



PRACTICAL WILDLIFE MANAGEMENT INFORMATION

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## Earl Says...

**B**oy, has 2024 started strangely. First week of January I tested positive for Covid. And although it was mild it still took me down for a while.

And as I'm writing this, we are experiencing some of the coldest temperatures I can remember during deer season. It sure has the bucks moving here which is a good thing but the older I get the more cold-natured I become!

I am really looking forward to the National Wild Turkey Federation National Convention coming up at the Opryland Hotel in Nashville, February 14-17. If you can come, please come by our booth and say hello.

Thank you all for subscribing with us and stay warm!



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# Finding and Using Medicinal Plants on Your Property

By Ryan Shurette



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*During periods of the Seventeenth Century, Sassafras (Sassafras albidum) rivaled tobacco as one of the most economically important plants in North America. Its roots were widely used to make root beer, and its bark was exported in mass quantities to Europe for its fragrant safrole oil. Photo in public domain.*

When I was a boy, I remember my grandfather seemed to know how to make a natural remedy for almost any type of sickness or health ailment. Whether it was for a family member or someone from our small central-Alabama community in need, my grandfather, upon hearing their symptoms, would call out some strange-sounding plant name. Then he'd usually tell them to come back in a day or so and he'd have something ready for them. Sometimes he kept assorted medicines at the ready, in the form of seasonal teas, foul-tasting tinctures, or even just a paper bag of raw roots. Although it was more than forty years ago, I can still taste that cold, bitter concoction of ginseng and yellowroot. The flavor was terrible; like green persimmons mixed with organic dirt. However, the image of those weird, twisted roots, looking something like alien tentacles, and the amber-stained

liquid inside that big mason jar was oddly intriguing to us kids. It was right there staring at us each time we opened the refrigerator to get a refill of my grandma's sweet tea. Back then, I think my little brother and I used to ask for a taste of it as an acceptance of each other's dares, and for proving our courage, more so than for seeking any health benefits. At any rate, one of our grandparents would usually oblige us with a nasty dose of it in a big stainless spoon. The fact that we both survived probably says something for the safety of herbal medicines, or at least my grandparents' trust in it.

Knowing the specific herb or combination of herbs for a disease or ailment was only the community herbalist's first step in the production of a potential medicine. One must also know where in the wild world to find the target plant species, and then how to collect and prepare it. In addition to his

many other titles, my grandfather was a woodsman. He kept a mental inventory of herbaceous plants and trees across much of his rural home county. The collection of the herbs was the aspect of medicine making that fascinated me the most. It was like a scavenger hunt across the wild landscape. Whether it was gathering **blazing star** (*Liatris pilosa*), or button snakeroot as he called it, to treat someone's poor crying colicky baby, or just digging sassafras roots for tea, it seems like he knew the exact spots to find the plants we were looking for. I suspect in hindsight he might have been looking for the correct associated habitats as much as for the individual plants he had seen in the past, but nonetheless I rarely remember going back home with him from our quest empty handed.

My grandfather's knowledge of herbal medicines, and the utilization of local natural resources in general, was actually not all that



uncommon in yesterday's rural South. It seems to me that people had a stronger connection with more aspects of the land (not just hunting and fishing) back then than we do today. Much of this knowledge and utilization of wild plants and resources was born out of necessity, especially in households that were relatively poor, or that were isolated from cities where modern products were more readily available. A lot of the knowledge surrounding local medicinal plant use was also undoubtedly handed down through the years by local native Americans tribes. Herbal medicines were a significant part of culture, health, and life in the native tribes. And while this technology and information is old, it might not be so outdated. In today's modern society, the production and sales of pharmaceuticals is a multibillion-dollar industry.

Modern treatment drugs are abundant, however most come with a long list of side effects. Just listen to the disclaimers during the next new drug commercial. I am certainly not one to shun modern pharmaceutical drugs as a whole and I am grateful that we have so many effective treatment options, but I do often wonder how many ailments could actually be improved, or even cured, using natural herbal remedies. I will obviously leave these decisions to you and your medical physician, but in the interim I can share with you a few of the species from my grandfather's apothecary. At the very least looking for them might provide some exercise. As a landowner, you will undoubtedly have many of these resources at your fingertips, even if limited to the boundaries of your backyard. In this article we will discuss how to find, identify, and use a few of the many medicinal plant species in the Southeast and beyond.



*Ginseng is long-lived and slow-growing, and a single large rhizome can take a wild plant twenty or thirty years to produce under normal conditions. Photo in public domain.*

**American ginseng** (*Panax quinquefolius*) was one of the most coveted herbs for my grandfather. American ginseng is native to the eastern half of the US and Canada. And although it's fairly common in some parts of its range, in the southernmost foothills of the Appalachian Mountains, this species was, and is still, pretty rare on the landscape. He was always very conscious of its conservation and would make efforts to help it endure in the locations he knew of by collecting and carefully sowing its seeds in the fall to improve its chances of germination and propagation. In fact, he rarely actually collected ginseng rhizomes, and I recall most of our walkabouts to the ginseng locations were only to check on its wellbeing. White-tailed deer will often browse ginseng foliage and it has several natural diseases that negatively affect it, as well as the threat of being over-harvested in many areas. American ginseng has been studied for several potential health benefits



ranging from increased energy, sharper cognitive function, maintaining lowered blood sugar levels, male libido and sexual performance, and anti-inflammatory effects. Various clinical studies have shown that the chemical compounds in ginseng (ginsenosides) may have some benefits in these and other areas, but most of the benefits are still debated by modern medicine. The demand for this herb however, is not debatable. The good stuff is in the rhizome (starchy root) and to harvest it means killing the whole plant. Ginseng is long-lived and slow-growing, and a single large rhizome can take a wild plant twenty or thirty years to produce. The majority of rhizomes collected in the ginseng trade are exported to Asian countries, as American ginseng is preferred by many users over Chinese ginseng varieties due to its



potency. So how do you find American ginseng? First you have to look in the correct habitats in the appropriate regions of the country. After that it can still be tricky to spot. Although seedlings typically have a single compound leaf with three serrated leaflets in the first growing season, most mature plants will have leaves (prongs) with five leaflets. As the plant becomes older, these prongs become larger and the plant eventually displays the typical arrangement of three or four compound leaves, although some very old plants may occasionally have more than four prongs. A healthy mature plant produces bright orange berries with up to 100 seeds that will ripen in late summer. These seeds will remain dormant in the local soil for two winters before germinating and emerging in April or May. Many forest landowners in the South and mid-Atlantic regions have been successful in “farming” wild-simulated ginseng in appropriate habitats on their lands. Wild-simulated farmed ginseng rhizomes are typically harvested after about 10 years

of growing, while there are some intensive artificial shade cultivation methods which might allow harvest in only about half that time. Soils are a very important consideration for finding or growing ginseng. Rich alkaline soils, high in both organic humus and calcium, that are moist but well drained, are usually required. Mostly shaded sites on the lower slopes of hollows, in hilly or mountainous hardwood forests (under sugar maple, tulip poplar, black walnut, buckeye, slippery elm, beech, or northern red oak) make some of the most productive habitats (Nadeau et al., 1999; Apsley and Carroll, 2004). When looking for American ginseng, or when considering a location to plant it, look for its companion plants. Associated native herbaceous species include jack-in-the-pulpit (*Arisaema triphyllum*), trillium (*Trillium* spp.), bloodroot (*Sanguinaria canadensis*), Solomon’s seal (*Polygonatum multiflorum*), mayapple (*Podophyllum peltatum*), wild ginger (*Hexastylis* spp.), and goldenseal (*Hydrastis canadensis*). Ginseng cannot tolerate too much sunlight

but usually can coexist with these companion species without too much competition. Because of ginseng’s rarity in many places today, harvesting wild plants is now by law restricted to certain seasons, or prohibited altogether, in some places. It has disappeared from those few spots I once knew of in our home county. This is the reason many enthusiasts just order seeds and plant them, instead of searching for a few remaining wild plants.

These rich, moist hardwood forest habitats are also good places to look for other medicinal plants besides ginseng. **Goldenseal** has been a widely used herb for hundreds of years. It was used by the Cherokee Indians for many ailments including cancer. The American Cancer Society (2008) issued a statement that indicated no current scientific support for that use, however. Still, more than 60 million goldenseal plants are harvested annually, most without being replaced or reseeded (Dworkin, 1999). This species is also slow-growing and much of the original population core (the Ohio River Valley) has been depleted. The native Americans also used goldenseal to improve digestion, as an eyewash, and as a yellow dye. Goldenseal contains several isoquinoline alkaloids including berberine, as well as hydrastine. Hydrastine is used to make hydrastinine which was patented by Bayer as a hemostatic drug early in the twentieth century. Goldenseal is fairly easy to identify. It is a member of the buttercup (*Ranunculaceae*) family and grows from a knobby yellow rhizome. It has finely pubescent (hairy) stems with two palmately lobed leaves, and when mature, the plant is usually about a foot tall. The small single white flowers have no petals and develop into a small red fruit that looks somewhat like a rasp-



*Goldenseal is a member of the buttercup (Ranunculaceae) family and grows from a knobby yellow rhizome. It contains a compound used to make hydrastinine which was patented by Bayer as a hemostatic drug early in the twentieth century. Photo by James Steakley*





*Dandelion is an excellent source of vitamins A, C, and K. Leaves and flowers can be consumed fresh in salads and a tea can be made with these parts, as well as the rhizome. One of the best ways to make a storable medicine from dandelion however, is to prepare a whole-plant dandelion tincture. Photo in public domain.*

berry. Further down the hollow and close to the streamside, you might encounter another berberine-containing plant called **yellowroot** (*Xanthorhiza simplicissima*). It typically grows in sandy or silty soil along streambanks and it has toothed leaflets and small maroon flowers in spring. It is a member of the buttercup family and according to the founder of the Chestnut School of Herbal Medicine (Blankespoor, 2023) the compounds in its bitter yellow rhizomes have the following properties: “cholagogue, hepatic, astringent, anti-inflammatory, and anti-microbial”. My grandfather used it as much as any other herb, mainly for treating ulcers and mouth sores.

One must look no farther than their own backyard in the spring and summer to find one of today’s most popular herbs. While this weed is not native to the US, it is now common and can be found across the globe in a wide variety of open disturbed habitats.

**Dandelion** (*Taraxacum officinale*) has been shown to have some very interesting health benefits, both anecdotally and in some clinical trials. These potential benefits include reducing blood pressure,

reducing bad cholesterol, regulating blood sugar levels, promoting liver health, and reducing the risk of some cancers. There are mixed reviews everywhere in the literature and it’s hard to find definitive research data that would suggest using only herbs like dandelion instead of expensive pharmaceutical drugs, but the studies I read

showed at least positive preliminary results in some of these treatment categories. Most folks are familiar with this species and its bright yellow flowers that grow on single unbranching hollow stems. These flowers produce the familiar fuzzy wind-distributed seedheads throughout the growing season. Leaves are sharply lobed and basal, growing out from the bottom of the stem. The leaves and flower stalk produce a milky sap called latex. Dandelion is a perennial, and like ginseng and goldenseal, it forms large underground rhizomes. It has been demonstrated over the decades to be safe and all parts of the plant can be eaten. Dandelion is an excellent source of vitamins A, C, and K. Leaves and flowers can be consumed fresh in salads and a tea can be made with these parts, as well as the rhizome. One of the best ways to make a storable medicine from dandelion however, is to prepare a whole-plant dandelion tincture. This tincture is made by chopping up the leaves and rhizomes and covering them with a strong (at least 40% by volume) alcohol such as vodka. The tincture should be allowed to sit for about three months so that the alcohol

will have time to extract the target compounds from the plant parts. The mixture can then be strained off, bottled, and used for several months. This same process can be used for most other herbs.

**Stinging nettle** (*Urtica dioica*) is a commonly used, nutritious spring herb. It is often stir-fried or eaten as a cooked green. While this plant can set bare legs on fire when you walk through it, the stinging characteristic is eliminated when the leaves are cooked or dried. The nettles are typically high in minerals and vitamins, especially Vitamin A and C, calcium, potassium, and magnesium. Its seeds and leaves are used in teas for treating allergies, arthritis, and as a kidney tonic. Stinging nettle fibers were also reportedly used by native tribes in British Columbia to make twine and fishing nets (Turner and Bell, 1973). Stinging nettle is native to North America, but it also includes subspecies that are not. The European variety is now widespread and fairly common across much of the US. Stinging nettle is usually found in moist open meadows, low open woodlands, and in riparian areas. It has a square stem and is covered with many bristly, stinging hairs. Flowers are small and greenish clusters borne at the leaf axils. Stinging nettle can usually be planted successfully in a garden and harvested regularly, but gloves are a good idea when handling this herb.

**Wild bergamot** (*Monarda fistulosa*) was another important Native American medicinal plant. They used this fragrant native species of mint to treat infections and digestive issues. Wild bergamot is sometimes called bee balm, and it has antimicrobial, anti-inflammatory, and diaphoretic properties when used as a supplement. The leaves can also be used as an expectorant.





*A simple tincture is made by chopping up the leaves, rhizomes, or other parts of a plant and covering them with a strong (at least 40% by volume) alcohol such as vodka. The tincture should be allowed to sit for about three months so that the alcohol will have time to extract the target compounds from the plant parts. The mixture can then be strained off, bottled, and used for several months. Photo R. Shurette*

It is still commonly used by many during cold and flu season. The most common preparations are as a tea or as a tincture. Bee balm is also a natural source of the antiseptic ingredient (thymol) found in modern commercial mouthwashes. Wild bergamot is fairly common in rich open meadows, prairies, and sunny woodlands, especially on calcareous soils. It prefers drier soils and often grows in large clumps, spreading clonally from rhizomes. It can grow to about three feet tall and has lance-shaped leaves which are coarsely serrated to toothed. It has clusters of elongated violet flowers in the summer. It is also commonly used as an ornamental and pollinator plant in gardens.

**Passionflower** (*Passiflora incarnata*) is a fast-growing perennial vine native to the southeastern US, and it is found in disturbed sunny habitats along fields, riverbanks, roadsides, or pastures. It is also commonly called a maypop vine,

and it is easy to identify. It has large three-lobed leaves and tendrils along the trailing stem. The frilled lavender blue and white flowers are pollinated largely by bumblebees. The familiar fruit (the maypop) is a lime green berry about the size of a chicken egg. The Cherokee Indians used this plant as a food source for centuries and the fruits can be eaten raw, although they are somewhat foul-smelling to me. Passionflower contains flavonoids and alkaloids which can serve as powerful antioxidants. The leaves and flowers are also reported to be an effective sedative used to help with sleeplessness and for pain, especially for headaches. Stems, leaves, and flowers are used for teas and tinctures. This species is also sometimes planted in gardens and around homes for ornamental uses, but it is limited in its northern range since it is only moderately cold hardy.

Another medicinal weed that inhabits open disturbed sites, roadsides, and clearcuts is **mullein** (*Verbascum thapsus*). Mullein is easily identified by its large greenish-grey fuzzy leaves that are arranged in a basal rosette. These basal leaves appear in the spring before a tall flower spike, with small yellow blooms, is produced later in summer. Mullein has a long history of medicinal and other uses and the large soft leaves have even been reportedly used for diapers and insoles for shoes. Native Americans commonly smoked mullein and utilized its flowers for dye. Mullein flowers can also be used for making an earache oil. WebMD suggests that mullein's leaves and flowers may have benefits for treating bronchitis, pneumonia, earaches, colds, flu, chills, fever, tonsillitis, allergies, migraines, joint pain, asthma, diarrhea, and colic. My grandfather typically used mullein leaves however, as a poultice for treating

wounds or sprains. **Violet** (*Viola* spp.) flowers can be also used in the same way as a fresh raw poultice for eczema or rashes.

During periods of the Seventeenth Century, **Sassafras** (*Sassafras albidum*) rivaled tobacco as one of the most economically important plants in North America. Its roots were widely used to make root beer, and its bark was exported in mass quantities to Europe for its fragrant safrole oil, used in tonics and to flavor drinks. Large quantities of safrole were found to cause cancer and possible liver damage in rats in the latter half of last century, and commercial sassafras tea production was subsequently banned in the US from 1977 to 1994.



*The Cherokee Indians passionflower (maypops) as a food source for centuries and the fruits can be eaten raw. Passionflower contains flavonoids and alkaloids which can serve as powerful antioxidants. The leaves and flowers are also reported to be an effective sedative used to help with sleeplessness and for pain, especially for headaches. Photo by Realtube*





*My grandfather sometimes collected the round marble-like rhizomes of blazing star (*Liatris*), or button snakeroot as he called it, to treat persistent colic in babies. **Disclaimer:** always consult a physician prior to using wild plant remedies. Photo in public domain.*

However, due to the unnaturally high levels the rats were given, this study carries very little weight in the opinion of most herbalists, and it is still used in the US today to make traditional root beer. Native to the eastern half of the US from Canada down into Florida, this small tree species was also used by the Choctaw and other natives in Mississippi, Louisiana, and parts of Alabama and Florida, and then by French and European settlers across the Southeast for food flavoring and preparation. Its leaves were ground into a powder which was used to thicken soups and stews, including file' gumbo. This species is usually easy to find in forest stands on well drained, slightly acid soils and it is widespread and abundant on the landscape.

**Wooly Dutchman's pipe** (*Aristolochia tomentosa*) was another species I remember my grandfather sometimes digging. He called it "black snakeroot" and he used this small spindly vine for treating "ailments of the blood" and for

other general health benefits. Wooly Dutchman's pipe has a dainty decumbent vine with heart-shaped leaves and a weird flower that resembles an old meerschaum tobacco pipe. There are conflicting reports about the potential health benefits of and use of this plant, but according to the literature it was apparently used in medicines for treating skin disorders, kidney disease, and circulatory disorders (Chevallier, 1996). Native Americans also used this herb to treat rheumatism and headaches. This species was also reported to have been the most widely used remedy for treating snakebites in North America, prior to modern medical methodologies, by applying the chewed root or crushed leaves to the site of the bite (Weiner, 1980). This species contains aristolochic acid however, and there is evidence that this compound can be carcinogenic and damaging to the kidneys in large quantities. In Europe the use of this plant genus was banned in 1981 due to these findings. Therefore, I am including this species in this discussion for informational purposes only.

In summary, some of the wild plants we might find on our forestlands and fields may be used for a variety of medicinal purposes. Many of these herbs were utilized for hundreds of years, well before there were any modern medicines, the FDA, or clinical trials. Some wild plants serve as the primary source for modern drugs. I would not suggest making regular use of the herbs that have been suggested as potentially toxic, but if you are curious about a certain plant remedy, do some homework, consult your physician, and then get out there at the right time of year and do some collecting and medicine making. Just remember to harvest natives responsibly for future generations.

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# What are the Most Successful Deer Management Programs Doing to be so Successful?

By Dave Edwards



Dave Edwards is a certified wildlife biologist and regular contributor to *Wildlife Trends Journal* and other hunting/wildlife publications. Dave was honored as QDMA's 2007 Deer Manager of the Year and nominated in 2011 as Alabama Wildlife Federation's Wildlife Conservationist of the Year. Dave is President of Tall Tines Wildlife & Hunting Consultants, Inc. Contact him at [TallTinesConsulting@gmail.com](mailto:TallTinesConsulting@gmail.com) or 912-464-9328.

**W**hat does it take to consistently have great deer hunting on your property? Over years of providing wildlife and hunting guidance and helping clients attain desired results, I've learned that exceptional hunting doesn't happen by accident. Regardless of whether the goal is managing for and hunting ducks, dove, turkey, quail, or deer, consistently providing exceptional hunting experiences results from well-thought-out and executed management of the land, the critters, and hunting activities. I have learned that the hunters who consistently have successful seasons and routinely harvest high-quality mature bucks are not "lucky." Luck is simply where preparation and

opportunity meet. These hunters or landowners have put considerable time, effort, and energy into positioning themselves for success.

Although I've had the opportunity to manage land and hunting for most game animals that have a season in the Southeast, much of my efforts have been focused on managing for mature trophy white-tailed deer. I have managed deer herds and associated hunting activities on properties that ranged from small tracts to large cooperatives of hunting clubs across thousands of acres. I have also worked with very wealthy private landowners who spare no resources to maximize hunting opportunities.

With 25 years of experience managing deer in various situations and parts of the country, I have gained a clear understanding of the key ingredients for successfully producing and harvesting mature trophy-quality whitetails. Based on this experience, I will share what I have found to be the most common ingredients to successfully and consistently produce exceptional deer hunting. I will lump these ingredients into three primary categories - the property, the deer herd, and the hunting itself. However, it's worth noting that each property, deer herd, and situation presents unique challenges. I am not saying that you must have all of the ingredients



I discuss here to have exceptional deer hunting. I am simply sharing those ingredients that have been common among the best deer hunting properties I have worked with.

## **The Property**

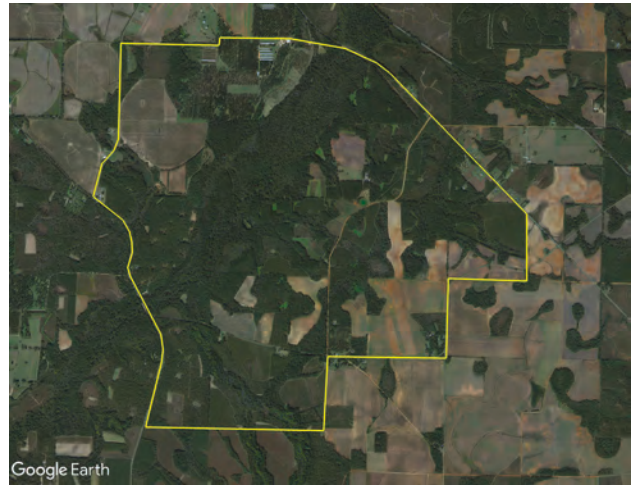
### ***Size & shape***

When it comes to managing a deer population and having increased opportunities for harvest, the size and shape of a property are crucial factors. In general, larger properties tend to be more advantageous. From my experience, the most successful properties I've worked with have been between 2,000 and 5,000 acres in size. This size is optimal because it is big enough to contain deer within the core area of the property, allowing for better control of population dynamics such as deer density, sex ratio, age structure, and recruitment of bucks into older age classes. However, these sized properties are also small enough to consistently achieve annual harvest goals, and aggressively manage for quality habitat. Managing a deer herd through harvest requires time, effort, and dedication. Although it is certainly possible to intensively manage larger properties, I have found that properties exceeding 5,000 acres often struggle to achieve their annual harvest goals and sometimes fall behind on habitat management plans.

When it comes to deer hunting, the size of the property plays a significant role in the number of harvest opportunities available. In the Southeast, a general rule of thumb for mature buck harvest rates is one trophy-quality buck per 600-1,000 acres. This means that properties in

the 2,000-5,000 acre range offer opportunities to harvest around 3-8 mature trophy-quality bucks per year. However, on smaller properties like 450 acres, the chances of harvesting mature trophy quality bucks are much lower and significantly depend on the management of the surrounding properties. While many people consider the number of trophy bucks harvested as a measure of exceptional deer hunting, doe and management buck hunting can also provide numerous harvest opportunities. Larger acreage provides more deer harvest opportunities compared to smaller properties.

Property ownership and boundaries are diverse in nature, and there is no perfect shape when it comes to recommending an ideal one. However, from my experience, I have found that large blocks of contiguous land are more successful. Having boundaries far apart reduces the likelihood of many deer in the core of the property from using adjacent properties. Regardless of the size of your land, you will always share deer with neighbors. I had a client who was losing many quality young bucks to his neighbors, which also did not harvest does, and he had to put extra effort into doe harvest to maintain quality herd conditions. He began purchasing some of the properties around him. He made it clear that he didn't want to own all of the land. He only wanted what was



*From my experience, the most successful deer hunting properties I've worked with have been between 2,000 and 5,000 acres in size.*

touching his! My point is that oddly shaped or long and narrow properties increase the number of deer shared with neighbors, leading to frustration due to poor management across the fence. However, no hunting on neighboring properties can be just as frustrating. Many times, I have asked a client about their neighbors and gotten a response similar to "They are great! I don't think they hunt much". While in some cases this could be good, no hunting means no herd management and likely no habitat management. This situation often results in a surplus of deer not being managed, leading to lots of immigration due to the deer seeking quality food and cover.

### ***Neighbors***

When it comes to successful deer management programs, good relationships with neighboring landowners or hunting clubs play a critical role. The properties that have seen the most success are those whose neighbors apply similar management strategies on their land and deer herd. For smaller properties, forming cooperatives with





*When it comes to managing for a healthy and vigorous deer herd, having a significant amount of acreage of intensely managed food plots is advantageous.*

surrounding lands is even more critical and essential for consistent, excellent hunting. Additionally, natural barriers, such as deep-water swamps, rivers, oxbows, or wide sloughs off a water body, can limit deer movement. Many successful properties have benefited from such natural barriers, leading to more control and better hunting opportunities.

### **Habitat**

Deer are known as edge species, meaning they thrive in areas where two or more habitats merge. These edge habitats provide deer with abundant food and cover resources. When it comes to deer management, properties with high habitat diversity and edge are more likely to produce healthy and flourishing deer populations. In my experience, properties that have a good mix of pine habitat along with diverse habitats tend to be the most successful. Pines

can be managed in a way that provides year-round food and cover for deer, making them an essential component of the best deer management programs. Some of the most common strategies employed on successful properties include active timber management, selective herbicide applications, prescribed burning, and strip disking. While hunting in a mature oak bottom can be visually stunning, having pine habitat that can be managed for high-quality food and cover has been proven to be more valuable for deer. In summary, if I had to choose between owning a deer hunting property that was either all mature oaks or all pine woods, I would select the pines without hesitation. However, there is nothing like watching a chase happen during the rut in big open hardwood bottoms.

One factor that has been consistently present in the most successful deer management properties is the inclusion of

some form of agriculture, especially during the summer season, either on the property itself or in close proximity. It is well-known that high-quality crops like soybeans, peanuts, peas, alfalfa, or corn are incredibly beneficial for deer. A significant amount of acreage dedicated to these crops results in healthier deer that can produce more fawns and grow larger antlers. I suspect that the presence of agriculture also suggests that soil quality is good in the area, which certainly contributes to healthier whitetail populations. While it is possible to have successful deer hunting without these crops, they have been a common element in the most successful properties I have managed.

When it comes to managing habitats for maximum success, having a significant amount of acreage of intensely managed food plots is advantageous. A general rule of thumb is to devote around 10% of the total property to food plots, but the most successful properties have 15-20% of their land aggressively managed in both annual (fall and summer) and perennial food plot crops. These plots come in varying sizes, with some large plots ranging from 5+ acres and a few smaller ones that are about 1-2 acres. In terms of hunting, mature buck harvest has been more successful on linear-shaped food plots that are adjacent to or passing through thick bedding and escape cover, such as a clear-cut or pine plantation. Examples of linear-shaped food plots include hub and spoke designs, cinderos, roadside plots, and right of ways such as gas lines or powerlines.

## Access

It is crucial to have good access when managing and hunting a property. The most successful deer programs have had good access throughout the entire property. All-weather roads enable equipment to access various parts of the property, which helps in managing the property effectively. These types of equipment include tractors, tree skidders, herbicide spray rigs, dozers, dump trucks, fertilizer and lime spreaders, ATV's, and more. It is frustrating to know that there are management strategies that could be implemented to significantly improve an area, but not having access to it.

From a hunting perspective, a network of primary and secondary roads and firebreaks provides discreet access without disturbing deer. In addition to providing access, roadsides offer a relatively easy way to enhance

the deer value of a property. Managed roadsides have been a common strategy among the most successful properties I have worked with. By simply widening the shoulders of roads, it is possible to create significant additional acreage of natural browse for deer across the landscape. You might be surprised at the number of miles of roadsides on your property that could be used to provide deer with additional quality food.

## Deer Management

### Decision making

Having a successful hunting program where you are consistently harvesting mature bucks is not the same as just killing a big buck every now and then. To achieve consistent great hunting, management decisions are made based on data collected from the deer herd over the past few years. The most successful programs are always seeking to

gather information about the deer herd. They record biological data from harvested deer, record hunting observations, and conduct population camera surveys each year, while monitoring the herd through random trail cameras throughout the year. By analyzing this information over time, trends in herd health and population status can be assessed to make sound harvest decisions. My point is that the most successful programs do not guess; they know. One of the ways they know is by conducting an annual camera survey to assess the status of the deer herd. A camera survey provides the most valuable information, revealing deer density, adult sex ratio, buck age structure, buck quality per age class, fawn recruitment, etc. On the most successful properties, hunters collect this data not because they have to, but because they understand the value of the information and how it helps them make informed decisions that maximize hunting quality on their property.

It is essential for a deer management program to have decision-makers who share the same goals and mindset. When everyone involved in managing a deer hunting property understands and agrees upon the program's goal and makes decisions that align with it, the program is more likely to succeed. On the other hand, disagreements and compromises among decision-makers often lead to failure. Based on my experience, the most successful deer management programs have been on private properties with a single owner making decisions and providing clear direction for the program. However, I have also



*The most successful deer hunting properties develop and implement well-thought-out plans for habitat, herd, and hunting improvements.*





*Maintaining a balanced sex ratio results in an intense but reduced breeding season allowing deer to recover before spring.*

seen success on leased hunting clubs with many members as long as everyone is on the same page, and the leaders take action to replace those who do not share the same goals.

### ***Harvest guidelines***

Effective trophy-quality mature buck management requires maintaining a balanced buck age structure. The goal is to ensure there is a high number of mature bucks available each year. This requires harvest guidelines that will recruit bucks to mature age classes. Location, quality of soils/habitat, and buck harvest goals all influence the guidelines. Age-based harvest guidelines have proven to be the most successful strategy for recruiting bucks to desired age classes. Hunters who learn to age bucks based on body characteristics are more likely to make better harvest decisions while in a deer stand. A dedication to learning these skills shows a commitment to the program's success. However, the most successful properties I have worked with did not need buck harvest guidelines because everyone hunting the property shared the same goals and understood the skills required to make good harvest decisions. These hunters

are also not solely driven by the kill, but rather by the management and journey. Many of my clients enjoy the challenge of the hunt and the experience of encountering a mature buck as much as harvesting one, especially one they have watched grow up under their management.

### ***Herd management***

Maintaining a healthy and vigorous deer population that offers great hunting experiences while also providing opportunities to harvest mature trophy bucks can be a challenging task.

Achieving this requires finding a balance between a low deer population with abundant resources and a population that exceeds the threshold, resulting in high competition and reduced health. While a low population is healthier for the deer, it may not satisfy the desire of hunters to see many deer. Conversely, high deer populations can compromise the health of the herd by increasing competition for resources. Therefore, finding the right balance is critical to maintaining healthy animals and satisfying the needs of hunters. This involves a combination of scientific analysis of data and informed management decisions based on that data. Successful deer management properties typically rely on experienced professional biologists to determine the ideal deer density to target based on available data about the herd and hunting, along with the quality of the property's habitat. These properties also tend to have a higher targeted deer density than an average property due to their aggressive food plot and habitat management strategies. The



*The most successful deer programs do not guess when it comes to making herd management decisions. They know by conducting annual camera surveys and collecting other information about the herd.*



*The best deer hunting properties I've worked with do everything in their power to hunt in a way that minimizes their disturbance of deer.*

increased food and cover allows them to offer better hunting experiences (relatively high numbers of deer observed while hunting) and more opportunities to see and harvest mature bucks.

Balancing the adult sex ratio is another critical ingredient for the most successful deer hunting properties. It not only benefits the herd health, but also results in breeding competition that forces mature bucks to seek and breed does during daylight hours making them more vulnerable to being seen by hunters. A balanced sex ratio leads to a shorter, more intense breeding season, which reduces the energy demand associated with the rut. This is in contrast to unbalanced sex ratios, where bucks commonly seek and chase does for many months in order to get them all bred. As a result, a balanced sex ratio allows deer to return their focus to feeding for the rest of the fall/winter. This helps them recover from the rigors of the rut. As spring arrives, these deer are in excel-

lent shape and can fully utilize the nutrient-rich new plant growth for their body and antler development and fawn production.

### Hunting

Managing hunting pressure is vital to maintaining high-quality hunting experiences throughout the season, even if the land and deer herd are well-managed. Deer are extremely cautious creatures with an innate ability to sense danger. Properly managing hunting pressure and "hunting smart" plays a critical role in the quality of hunting experienced on a property, particularly as the season progresses and as it relates to seeing mature bucks. There is truly a black-and-white difference in hunting quality between properties that manage pressure versus those that do not. The best deer hunting properties I've worked with do everything in their power to hunt in a way that minimizes their disturbance of deer. By doing so, quality

hunting exists throughout the season. Many hunters do not understand the impacts of hunting pressure on future deer movement and its accumulation over a season. Even when efforts are made to hunt without disturbing deer (e.g., scent management), each hunt applies some amount of pressure which impacts deer. One of the reasons many hunters do not recognize their hunts as "pressure" is that most of the "pressure" impacts deer they never see. These include deer that are "bumped" while entering and exiting, deer that pick up a hunter's scent while traveling downwind of a stand, deer that come across places where hunters walked in or out, or deer impacted in the immediate area being hunted, hours later, by a hunter's lingering scent from sitting in a stand for 4 hours. Each encounter affects how and when deer move and the number of deer seen during future hunts. Deer quickly learn to avoid hunters by reducing daytime movement, sticking to



thick cover, and avoiding areas where they had negative encounters. The most successful deer hunting properties intensively manage how, when, where and how often they hunt the property to minimize hunting pressure. The following are key ingredients or strategies the most successful deer hunting properties use to manage hunting pressure.

### ***Manage the amount of hunting***

Less hunting on a property means less hunting pressure. Even when efforts are made to manage hunting pressure, each hunt that takes place applies some amount of pressure. While managing hunting leases over the years, I can't tell you how many times I was asked by someone picking up a new lease,

"How many members do you think I need?". My answer was always the same - "As few as you can afford!". The very best hunting I have experienced was on properties that were not consistently/routinely hunted throughout the season. Because hunting pressure was limited with "rest" between hunts, every hunt was like opening day. Deer moved during the day, entered food plots early, and did not always appear skittish or nervous. The reality is that most of us cannot afford to purchase a large deer hunting property or even pay annual fees for a large hunting lease just for ourselves. However, the take-home message is that every hunt applies pressure that will impact deer in some way, often affecting hunting experiences on other days. Be mindful of this, and

regardless of how many people hunt the property, manage the amount of hunting that takes place to ensure quality hunting throughout the season.

### ***Aggressive stand management***

The most successful deer hunting properties actively manage deer stands, and much of this work is done immediately after the season ends rather than just before the hunting season starts. On these

properties, existing stands are constantly being assessed, new stand locations are being found, and maintenance or hunting enhancement needs are being noted. By constantly moving stands each year, hunting locations stay fresh, reducing the ability of deer to hone in on stand locations and increasing hunting success. Sometimes, a stand is simply in the perfect location and does not need to be moved, but there may still be ways to enhance hunting from the stand, such as adding a sneak trail to access the stand, tightening a squeaky seat, pruning a limb or two, or directing deer movement by laying a tree down.

Of course, being in the right place at the right time results in high-quality hunting experiences. The most successful deer hunting properties influence this by having an abundance of thoughtfully and strategically placed stands in high deer-use areas. Having many great stands across the property to choose from on any given day and wind direction allows hunters lots of options, which will help them reduce pressure in any one area or stand. For mature bucks, the most productive stands are often located along habitat edges or near thick cover. When choosing a location for a stand, careful consideration must be given to how a hunter will access the stand, which wind direction it can be hunted, and how much hunting pressure using this stand will create. I have witnessed several great spots for killing a target mature buck where a stand was never installed because there was no way to access or hunt it without applying excessive hunting pressure. It's that important.



*The most successful deer hunting properties actively manage deer stands, and much of this work is done immediately after the season ends, rather than just before the hunting season starts.*

## Hunting Stands – Wind Chart

Brickhill Plantation



- ⊕ = Best Wind for Stand
- ✗ = Do NOT hunt stand
- = Margin Conditions

	NW	N	NE	E	SE	S	SW	W
Swamp	⊕	⊕	⊕	—	✗	✗	✗	—
Log Stand	✗	—	⊕	⊕	⊕	✗	✗	✗
Buck Ridge climber	✗	✗	✗	—	⊕	⊕	⊕	—
Horse Pen	✗	✗	✗	—	⊕	⊕	—	—
Henrys	⊕	—	✗	—	✗	—	⊕	⊕
Canebrake	✗	—	⊕	⊕	⊕	—	✗	—
Osprey	—	⊕	⊕	—	✗	✗	✗	—
Camp Field	⊕	⊕	⊕	—	✗	✗	✗	—
Garhole	✗	—	⊕	—	⊕	—	✗	—

*One of the most common strategies among the best deer hunting properties is that hunters religiously hunt with the wind in their favor. They do this by knowing the wind direction, how it reacts at a specific stand, and use wind charts to help make wise stand choices.*

### Use trail cameras to scout

Trail cameras have become an extremely valuable tool for deer management and hunting. They are commonly used for conducting camera surveys to evaluate various population characteristics and make informed harvest decisions. But they are equally valuable from a hunting perspective. Nowadays, almost every deer hunter owns at least one trail camera because they are powerful scouting tools. The best deer hunting properties often use multiple cameras deployed across the property to find and pattern trophy bucks. Using cameras saves time and reduces hunting pressure, leading to more productive hunts and less disturbance on the property. The images captured by trail cameras can also be used to make informed buck harvest decisions. In summary, trail cameras are an excellent tool for reducing hunting pressure, increasing hunt productivity, and achieving deer management goals. They are widely used by

the most successful deer hunting properties.

### Apply low impact strategies for harvesting does

The best deer hunting properties meet doe harvest goals each year.

However, they do so while keeping hunting pressure and

disturbance to a minimum around key stands/locations geared toward harvesting mature bucks. By this, I mean they understand the impacts and consequences of harvesting and blood trailing does in and around prime hunting stands or food plots. For example, instead of waiting until after the rut or during the last couple weeks of the season to harvest does, hunters on the most successful properties initiate doe harvest early and continue efforts throughout the season in areas like clearcuts, woods, or roads/managed roadsides that minimize the impact on prime buck hunting areas.

### Conclusion

As someone who is passionate about their job, I am extremely grateful to have the opportunity to assist landowners and hunters in creating and managing top-notch deer hunting properties. Over the past 25 years, I have gained extensive knowledge and experience related to managing

land, deer, and hunters to achieve desired results, and I have learned that consistent, exceptional deer hunting does not happen by accident. From my experience, there is no shortcut to creating a truly exceptional deer hunting property. It requires a well-planned and executed management strategy and takes dedication, hard work, and a deep understanding of the property, the deer herd, and hunting activities. Factors such as the size and shape of the property, management on neighboring lands, the quality of the habitat, management of the deer herd, and how a property is hunted all play a critical role in consistently producing and harvesting mature trophy-quality whitetails.

But what makes a deer hunting property exceptional? In my opinion, it's all about the results. Do you routinely and consistently have great hunts where you see lots of deer and have encounters with trophy-quality mature bucks? If not, assess your program to determine what the limiting factors are and where possible, do something to address them. Every property is different and has its own challenges. Ultimately, while there is no one-size-fits-all approach to creating and managing an exceptional deer hunting property, consider the key ingredients of the most successful programs I have shared as you think about how to make your property better. I hope my insights on the most successful deer hunting properties I've worked with will inspire you and give you ideas to enhance your own property.



# Lake Management is Never Complete

By Scott Brown



Scott Brown is a Biologist and regular contributor to Wildlife Trends Journal with over 35 years experience in research and managing natural resources throughout the Southeast. Scott founded Southern Sportsman Aquatics & Land Management in 2007 and now has clients from Texas to Florida and into the Carolinas. Contact him at [tazmanlabs1@gmail.com](mailto:tazmanlabs1@gmail.com) or 336-941-9056.

*Electrofishing helps identify issues with the target fish being managed, but a full lake evaluation every one-to-two years identifies problems with water chemistry, habitat and the fish population that fishing alone does not reveal until it is too late.*

needing to be done to keep the quality of the fishery at the level you have achieved, otherwise it can quickly return to where you started, or become worse.

## Water Chemistry

Water chemistry parameters in both new and old lakes change quarterly and over time. Water chemistry is the foundation of the aquatic ecosystem. Once your lake has reached your goals, occasionally monitoring water chemistry is still advised. This is fairly inexpensive to have done, or you can purchase some basic meters and

**M**any lake owners make the mistake of feeling complacent, feeling they have reached their goals and reduce or stop management practices, or discontinue the assistance of their Lake Manager. This usually comes when fishing has gotten good, due to intense management practices performed, and following their manager's recommendations. This

thinking can lead to timely and potentially costly measures to correct issues that arise from lack of lake management after you have reached your goals. Water chemistry, vegetation and fish all need to be consistently monitored and issues addressed, even after you feel everything with your lake is good. Once goals and objectives are met, there are still things



*We will never stop saying water chemistry is the foundation of your aquatic ecosystem. Good water chemistry 12 months a year, along with quality habitat and genetics, allows fish to grow at their maximum rate, maximum size and maximum carrying capacity.*

testing kits and monitor yourself, if you know how to interpret the results.

If you have initiated a fertilization program, checking visibility every two-to-three weeks from early spring to late fall is mandatory. When fertilizing, visibility should be between 18 and 36 inches. If a Secchi Disk is not used, the trick of lowering your hand into the water off a dock or from a boat is advised, and if you can see your fingertips when most your arm is under water, add pond fertilizer as

directed on label until water temperatures drop below 60° F in late fall or early winter.

Also associated with fertilizing is water pH. If the pH gets low (below 6.0), it will not allow an algae bloom to occur, and lime will need to be added. We recommend adding one-to-two tons of lime per acre (to raise 1.0) in late fall, to get it right so nutrients can

produce planktonic algae (green water) the following spring. The reason lime should be added in fall is so it has time to completely dissolve and gradually improve the pH to a desirable level for fertilizing.

## Vegetation

If vegetation begins to appear and fertilization has been stopped during the growing season, the decision must be made if there are too many plants present above or below the surface to allow an algae bloom to resume without having the plants take over and the water remain clear. When nutrients (fertilizer) are put into a lake, they will be used by planktonic algae, filamentous algae, submerged or emergent plants. If shoreline, emergent, and/or submerged plants are well established, they will use up all the fertilizer and not allow an algae bloom to occur.

Shoreline and submerged aquatic vegetation including algae (filamentous and planktonic) must constantly be monitored and



*Constantly surveying aquatic plant species and coverage is necessary to take action before it becomes a real problem. Primrose, although gets a pretty yellow flower, is an exotic and invasive plant and needs to be treated or removed as soon as it is identified.*





*Maintaining feeders and aeration systems is a year around job. Filling feeders and dyeing a lake is done during the growing season, which can be 6-12 months per year, depending how far north or south you live.*

treated as needed. Letting a plant species go in hopes it will correct itself is never successful and renders a costly mistake and possibly be detrimental and even catastrophic to the fish population you have worked so hard to develop into a quality fishery. Once a potential invasive or problem plant appears, it needs to be identified by species, labeled as beneficial or detrimental, and if needed, treated with herbicide or manually removed immediately. The earlier the herbicide treatment is performed, the better results and less expensive. If a plant gets out of control and covers a large portion of a waterbody in late spring or summer, treating it can put your fish population in

jeopardy by stressing or killing them with a sudden drop in Dissolved Oxygen (DO) caused by decomposing plant material. Some plant species have the capability of reproducing and spreading faster than you think. Looks good today, but a few large rains and high nutrient runoff over the next few weeks can leave you scrambling and losing ground on your perfect lake. If a chronic vegetation problem exists, consider stocking grass carp to help maintain may be an option. Be sure the problem plant species is consumed by grass carp prior to stocking. Not all plants are consumed by grass carp, and they consume very little filamentous algae. We normally recommend

stocking grass carp 3-7 per acre depending on the plant and objective. Do not stock grass carp with the assumption, “the more, the better”, this is an assumption that sets you up for a disaster.

Filamentous algae is one of the most common nuisance plant species we encounter. Many call it moss or pond scum, and can turn a very nice aesthetically pleasing water body into a mess in a short period of time if unchecked. This is caused by excess nutrients whether already in the lake, washing in from nearby uplands, or being added to produce a planktonic algae bloom. Besides treating the algae with herbicides, (usually copper based products) the cause needs to be identified and reduced or eliminated, if possible. If a fertilization program is in place, this can be a vicious cycle of fertilizing and spraying if not done properly. That is why staying on top of a fertilization program is mandatory. As water gets clearer, other plants besides the planktonic algae are absorbing the fertilizer and growing. The fewer nutrients available for planktonic algae growth, the clearer the water and the better other plants grow above and under the water surface. If pond dye is being used to keep submerged plant and/or filamentous algae growth down, visibility should be checked constantly during the growing season and more applied as needed, per the manufacturer’s recommendations.

Common invasive plant species always need to be monitored and kept in check. A few other plant species besides algae that grow and spread quickly include bushy pond weed (Naiad), Hydrilla, watermilfoil, Salvinia, water hyacinth, primrose, water lettuce, cattail and duckweed. All these species and some other fast-growing species need to



be closely monitored as they can get out of control quickly. A shoreline hardwood species such as willow needs to be addressed on an annual basis, as these can quickly spread, get out of control and become costly to treat and/or mechanically remove. Once a year, unwanted trees need to be cut down and treated with herbicide to prevent re-growth. This is especially important regarding the dam, as no trees should be allowed to grow on the dam for any length of time. To encourage soft tissue plant growth and reduce unwanted hardwood and pine growth, annually mowing the shoreline in late winter is advised. If you are treating any vegetation in or around your waterbody yourself, contact your professional lake manager or herbicide rep to discuss the techniques and herbicide options that will best solve your problems. Too many landowners are provided wrong information or advised to use herbicides illegally from family members or friends who are “lake experts” that cause issues in the future, or do not achieve the desired goal.

### **Fish Attractors**

Refurbishing natural material (oak or evergreen) fish attractors is required about every four to eight years, depending on what material was used. Christmas trees will lose their needles and small branches over the years, all that is left is a trunk and blocks. If evergreen trees are desired, collecting neighbors’ Christmas trees or working with a local tree lot to take their unsold trees can get you a lot for free, and no cutting down required, just collect, and sink in your lake. We prefer to use artificial materials, so this work is eliminated in the future, but natural materials are cheaper.



*The bass on top is from a lake where no small bass harvest occurs, and there is very little forage for bass that size to prey upon (eat). The bass on the bottom comes from an intensely managed lake where bass removal is a high priority, and there is plenty of forage for the bass present to grow at their maximum rate.*

### **Aeration and Fountains**

Cleaning and servicing fountains and aeration systems is required every six months to two years, depending on the type of system. Fountain heads can become clogged with algae and/or calcium. If your system has aeration stones, they need to be cleaned every two years with muriatic acid and a wire brush. If your pump is oil or carbon vein, they should be inspected, and parts replaced as manufacturer recommends. Check

air filters and replace them every year, and always check to see cooling fans are running properly to ensure the pump does not overheat and cause undue breakdowns or inefficiencies.

### **Feeding**

Supplemental feeding of fish is constant if water temperatures are above 55° F. Allowing feeders to go empty and not feeding for several weeks is unadvised when a lake reaches its carrying capacity, espe-





*Hard work equals big fish. Reaching your lake management goals is a never-ending job, but it is very rewarding and enjoyable having a high-quality waterbody that family and friends can enjoy with you.*



*Whether adding artificial or natural offshore submerged habitat material, these can be added any time of year and definitely benefit the bass, bluegill and catfish populations.*

cially if it's an intensely managed lake. You have artificially created a higher carrying capacity than a natural, un-manipulated waterbody, so the feeding program that's been in place for some time needs to continue uninterrupted. If feeding is suspended in winter, charge batteries and store them at room temperature. Cold can really shorten battery life. Check timers and feeders in late winter to assure all are in operating order before filling and feeding begins. Make sure all solar panels are clean and clear of limbs shading them out, impeding the daily charging process.

## **Fish Population**

Maintenance of the fish populations may include evaluating, stocking and/or harvesting. We recommend conducting an electrofishing survey every one-to-two years to determine fish species present, abundance and health. Even if your lake is just the way you want it, it will change, and those changes need to be documented, management strategies validated, and current management techniques adjusted to correct any future issues. Electrofishing also can predict gaps in the near future of forage sizes and species make up, which allows stocking plans in the future to assure no size class of





*A quality managed lake benefits the environment, other plants, wildlife, people and Man's Best Friend can even get benefits from training sessions.*

*A quality managed lake benefits the environment, other plants, wildlife, people and Man's Best Friend can even get benefits from training sessions.*

largemouth bass are left with too little food and growth rates slow. Electrofishing identifies many problems before the angler will ever notice them, no matter how much you fish and how successful you are.

Stocking forage, either to introduce a new forage species or to replenish depleted forage may be required once a lake reaches quality or trophy status. This refers back to electrofishing results and looking at stomach contents when harvesting smaller bass to see what they are feeding on and how plentiful the forage size for that size bass is available. Also, if a species that does not naturally reproduce such as channel catfish, stripe bass hybrids, or species that were stocked as bass forage knowing they would not survive like threadfin shad, or season specific species like trout that will die in the summer or Tilapia will die in winter, will need to be restocked every year, every other year, or whenever numbers become depleted. Again, if you are working with a professional lake manager, do not stock any fish without consulting them first. A good lake consultant will not mind the questions and should not charge you for a few minutes of time on the phone, or via email addressing your stocking questions. There have been some huge mistakes from landowners not asking their lake manager before stocking something a family member, friend or even hatchery recommended.

Removing bass is a constant task, needing to be done every year. Reducing bass numbers and having abundant forage for remaining bass is necessary in all size groups to keep growth rates high. Once you get a largemouth bass population, even to trophy status, removing some individuals is an ongoing





*Not tending to these cattails has allowed them to grow in thick and rendered useless to fish and wildlife. Annually or every other year, thinning them mechanically or with herbicide is advised.*

chore. This is the most common mistake amongst lake owners, once they start seeing more forage and abundant bigger bass, they stop harvesting small bass in the designated slot that was prescribed. Or they do not adjust the slot as needed to alleviate the “bottle neck” wherever that may be within the population. If this is not feasible for you to remove fish, get friends and family to help, or talk to your lake manager and if they have an electrofishing rig and your state allows it, the required annual number of bass needing removed can be done by electrofishing. Continually monitoring friends and family so they are not harvesting fish larger than the designated slot is very important. We have seen a lake drastically improve over a three-year span, only to be drug

back to its original shape due to friends and family harvesting larger fish, to the point where they were sneaking out four to seven-pound largemouth bass on a regular basis, decimating the quality bass population and turning back time on all the work done to get the population to that point. Electrofishing results documented the drastic decline in quality fish, and investigation and spying by the landowner exposed the harvesting of quality fish, despite the angler’s knowledge of the harvest guidelines set to create a trophy fishery. Fish are no longer required to get a high quality, exact replica mount made. Measure Total Length, Fork Length, and Girth at the fattest point while held horizontally (looks like swimming in water) and some quality photos to document colors and striping, are

all that is needed to preserve your trophy. And if you are hungry for fried bass, catch 10-20, or more 12-14 and fry them up. You get a nice meal and help the lake management cause.

### **Final Thoughts**

The final task to do on a regular basis with your waterbody is to enjoy it! Too often we see great lakes developed and the owner never enjoys the fruits of his labor. Spring is the best time to fish ponds. For largemouth bass it’s the pre spawn. I have fished three-acre lakes for only three hours and caught over 25 bass of various sizes ranging from 1 to 8 pounds. When they are biting like that, removing bass becomes easier and reaching your recommended



harvest goal doesn't become a chore, less time consuming and it's enjoyable. I fish ponds in the middle of the day during deer season, its very effective and fun if you use the correct bait. There is no more thrill than catching large-mouth bass at dawn or dusk from a pond with topwater lures in the spring, summer and fall. For bream the best time is late winter to late fall. The hotter it is, the earlier and later in the day you should fish. Black crappie fishing peaks in early spring but is fairly good fall through spring. For catfish, early in the day and late afternoon with worms, chicken livers and hotdog pieces work best.

There is not much better than catching your own 14–20-inch catfish and frying them up the same day they are caught.

There is no doubt, once your lake gets to your desired goal, the time and money needed to keep it at that level is reduced, but management does not stop. Some tasks will always need to be performed and the quality of the lake will depend on it. You will get some fluctuations in quality from fish population dynamics (like crappie that are cyclic with peaks and valleys of good and bad year production and growth) and Mother Nature (flooding or

drought), but the more you stay on top of the routine tasks the less drops in quality you will observe, and the more your lake will stay where you want it. Your lake manager should provide you with a quarterly calendar for two to four years out when he creates a management strategy, that helps remind you what needs to be done and when, especially if you or your staff are performing most of the work yourself.

*“Memories of Spring just may be the latest and greatest insight into turkey hunting that members of the Tenth Legion will salute!”*

— Will Primos



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# Wildlife Trends Journal Management Calendar

By Dave Edwards



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*Burning small areas just before turkey season is a great way to attract turkeys and create strutting zones.*

## **Assess management strategies, review or develop a plan, & prepare for upcoming projects**

**I**t's important to plan and prepare well in advance to make sure you have everything you need for the projects you want to start this summer. I heard a saying that has stuck with me over the years that always reminds me to plan – “People don't plan to fail, but often fail to plan”. Planning also allows you to prioritize projects, create a budget for the upcoming year, and develop timelines for completion to help you stay on track. Many landowners simply tackle projects as they come up or as they think of them. This strategy can work, but without planning they may overlook or run out of money before addressing a more needed project.

Spring is a busy time for us at Tall Tines Wildlife Consultants helping landowners develop a plan of action for the coming year to improve the wildlife value and hunting on their property. We conduct what we call “property management assessments”. During this consultation, we review projects that had been completed the previous year, review harvest data or other information that provides insight into how the wildlife we are trying to manage is responding to management, re-assess progress towards goals, assess the habitat and property, in general, to determine its limiting factors, and develop a prioritized list of activities that need to happen to help the landowner achieve their goals. While this is a professional service we provide, it is a process that I feel all landowners should go through each year,

whether they hire a professional biologist or not, to keep them on track and moving forward. This reminds me of another saying – “Don't keep doing the same thing and expect different results.” Now (late winter/spring) is the time to assess your management program, determine the needs for improvements, and develop a plan to address these needs.

## **Make preparations for spring turkey season**

One of the best ways to ensure you have gobblers in the spring is to manage your property throughout the year to promote quality nesting cover. I have worked with many landowners that had gobblers on their property most of the year, but they disappeared during the spring. After closer inspection, their prop-





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erty didn't have good nesting habitat, and the hens had moved to adjacent properties carrying the gobblers with them. Quality nesting habitat is created by maintaining a patchwork of early successional habitat throughout your property. Burning, herbicide applications, strip disking, timber harvest, and roadside management strategies are all tools that can help you create quality nesting habitat for turkeys. Besides the key element of creating nesting habitat, creating strutting zones in strategic areas near nesting cover around your property will help put turkeys where you want them to be. February or early March is a good time to create strutting areas. A mower, disk, fire, or combination of these are the

tools of choice for this task. Fire is my preferred tool if it can be used. Strutting areas are simply areas that have relatively little or open ground cover that will be attractive to turkeys for breeding courtships. I often create these areas between roosting and nesting areas and preferably near a food source such as an old field, chufa patch, or food plot. Areas that often lend themselves well to creating strutting areas are powerlines, thinned pine rows, and roadsides. Lastly, mowing hunter access trails will help you slip into areas to hunt without making a bunch of noise. If these trails go through thick habitat, don't be surprised if turkeys use the same trails. Speaking of mowing, if you have areas that need mowing

before summer arrives, do so before turkeys start nesting.

### **Collect shed antlers**

Bucks across the whitetail's range should have shed their antlers by mid to late March. Searching for and collecting shed antlers can be a fun and exciting activity for friends and families to participate in during the springtime. Shed collecting offers a unique opportunity to spend quality time with family, while also providing valuable insight into the quality of the deer herd on your property. Over time, you can compare the antler sheds found from different seasons to track the progress of your deer program. If you notice that the





*Now is the time to scout for next deer season. Scouting and installing or moving stands now will reduce the amount of disturbance applied as you approach the season next year.*



*Fertilizing clover in the spring will provide a nutritional boost that will enhance its growth.*

antlers are gradually getting larger each year, then your program is moving in a positive direction. To increase your chances of finding antlers, focus your search in key areas such as food plots, fields, around feeders, and along trails where deer must jump over fences or ditches. Additionally, training your Labrador retriever to find antler sheds can be an exciting and rewarding outdoor adventure for you and the dog.

### **Squirrel hunt**

Squirrel hunting seems to be a lost passion for many hunters. Squirrel season runs through February in many states and can offer some great excitement. I often use squirrel

rel hunting as an excuse to be in the woods scouting for deer sign. As you will see in the calendar item below, late winter is one of the best times to scout for new deer hunting spots. Whether you are interested in scouting for deer or not, squirrel hunting is a great activity that will help you learn a property and will often spark ideas of ways to improve it. I personally value squirrel season as it provides a great way to teach kids how to hunt without having to be too serious or quiet and often results in lots of action and shooting. As we move along hunting, we take time to investigate everything we come across, such as deer tracks, turkey feathers, armadillo shells, and turtles, which leads to discussions about how nature

works. Be sure to pack plenty of snacks!

### **Learn more about your property & scout for new deer stand locations**

Have you ever noticed that deer seem to disappear right before hunting season starts? It's not because they have deer season marked on their calendar. Rather, it's because hunters apply lots of disturbance to deer with their preparations for hunting season. These disturbances, which include loud noises and human activity, cause deer to alter their movements to avoid potential danger. With over 25 years of experience managing deer and hunting, I've learned that



hunting pressure plays a significant role in hunting success. If you want to improve your hunting experiences and see more deer, it's important to manage hunting pressure and other disturbances on the property you hunt. One effective way to do this is to be prepared well before hunting season. Late winter or just after hunting season is the best time to learn about your property and identify areas that could be improved. By doing this, you can maximize the value and use of your property. During this time of year, deer are using areas where they feel safe and comfortable, so if you find out where they are hiding, you'll know where to find them next season. Late winter is also a good time to erect or relocate stands, trim shooting lanes, and reduce the pressure you'll need to apply just before the season starts. By doing all this in advance, you'll significantly enhance your opportunities next season to see and harvest the big bucks you've worked so hard to grow.

### **Prune fruit trees**

Pruning fruit trees is an effective management strategy that can boost the health of the tree and improve fruit production. It's important to avoid heavy pruning as it can stunt a tree's

growth and delay fruit bearing, which is particularly detrimental to young trees. Proper pruning will establish a sturdy scaffold system with well-spaced, wide-angled branches that can withstand heavy crops and high winds. A well-trained young tree will produce heavy crops early and continue to bear fruit efficiently. The ideal time

to prune fruit trees is during the dormant season, but diseased or dead branches can be removed at any time. To keep fruit trees healthy and productive, it's advisable to prune them regularly, ideally every year. Neglecting trees for years and then heavily pruning them is a mistake. However, older trees may require more aggressive



*Adding a variety of wildlife-friendly trees and shrubs can enhance the wildlife value of your property.*



pruning than younger trees to rejuvenate them.

### **Transplant native shrubs or trees to add aesthetics or screen unnatural structures or objects**

While this has nothing to do with wildlife management, it may enhance experiences around the property you hunt. Late winter is a great time to install or transplant shrubs or other plants to add aesthetics or hide unnatural objects around your camp or property. Depending on the situation, native shrubs can also provide a great screen along property lines where needed. Examples of such items may include electric boxes, AC units, pump houses, clay target throwers, etc. While purchasing shrubs or plants is always an option, consider transplanting natural plants that exist on your property. These plants are well adapted to the soils and climate of your property, and best of all, they are free. Choose shrubs/plants that are evergreen or will provide the “cover” needed to do the job. A few plants I have had great success with include wax myrtle, broomsedge grass, and various holly and ferns. When digging up plants, keep as much of the root ball intact as possible. That is, leave plenty of room around the base of the plant and cut a circle around the plant with a shovel, working deeper and under the plant until the root mass (full of dirt) breaks free. Handle the root mass with care while transporting it to its new home. The goal is to keep as much of the existing soil around the roots in place as possible – which protects the small feeder roots of the plant. A large plant container (the black pot that shrubs or trees are grown in) is helpful to have when transporting to protect the root ball. Dig the new hole larger

than the original and loosen the soil in and around the hole. After placing the plant in its new home, use soil from the hole to pack around the root ball. Ensure no air pockets exist and firmly pack the soil (firm, not compact) around the plant. If possible, water the plant in. During its first year of life (particularly the first summer), the shrub may need a little TLC. Make sure it has plenty of water and keep competing vegetation under control.

### **Plant supplemental fruit trees and/or other wildlife-friendly plantings**

Supplementing your property with plantings of oaks, chestnuts, pears, crabapples, plums, autumn olives, etc., is a great way to enhance both the esthetics and wildlife value of your property. Late winter through early spring (before spring green up) is the best time to plant most wildlife-friendly trees/shrubs. Planting a variety of trees/shrubs will ensure that a variety of food sources are available throughout the year. The plantings should be strategically placed around food plots or fields, along roadsides/intersections, or other areas that will receive adequate sunlight. If quail management is one of your goals, and your property has lots of open land, you may consider establishing hedgerows for additional quail habitat. Hedgerows are often created using wildlife-friendly plantings such as plums, dwarf chinquapin, or sawtooth oaks, along with other shrubs. Hedgerows can be enhanced by planting adjacent strips of partridge pea or food strips of corn, Egyptian wheat, sorghum, or millets this spring/summer. The Wildlife Group is an excellent source for obtaining beneficial wildlife trees/shrubs as well as getting advice on planting strategies and tips.

### **Fertilize perennial clover plots to provide a jump start for spring growth**

Although I am a fan of planting annual summer crops to provide maximum nutrition through the summer months, I also like to include perennial clover plots in food plot strategies for diversity and as a year-round crop that will be available when other crops fade out or are being planted. Perennial clover plots will start growing rapidly once spring green-up begins and daily temperatures exceed 65 degrees. Fertilizing clover can add a significant growth/nutritional boost to clover and other perennials. Because clover produces its own nitrogen, apply a fertilizer that does not contain nitrogen, such as 0-20-20, during early-mid spring to provide adequate nutrients for clover growth. If you add nitrogen, you are simply feeding competing grasses. Although I strongly recommend pulling soil samples and applying fertilizer accordingly, a “common” fertilizer application rate for clover in the spring is 200 lbs./acre. Once the growing season begins, monitor the plot for undesirable weeds and grass. Pre-emergent herbicides are a fantastic tool that will kill weeds before they have a chance to become a problem. If you are unable to apply a pre-emergent herbicide, mowing will help reduce undesirable weeds (do not mow too low...your mower should be set to cut just over the clover). However, if weeds and grasses persist, apply selective post-emergent herbicides for control. Although herbicides are more expensive than mowing, they are often the most effective. Mowing is used to give the clover a better chance to out-compete the weeds while herbicide kills the weeds.



## Initiate Late Winter/early Spring Strip Disking

Are you looking for an inexpensive management strategy that can improve the wildlife value of your property? Strip disking is an excellent management practice that can produce exceptional food and cover for various wildlife. If you have a tractor and a disk the only expenses of strip disking are fuel and time. Simply find areas within relatively open habitat, drop the disks, and drag them. Obviously, the tractor operator needs to pay attention to avoid stumps or other obstacles to prevent damaging the tractor or disks. The goal is to just “stir” the soil to promote the germination of seeds in the natural seed bank. Generally speaking, one pass is all

that is needed. Having said this, I typically mow areas I intend to harrow first if possible (with the mower deck raised to a high setting). Doing so prevents disks from riding on top of taller grasses and shrubs. Disking can be done along roadsides, in or around old fields, and within thinned pine plantations or mature longleaf stands. Disking strips 10-30 feet wide in late winter and early spring will stimulate the growth of desirable native quail food plants such as partridge pea and beggarweed. The new succulent vegetation that grows in the strips will also attract insects. Late winter – early spring is also the best time to disk to promote high quality deer browse as it promotes broadleaf weed growth. These areas can be managed by

re-disking every other year. The time of year you disk will influence the types of plants that colonize. For example, winter disking produces heavy-seeded quail foods such as partridge pea and ragweed, while disking in April increases the production of important seed-producing grasses such as panic grass. Disking in June favors grasses and green vegetation that attracts insects and promotes a number of major seed plants that turkeys and quail readily feed upon in the fall. In general, seasonal disking can provide a diversity of seed-producing plants for quail and turkeys as well as quality browse plants for deer.

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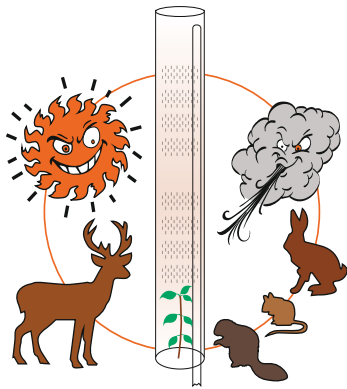
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