrogen toxicity to animals from fertilizer on top of the ground will not be a problem. Those who plant for wildlife also know that deer especially love anything that’s been fertilized. One game manager told us, “If you don’t believe fertilizing white oaks works, fertilize around only one side of a

tree and see which side the deer feed on.”

Without doubt, this suggestion could add some expense to your annual management. To be sure he fertilizes the same white oaks every winter, one land owner we know sprays a white dot on the treated trees. These are also easily seen by a hunter locating the area for the first time or in the light of dawn or dusk.

A budget-saving practice, on the other hand, is to locate young, native oaks on your property which you want to keep and put grow tubes on them, cut the competition away, bring the sunlight in, fertilize them and treat them like store-bought trees. Everywhere you have mature producing oaks, you’ve got young ones coming along, and you can give them some help too. This is especially worthwhile when helping young white oaks you find. Some people also do the same with the much faster-growing, native chinkapin oak, which is abundant in the Southern piedmont and a reliable acorn producer, even at an early age. Because the native chinkapin oak can bear acorns while it is 12-15 feet tall, it is an excellent tree to nurse along. A little mulch on these trees is helpful too. Fertilize and mulch, and your trees will repay you for it – far sooner than the others.

Young trees also like the “grow tube.” The grow tube alone can add up to 3 feet of growth per year,



Some years oak trees drop tremendous numbers of acorns.

and the grow tube is a one-time expense (available over the Internet and from The Wildlife Group). Also called a “tree protector,” the grow tube is a corrugated plastic wrap that protects the young trunk and also provides a greenhouse effect. Grow tubes are most often used with purchased trees, but the grow tube can be recycled. When a tree grows out of its grow tube, that tube can be put on a young, wild tree in the woods – dogwood, redbud or fruit-bearing persimmon.

When you begin selecting young trees in your woods and determine to care for them, you are simply helping along what mother nature intends. The young poults are replacement turkeys, and fawns are replacement deer – recruits the wildlife biologist would call them. The most mature trees will have to be replaced too one day. We never know what next year’s hurricane will take out. A range of ages among your trees is thus very desirable.

One thing we will always emphasize is that we can help mother nature with these trees – whether wild or purchased – but mother nature has the final vote. Rainfall and its timing makes the real difference. A late freeze killing the spring blossoms on many oaks will add yet another variable, another reason for a variety of species of trees.

Our next article will cover planting and cultivation and information on some of the more successful trees being planted, including Allegheny chinkapin, Chinese chestnut, bur oak, sawtooth and Nutall oaks, as well as soft-mast trees and native browse.

While this is certainly a lot to digest, we are covering one of the strongest components of any healthy habitat. Mast-bearing trees are the permanent food plot – the food plot that takes only as much care as you want to give it, or have the time to give it. And the best way to learn it is to get

into it and do it yourself. The different trees will begin to reveal their traits to you. You’ll know the story of every tree you have planted or cared for and you will have the pride of a grandparent with every acorn crop that comes along.

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*Although not one of the writers, Eddie Stinson, grower and shipping supervisor at The Wildlife Group has been growing and shipping trees for the wildlife market for more than twenty-five years. This, as well as future articles, owes much to Eddie’s knowledge and the teaching he patiently passes along.*

*Wallace Whatley, who also lives in Auburn, is a freelance writer who writes and edits for Wildlife Trends. Wallace also hunts and owns a hunting property where he has experimented with wildlife plantings purchased from Eddie for eighteen years.*



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