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Earl Says...

As usual, our expert staff of writers has put together put together some valuable and practical information this month for the Do-It-Yourself land owner. The theme for this issue of Wildlife Trends Journal is tools.

I had no idea what all it takes to manage a pond until I read Scott Brown's article on tools for ponds. Water chemistry kits, secchi disks, special rakes, etc. It's always easy to call in the experts to do the work for you but there's a special feeling you get when you can do the hands-on work yourself.

And speaking of tools, Ron Jolly's article on blood trailing dogs is fascinating. We've all made a bad shot and ended up with a wounded deer we couldn't find. It's a gut-wrenching feeling and any tool I can use to recover that deer is invaluable. But if you don't have your own dog there are lots of people and groups you can call to help. One group I follow on Facebook is "Nose to the Ground – Alabama, A Free Blood Trailing Service".

Tools are invaluable to us all and the more we know about how to use them in our land management strategies, the better. Although sometimes the lines between tools and toys is blurred. I'm still trying to explain to my wife why I need that new "tool" to put another trophy on the wall.

Andy Whitaker Publisher/Editor





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Know What You're Working With: Conducting a Wildlife **Habitat Assessment**



ost will agree that successfully managing or attracting any wildlife Ispecies on a property can be a challenge in itself. Depending on the situation, it will likely require at least a little bit of time, money, or both. Therefore it is important to consider some fundamental features early on in the process, maybe even before you purchase your property. In this article I would like to discuss one of the most vital aspects of wildlife management planning. And for some reason it is also a part that is often overlooked or underappreciated. Imagine if you will, taking on virtually any large task at

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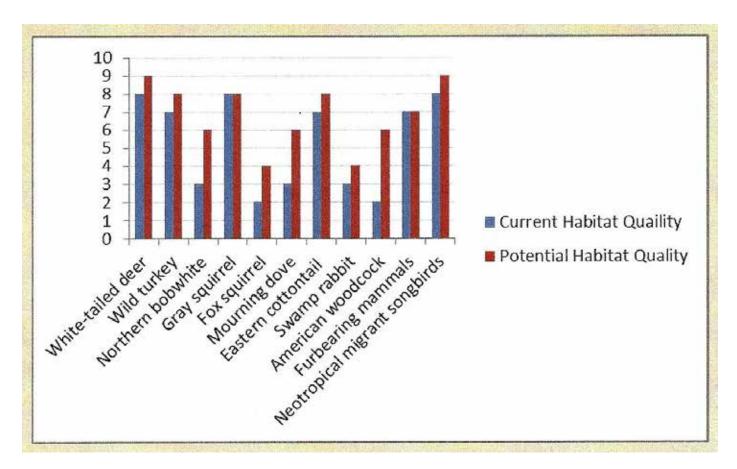
Any rare or special plants should also be captured in an inventory along with plenty of high quality photos. I am aware of several landowners whose favorite and most ecologically significant feature on their entire property is a rare plant community such as a pitcher plant bog, glade, or some other botanical treasure. White-topped pitcher plant shown here.

work. For those in the construction business let's use building a bridge as an example. Before we started the actual job, we obviously would need to ask some questions. We first would want to know the objectives of the person who would be paying us for it. Then we'd also need to take a look at the site (or at least a report of the site that someone else may have generated) to gather a lot of other critical information. We'd want to know something about the size of the bridge that would be needed based on the distance across the obstacle to be spanned, the nature of the obstacle to be spanned, the slope of both sides, the nature of substrate, alternate location sites, access restrictions, weather and seasonality issues, types of resources available,

etc. etc. This "site inventory" would hopefully inform us well enough to eliminate costly mistakes or inefficiencies and allow us to be successful.

Construction not your bag? Let's consider another example using a different profession. Imagine you are a chef, and the task is to design and bake a wedding cake. Again, you wouldn't start mixing up batter without first asking specifically what the client wanted. Then, especially if working in a new kitchen, you'd take an inventory to ensure you have all the needed tools and ingredients on hand for creating your work of art. The very same concept applies when it comes to purchasing, leasing, or otherwise stewarding a new tract of land with

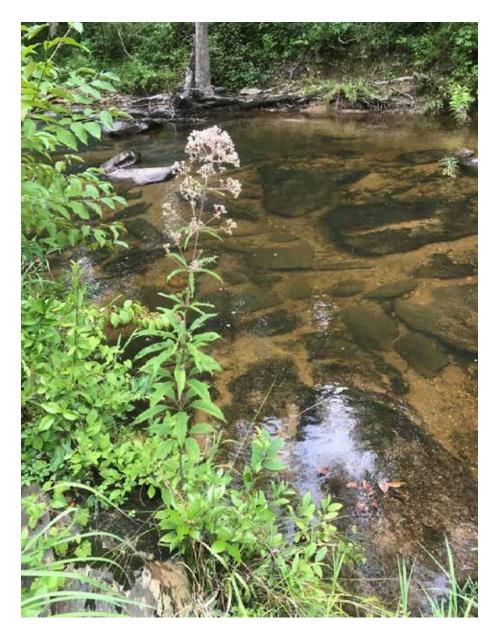
the intent of managing one or more species of wildlife (albeit managing wildlife is typically much more complicated than baking a cake). First we would need to identify what species were important and for what use we'd want to manage the property. If objectives are set in stone and are very specific, an inventory of a property's habitats (and therefore its ultimate potential to fulfil the manager's objectives) is critical prior to purchasing the land or prior to investing in its actual management. For example, if one were interested in acquiring a tract where they could successfully manage and hunt wild bobwhite quail, they may not want to invest in a 100-acre property within the city limits that is occupied by 20% ponds and 80% seasonally flooded



Most of the interpretation and information dealing with the habitat potential of a tract can be covered in the individual stands discussion sections, but a simple bar graph can also be used to show relative value of existing habitats (Current Habitat Quality) versus the value of those that may be realized through some level of management (Potential Habitat Quality). This graph may include a number of common game and non-game species along with ratings for each species for both categories. These ratings can simply be qualitative based on the quality and arrangement of the habitats observed on a property, and do not have to be based on quantitative measurements.

bottomland hardwood forest, due to possible restrictions on burning, coupled with the challenges the establishment of the herbaceous plant communities quail would need. However, the same tract may be perfect for a buyer interested in managing and hunting wood ducks. If someone's objective is to simply have a green space or to be close to trees and nature regardless the species or condition, a thorough inventory of the habitats that exist on a tract of land may not be critical prior to purchase. If on the other hand a buyer wanted to use or lease the property for hunting or managing one or more specific wildlife species however, a detailed inventory (in the form of a wildlife habitat assessment) would again be important in order to get a good idea of how compatible a property is or could be in meeting their clients' objectives.

Most folks obviously realize this concept to some degree and have at least a gross idea of what kind of tract they are buying. But a true habitat assessment goes into much more detail than the example I used above and takes a stand-by-stand look at the structure, composition, and ultimately the management potential of the property. Having a quality wildlife habitat assessment prepared is really just taking an inventory or a "snapshot" of what types of biological (vegetation) and physical (soils, water) features exist on a particular property and representing this information spatially (on a map or maps), quantitatively (via a breakdown of the abundance in species and structure), and qualitatively (through a discussion of these individual habitats and what they offer to wildlife species). It is the combination of these biological and physical features that dictates what species can be successfully attracted to, grown, hunted, or manipulated on a property. In fact, it is this inventory and assessment of



Perennial stream running through a property. An assessment of the surveyed stream reach suggested high water quality as indicated by an abundance of lowtolerance lotic species including minnow mayfly (Baetidae) nymphs and abundant aquatic snails (Elimia sp.; shown here).

existing habitats that really make up the first half of a wildlife management plan. The second half of a typical wildlife management plan relates to the treatments, activities, and recommendations that should be performed over time to achieve specific goals of the landowner or manager. A habitat assessment may also be important even if you have owned the tract of land for some time, and maybe even if you already have a management plan in place (especially if it is old). In this article, however, I want to separate the inventory and

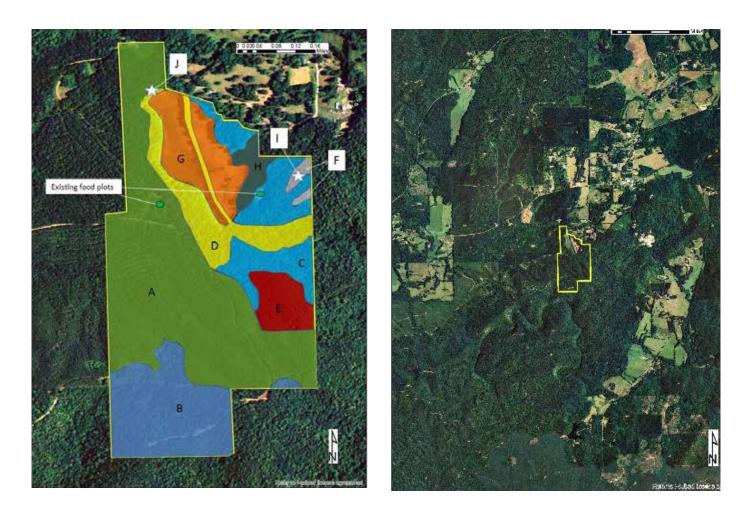
assessment concepts from the treatments and recommendations concepts and focus specifically on the former to show the value of a habitat assessment, especially in the areas of real estate purchase, marketing, and leasing.

With so many buyers looking for hunting and recreational property these days, I have often wondered why more rural land real estate firms don't use a formal wildlife habitat assessment as a marketing tool for selling properties, especially on their premium wildlife tracts.

Typically some pictures are taken by an agent and a short list of amenities or descriptions (number of food plots, the dominant forest type, etc.) is given and that's about it. It is often left to the potential buyer to interpret this limited amount of information as well as the potential for managing a desired species or suite of species. You might be thinking, "Well there's a good reason for that. You can't have a management plan in place before you know what the potential buyer wants!" Touché, but a habitat assessment is not a management plan. It simply paints a very detailed picture of what's out there and is not dependent on the

objectives of a buyer. The buyer's objectives would obviously initiate the treatments and management actions in a full blown management plan. But the first step is to take an inventory of the site. In other words you wouldn't have to know exactly what the bridge was going to look like before you ordered the "site inventory" report. A habitat assessment can be performed at varying levels of intensity and in some cases it may be conducted by a realty company's staff without extensive botanical or ecological training. However, in many cases (for as little as a few hundred dollars) a comprehensive report (with stand maps, a list of tree,

shrub, and understory species present, rare community descriptions, photos of specific wildlife features, and discussions of these habitats) could be prepared using a professional consultant. I would expect that a quality habitat assessment when used as a marketing tool would pay for itself many times over on most highquality rural tracts. An assessment may even be prepared for free (through a landowner assistance program) for a landowner in some cases if they are committed to improving a tract. Later in this article we will discuss the individual pieces of a habitat assessment and give some real-life examples but



Vicinity and stand map depicting each major habitat (or forest) type on a tract. A few specific examples of habitat type descriptions are: un-thinned 17 year old loblolly pine plantation, mature upland hardwood, mixed mesic mature hardwood-pine, bottomland and riparian habitats, cutover/ early successional habitat, agricultural soybean fields, open mature upland longleaf pine, and existing wildlife food plots. Each of these habitat types is typically broken down further in an indepth discussion including stand age, species present (or at least the most common representatives) for trees, shrubs, and herbaceous plant communities. first I will attempt to further validate the importance of such a portfolio and close the loop of exactly what comprises the "assessment".

Consider this. Just as timber on a tract of rural land has significant value (in the form of volume and dollars on the stump), wildlife (and wildlife-related recreation) also has an inherent value to those whose main interests lie in hunting and watching game and non-game species. This trend has become more apparent over the past decade with more and more folks looking for a place to just get away and enjoy time with their family in a natural setting. For assessing the amount of timber on a property, a cruise can provide a concise and quantitative estimate of available volume (from which a financial



Mast and fruit-producing shrubs and trees are important to include in an inventory, especially when they occur in significant numbers and will be important to wildlife. Knowing that a 55-acre mixed hardwood stand exists on a property is good information, but knowing that the relevant abundance of white oak, post oak, and water oak is 45%, 28% and 5%, respectively in that stand, paints a clearer picture of what kind of benefits that stand will have for winter deer and turkey populations.

appraisal can be generated). The cruise is simply an inventory of the timber resources of the property. However, it is much more difficult to try and put a value on all the different wildlife habitats (both for currently existing habitats and for their potential) found on a property. And as we have established, these values can vary depending on the specific interests of the potential landowner. In the context of using a habitat assessment as a real estate marketing tool however, some simple assumptions can be made to showcase certain existing habitats as well as the potential a given property has. These assumptions are based on the fact that most potential rural lands buyers are interested in at least one of the top few game species (deer, turkey, and bobwhite quail) and/or any unique plant and animal communities

(songbirds, pollinators, rare plants, etc.) found here in the southeastern US. Realtors with tracts in the Midwest or other major waterfowl flyways could assume duck hunting would also be popular. So an inventory would then be used to assess the existing habitats (based on these assumptions that clients would want to maximize opportunities to see or harvest the maximum number of these target species). Most would-be landowners might also be interested in any special physical features (waterfalls,

seeps, bogs, glades, bluffs, caves, etc.) and so these elements are also good to look for and represent in a complete habitat assessment when it is used in this way. Going one step further, a biologist or experienced land manager may also provide some discussion on the potential of the property based on these assumptions and rate how far away from desired condition a property is. In other words if a mature upland pine stand needs only to be lightly thinned and burned to be good quail habitat, that stand would have more short-term potential than a bottomland stand that is occupied by a fifty year old stand of Chinese privet, making it presumably more attractive to a quail enthusiast. Discussing the potential of a property would be considered an optional part of a wildlife assessment in the purest definition, but when it's being used as a marketing tool it makes sense to include this kind of interpretation.

For attracting clients to hunting leases, most of the same principles still apply. Especially on premium properties, a comprehensive habitat assessment will provide a tangible document to showcase the types of habitats that exist there, and therefore the game species the tract should support. Again the specific location and region of the country may dictate to a large degree what kind of potential a tract will have to produce and hold certain game and non-game wildlife species, but having a robust portfolio of the property's stands, tree, shrub and understory plant species, and other features would be a great way to accurately and efficiently showcase what the land (and the landowner) has to offer. If a landowner did not have such an assessment but the interested party felt sure the property was right for him or his club, an assessment could be performed at the expense of the client after the lease was contracted. This may not be very important, after the fact, if the leasing party only wanted to hunt and didn't intend to actively manage the tract. However, if they did intend to manage for certain species, an assessment would provide them a baseline from which to start and highlight the specific features and stands from which to build habitat. Conducting a habitat assessment is not the same as just scouting for hunting areas or locating good

places to put food plots. That can be done at any time by anyone. An assessment can obviously inform a landowner about these things but it should serve a larger purpose than that, and the key difference relates to management and identifying whether the requisite habitat components are in place.

And finally, the same basic points would come into play for an existing landowner who wanted a more detailed picture and assessment of his or her property in order to make better informed decisions about their management choices. Again, if a landowner has an existing wildlife management plan, the inventory and assessment should have already been conducted in that process. And most longterm landowners know their land pretty well themselves anyway. Sometimes, however, objectives are formulated and input into a management plan at the same time, or even prior to the time, that the inventory and assessment is conducted. Unless the landowner is savvy about the intricacies of habitat structure and composition on their land, the objectives may not match well with, or be supported by, the existing vegetation and features of the land. If conflicts exist, these issues are typically brought up and addressed in one way or another if the preparer of the plan is wellversed in active forest management. A better scenario, however, would be to have an intensive inventory and assessment before management objectives are formed, although this is not usually the way it goes. And in the real world having an assessment as a prerequisite to objectives becomes less important as money becomes less of a limiting factor. Let's say for example, on Ouail Tract A, a habitat assessment identifies six upland pine and mixed pine-hardwood stands (totaling 235 acres) between 40 and 60 Basal Area with 80% or greater native bunchgrass ground cover

(comprised of yellow Indiangrass [Sorghastrum nutans], Elliot's bluestem [Andropogon gyrans], little bluestem [Schizachyrium] scoparium], split beard bluestem [Andropogon ternarius], silver plumegrass [Erianthus alopecuroides], and purpletop [Tridens flavus]) intermixed with abundant native legumes (including partridge pea [Chamaecrista fasciculata], creeping tick-trefoil [Desmodium repens], wild bean [Strophostyles umbellata], trailing lespedeza [Lespedeza procumbens], and pencilflower [Stylosanthes biflora]), and assesses these understories to be high quality nesting and forage habitats for bobwhites*. This type of information may be of little concern to a wealthy manager on the other side of the county who owns Quail Tract B, who is looking to restore existing Bahia and fescue pasture land and former agricultural fields to quail habitat, regardless the cost. In these two contrasting scenarios the cost of growing a wild covey of quail could be almost free. or it could be astronomical. With time and money, the end results can be the same. But the point is, knowing what you are working with can make a lot of difference with regards to wildlife management objectives planning. Note* Scientific names are typically used in habitat assessments and inventories when naming herbaceous plants because unlike in bird and mammal taxonomy, there are often multiple approved common names for plants.

Now that we've established the benefits and potential applications of a habitat assessment, let's take a closer look at the actual



components. Although there is not one specific template that must be followed, I feel like a stand-alone wildlife habitat assessment should be a visually appealing but functional document that flows from describing the property as a whole to breaking it down into timber stands (or equivalent units), and then into its fundamental habitat components. So typically an overview of the property and the nature of the assessment is first provided along with any vicinity maps and pertinent background information. This summary would capture general information about the property size, location, topography, soils, and adjacent properties, etc. as well as the assessment survey date, preparer information, and any other relevant information about the assessment purpose or process. If landowner objectives have been set, this would be appropriate to include and discuss here. This overview would be followed by at least one map representing the major habitat (or forest) types. For instance, a few specific examples of habitat type descriptions are: un-thinned 17 year old loblolly pine plantation, mature upland hardwood, mixed mesic mature hardwood-pine, bottomland and riparian habitats, cutover/early



Knowing details like a property hosts six upland pine and mixed pine-hardwood stands (totaling 235 acres) between 40 and 60 Basal Area with 60% or greater native bunchgrass ground cover (comprised of yellow Indiangrass [Sorghastrum nutans], Elliot's bluestem [Andropogon gyrans], little bluestem [Schizachyrium scoparium], split beard bluestem [Andropogon ternarius], silver plumegrass [Erianthus alopecuroides], and purpletop [Tridens flavus]) intermixed with abundant native legumes (including partridge pea [Chamaecrista fasciculata], creeping tick-trefoil [Desmodium repens], wild bean [Strophostyles umbellata], trailing lespedeza [Lespedeza procumbens], and pencilflower [Stylosanthes biflora]), and that these understories have been assessed to be high quality nesting and forage habitats for bobwhites, can be very helpful planning information when setting management objectives.

successional habitat, agricultural soybean fields, open mature upland longleaf pine, and existing wildlife food plots. These "stands" should be depicted spatially on a map along with their acreage and/or respective percentages of the total tract size. Then each of these habitat types is typically broken down further in an

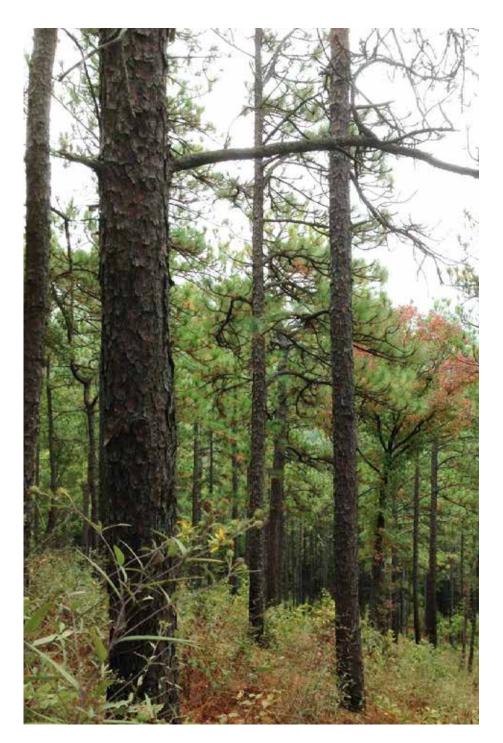
in-depth discussion including stand age and species present (or at least the most common representatives) for trees, shrubs, and herbaceous plant communities. Structural qualities of the stand (including Basal Area and/or canopy closure) that allow sunlight to permeate to the forest floor are important to include also. And finally, any discussion which may be pertinent to game species or unique non-game species could be included here as well.

The following excerpt is an example of how a commonly encountered loblolly pine stand may be described in a wildlife habitat assessment. Typically, each and every individual stand on a tract would be described in this manner along with providing photographs of the representative vegetation.

"A. Loblolly pine plantation (20-year-old):

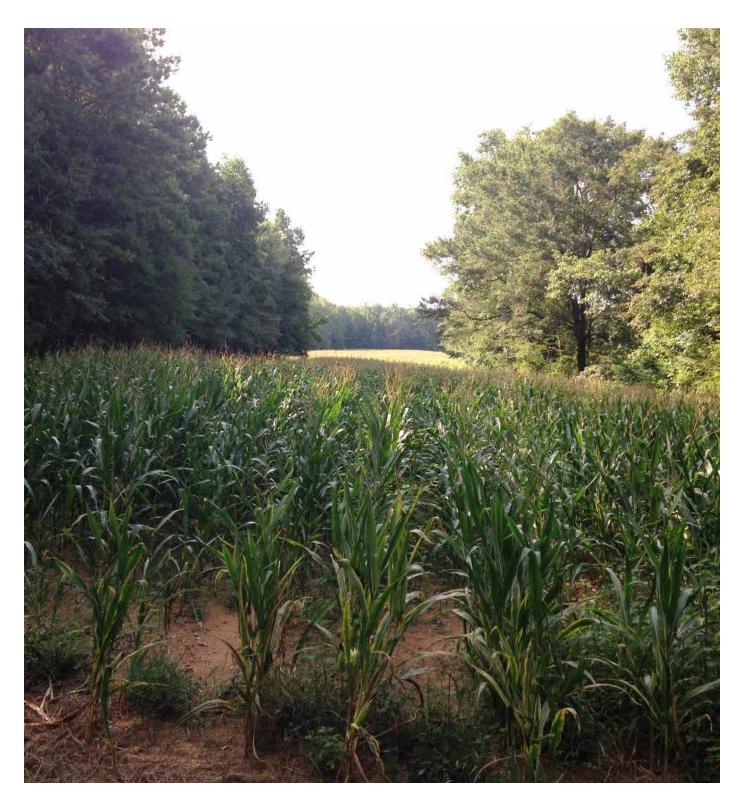
Approximately (41%; 43.5 acres) of the surveyed property is occupied by a young (planted in 1998) loblolly pine (Pinus taeda) plantation. This stand is located primarily on acid clay soils with slight to rolling topography and average DBH over the entire stand was 10.5 inches. Upper portions (approximately 19 acres) of the stand are shaded with a closed canopy and an average Basal Area (BA) of 120 ft2/ac. Un-thinned, monoculture loblolly pine stands have been demonstrated in many cases to provide limited wildlife value, especially during years 5-15 due to the shaded canopy and lack of herbaceous understory habitats. However, the lower portions of the stand (approximately 24.5 acres) have been third-row thinned (in 2010) and have an average pine BA of 70 ft2/ac. These thinned areas contain an average midstory canopy cover of 35% comprised of sourwood (Oxydendron arboretum), pignut hickory (Carya glabra), red maple (Acer rubrum), sweetgum (Liquidambar styraciflua), and yellow poplar (Liriodendron tulipifera). Total hardwood midstory BA is estimated at 10 ft2/ ac. and there is approximately 60% shrub cover across the stand consisting of, in order of importance, highbush blueberry (Vaccineum arboretum), oak-leaf hydrangea (Hydrangea quercifolia), winged sumac (Rhus copalina), sawtooth blackberry (Rubus argutus) and American beautyberry (Callacarpa Americana). The shrubby understory in the stand currently provides high quality bedding cover for white-tailed deer and moderately good escape cover

and nesting cover for wild turkeys. Some desirable deer browse species in the form of Japanese honeysuckle (Lonicera japonica), sweetleaf (Symplocos tinctoria), and smooth and round-leaved tick-trefoils



In addition to timber stands, open habitats (clear-cuts, old fields, borders, agricultural fields and pasturelands) as well as any food plots should be captured and described in detail in the assessment.

By providing some discussion on the potential of a property, the biologist or preparer of the assessment can paint a picture of how close a property is to being "ready" depending on the target species to be managed. In other words, if a mature upland pine stand needs only to be lightly thinned and burned to be good quail habitat, that stand would have more short-term potential than a mixed bottomland stand that is occupied by a fifty-year-old infestation of Chinese privet in the understory, thus making the upland pine stand presumably more attractive to a quail enthusiast. (Desmodium laevigatum and D. retundifolium) are present throughout the lower portions of the plantation and stand edges and heavy deer use was evident within the stand. Several occurrences of native bunchgrasses (including broomsedge bluestem (Adropogon virginicus), yellow Indiangrass (Sorghastrum nutans), and poverty oatgrass (Danthonia spicata) were observed within open thinned parts of the stand. Some of the thinned bottom portions of the plantation are suitable American woodcock habitat and I would expect utilization by this species during winter and the spring breeding season. Both upland and lower portions of the stand are currently only marginally suitable for bobwhite quail, although there is good potential (via additional timber harvest, herbicide applications, and prescribed burning) should the landowner have an interest in managing for quail in



the future. Other game species noted as present (either by direct observation or signs) include eastern cottontail, swamp rabbit, grey fox, and eastern grey squirrel. A comprehensive list of non-game bird species observed or predicted in the habitat types on the property is also enclosed as appendix to this assessment."

A stand description could be more inclusive and may go into more detail regarding the relative abundance of each tree, shrub, and herb species. In addition to timber stands, open habitats (clear-cuts, old fields, borders, agricultural fields and pasturelands) as well as any food plots should be captured and described in detail in the assessment. These habitats are often the most important producers of food (both from insects and herbaceous products) on a property and having a species inventory of the dominant plants (as well as a description of their relative abundance) will paint the picture of what species of wildlife would likely be using those areas. A description of the age (successional stage) of each open area should be given along with the history and/or potential of maintenance of the opening.

A complete and comprehensive list of all species found on the property is sometimes requested of the preparer by the landowner or manager but is not typically required. This level of intensity usually greatly increases the level of survey time needed to complete the report. However, all important plant communities should be described, both in composition and structure. Mast and fruit-producing shrubs and trees are important to include, especially when they occur in significant numbers and will be important to wildlife. Knowing that a 55-acre mixed hardwood stand exists on a property is good information, but knowing that the relevant abundance of white oak,

post oak, and water oak is 45%, 28% and 5%, respectively, paints a clearer picture of what kind of benefits that stand will have for winter deer and turkey populations. Other features to consider include stream and aquatic habitats. Water features such as perennial streams and creeks are typically very attractive to landowners and potentially to wildlife, depending on the region. The health of a stream, however, is equally important. Sedimentation, pollution, and other issues are important things to disclose if they are present. Using basic aquatic habitat and water quality assessment techniques, information can be provided in a comprehensive assessment. Since certain aquatic animals are very intolerant of pollution and water chemistry changes, the mere presence of these aquatic indicator species, like some mayflies and other insect species, as well as certain mollusk and fish species can tell you that a stream, creek, or river is in good condition. Riparian habitats and their ability to effectively buffer any potential sedimentation and erosion is also typically discussed in an assessment. If native riparian vegetation exists on a property, it is also fairly easy to reliably predict exactly which passerine bird species will utilize these habitats. This type of information is also appropriate to include in a habitat assessment especially for lesser-known nongame species. Often, since many songbird species are predictable depending on what specific habitats exist on a tract, a comprehensive list can be generated and included as an appendix to an assessment. Any rare or special plants should also be captured in a report along with plenty of high quality photos. I am aware of several landowners whose favorite and most significant feature of their entire property is a rare plant community such as a pitcher plant bog, glade, or some other botanical treasure. And they might

have never known about it without a thorough inventory. And as stated earlier, detailed documentation and photos of physical elements like waterfalls, canyons, or caves are also important. If the assessment is being used as a marketing tool for selling a property, these features can become very valuable and the associated photos should be of high quality and aesthetically pleasing.

Finally, a supplemental section on the habitat potential of the property can be included in the assessment. Again, unless landowner objectives have already been defined, this part of the analysis will be based on some basic assumptions about the use of the property and interest of the owner or future manager. Most of the interpretation and information dealing with the habitat potential of a tract can be covered in the individual stands discussion sections, but a simple bar graph can also be used here to show relative value of existing habitats (Current Habitat Quality) versus the value of those that may be realized through some level of management (Potential Habitat Quality). This graph may include a number of common game and non-game species with the respective ratings for each species for both categories. These ratings can simply be qualitative based on the quality and arrangement of the habitats observed on a property, and do not have to be based on quantitative measurements. Again, assessing wildlife habitats and their value is almost always less exact than something like a timber cruise. Any charts or graphs should be informational but also easy to understand and interpret, just like the photos of the habitat components themselves. In summary, a comprehensive wildlife habitat assessment should be informational but also interesting and enjoyable to read.

The Ultimate Blood Trailing Tool! Blood Dogs



There is nothing more humbling or humiliating than making a marginal shot on an animal you have worked days, months or even years to get in your sights. You may have scouted your land and found the perfect place for a stand. You may have managed your land with good timber practices that produced the perfect food and cover that a mature buck called home. You may even have planted the perfect food plots that attracted a trophy buck to your land. In the end, all these efforts do not matter is you muff the shot. In 2010 our management efforts produced a buck we named Little Joe. We had done everything in our power to provide what he needed on our land. I

By: Ron Jolly Photos By: Tes Randle Jolly

Ron Jolly (ronjolly22952@ mindspring.com) is an award winning outdoor writer and video producer living with his wife, Tes, on their farm near Tuskegee, Alabama. Tes (www.jollysoutdoor visions.com) is herself an award winning writer and outdoor photographer. You've seen lots of her work in each issue of Wildlife Trends Journal including this issue. had done my homework and put a hang-on stand in the perfect tree. We had watched him grow into the largest buck we had ever seen on our east-central Alabama farm. On a crisp November morning everything was perfect to hunt that stand. I did everything right getting to it and in it. Little Joe did everything I expected as he approached from upwind to a distance of less than 30 yards. When he entered the shooting lane I had prepared and stopped broadside, I settled my 30-yard pin behind his shoulder just below midbody. I did my mental preparations of focus, breath, squeeze the release trigger. Then the arrow flew 6 inches left of target.

What followed was two of the worst days of my life as a hunter. I tried everything I knew to allow the arrow to do its job. That 8-hour wait was torturous. Not finding the buck at the end of a five-hour search set the stage for a long, sleepless night.

The next day's all-day effort only made the situation worse. A speck of blood here, a speck of blood there, but no Little Joe. Finally, the next day, my wife, Tes, found what the coyotes had left of that beautiful 145" Alabama buck. You may have never experienced the gut-wrenching ordeal of making a bad shot but if you hunt long enough you will. I would not wish it on anyone, but everyone should know it can happen. At the end my Little Joe nightmare I decided it would never happen to me again. There had to be a better way of following a blood trail.

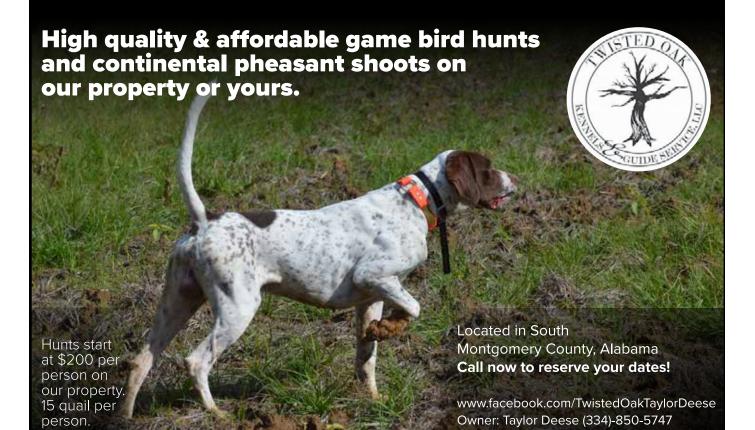
Three Professionals

My search for a solution to wounding and losing a deer led to blood trailing dogs. When I shot Little Joe, I did not know anyone in my area who had a dog capable of finding wounded deer. I did, however, know Bobby Culbertson. Culbertson is the head guide at Tara Wildlife in Mississippi. Tara is a first-class bow-only operation that harvests over three hundred deer each season. Blood dogs play a huge role in the hunter success that has made Tara a premiere bowhunting destination.

Bobby Culbertson—Vicksburg, Mississippi

"We use Labrador Retrievers, mostly male dogs," said Culbertson. "Our dogs are the big Labs and very few females have the stamina and drive to cut it here. We try to have at least one six-to-eight-month-old pup to start each season. Our hunters have specific instructions to not trail a wounded deer. If a deer dies in sight of a hunter, he can go look at his deer but he is not to move it. If we have a young dog, we allow him to find that dead deer. It's all about repetition!"

"These dogs are like family. They go with us everywhere we go. They work hard and by the end of the season they are pretty lean. Their chest and face are bald from the





Brian Sheppard, left, and his dogs have recovered hundreds of deer for hunters in Alabama and Georgia. Photo courtersy of Brian Sheppard

briars. These dogs often recover six, seven, eight deer a night! When a young dog is proficient at finding deer we know are dead we start letting him run with an old dog on a more difficult track. It doesn't take long for the pup to catch on. Normally, after one season the pup has developed into a legitimate blood trailer," said Culbertson. "These dogs are like pets most of the day. We attach a cowbell to their collars before turning them out on a track. The sight and sound of the bell flips a switch in these dogs. They are all business from that point on. We also use tracking collars in case we lose contact with the bell."

"We put one tracking dog on the track and hold another dog on leash. This dog is the catch dog. He is usually a big male that has a lot of grit. If the tracking dog jumps or bays a wounded deer we turn the catch dog loose. We can usually tell early on if we have a mortally wounded deer," said Culbertson. "The dog just acts different. He has his nose on the ground and is all business. I believe mortally wounded deer give off a unique scent and the dog recognizes this scent."

I asked Culbertson to explain to me just how valuable these dogs are to Tara's success. He summed it up by saying, "At the end of November last season we had shot 76 bucks at Tara, 28 of those died in sight of the hunter. We put the A-string dogs on the 48 bucks that ran out of sight. We took 43 of those bucks to the skinning shed. These dogs can do more on a track in five minutes than we can with a light in an hour. I'd have to say these dogs are invaluable!"

Brian Sheppard—Pine Mountain Georgia

Brian Sheppard is a for-hire tracker who lives in Pine Mountain, GA. He covers Alabama and Georgia and uses Hindes breed dogs to trail wounded deer.

"My dogs go back to the line of dogs bred by the Hindes family in Texas," said Sheppard. "These dogs are a mix of Blue Lace, Black Mouth Cur and Catahoula Leapord Cur. They have tremendous grit and are very good at finding wounded deer. They have found literally hundreds of deer that hunters could not find."

"I start my dogs by first making them my friend. I keep them with me as much as possible and let them know when they do things that please me. When you do that, they instinctively learn what is expected of them. Short, easy blood trails created with a deer leg sprayed with deer blood is how I start them. I start a dog at six months old and make the trails progressively more complicated. These dogs are bred to trail blood so it only takes a short while and positive reinforcement for them to understand what their job is."

"When a hunter calls me to help

find a wounded deer, I ask specific questions," said Sheppard. "Was the shot with a gun or a bow? Where did you hit the deer? How long has it been since the shot? Have you tried tracking the deer and did you jump it? The hunter's answers to these important questions determine how I approach recovering that animal. I like to wait three hours before turning my dog out on a gun shot deer and four or more hours on a bow shot deer. Shot placement plays a huge part as does an undisturbed trail."

"As a hunter you owe it to any deer you shoot to make every effort to recover the wounded animal. Sadly, calling in a blood dog is often the last resort. It should be the first thing you do if you suspect your shot was marginal. A good dog on an untainted trail greatly increases your chance of recovering your deer. Whether the dog finds your deer or not, you know you have done everything possible to recover it."

Harold Kawolski—Tuskegee, Alabama

In 2015, Harold Kawolski had a bad experience in the deer woods. He shot and did not recover the best buck of his life. After days of futile searching, Kowalski vowed that would not happen to him again. The



Brian Sheppard uses a mix of cur breeds for his blood trialing dogs. Photo courtersy of Brian Sheppard



Labrador retrievers make excellent blood trail dogs and are the breed of choice for the professionals at Tara Wildlife.

following spring, he tackled the task of purchasing and training a dog that could help him avoid the nightmare of losing another wounded deer.

Kowalski traveled from Alabama to Illinois to choose a pup he hoped to train into a blood dog from a litter of Slovensky Kopov puppies. He had done his homework and knew these puppies were descendants of a long line of blood trailing dogs. When he headed home to Alabama, he had chosen a male he named Otis.

The first few months were spent bonding with his new student and teaching basic commands such as sit, stay and come. When Otis was 6 months old Kowalski began the process of introducing Otis to blood trails. Since that time Kowalski has added a second dog to his kennel and started a business that helps other hunters recover wounded deer. Here is Kowalski's advice should you decide you want train a blood dog of your own.

"There are five essential traits every good blood trailing dog must have. Some you can teach, but others must come in the dog's DNA," says Kowalski.

- 1. **Drive**—Probably the most important trait for a tracking dog. Drive can't be taught. He either has an intense desire to hunt or he doesn't. To insure a dog has drive purchase one from a litter of proven hunting dogs that have been bred for the purpose of hunting. Drive is what makes a dog want to please you and succeed.
- 2. Grit—A good tracking dog needs to have grit. Grit is the

ability to get down and dirty when the situation calls for it. Whether the trail leads into the nastiest swamp or the ugliest briar thicket, a dog with grit will not quit until the handler calls him off.

- 3. Social Skills—Tracking dogs need to be friendly and well socialized. They will be around new people on the track and at hunting camp. Obedience training is key. Commands such as come, stay, leave it, hunt and sit should be taught using positive reinforcement such as treats and praise. Later, the reward for a job well done is chewing on a recovered deer.
 - 4. **Intelligence**—Tracking a wounded deer is like a puzzle the dog is required to solve. A

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Blood trailing dogs can find deer even in rainy weather and difficult terrain.



dog needs to have the ability to learn, remember what he has learned and apply it to the situation. When a dog is needed, something has gone wrong. The dog needs to have the ability to focus on the problem and figure it out without the handler's help.

5. Nose—Almost any dog can trail a lung shot deer spraying blood everywhere 30 minutes after the shot. Only dogs with the exceptional ability to smell will be able to track a deer shot through the guts 24 hours earlier and leaving no blood sign.

Breeds such as Labrador Retriever, Cur, Slovensky Kopov, Bloodhound, Lacie, Drahthaar and German Wire-Haired Dachshund are bred to have these traits. With proper training these dogs can be made into excellent blood trailing deer dogs.

These pros differ on breed of dog but agree on methods of training and characteristics needed in a good blood dog. Not all dogs are created equal regardless of breed. Some dogs are just better than others. If the dog you have chosen as your blood trailing deer dog does not have what it takes you will know within a year.

Mistakes Hunters Make

As a hunter, there are several things you can do to improve the odds of a blood dog finding your wounded deer. All three pros agree a dog can do just so much. What the hunter does or does not do can determine success or failure. Here are the five top things a hunter should or should not do to make a blood dog's job easier.

1. Do not disturb the evidence. Often trails are contaminated by hunters who are anxious to

The ultimate reward for a good blood dog and his handler is recovering a deer that a hunter could not find. find their deer. Walking the blood trail scatters the scent. Once the scent is on your boots a dog can smell it wherever you go making it difficult for the dog to determine the right trail.

• 2. Always mark where the deer was standing when the shot was taken. Also, take note of the direction the deer ran and the last place you saw it. This gives the dog and the handler an advantage in solving the riddle.

- 3. Know your land and who owns the land around your property. Be ready to call for permission if the trail leaves your property and goes onto a neighbor.
- 4. Be prepared to track at night. A good light will help you

move through the woods at dark and aid in following the trail. Be prepared to mark the trail and your progress. Marking the trail give you a place to return to if you lose the trail.

5. Do not push the deer. If you think you have made a marginal shot, wait at least 30 minutes and mark where the



A blood dog should be part of the family. He will be exposed to new people many times in his career.



Failing to recover a wounded deer is a heart breaking experience. A blood trailing dog greatly increases your chances of avoiding the tragedy of losing a deer.

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deer was standing. Call your blood dog handler and listen to his advice. It may be hours or even the next day before he can get there but do not worry. A good blood dog can follow a track many hours after the shot. Pushing the deer will often result in a lost deer.

A blood dog will not always find your wounded deer. They do, however, increase your odds of recovering a wounded deer exponentially. All three of the pros interviewed agree that if the dog does not find your wounded deer that deer is probably not mortally wounded. That may be a bitter pill to swallow but believe me, it is far less agonizing than wondering the fate of an animal.

Conclusion

There is no doubt that a trained blood dog greatly increases the chances of recovering a wounded deer. All dogs can smell infinitely better than humans. When trained to follow the scent of blood, regardless of breed, these dogs are a great tool for solving the mystery of blood trailing wounded deer. Regulations on the use of blood dogs vary from state-to-state. Some states require the dog be maintained on a leach. Other states allow blood dogs

leash. Other states allow blood dogs to roam free. Is it legal to use a blood dog at night in your state? What is a legal way to dispatch a wounded deer if the blood dog bays it?

Always consult your state and local regulations before employing a blood dog to recover a wounded deer. In Alabama there is no leash law and you can use the dog at night. You cannot use a firearm to dispatch a wounded deer unless gun season is open. A good handler will know what is legal and what is not. In the age of the internet, a good blood dog could be as near as a short Google search. Simply type in blood trailing dog, your state and county for results. I advise locating a blood dog before you are in a situation where you need one. Call that handler and discuss his rates and availability. If you are comfortable put his number in your phone.

If you are looking for a highquality archery hunt in the South you cannot go wrong at Tara Wildlife. They can be reached at 601-279-6506. If you live in Alabama or Georgia and need the services of a professional blood dog handler Brian Shepard can be reached at 706-718-1690. Harold Kowalski has dependable blood dogs ready for service in the Macon County, Alabama area. He can be reached at 334-421-1811. These are the guys I met and interviewed for this article. I am certain with a little effort you too can locate a blood dog in your area that could salvage your hunt of a lifetime!



A good blood dog will hold a wounded deer at bay until the handler arrives to dispatch the deer. Photo courtersy of Brian Sheppard

Tools for the "Do It Yourself" Pond Manager



By Scott Brown

Scott Brown is a Biologist and regular contributor to Wildlife Trends Journal with over 30 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 scott@southernsportsmanaquaticsandland.com or (336) 941-9056.

Newly planted bulrush and maidencane around a pond, all done with a 4'X 1" X 2" stick with a fork notched in the end to slide plants into bottom sediment without damaging roots.

here are many lake owners across the country that manage their own lakes and ponds with various levels of involvement. Some from necessity to save money and others because they have come to enjoy it and get a satisfaction from managing lakes (like their land) and witnessing the success of their efforts. With the internet, it has become easier to access articles (both instructional and scientific) and videos on "how to" do about anything regarding lake management. This magazine is a great source for tried and proven techniques for all fish and wildlife management. The authors have decades experience and have observed success first hand on what does and does not work in the field. Even then, not all techniques work everywhere in every situation. The one thing the internet or printed materials does not provide lake owners/do it yourself lake managers is experience, which is where a good professional lake manager can really make the difference between marginal results and exceptional results, depending on your goals and objectives. As stated earlier, over time, we have observed a joy from some of our clients and lake owners to get involved and perform some of the lake management duties themselves. There are many tools a lake owner can use to improve their waterbody. I will not be addressing the electrofishing

boat, but we do know of a few landowners around the country that have their own. But due to their cost, it is not beneficial to own your own unless you have a lot of lakes and want them sampled more frequently than recommended.

Tools for Monitoring Water Chemistry

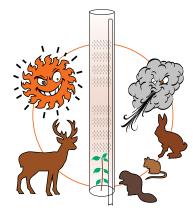
We always start any lake or pond conversation with water chemistry. As a professional, I use a multiparameter meter that checks temperature, dissolved oxygen (DO) pH and salinity. This meter can cost over \$4,000, but there are kits using titration that will also give you fairly accurate data on important pond management water quality parameters. In addition to the meter, we use a titration kit that checks Nitrites, Ammonia, Chlorides, Alkalinity and Hardness. These kits look like a large pool water testing kit, where mixing a few reagents with a specified

amount of sample water will change colors and the amount of reagent used indicates the reading for that parameter. There are kits available that can be used to check most important parameters in pond management, where the expensive meters are not necessary. The two most popular/dependable kits are LaMotte and HACH brand kits. There are also small meters available for testing individual parameters that cost much less than the professional instruments. There are even test strip kits that can determine a few of the important parameters. However, they are not very accurate and only measure in whole numbers, and some parameters need to be more precise. This type of equipment can be purchased from various vendors found on the internet.

A good **thermometer** is a must when you are conducting a fertilization program. Knowing the water temperature (1 - 2 feet below the surface) and when to start application (when water reaches 60oF) in the spring and stop in the fall (when temperatures drop below 65oF) is important. Starting a fertilization program late may result in excess emergent and submerged plant growth, clear water, and no planktonic algae bloom. Continuing to fertilize once the water temperature gets below 60oF is wasting fertilizer, money and will not grow planktonic algae regardless of amounts applied and may grow undesirable cooler water filamentous algae instead. Thermometers are also useful in winter to help determine if you have experienced any cold weather dieoff of a particular species, giving you an idea before spring arrives whether you may need to restock certain species. For example, threadfin shad will begin dying off when water temperatures throughout the water column get below 450 F. Many lakes may have a surface

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Sometimes a lake management tool is as simple as a shovel. Here the author is placing cypress trees around a 13-acre pond for habitat and aesthetics.

water temperature of below 450 F. but if there are areas with temperatures above 450 F, threadfin shad will survive winter in these thermal refuges with adequate dissolved oxygen and food. Deep water temperatures are harder to take with a traditional thermometer than a meter. Small electronic thermometers with a cord can be purchased fairly inexpensively, fitted with a long cord to acquire data from greater depths. Another important tool related to water quality is the Secchi disk. This tool is important for those conducting a fertilization program. The Secchi disk is round, divided into fourths with alternating black and white. This device checks visibility of water. When visibility is too great (above 36 in.), its time

to add fertilizer. If visibility is too low (below 18 in.) do not add fertilizer. Although this tool is fairly simple to operate and very important, many do it yourself lake managers do not use it at all or misuse it and they run their fertilization program incorrectly causing fish kills or generate undesirable aquatic vegetation growth. These can be purchased, or made from plastic or metal, painted and mounted on a stick with inch marks, or tied to a string and weighted. Slowly lower disk into the water until the pattern disappears, then gradually raise until the pattern is clear. Measure the distance from the water surface to depth of the disk and that is your Secchi (visibility) reading.

Tools Used to Manage Aquatic Vegetation

There are several tools that can be used by a pond manager for increasing or decreasing vegetation in a waterbody. Most of the time managing aquatic vegetation is spent decreasing unwanted vegetation, as opposed to increasing. For increasing vegetation extracting (harvesting) and replanting tools vary between species, or if plants are purchased, only planting tools are required. Some plants may be hand pulled, some species can be cut, while others need to be carefully dug out with a small shovel. Tools commonly used for planting vegetation in a waterbody include shovel, dibble bar (normally used for planting bare root trees in



The cutter and rake on left are great tools for removing undesirable vegetation and the dibble bar and small shovel on right are great for harvesting and transplanting desirable vegetation in your waterbody.



Water chemistry is the foundation of any lake management plan. This kit tests most parameters a lake manager is concerned about and costs considerably less than electronic meters.





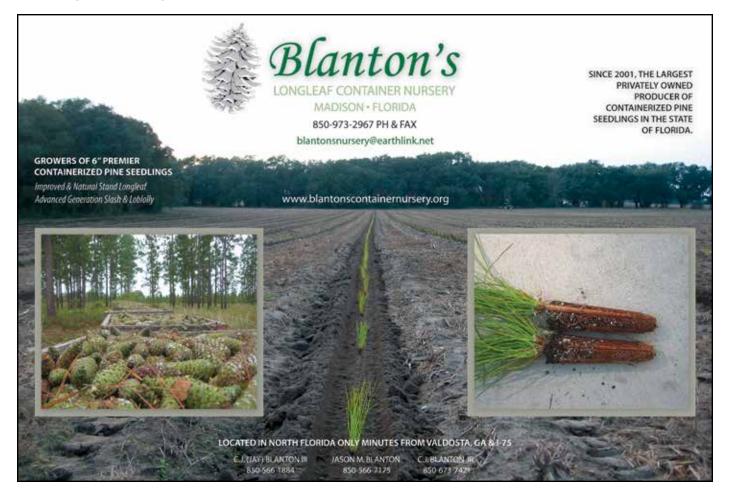
Some of the most common tools in small waterbody management. Aquatic vegetation is desired, but when it gets out of control, it needs to be treated early so it does not become an issue.

uplands) and 4' x 2" x 1" stick with a fork cut in the end to gently push plant roots into the soil along the water's edge or under water in the proper depth.

There is a wide range of tools for controlling unwanted vegetation.

From cutters and rakes, tank and backpack sprayers, mowers, weedwhackers tractors and for excessive jobs a back hoe can be used if you have access to one. There are a couple of cutters and rakes on the market for manually removing aquatic vegetation, some are separate tools and some cut and rake simultaneously. These are much larger than a traditional metal rake that would be used on your yard. I recommend using a separate cutter and rake, where the cutter is thrown into the water from shore and drug back on bottom cutting as it goes. After a section is cut free from the bottom, a large plastic rake is thrown out and drug back by a rope, pulling the vegetation with it. Depending on the type of vegetation, a swimming pool noodle can be attached to the back of the rake head, so it floats and does not sink through the debris, bringing more material back each throw. A simple lawn mower and weed whacker can be used for clearing

vegetation along the edge. There are a few weed whacker models where the head can be submerged and cut below the surface the length of the shaft. These are more expensive but do last longer in the aquatic environment and clear larger areas quicker than other methods. Both a backpack sprayer and small battery-operated tank sprayer are useful in applying label approved aquatic herbicides to shoreline plants, emergent and submerged vegetation. For best results, frequently go around small waterbodies and spot treat nuisance aquatic vegetation as it appears instead of waiting for it to become an issue and possibly requiring treatment of a larger scale that you may not be equipped. The small battery-operated tank sprayer (they come in 8,15- and 25-gallon sizes) can be placed in a UTV or golf cart and sprayed from the shoreline or placed in a small Jon Boat. As always, when using herbicides, wear the proper safety equipment and use



as directed by label for aquatic use or contact a professional herbicide applicator. In addition to knowing your equipment and the herbicide, knowing the effects the herbicide AND dying plants will have on water chemistry is imperative. Too many times, lack of knowledge results in a fish kill in your own waterbody or could cause issues down stream on someone else's property, in someone else's waterbody. Aquatic herbicide application is more complicated than treating upland plants due to the water chemistry changes that can occur from your actions.

One of the most important tools for the do it yourself aquatic vegetation manager is a source to help properly identify plants. Many misused herbicide occurrences are from misidentifying a plant and applying an herbicide that does not work on a particular plant and the water and fish reactions to your actions. Books, reliable web sites, State Fish and Game agencies and County Extension Offices are all great sources for plant identification. The University of Florida, Texas A & M University and Mississippi State University all have outstanding resources for aquatic plant identification and management techniques that work on each species. I do not recommend message boards or Facebook Groups for technical information regarding aquatic herbicide use. We highly caution applying your own herbicides in aquatic environments. There are several aquatic vegetation books available, finding a good one for your area is a must. The two I use were written in Florida, but are applicable throughout much of the southeast. Check your County and State regulations on applying your

own aquatic herbicides. Regulations vary between states, and some counties have their own restrictions in addition to State regulations, even on private property.

Tools Used to Manage Your Fish

Items like a **fishing pole**, **fine mesh** dip net, measuring board/yard stick, digital or spring scale, Fish Harvest data sheets, sources for proper fish identification and a filet knife are all tools that can be used to assess your fish population. Catching various species of fish present in your lake and documenting their length and weight at capture can help create a length frequency, for example, in largemouth bass. This will help document where the bottle neck is and what size bass to remove. Also, a success rate of fish per hour can identify if there are too many of a certain species, not enough and



This home-made measuring board works great for documenting lengths of fish caught during the year.



This black crappie is being weighed on an inexpensive accurate digital scale that can help track fish growth between electrofishing samples.

trends from year to year identifying peaks and valleys of good years and poor. Fish can be measured in inches to the nearest quarter and if a decent digital or spring scale can be afforded, weight recorded down to the nearest ounce or grams then converted to English units is best. When largemouth bass length and weights are collected, a Length-to-Weight analysis can be run on fish 10-inches and greater to calculate health or how robust they are.

A fine mesh dip net can be swooped through weeds and along shore to catch and identify non-sport species that may be forage or juvenile sportfish, and possible invertebrates such as crayfish, grass shrimp and insect larvae. The filet knife can be used to cut open stomachs of fish kept or small bass being removed to see what forage they are consuming, and this may help you build a species present list. All this does not replace a high-quality electrofishing survey, but it can help provide clues to what is going on between surveys and in addition to

occasional electrofishing.

A tagging gun is becoming a popular tool for private lake owners, where a fish's length and weight are recorded, date of capture, then tagged (tag number recorded) and released unharmed. Recaptured fish are again weighed and measured to see how much they have grown in the amount of time released. This can get to be a fun, inexpensive project, as tags only cost \$1 each. If you are not being diligent about gathering the data from recaptures the effort is useless and costly, and I recommend not doing it. Please research proper tagging techniques, as you can harm or kill the fish with improper technique and/or placement. If you discover you have too many catfish, instead of catching one at a time, set a few trotlines. Trotlines are cheap to make and allow you to fish many hooks at once and remove a greater number with less time spent actually fishing. Match the hook size to the size being targeted. If only large fish are desired, use bigger hooks to reduce

small fish getting caught. I covered many tools that can be useful to pond managers and probably forgot a few or don't use some that other professionals use. Whether an amateur or professional wanting top-of-the-line or just decent and works for a reasonable price, there are only a few suppliers of the profession's equipment. We frequently get our equipment from Forestry Suppliers, Pentair Aquatic Eco-Systems and Wildco. Things like hand tools, and spray/broadcast equipment we have gotten at Lowe's/Home Depot, Tractor Supply, Northern Toll and Harbor Freight. A good field book to help you identify fish is the Peterson Field Guide series. There is one for all of North America Freshwater fishes and others directed to certain areas of the country, which is the one I recommend. I don't endorse any of these companies, but we do buy field equipment from all of them, and probably a few others where a specific item is needed.

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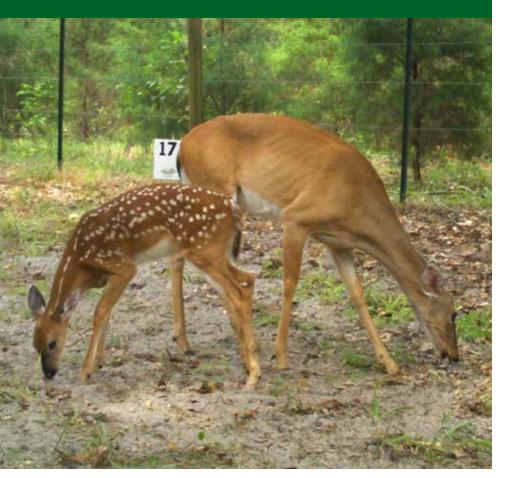
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Wildlife Trends Journal Management Calendar



Collecting fetal data from harvested does will provide insight into the reproductive performance of a deer herd.

Collect fetal data from harvested does

Tf breeding season or rut occurs in your deer herd before or around Thanksgiving, and your hunting season extends into late December or January, you should be able to collect and measure fetuses in does harvested later in the season. Similar to human fetuses, the age of deer fetuses is determined by their length. Commercially produced fetus scales are essentially rulers that can be used to measure and ultimately determine age of the fetuses. White-tailed deer fetal scales can be obtained from the Quality Deer Management Association. Knowing the date of harvest along with the age of the fetus allows you to determine the day of conception. With an adequate sample size of fetal data, this information can provide much insight to your deer herd's reproductive performance as well as the length and peak of the rut in your deer herd. This not only helps you determine when to put in for vacation next year (during the rut), but the length of the breeding season will shed light on the adult sex ratio of the herd. A tighter sex ratio will result in a shorter more intense rut due to increased competition for mates, while an unbalanced sex ratio will likely be represented by a long, weak rut due to less competition and length of time it takes bucks to "service" the abundant doe population. This information,

By Dave Edwards

December/January 2018 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 General Manager for Cabin Bluff Lodge and President of Tall Tines Wildlife & Hunting Consultants, Inc. Contact him at Dave.Edwards@ CabinBluff.com or 912-464-9328. along with hunter observation data, is a great and free way to help assess the status and success of your deer management program.

Strip disk areas to promote beneficial natural habitat for wildlife

Strip disking is simply one of the easiest, cheapest, and most effective management practices to implement to create high quality food and cover for wildlife. Strip disking is as simple as it sounds. To strip disk, you merely drop the disk far enough into the soil to lightly break the surface of the ground. Lightly disking the ground will provide enough disturbance to stimulate the natural seed bank of wildlife friendly weeds the following spring and summer. Heavy disking like you were preparing a clean seedbed for planting a food plot is not needed. One pass is generally enough to stir the ground up and expose bare soils

that will promote germination of desirable weeds. While not necessary, I often mow areas I plan to strip disk ahead of time. This makes disking more effective if vegetation is relatively thick or tall. It also knocks back/reduces competition of the undesirable or overgrown plants I am trying to replace. Strip disking at different times of the year will result in different plant communities. While disking can be conducted any time of year, it is normally done in spring or fall. Fall/winter disking normally results in a broadleaf plant response, while spring/summer disking promotes native grasses. Alternating the season in which you strip disk will add diversity to your property. Strip disking can be done in thinned pine plantations, relatively open mature pine stands, along the edges of food plots, or in open fields. Basically anywhere sunlight can reach the ground will work. To

optimize the benefit of strip disking, avoid disking straight lines. A serpentine pattern that winds through the habitat will provide the most edge and diversity.

Create a wind map for deer stands to assist in making good stand choices next year.

A deer's nose is its best defense. Through my career as a wildlife biologist I have been fortunate to have worked and hunted with many "lucky" hunters – those that seem to cross paths with the biggest bucks on the property year in and year out. These are the guys you see in magazines standing under a barn wall full of mounted bucks. Generally speaking, I am not one that believes in "luck". To me, luck is where preparation and opportunity meet. All of these hunters did their homework to understand how and why deer (particularly the mature bucks they

Hunting Stands - Wind Chart



Brickhill Plantation

Best Wind for Stand
 Do NOT hunt stand
 Margin Conditions

	NW	Ν	NE	E	SE	S	SW	W
Swamp	\oplus	\oplus	\oplus		X	X	X	
Log Stand	X	_	\oplus	\oplus	\oplus	X	X	X
Buck Ridge climber	X	X	X		\oplus	\oplus	\oplus	
Horse Pen	X	X	X		\oplus	\oplus		
Henrys	\oplus	×	X	· · · · · · · · · · · · · · · · · · ·	X		\oplus	\oplus
Canebrake	X		\oplus	\oplus	\oplus		X	
Osprey		\oplus	\oplus		X	X	X	
Camp Field	\oplus	\oplus	\oplus		X	X	X	
Garhole	X		\oplus		\oplus		X	

Creating a wind chart helps hunters make wise stand choices, but also helps reduce hunting pressure - by not hunting stands with wind directions that will disturb approaching deer.



Late winter can be a nutritionally stressful period for deer. Initiate feeding to supplement other food sources and help deer go into spring in good condition.

were hunting) used the property and set up stands accordingly. They all seem to have different thoughts on where and when to hunt the stands. However, the single common strategy used among ALL of these hunters was they closely monitored wind and only hunted stands under favorable winds. That is, they only hunt areas when the wind is right carrying their scent away from where they expected deer to come from. Although I often wear ScentLok and spray myself with odor neutralizers before heading to a stand, I am a firm believer that if a deer gets downwind, it is over (at lease in most cases). On properties that have hills or draws wind will behave differently across the property. As wind hits ridges or tree lines it is diverted and results in the wind changing directions at given

points on the property. You may be surprised that a true north wind can generate a south wind in some locations on a property. Something else that will cause "odd" winds is large bodies of water such as a lake or river. In the morning, cool air in the woods is often drawn out to the warmer water area creating different wind currents than the true wind reported. The opposite can occur in the evening. These situations often occur under light wind conditions. To create a wind map, simply record the true wind (wind direction without interference - wind the weatherman reports), then visit various spots on the property where deer stands are located and record the actual wind at these spots. Many hunters collect and record wind information over time, like while they are hunting, then compile what

they have collected to create a wind map. Once generated, a wind map is a valuable tool that will help you select which stand to sit, resulting in more successful hunts. Obviously, you still need to be in the right place at the right time. But these "lucky" moments happen more often when you have prepared and selected a stand where your scent is not a factor.

Scout now to improve hunting for next duck season

Doing a little homework this season, even if it means missing a hunt or two, will help you have better duck hunts next year. By this I mean take time to watch and glass wetlands, moist soil impoundments, beaver ponds, lakes, and flooded fields to find new areas to hunt. While food sources and water can change from year to year, in most cases ducks will be attracted to the same areas each year. Simply stage yourself somewhere that you can see the area you are scouting without spooking ducks. In most cases, a high vantage point that offers a landscape view is best as it often allows you to see where ducks are coming from as they approach and which direction they go when they leave. Good vantage points are often hills, highways, bridges, barns, and sometimes deer stands. The point is to get as high as you can so that you can see the sky where ducks are flying. I can't tell you how many times I have set up and scouted like this and found an even better spot by being able to see flocks from a

landscape level verses getting into the actual area (tight) where I thought ducks would be. In some cases, you may not see ducks go down but notice that lots of flocks headed in a certain direction. Relocating closer to the area you saw ducks headed on the next scouting mission will often reveal a new honey hole. As you begin to pin point areas ducks are using, close in tighter and start learning exactly where ducks want to be and how they approach when coming in. If it is still duck season, this is when I like to hunt the spot a couple times. Doing so will help you identify exactly where to build a blind this summer. So by next season, you will be sipping coffee

after putting out your spread of decoys while waiting on daylight and ducks to start flying.

Assess and flag or mark wildlife improvement projects such as new food plots, plot expansions, wildlife clearcuts, new roads, and roadsides that will be widened.

Because temperatures are cool (or cold) and the leaves are off trees where you can generally see better in the woods, winter is a great time to assess and mark areas where trees will be harvested or dozier work will be needed. Having the leaves off is certainly a big help because you can see what you are doing and visualize areas that you are flagging. Projects that may need to



Late winter is a great time to plant fruit trees that will enhance the wildlife and aesthetic value of your hunting property.



It's time to prepare and initiate dormant season prescribed burning.

be marked or flagged include small bedding areas that will be created with chainsaws (can run the chainsaw during the winter too while it is cooler), new food plot areas or expansions on existing plots, areas along roadsides that need attention next spring, etc. Besides flagging areas that will require heavy equipment and drier conditions, winter is also a good time to flag areas that will be planted in wildlife friendly orchards, supplemental hardwoods, areas to plant hedgerows for quail through fields, etc. Marking these areas in winter will not only be more pleasant for you and allow you to see what you are doing, but will ensure you are ready to tackle these

projects when conditions are right. Also, flagging in winter gives you time to think more about the areas you have flagged out before the project is implemented. The last thing you want is to be flagging just ahead of a logging crew and having to make hasty decisions on where you want a new food plot to be created.

Prepare dormant season prescribed burn plans and initiate burns as weather permits.

Fire is a management strategy that is relatively cheap to implement and results in better habitat for wildlife. If you have pines on your property, fire is an essential tool to improve wildlife habitat and should be on your annual task list. However, burn plans need to be well thought out and completed well ahead of time. With the exception of longleaf pine/ coastal plain areas, most understory burning in the Southeast is conducted during the winter dormant season. Acceptable relative humidity, temperature, fuel moisture, and steady, persistent winds often occur during this period. Cool season burns are generally conducted between December and spring green up. In the Deep South, try to conduct burns before March 15 to avoid destroying turkey nests. Cool season or winter burning is not only a good way to reduce fuel loads and control undesirable hardwoods in a pine stand (which reduces the chances of

a wildfire that can be detrimental). but is also a great way to stimulate new understory plant growth which will result in quality food sources for wildlife. Fire rotations (interval of time between burning the same area again) vary depending on your goals and habitat types but are generally every 2-5 years to promote quality wildlife habitat. It is also a good idea to strategically plan your burns so that you always leave some areas unburned. How much area to burn will depend on your specific property and habitats. However, do not feel that you have to burn large areas (50-100 acres or more) to make a difference and create quality wildlife habitat. Relatively small burn areas in the 5-10 acre range are easily done in a couple hours and will make a difference. Always check local burning laws and consult with an experienced burn manager before lighting a woodland fire. The U.S. Forest Service or your state forestry commission are great sources for obtaining more information regarding burning in your area. Check with the US Forest Service for information regarding prescribed burning as well as examples of a burn plan. It is also a good idea to coordinate your burns with a professional land manager that has experience burning.

Tree planting activities - start planning, ordering supplies, and planting

Strategically adding beneficial trees to your property adds habitat diversity, wildlife value, aesthetics, and can be a very gratifying project – especially once the trees mature and you see the value they provide. However, planting trees is more than just randomly plopping trees in the

ground. For the best results plantings should be well thought out with the future in mind. Besides the obvious "where" to plant trees, you need to consider which species are suitable and do well in your soils/ climate, how large they get, and future maintenance needs. Once trees are planted, they will require a bit of care to ensure good survival and growth during their first couple growing seasons. Site preparation is important to reduce competing weeds to enhance tree seedling survival during the first growing season. Depending on the situation, an initial mowing may be needed to provide a clean working area and reduce weed competition. There are many species and varieties of soft (e.g., fruit trees) and hard mast (e.g., oaks) trees available that will benefit wildlife on your property. I generally like to plant a diversity of trees that will provide various food sources throughout the year. Supplemental tree plantings not only provide additional food resources for wildlife on your property but can provide exceptional enhancements to the aesthetics. Common areas to add supplemental tree plantings include road intersections, roadside management areas, old field habitats, and in or along the edge of fields or food plots. The key is to plant them in areas that will receive sunlight. Some trees require crosspollination to produce fruit so, if needed, be sure to plant them in small groups. I recommend contacting your tree supplier/ nursery, such as the folks at The Wildlife Group, well ahead of planting time. They can help you determine which trees will grow and produce best on your property, help you develop a planting plan based

on your goals, and ensure the trees and other supplies are ready when you are.

Provide supplemental feed for deer

Even in the South, late winter can be a nutritionally stressful period for deer. They have endured the rigors of breeding season and natural food sources can be limited. Providing supplemental feed during this time can boost energy and nutrition. This recommendation/activity is directed towards landowners or managers that have done a good job managing their natural habitat, food plots, and deer herd conditions. That is, before thinking about starting a supplemental feeding program for deer on your property, you need to take care of the "important" things first. In other words, you cannot hang shutters if you do not have a house – and you will not grow big bucks and a healthy herd with supplemental feed alone. It is a supplement to other management strategies and activities. However, when done in combination with other core management practices, supplemental feeding can be valuable for deer. Be sure to check your local game laws before providing feed on your property. Many states do not allow the use of feed during hunting season. Ideally, providing supplemental feed throughout the year is best, but supplemental feed will be most used and most valuable for deer in late winter and summer. These are periods when natural food availability is at its lowest. So if you have a limited budget and cannot or do not want to feed throughout the year, provide it during the periods deer need it most.





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