



Wildlife Trends

JOURNAL

JULY/AUGUST 2012

VOLUME 12, ISSUE 4



INSIDE THIS ISSUE

Fertilizer Fundamentals – Maximize Nutrient Availability in Your Food Plots

By Ryan Basinger

Structure for Your Pond

By Scott Brown

Integrating Alfalfa into Food Plots – in the SOUTH?

By John Frank Deese

Pig Trapping: 10 Biggest Mistakes (Numbers 5 - 1)

By Stephen S. Ditchkoff

Wildlife Trends Journal Management Calendar

By Dave Edwards

Wildlife Trends Journal Pond Management Calendar

By Scott Brown

BRING 'EM CLOSE



1-800-227-8941

WILDLIFE.PURINAMILLS.COM

TO FIND YOUR LOCAL PURINA® CERTIFIED EXPERT DEALER

 **PURINA**®

A DIFFERENCE YOU CAN SEE™

ONLY AVAILABLE IN SELECT MARKETS AND AT SELECT DEALERS. REGULATIONS FOR FEEDING OF BIG GAME CAN VARY FROM STATE TO STATE. PLEASE CHECK WITH YOUR LOCAL GAME AND FISH DEPARTMENT FOR THE PROPER USAGE OF THE BIG GAME FEEDS.

©2012 PURINA MILLS, LLC



Earl Says...

I always enjoy exhibiting at hunting shows around the south because it gives me a chance to see a lot of my subscribers as well as share what we do at *Wildlife Trends Journal* with folks who may not have heard about us. But mostly I get the chance to see new products and services for hunters, landowners and wildlife enthusiasts that I can share with you.

It looks to me that the economy still has a lot of folks holding on and not spending as much money as in the past. But we all still need those necessities like ammo, tree stands, food plot seed, fertilizer, ATV's, etc. It's like Christmas shopping going from booth to booth. If you get the chance, attend one of these shows and you'll see what I mean. The month of August will be a busy one for us exhibiting at a few of these shows and we would love to see you if you're in the neighborhood. Here's a schedule of the upcoming shows we'll be attending:

August 3-5 – Mississippi Wildlife Extravaganza, Jackson, MS

August 10-11 – Land and Wildlife Expo – Nashville, TN

August 17-19 - Perry Buckarama – Perry, GA

Come see us at a show near you this summer and let's talk some hunting!

Andy Whitaker
Publisher/Editor



Wildlife Trends JOURNAL

101 MARKET PLACE, SUITE 500
MONTGOMERY, ALABAMA 36117

www.wildlifetrends.com
800-441-6826

PUBLISHER/EDITOR
Andy Whitaker

DESIGN
Kim Koellsted/Craftmaster Printers, Inc.
Craftmaster Printers, Inc.
687 North Dean Road, Auburn, AL. 36830
(800) 239-3293

CONTRIBUTING AUTHORS

Dave Edwards
Dana Johnson
Brant C. Faireloth
Kedric Nutt
Brian Sheppard
Wes and Leslie Burger
Dr. Wes Wood
Theron Terhune
Marion Barnes
Ted DeVos
Bryan Burhans
Keith Gauldin
Rodney Dyer
Dr. Keith Causey
Gary Springer
Dr. Stephen Ditchkoff
Anna Huckabee Smith
Tes Randle Jolly
Kevin Patterson
Ryan Basinger
G. Ryan Shurette
Matt Euten
D. Clay Sisson
Kent Kammermeyer
Allen Deese
Scott Brown

For Wildlife Trends editorial, advertising, or
change of address:
1-800-441-6826
info@wildlifetrends.com

Wildlife Trends Journal is published to provide landowners, land managers and wildlife enthusiasts the latest research-based information in wildlife and game management. Article authors are carefully selected for specific expertise in their respective fields. Subscribers receive six bi-monthly issues and a handsome library binder to save their past issues.

Articles may be reprinted with the permission of Wildlife Trends editorial staff.

Cover photo by Ryan Basinger

Fertilizer Fundamentals – Maximize Nutrient Availability in Your Food Plots

By Ryan Basinger

Ryan Basinger is a wildlife biologist and manager of Westervelt Wildlife Service's wildlife consulting business where he assists private, industrial, and corporate landowners throughout the Southeast in reaching their property management goals. Ryan holds a bachelor's degree in wildlife science from Mississippi State University and a master's degree in wildlife science from The University of Tennessee.



If you have picked up an issue of *Wildlife Trends* or other management-based publications containing articles related to food plot management over the last decade, you have been beaten over the head with the notion to collect soil samples to determine lime and fertilizer requirements needed for healthy, productive food plots. In fact, you are probably tired of reading about it. However, few articles take this recommendation further by explaining how to interpret the results of a soil sample and apply them to your food plot program.

Indeed, crops will germinate and grow without fertilizing them. Also, they will respond to any fertilizer treatment applied to them. However, it is important to consider why you plant food plots. Do you want to attract more deer? Do you want to grow bigger deer? Or do you want to manage a food plot program that maximizes forage production, nutrient availability, and attraction that allows you to realize the

full potential of your overall property management regime? If the answer is yes, then a basic understanding of the fundamentals of soil management and proper application is required.

Since we are on the brink of the fall planting season I thought it would be beneficial to discuss the process of fertilization and how to formulate a recipe that is not only easier on your wallet, but satisfies the needs of forages you will be growing. The bottom line is that forages are simply the vehicle that delivers the goods from the soil into the mouths of deer and other wildlife. If nutrients are lacking within the soil, food plot consumers (deer, turkeys, etc.) will not obtain the maximum benefit and is counterproductive to the goal of a highly productive food plot program.

I am amazed at the number of food plotters that actually go to the trouble of collecting soil samples from their food plots, yet apply the same dose of 200-300 lbs./acre of 13-13-13 year after year, despite what the soil sample calls for. This strategy is not only a waste of time, but also restricts your ability reach the full potential of a food plot program that could significantly increase the nutritional plane of the property you hunt and manage.

Key Nutrients in Fertilizer

The primary nutrients required in the greatest amounts for plant growth include nitrogen (N), phosphorus (P), and potassium (K). They are in this order and correspond to the numbers on a bag of fertilizer, which represent the percentage of each nutrient contained within the bag. For example, one 50 lb. bag of 10-10-10 fertilizer contains 5 lbs. N, 5 lbs. P, and 5 lbs. K. Below is a summary of each primary nutrient and the role it plays with regard to plant growth and overall production.

Nitrogen – nitrogen is the primary nutrient in plant growth and increases palatability (a measure of attraction), which results in higher quality forage. It also increases protein levels in plants,

which is important for many bodily functions and aids in antler development, milk production in lactating does, body growth, development, recovery, etc.

Phosphorus – phosphorus is essential for growth of roots and leaves within plants and influences the ability for plants to use other nutrients within the soil. It plays a major role in bone and tissue growth, which is essential for fawn development and antler production. Phosphorus also plays a significant role in seed production, which should be of particular concern for those who manage grain plots for upland game birds.

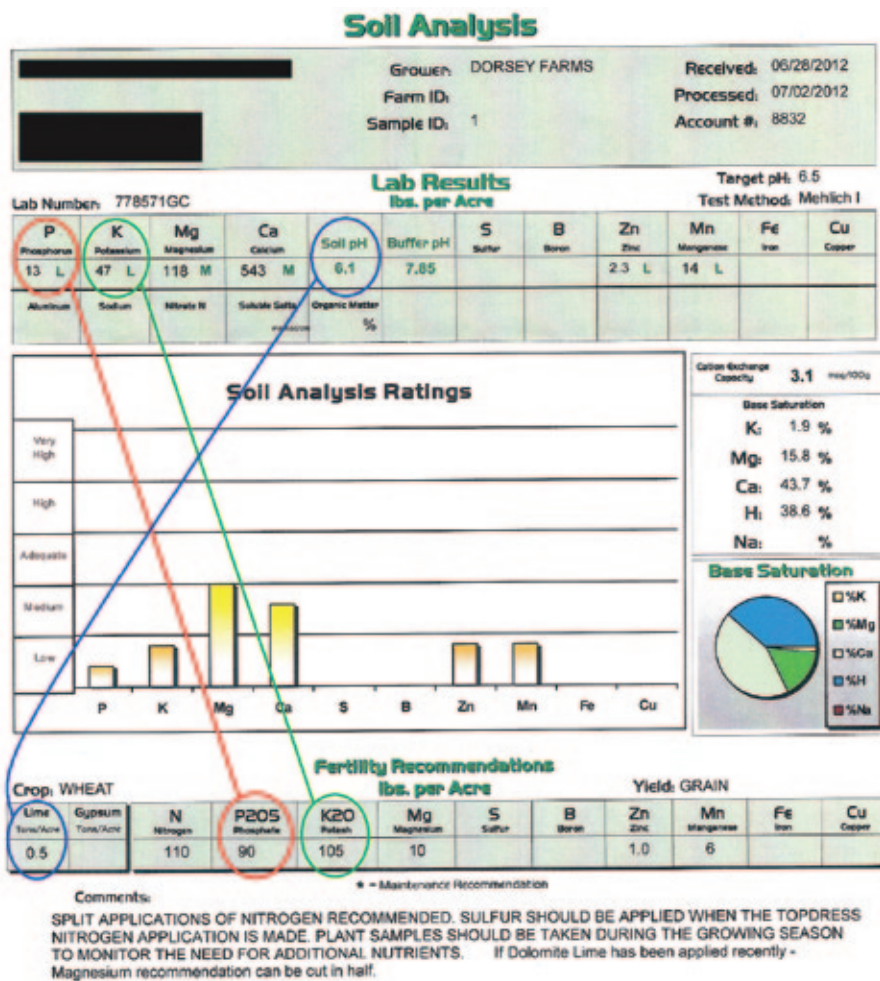
Potassium – potassium has many roles in plant growth and development, such as regulating water and nitrogen uptake, aids in nutrient transport, and builds plant proteins. It also aids in development of plant root systems, which is critical for drought and disease resistance.

Types of Fertilizer

Now that we have a clear understanding of the key nutrients contained within fertilizer, let's examine the primary types of fertilizer. In food plot settings there are basically two types of fertilizer that will be used – “complete” fertilizer or “high analysis” fertilizer.

A complete fertilizer contains a certain amount of the three primary nutrients within the bag, such as 13-13-13 or 17-17-17. With a complete fertilizer, the amount of each nutrient within the bag is relatively low. For example, a 50-lb. bag of 13-13-13 contains 6.5 lbs. N, 6.5 lbs. P, and 6.5 lbs. K.

Conversely, a high-analysis fertilizer contains a large amount of a specific nutrient, such as triple super phosphate (0-46-0) or potash (0-0-60). A bag of 0-46-0 contains 23 lbs. P but does not contain any N or K. Likewise, a bag of 0-0-60 contains 30 lbs. K. Thus, it is almost always recommended to use high-analysis fertilizers if available to





Collecting soil samples allows you to determine the proper amounts of lime and fertilizer needed for producing healthy, productive food plots.

save time, money, and avoid applying unnecessary fertilizer at levels that aren't needed.

A Real World Example

A basic soil test will provide you with information similar to the one illustrated here. The primary points of interest will be the soil pH (sometimes referred to water pH depending on the lab used) and the levels of phosphorus (P) and potassium (K). The amount of nitrogen (N) present is not provided because N levels are not stable and fluctuate throughout the year.

For this particular sample you will notice that wheat was recorded as the crop to be grown and the recommended fertilizer rates are given based on nutrient levels detected from the analysis and the needs of the respective crop for optimum production. Thus, it is important to state the crop you plan to grow as different crops require nutrients at different levels.

Soil pH was determined to be 6.1 and the recommendation is to apply 0.5 tons of lime per acre, which will allow nutri-



BACH & DEVOS
FORESTRY AND WILDLIFE SERVICES, INC.

Woodland Mulching: It Can Be Addictive!

**Land Clearing- Logging Clean-up - Firelanes - Roads
call us at 334-269-2224**



Bach & DeVos operates two woodland mulchers/grinders on forestry based carriers.

Other services include timber sales, forestry/wildlife plans, burning, site preparation and planting, GPS and mapping, land sales.

ents (fertilizer) to be fully available for plant uptake. The amount of phosphorus present in the soil was determined to be low (only 13 lbs./acre) and the recommendation calls for an additional 90 lbs./acre. This can be achieved by applying 200 lbs./acre of triple super phosphate (0-46-0) or diammonium phosphate (or DAP), which is 18-46-0. Remember, the middle number represent the amount of phosphorus in a bag of fertilizer. A 50 lb. bag of either of these fertilizers contains 23 lbs. of phosphorus ($46/2 = 23$ lbs.). Thus, to determine how many bags you will need, divide the amount recommended (90 lbs.) by the amount in one bag (23 lbs.), which equates to approximately 4 bags per acre (or 200 lbs.).

The same process applies for determining how much potassium to apply. The soil sample analysis reported that 47 lbs./acre of potassium is currently available, which also falls within the low range. The report recommends adding 105 lbs./acre, which is most easily achieved by using potash (0-0-60). The



Renting a fertilizer buggy is inexpensive and allows you to efficiently apply bulk fertilizer more quickly and effectively



Specializing in Quality Grown Container and Bareroot Trees.

Pears

Gallaway
Phoenix
Senator Clark
TS Hardy
Author Ledbetter
John Ledbetter
Dixie Delight
Big Mama
Orient
McKelvey
Gate

Apples

Brogden
Anna
Royal Limbertwig
Autumn Rush
Gibson Gold
Gala
Horse
Arkansas Black
Yates

Crabapples

Callaway
Transcendent
Lincoln
Dolgo
Dozier

Other Plants

Chestnuts
Chinquapins
Oak Trees
Japanese Persimmon
Blackberries
Figs
Plums
Honeysuckle
Blueberries

Supplies

Plantra Jump Start Tubes
Fiberglass Stakes

See Us on Facebook !!



The Wildlife Group

2858 County Road 53
Tuskegee, AL 36083
800-221-9703

www.wildlifegroup.com
email Allen@wildlifegroup.com

Place orders early to insure availability!



Improving Wildlife Habitat is Our Business!

last number on a bag of fertilizer represents the amount of potassium present. A 50 lb. bag of potash contains 30 lbs. of potassium ($60/2 = 30$ lbs.). To determine how many bags of potash to apply per acre, divide the amount recommended (105 lbs.) by the amount contained within one bag (30 lbs.), which equals 3.5 bags per acre (or 175 lbs.).

The soil sample analysis also calls for Nitrogen to be applied because wheat is the crop to be grown and requires nitrogen for optimum production. The most sensible option is to use ammonium nitrate (34-0-0), which contains 17 lbs. of nitrogen in a 50 lb. bag ($34/2 = 17$ lbs.). To determine the number of bags needed, divide the amount recommended (110 lbs.) by the amount in one bag (17 lbs.), which equals 6.5 bags per acre (or 325 lbs.). It is also important to consider that if you use diammonium phosphate to meet phosphorus requirements (described above), each bag also contains 9 lbs. of nitrogen and should be factored in when determining how much ammonium nitrate to apply (less ammonium nitrate will be needed). Also notice the soil analysis recommends splitting the nitrogen application. Thus, you can apply half the recommended amount (approximately 150 lbs./acre) at planting and incorporate into the soil by disking, then top dress the remainder about a month later just prior to a rain.

For this particular soil sample, the following amounts of fertilizer are needed per acre to realize optimum

wheat production:

- N – 6.5 bags ammonium nitrate
- P – 4 bags triple super phosphate
- K – 3.5 bags potash

Rent a Fertilizer Buggy

Other than the \$8 you spent on the soil sample, the \$35-50 it generally costs to rent a fertilizer buggy is well worth it. Most buggies will hold about 3.5 tons of fertilizer (7,000 lbs.). Thus, a fertilizer application of 300 lbs./acre would allow you to treat approximately 23 acres with a full buggy if needed. Also, don't feel like you need to have a full buggy to justify renting it. I've rented buggies in the past with less than 1,000 lbs. of fertilizer in them. Although I'm sure it got a few chuckles out of the guys at the feed store, it made my job much easier.

Because a fertilizer buggy can be pulled behind a truck, it doesn't tie up a tractor as do conventional cyclone spreaders. Doing so will allow the tractor/operator to be more efficient by performing other food plot projects simultaneously.

Lastly, another consideration is that some farmer's co-ops and feed stores do not carry high-analysis fertilizers in a bag and must be purchased in bulk. Renting a buggy will save money by allowing you to purchase these fertilizers in bulk, which will require much less fertilizer to reach nutrient levels needed to achieve optimum plant growth and production.

The Law of Averages

I've never been accused of splitting hairs, thus, I'm not afraid to apply 45 lbs./acre of phosphorus to a food plot when the soil sample recommends 50 lbs. if it makes life easier. The underlying goal should simply be to get as close as possible to the recommended amount. In some cases, fertilizer requirements for individual food plots across a property will be "relatively" similar. There are exceptions, such as newly created fields that do not have a history of lime or fertilizer or in cases where soil types vary drastically across the property. In these situations, different prescriptions will be needed. However, when recommendations for individual fields are similar, calculating an average will save time during the application process.

Below is an example of how to develop a standardized fertilizer recipe for food plots with similar nutrient levels, assuming the same crops will be planted. This scenario is most likely to occur in fields with similar soil types and management history.

Based on the soil samples collected within the 5 food plots below, average nutrient recommendations were calculated since nutrient levels were relatively similar. Also note the recommendation for nitrogen was constant for all fields (40 lbs. per acre). This is because clover is being planted, which has the ability to produce its own nitrogen. Some of this nitrogen will be available for use by wheat and oats. If clover is

Summary of Soil Sample Recommendations

Crop - Wheat, Oats, Crimson Clover	Nutrient Recommendations (lbs./acre)			
	Acres	*N	P	K
Food Plot				
Swamp Field	2	40	60	90
Funnel Field	1.5	40	40	70
Ridge Field	2.5	40	60	80
Cadillac Field	4	40	50	60
Runway	5	40	70	90
	15	40	56	78
		Nutrient Averages		

not planted, the recommended amount of nitrogen to apply would increase significantly.

According to the summary table above, I have formulated a “fertilizer recipe” to determine the types and total amounts of fertilizer to apply to achieve the recommended nutrient levels for each food plot (see below).

The fertilizer recipe above was calculated based on the average amount of each nutrient recommended for the 5 food plots. Remember, to determine the amount needed, simply divide the recommended amount by the amount of the respective nutrient in one bag of fertilizer.

Once total amounts are determined for each nutrient, simply contact your local feed store (or wherever you purchase fertilizer) and have them mix the fertilizer and put it in a buggy (if available). Based on the 15 acres that will be planted in this example, you would need a total of 1,800 lbs. ammonium nitrate, 1,875 lbs. triple super phosphate, and 1,875 lbs. potash. Lastly, set the fertilizer buggy at the desired application rate of 370 lbs. per acre and let it eat (most buggies have a table explaining where to set the gate for applying the desired amount). If using a buggy is not an option, simply multiply the number of bags needed per acre for each nutrient by the total acreage (15). This will determine how many bags are needed.

Also notice that high analysis fertilizers were used in this example because it significantly reduces the amount and cost of fertilizer needed to fulfill the

recommended levels for optimum forage growth and production. For example, if you used a complete fertilizer for this scenario, such as 13-13-13 to achieve the recommended amount for phosphorus, it would require nearly 9 bags (or 450 lbs.) per acre. Remember, a 50 lb. bag of 13-13-13 only contains 6.5 lbs. of phosphorus. Furthermore, you would need to apply additional potassium to meet the recommended amount needed, which would be even more costly. Thus, it is most sensible to use high-analysis fertilizers if possible.

Calculate Food Plot Acreage

Another tip to streamline fertilizer and lime applications is to calculate the exact acreage of each food plot that you manage, which is most easily accomplished with a GPS unit or rangefinder. Knowing the exact food plot acreage also helps to combat rising fertilizer costs. I can’t tell you how many times I’ve pulled up to a “5-acre field” with a landowner that turned out to be 2 acres max! Fertilizer (and seed) is too expensive to guesstimate acreage and apply more than necessary.

Conclusion

Hopefully the information provided will help you develop a basic understanding of fertilizer and its role in maintaining a successful food plot management program that raises the nutritional carrying capacity for deer and other wildlife on the property you manage. I realize that all the numbers,

ratios, and calculations used in this article may seem a little confusing, however, it will begin to make sense over time with practice. All you really need to know is how to interpret a soil sample report and how much of each nutrient is contained in a bag of fertilizer – the rest is simply putting the two together. If you need further assistance interpreting the results of your soil samples, contact your county extension agent.

As a result of recent increases in the cost for fertilizer combined with the lack of a general understanding among hunters and land managers with regard to optimizing food plot production, many skimp on fertilizer applications. They often buy the cheapest fertilizer blends on the market and apply it at rates well below the levels that are needed to maximize forage growth and production, plot longevity, and overall attraction. This is unfortunate because so much time and money is invested in managing food plots, while deer and other wildlife do not reap the full benefit. Considering this, if your food plots are managed to reach their full potential, your odds for success will increase significantly. Will this be what sets your food plots apart from your neighbors this hunting season?

References:

Harper, C. A. 2008. *A Guide to Successful Food Plots: Blending Science with Common Sense. UT Extension, PB 1769. Knoxville, TN. 168 pages.*

Fertilizer Recipe

Fertilizer Type	Number of bags needed per acre	Pounds needed per acre	Total pounds needed
N - Ammonium Nitrate (34-0-0)	40 lbs / 17 lbs = 2.35 bags	120 lbs	15 acres x 120 lbs = 1,800 lbs
P - Triple Super Phosphate (0-46-0)	56 lbs / 23 lbs = 2.5 bags	125 lbs	15 acres x 125 lbs = 1,875 lbs
K - Potash (0-0-60)	78 lbs / 30 lbs = 2.5 bags	125 lbs	15 acres x 125 lbs = 1,875 lbs
Totals		370 lbs	15 acres x 370 lbs = 5,550 lbs

Structure for Your Pond

By Scott Brown

Scott Brown started Southern Sportsman Aquatics & Land Management in Spring 2007 and now has clients from Texas to Florida. Scott can be reached at scott@southernsportsmanaquaticsandland.com or (214) 383-3223.



This pond, built many decades ago, has both live and dead cypress trees in it providing additional habitat for the fish population. This particular pond has a quality redear sunfish, largemouth bass and black crappie population.

Summer months are a good time to add structure to your pond. There shouldn't be much vegetation planting or spray work, feeding should be taking care of itself and even angling success probably has slowed down a little. So now is a great time to get wet, get cool and provide extra shoreline and offshore habitat for your fish population.

There are many types of structure made from both artificial and natural materials. Structure can improve quality and increase fish numbers, while providing a location for fish to congregate and make them easier to catch for youth and novice anglers. There are several different manufacturers that now offer fish attractors pre-assembled or in kits you put together. I prefer artificial products that are safe for the environment and never need replenishing or replacing. Natural materials (generally cheaper) come in the form of tree roots, trunks, tops, Christmas trees, boulders and

gravel/rock. Artificial materials over the years range from tires, concrete, aluminum, iron, pvc and other various plastics. Structure is best placed on the lake bottom prior to filling, but can be added with the lake full of water.

If clearing an area for your lake is required and includes cutting or removing trees (roots and all), consider using the root balls, trunks and tops. If an area is to be flooded to form your lake, leaving trees standing along an edge or in a marsh-like area, knowing they will die, is acceptable as these will provide both fish structure and bird loafing and nesting habitat simultaneously. These remaining trees will eventually die, except cypress, post flooding and eventually rot off at the water line. But depending on the species, it could be decades before they break off. Cutting some trees off so their trunks remain standing to create vertical structure is also recommended. If several trees close together are cut off where eight feet of water will be, approximately three feet below the surface creates great vertical structure. Just be sure these underwater stumps do not interfere with other lake activities such as boating, swimming or compromising the dam. If there is an over abundance of trees around an existing lake, thinning can improve growth of remaining trees and if close enough to water, hinge cutting can drop the top into the lake while leaving it partially attached and anchored on shore. No woody structure should be left standing on or buried in the dam, as the decomposing process could weaken the dam causing leaks or failure. Root balls pushed together with a little dirt on the trunks to keep them from floating make great underwater condos. Whole trees lying with their feet on shore and tops out under water also make great habitat. Some fish species attach their eggs on or under submerged woody structure such as large limbs and logs. Other forage such as some aquatic snail lay their eggs on woody structure above the

waterline.

Christmas trees have always been used for structure. They work well for about 3-5 years, but then become ineffective as all the limbs break off and the only thing left is a trunk, concrete block and possibly a float. Christmas tree fish attractors need to be refurbished about every five years. Over time if you continue to add to it they will become a nice fish attractor of trunks and cinder block. Placing 3-5 in a bunch, suspended 1-2 feet off the bottom is best each time. Again place these where they will not interfere with boating or swimming activities.

Concrete culverts and pipe also make good habitat for fish and possible spawning areas for channel catfish.

Pipes laid horizontally in groups of three or four create a nice offshore "reef". Another product of concrete used is stacking cinder blocks together so fish can occupy the holes. Wooden pallets can be wired together and weighted down with a few cinder blocks to make a great fish condo.

Another form of structure is using rocks or gravel. These areas are beneficial for feeding and/or spawning. Especially in areas where there is a lot of organic material (muck) on the bottom, gravel beds become spawning locations for bass and bream. These are easy to install prior to flooding and can be done with a large Jon boat, jack and plywood platform with an already full waterbody. I have seen trays 4' X 4'



This tree was removed from a pine planting and has a second life providing habitat for fish and wildlife along the lakeshore.

PRINT responsibly.

Craftmaster is proud to be an approved provider of FSC®-certified papers.



By choosing to print on paper that is Forest Stewardship Council™ Chain of Custody certified, you help create demand for responsibly managed resources, which in turn motivates more suppliers to adopt good stewardship practices.

Buying products made from wood doesn't have to add to the problems facing our planet. Visit our website to find out how you can purchase quality FSC® Certified wood products and help sustain our forests for future generations.



CRAFTMASTER PRINTERS, INC.



334.502.3456 800.239.3293 687 North Dean Road Auburn, Alabama 36830 www.craftmaster.com

ENHANCE YOUR LAND AND YOUR EXPECTATIONS



- MULCHING | LAND CLEARING | WILDLIFE MANAGEMENT
- PROPERTY DESIGN | PROPERTY MAINTENANCE | FOOD PLOTS | BUSH-HOGGING
- WILDLIFE CAMERA SURVEYS | SHOOTING HOUSE CONSTRUCTION & PLACEMENT
- ROAD DESIGN & CONSTRUCTION | FENCING | PASTURE REJUVENATION SERVICES
- AERATION | FERTILIZATION | OVERSEEDING | MOWING
- LAKE & POND DESIGN AND CONSTRUCTION
- CABIN, BARN & SHED DESIGN AND CONSTRUCTION | EQUESTRIAN SERVICES



ENJOY YOUR INVESTMENT

Birmingham, AL | www.blackjacklands.com | 205.365.5205

made of 2" X 4"s and plywood with approximately 2-3 inch thick gravel placed in areas with excessive organics and bream begin spawning in less than a week after they were deployed. To deploy these it is best to set the frames and add gravel. Otherwise a large backhoe or small crane is required to swing them out and lower into the water. I recommend river or limestone gravel, but use what is common in your area. Place gravel beds in approximately 3-6 feet of water.

Concrete rip-rap, frequently used to stop dam erosion, is also good structure. It can support both prey and predators small and large depending how big of rock is used. It can also help create a crawfish forage base by providing hiding areas for crawfish so all are not consumed shortly after stocking. Again, some forage species of minnows and other forage animals will use these areas to nest or attach eggs.

All the structure above, in addition to providing hiding areas for fish, are gathering places for algae and small plants where invertebrates (insects, worms, etc) gather to feed, which in turn attracts small fish that attract larger fish. Generally, artificial materials take slightly longer for things to start growing on them, but they eventually do get covered in algae and other plant and animal life and look more natural afterwards.

The final point to consider is how deep to place your structure. The most common mistake individuals make is dumping or placing all fish attractors in the deepest spot on the lake. This is not always the best location, as the dissolved oxygen certain times of the year may be too low or non-existent to support fish so they will not use the area. Put a few in deeper holes and a few in water 4-8 feet deep. If you have regular water chemistry parameters collected by a lake manager, they will be able to tell you at what depths to place your structure to get the most out of them. You will learn over time some attractors may get used year round, and some only during certain seasons. This will help you become a more successful and efficient angler.

Following are instructions on how to build what I feel is an excellent attractor that will last forever without straining your budget. These attractors come from years of observing and building on the market designs. These can be built for about \$75 each in materials and provide 144 cubic feet of habitat that never needs refurbishing like natural materials. They are easy to build and easy to deploy in a pond or lake either empty or full of water. We have discovered this design can be deployed and always lands foot first as long as it is deep enough to flip itself upright prior to hitting the bottom and the bottom slope is not excessively steep.



Once flooded, these culverts and pipes become hiding areas for bass, catfish and when not already occupied by the previously mentioned, bream.



**Southern
Sportsman
Aquatics & Land
Management**

Services Available

- Lake Design
- Lake Renovation
- Water chemistry sampling
- Fish population evaluation (including electrofishing)
- Fish stocking and harvest strategies
- Vegetation planting & control (pesticide application)
- Fish and game feeder installation and repair
- Aeration system installation and repair
- Fish attractor installation/refurbishing
- Liming, fertilizing and turbidity control
- Urban pond management for golf courses, housing developments and commercial complexes
- Aquatic scientific data collecting for environmental impact studies
- Wildlife habitat management (deer, turkey, quail, waterfowl)
- Whitetail deer camera census surveys

“Serving the South from Texas to Florida”

Texas: Scott Brown
(214) 383-3223

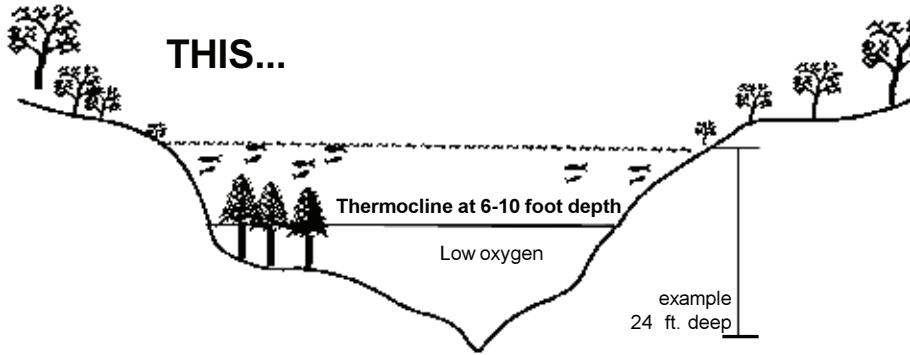
Florida: Steve Lopez
(904) 484-6773

Visit us on the Web:
Southernsportsmanaquaticsandland.com

Products Offered

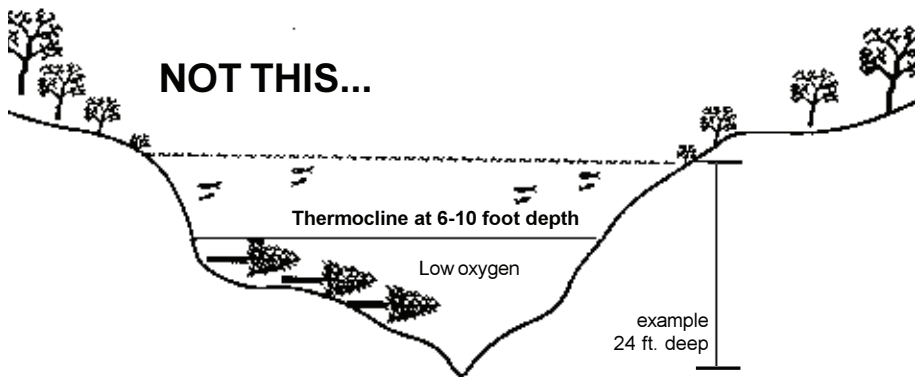
- Great Lakes Aeration Systems
- Kasco Fountains
- Desert Rain Fountains
- Texas Hunter Fish & Game Feeders
- Perfect Pond Plus Fertilizer
- Sweeney Fish & Game Feeders
- Forever Tree Fish Attractors
- Custom built wood duck, bluebird and bat houses

BRUSHPILE PLACEMENT IN LAKES AND PONDS



IMPORTANT NOTE:

Place brush in a vertical position and in water less than 15 feet deep as shown in the above diagram. By using this method, fish will be able to utilize the brush all year long. Using the method shown below, fish will only be able to utilize the brush during the spring and fall turnover.



This diagram depicts the right and wrong way on how deep to place your structure (from the Missouri Department of Conservation publication titled *Fishing in a Barrel, A Guide to Design and Placement of Fish Attractors*)



Supplies needed:

- 1 - two hole concrete block
- ½ bag of Quikcrete
- 1 - PVC pipe 10' X 4", cut in half (two pieces, 5' X 4")
- 16-18 pieces, 6' X ½" (inside diameter) and 20-22 pieces 4' X ½" (inside diameter) polyethylene tubing
- polypropylene rope attached to a float or decoy if marking is desired.

How to build: After cutting the PVC pipe into two 5' long pieces, drill three ¾" holes through both sides of pipe, within four inches of one end of each piece. Place end with holes in each opening of concrete block and angle away from middle with holes inside block. Pour readied concrete into both holes of concrete block and tamp flat, assuring the concrete went through pre-drilled holes. Once concrete has dried, drill ¾" holes through PVC with a regular drill bit (not a wood bit, as holes are too loose and "limbs" will roll over) at 90° angles from each other, six inches apart. Force polyethylene tubing through adjacent holes. Holes may need to be slightly wallowed out to allow PVC to be pushed through easier. Use longer pieces in bottom holes and shorter in top portion. Bottom "limbs" should be pushed about 1/3 of way through leaving the longer portion away from the center (trunk), while shorter pieces pushed half way through. Leave one hole on each "trunk" base unoccupied if adding a float. Rotate all limbs up, alternating right and left approximately 30-45 degrees as you go up or down a row.

How to deploy: Position boat over the area you want to place attractor, knowing the top will not stick out above the water, and lower the attractor over the side assuring it settles up-right and

These attractors are being assembled to be put into a lake 70 feet deep. However, all of them were placed in 8-15 feet deep water so they will be used all year round by fish. Notice the dam already has great structure and once full, the rocks will become congregating areas for prey, predators and anglers seeking a big fish!



These three decoys (two in upper left corner) are not for hunting, but identify where in the pond the offshore fish attractors are located. In big bodies of water a goose decoy is used so it can be seen from greater distances. If you don't want anyone to know where the structure is located, mark with a hand-held or boat GPS.

does not fall over. If marking, tie the rope through the holes on each pipe at base and lower to bottom by rope. Once set, cut rope so float will be above waterline during high water, but without

so much slack it gets tangled with everything. Setting in 7-12 feet of water will assure year round usage. If marking and placing several together, only mark the first one deployed, and place the

others around the marked one. Setting out generally takes two people. Several can be placed in a group or singles can be set apart depending on the size of pond and size attractor you desire.



**DISTRIBUTION OF HERBICIDES • AERIAL APPLICATION OF HERBICIDES USING HELICOPTERS
FORESTRY, RIGHTS OF WAY, AQUATIC, RANGELAND AND PASTURE • AGRICULTURE**

HEADQUARTERS: LOUISVILLE, MS • 662.779.2183



Integrating Alfalfa into Food Plots – in the SOUTH?



By John Frank Deese

John Frank Deese is a wildlife biologist/product consultant for Whitetail Institute and owner of Deese Wildlife Services.

For questions/consultation, he may be contacted at: frank@whitetailinstitute.com or 334-322-1143

Mature stand of forage alfalfa, ladino clover, and chicory. The proper seed blend can offer many advantages compared to planting a single species.

Alfalfa has been used for a very long time, and is thought to have originated in the region currently known as Iran. In fact, it is the oldest known domesticated forage and is thought to have been used as forage more than 3,300 years ago. The first documented use by the Chinese dates back to the 6th century, where they used alfalfa as a remedy for kidney stones and various other medical conditions. The Conquistadors used alfalfa as feed for their horses and introduced this plant to the Americas when they arrived in the 1500's.

North America is the world's top alfalfa seed producing region. In fact, the United States and Canada normally produce over 100 million lbs. of alfalfa seed each year. According to the USDA, well over 60 million acres of alfalfa and alfalfa mixtures for hay were harvested in the United States from 2009-2011. South Dakota alone harvested a yearly average of 2.3 million acres of alfalfa over that same time span.

Arizona yielded a yearly average of 8.3 tons of alfalfa hay per acre during that time. Yes folks, that's 8.3 tons/acre EACH YEAR! California is our nation's top alfalfa producer, averaging almost 6,500 tons of alfalfa hay each year for the past three years. Other top producers include South Dakota, Idaho, Montana, North Dakota, Nebraska, and several other states from the mid-west.

Go ask any experienced cattle farmer what he would plant for his livestock if his options were unlimited. After he looks at you like you have lost your mind, I'll bet you the word alfalfa will be somewhere in his reply. He would probably choose alfalfa over most other crops for several reasons. Alfalfa is a legume, but not just any ordinary legume. It is one of the very best nitrogen fixing forage plants known to man. From a feed value standpoint, alfalfa is king. Not only is it high yielding, this forage legume exhibits high levels of digestible protein, calcium, phosphorus, magnesium, and other nutrients. Alfalfa helps improve overall soil structure by potentially developing an extensive root system up to 20 feet below the soil surface, enabling it to possess impressive drought tolerance capabilities. Known as the "Queen of Forages", alfalfa is widely used for hay production because when managed properly, it recovers well from cuttings, and cured alfalfa hay can potentially have protein levels close to 20%

Whitetail Deer prefer forage alfalfa over many foods, and they aren't the only animals that take advantage of the nutritional benefits alfalfa brings to the table. Agriculture and its effect on wildlife has been a controversial topic that is still heavily discussed to this day. However, there is no denying that wildlife reap benefits from commercially planted alfalfa fields. Wildlife biologists conducted a study on the amount of wildlife usage of alfalfa fields in Sacramento Valley, California. They discovered that out of 643 resident species of mammals, birds, amphibians, and reptiles, 162 species (25%) used the alfalfa

fields on a regular basis, and 10% used them extensively. According to a study on the crude protein and fiber content in alfalfa stems and leaves, the crude protein content of an alfalfa leaf can be up to 38% if growing conditions are favorable. Here's my point: Forage alfalfa is not only beneficial to wildlife from a nutritional perspective, they also like its taste.

So, why isn't alfalfa grown frequently in the South for hay production or wildlife management? Actually, farmers have been growing alfalfa in the South since the late 1800's. Production slowly climbed throughout the following decades, then fell sharply in the late 1950's due to the arrival of the alfalfa weevil and vast abundance of inexpen-

sive nitrogen fertilizer. If you had a map of the United States with alfalfa production and average climactic conditions listed for each state, you would notice a trend connecting alfalfa production with the weather. Production is higher in areas that have a combination of low humidity, low/moderate rainfall, and decent/fertile soil quality. The use of irrigation in a few states skews the numbers a bit, but you get the picture. Just like everything else in this world, alfalfa does have a few problems that have not been completely resolved yet. Generally speaking, disease and insect/nematode predation are two of the major problems associated with alfalfa in the Southeast due to high amounts of



Great example of how some forage alfalfa varieties can still be highly palatable when mature.



Sainfoin is a highly preferred forage legume by whitetail deer.

annual rainfall and high humidity. Nematodes are more likely to affect alfalfa on the sandy soils of the Coastal Plain and sandy river bottoms that are so common in the Southeast.

Am I insinuating that you should not consider the introduction of forage alfalfa to your property? Absolutely NOT. However, with the increased risk of crop failure due to factors mentioned above, you are probably asking yourself why would anyone in their “right mind” even consider planting alfalfa “down here” when we have nutrient rich, highly palatable clover, chicory, and other perennial forb varieties that have been proven to perform exceptionally well in our climate. Believe it or not, I have found two very interesting reasons for considering the addition of alfalfa to your food plot regime.

Reason #1: Technology and understanding of plant genetics has improved drastically since the 1950’s. Both uni-

versities and private businesses have taken advantage of this technology, resulting in the development of hundreds of disease and pest resistant varieties of alfalfa to choose from. You can literally choose an alfalfa variety that exhibits high resistance to the most common pests and diseases in your “neck of the woods”. Yeehaw! For those like me who worry too much, could we plant a combination of different alfalfa varieties to address a broader spectrum of pests and diseases?

Absolutely. After all, why put all of your eggs in one basket, right?

Reason #2: Established alfalfa has a much higher drought tolerance in well drained soils compared to clover. Therefore, it should be possible to take advantage of alfalfa’s nitrogen fixing capabilities in these soils by using new and improved alfalfa varieties as components of a larger blend. This would surely improve soil quality in areas

where soil conditions are incapable of supporting a year-round clover based crop. I realize that some people may regard this idea as being totally impractical, but leading seed companies that specialize in food plot nutrition have been doing this for years with tremendous success. Believe it or not, there are situations where this has been proven time and time again.

Please note that I am not in any way stating that there is a “silver bullet” seed blend out there that solves all of the problems associated with food plots. But I am saying that some landowners are missing out on the benefits forage alfalfa has to offer, especially when it is added to a blend of other plants that complement each other. There are several advantages to planting a seed blend rather than one particular plant. A good seed blend should be highly adaptable to a wide range of growing conditions that can occur within the parameters for which the blend was designed. For example, the blend should be flexible enough for some components to thrive in pockets of high moisture while other components are adapted to withstand relatively dry soils. Shoshone sainfoin is an excellent forage legume that can be part of an alfalfa blend. Although most people have never heard of sainfoin, it prefers the same type of deep, well drained soils as alfalfa, is resistant to the alfalfa weevil, and generally has faster spring “green up” compared to alfalfa. Sainfoin also has some disadvantages in areas compared to alfalfa, which makes it a great companion legume in the overall blend. You will need to add non-legumes such as chicory to the blend as well. To my knowledge, Whitetail Institute is currently the only seed company that offers a blend of forage alfalfas, Shoshone sainfoin, forage chicory, small burnet and clover that was designed specifically for whitetail deer. It is a fact that all plants are susceptible to a number of insects and diseases. However, a healthy plant that is

adapted/modified for its environment is much less likely to experience these issues compared to a plant that is struggling to survive. Also, never forget that ensuring the health of alfalfa is crucial if it is to be planted in the South.

Let's take a look at the basic requirements for alfalfa establishment and stand persistence. *(Please note that there is an incredibly vast amount of publicly available information about alfalfa. For the purposes of this article, only the most important (in my opinion) and basic requirements for alfalfa establishment are mentioned here. Information on specific diseases and disease symptoms, insects and insect treatments, detecting nutrient deficiencies, autotoxicity, etc. can be found on the web, or at your local county extension agent.)*

First and foremost, you must have the **proper soil type**. All Alfalfa grows best on deep, fertile soils that are somewhat well drained. These soils must also have a high moisture holding capacity. Fortunately, deep, well drained soils generally hold vast amounts of water quite well. In my experience, many people tend to associate alfalfa with slopes and hilltops. While alfalfa can potentially grow very well on these sites, it can also perform just as beautifully on flat ground as well. Alfalfa has a deep root system and is adapted to draw water from a large volume of soil. Therefore, alfalfa is drought tolerant only if it has a healthy root system. This means that root growth cannot be restricted by subsoil layers, poorly drained soils, or hardpans. Use of a subsoiler or chisel plowing is recommended for soils that have compacted layers or hardpans. Well drained subsoils usually have light colors (light red, yellow) whereas poorly drained subsoils will have a darker appearance (gray, brown, etc.) Loam based soils such as clay loam or sandy loam are likely suitable soil types. Very sandy soils are not suitable for alfalfa because they dry out so quickly during

the summer months. Continue to plant cool season annuals in these areas or simply leave them alone. The use of a soil map may be helpful in locating areas suitable for growing alfalfa.

Second, **proper soil pH**, planning, and patience are three requirements that go hand-in-hand with one another. Proper soil pH improves nutrient availability by affecting the solubility of minerals. Adjusting soil pH and nutrient levels can be an extremely slow process. You should plan to give yourself at least one year to improve soil quality before planting alfalfa for the first time. Several years of soil preparation may be required if planting on soils that have not been limed and/or fertilized in the past. Alfalfa is a high yielding plant, but achieves this only through high nutrient demand. Soil testing is a

must so stay away from those “do-it-yourself” pH kits. You can get grossly inaccurate results if something goes wrong, which is very likely considering you and I do not test soil samples every day. Be sure to use a reputable soil lab for your soil analysis. Nutrients that are deep within the soil are most available to alfalfa when soil pH is between 6.5 and 7.0. Soil pH also affects the activity of soil microorganisms that decompose organic matter and those that produce nitrogen. The nitrogen fixing capabilities of the bacterial colonies of rhizobia require the soil pH to be within this range. Low pH soils can kill the rhizobia, causing a nitrogen deficiency. Nitrogen deficiency in alfalfa stresses the plant, which usually leads to disease or other issues. Due to alfalfa's deep root system, subsoil pH is also very



Forage alfalfa

important for root development. It is recommended to take soil samples in 1 foot increments down to a minimum of 4 feet. The subsoil pH needs to be greater than or equal to 5.5 at every increment to prevent certain elements such as Al and Mn from becoming soil soluble, which can possibly be toxic to alfalfa roots. If subsoil pH is lower than 5.5, either add the recommended amount of lime and wait several months, or plant something other than alfalfa. Patience is required when adjusting soil pH because it can take 6-12 months for lime to adjust topsoil, and several years may pass before subsoil pH is corrected. If more than 2 tons of lime per acre is needed, apply the first half and disk thoroughly into the soil. Then plow it as deeply as possible to incorporate the lime deeper into the soil profile. Then apply the second half and repeat disking.

A good **soil fertility** program is yet another important piece of the puzzle. Alfalfa is similar to other forage legumes in the fact that it requires the basic soil nutrients (nitrogen, phosphorus and potassium) for basic plant functions such as growth and energy transfer. However, the high rate at which alfalfa uses these elements demands continuous soil testing at the same time each year to ensure these nutrient levels are always in adequate supply. Make sure the soil lab provides recommendations specifically for alfalfa and always add the full amounts of each item suggested. Phosphorus is immobile in the soil, so applying the entire recommended amount at once is permissible. Potassium is mobile in soils; therefore it should be divided into two separate applications in the Piedmont and Mountain regions. The sandier soils in the Coastal Plain region do not maintain potassium levels as well, so four separate applications should be made each year. There are a total of 16 nutrient elements that play important roles in plant growth. Availability of every single one of them should be monitored

continuously and supplemented when necessary. Some forage legumes--clover for example--can be more forgiving when certain nutrients are deficient. Alfalfa is not one of them.

As stated earlier, **selecting the appropriate alfalfa variety** for your specific area can potentially be a lifesaver. Variety selection is based on a number of qualities including yield performance, fall dormancy, pest and disease resistance, stand persistence, and seed cost/availability. Yield performance and stand persistence are important attributes for commercial growers in western states for obvious reasons. However, fall dormancy rating and disease tolerance are the two most important characteristics to consider when planting in the South. I suggest contacting your local county extension agent for the appropriate alfalfa variety for your area. Generally speaking, alfalfa varieties appropriate for the South should be highly resistant to as many diseases and pests as possible. After all, high yield performance and good stand persistence are unattainable if plants are suffering from pests and disease. Dormancy rating is a measure of a variety's tolerance to cold weather. Some varieties go dormant very early in the fall while others never enter dormancy. The dormancy scale ranges from 1-9, with 1 being the most dormant (no growth during Fall-Winter) and 9 being the least dormant (active growth for 12 months). Varieties with a dormancy rating 5-9 are generally suitable for the Coastal Plain region, while varieties with ratings 3-6 are better suited for the Piedmont and Mountainous regions.

There are a few things to keep in mind when purchasing your alfalfa seed. I suggest purchasing your seed from a reputable source to ensure the seed has been handled/stored properly. As mentioned earlier, a seed blend containing alfalfa is strongly recommended over planting pure stands of alfalfa for a variety of reasons. Your seed needs to be inoculated. All legumes require a

special group of soil bacteria called rhizobia for nitrogen fixation. These rhizobia live within nodules on alfalfa roots, and are responsible for nitrogen fixation. Alfalfa requires a certain species of rhizobia called *R. meliloti*. Your alfalfa seed must be coated with an inoculant containing this specific type of bacteria. Just like everything else, these bacteria will eventually die. Check the inoculation expiration date before planting the seed. If the date has expired, you will need to add fresh inoculant to the seeds before planting.

I cannot place enough emphasis on the importance of **seedbed preparation**. Everything done prior to planting will be in vain if time and effort are not invested in preparing the seedbed. Perennials (especially Alfalfa) can sometimes be very slow to establish, especially if rainfall is in short supply. Alfalfa seedlings devote much energy towards root development, and can be easily overwhelmed by competing vegetation. This is why a clean, weed-free seedbed is the ideal environment for alfalfa seedlings. Successful weed control requires planning, patience, and persistence. In the South, it is generally recommended to plant perennials in the fall. This makes early spring a good time to begin soil testing, lime applications, and controlling weeds. Alfalfa seeds are very small, and should not be planted deeper than 1/4". Your seedbed needs to be smooth and firm, and the use of a cultipacker before and after broadcasting seed is strongly recommended to firm the seedbed and make good seed to soil contact.

Although alfalfa is quite a remarkable plant that has been used for thousands of years, it has its limits just like everything else this world has to offer. Sometimes things serve us better when used in a combination of other things. Although you may like ketchup, you would rather have it on a hamburger than by itself (I hope). The same can be said about alfalfa when integrating it into your food plot program.

Nature's Nano Technology - Biochar

How biochar can help your food plots and tree plantings

Biochar Properties – A One-Time Soil Amendment

Biochar is a lightweight, highly porous organic material – produced from biomass for use in soil: farms, food plots, tree plantings & gardens.



Biochar's unique physical and chemical properties have the potential to permanently improve soil structure, enhance water circulation, improve nutrient availability and enhance beneficial microbial interactions with plants. Biochar can change the soil's structure to allow compacted soil to breathe, and create homes for microbes. Its durable, stable nature continues to maintain soil quality for centuries. Simply put, biochar can build better soils.

Adding biochar to a field or to each tree planted can cut input costs and improve the nutritional quality of crops grown on poor soil. While biochar has many different effects on soil chemistry and biology, only some of its physical effects are easy to see.



Biochar Field Trials with James Madison University, Shenandoah Gardens, Shenandoah Valley, VA
Left side is control strip - No Biochar.
Right side w/Biochar - Crops performed better, had better color with higher yields.

Biochar can improve soil structure by attracting and binding particles into larger structures—known as “aggregates”. Soils with better aggregation are properly

aerated, are better able to let rainwater infiltrate and are less prone to erosion. In short, soils with better aggregation have better tilth. Such an effect is, however, unlikely to be visible in the short term—biochar needs time to interact with other soil constituents and its effect improves over several years after application.

Biochar does not decompose like compost or manure, which disappear from soil within a few years, creating a steady need for annual re-application. Years after being incorporated into your soil, biochar keeps on working and some of its effects improve with time. As biochar matures to improve aeration, drainage, nutrient retention capacity and tilth, it fosters beneficial soil microbes that perform key roles in nutrient cycling. Biochar builds a permanent healthy soil.

Scientists studying Terra Preta in South American rainforest describe its teeming microbial communities as a “microbial reef.” Like a coral reef does for sea-life, biochar does for the soil, supplying food and shelter. Instead of sheltering marine life, biochar supports an underground ecosystem of fungi, bacteria and other organisms—the base of the soil food chain. When times are lean, biochar is a reservoir storing bio-available nutrients. When times are full, biochar is a platform for microbes to launch a biological bloom of soil-enriching activities.

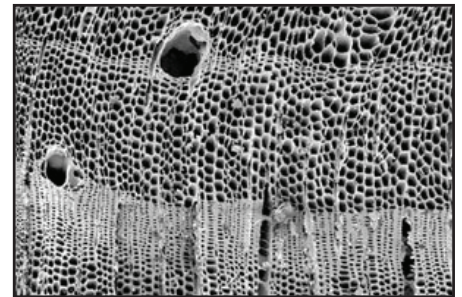
Can prescribed burns produce biochar?

In an oxygen-rich burn, only ashes remain after total combustion of biomass. Low temperature smoldering fires are a natural charring process in prairie and forest ecology. Pyrolysis (the process used to make biochar), develops wherever low - or no-oxygen conditions occur in fire's uncontrolled chaos.

Forest & prairie fires produce natural biochar though only at a rate of 1% due to the open-air environment that fuels it.

National Geographic called biochar a “soil within the soil.” At plant scale, roots search the soil for water and nutrients. At a microbial scale, bacteria and fungi

eat molecules retained in biochar pores to convert them into nutrients for plant roots. Biochar promotes resilience and diversity in this network of nutrient cycles.



Biochar's internal structure - magnified 1000x. Biochar consists of cavities that retain water & nutrients that are accessed when plants need them. What can be seen here are the larger pores of biochar, it also has pores that are too small to be visible at this magnification.

A land owner can let this “microbial reef” do the work of growing strong plants, while biochar also helps to buffer changing rainfall and water, unusual weather and fluctuations uncommon to soil. Land owners should see themselves as microscopic zookeepers—raising and sustaining vibrant communities of soil microbes. Growers should see soil as a complex living system—to be stewards of living microbial ecology.

TO ORDER:

Go to www.SoilReef.com

For larger volume sales, contact:
Jeff Wallin - 954-309-8721 or
Doug Guyer -
Doug@thebiocharcompany.com



www.SoilReef.com

“Despite their artistic pretensions, sophistication, and many accomplishments, humans owe their existence to a six-inch layer of topsoil and the fact that it rains.”
~ Anonymous

Pig Trapping: 10 Biggest Mistakes (Numbers 5 - 1)

5:00 PM T



By Stephen S. Ditchkoff

Stephen Ditchkoff is an associate Professor at Auburn University. At Auburn, Steve teaches both undergraduate and graduate courses in Wildlife Science and conducts research with white-tailed deer and wild pigs. He can be contacted at 334-844-9240 or ditchss@auburn.edu.

Multi-catch doors don't result in many pigs entering a trap after the door has been closed. The money needed to construct multi-catch doors is probably better spent on the purchase of additional traps with standard, less expensive doors.

In the last issue of *Wildlife Trends Journal*, I described 5 common mistakes made by pig trappers. These included trap type, door size, bait type, capture of boars, and trigger type. Attention to those topics can dramatically increase your proficiency as a pig trapper and the number of pigs you catch, as well as decrease your costs when trapping. In this issue, I will discuss what I consider to be the 5 greatest mistakes made during pig trapping.

MISTAKE #5 - Door Style: The type of door used when trapping is thought by most to have a big impact on your trapping success. If you ever spend much time around biologists with pig trapping experience, you will inevitably hear long discussions concerning trap style. Every pig trapper has their favorite style, and they will narrate long stories describing the effectiveness of their preferred door. More often than not, these stories also include how that door style enabled them to have huge

impacts on the local pig population. After spending some time involved in these discussions, one can't help but leave with the impression that door style is a critical component of trap design.

In the last issue of *Wildlife Trends Journal* I discussed how door size influences trapping success, and described how larger, mature pigs are often hesitant to enter traps with small doors. Here, we'll discuss the relative value of multi-catch doors. A multi-catch door is designed to allow pigs to enter a trap after the trap has been tripped and pigs are secured in the trap. They come in a variety of styles and normally involve some sort of swinging apparatus that allows a pig to push its way into the trap. These doors may swing either vertically or horizontally. Many trappers

swear by these door styles, and give the impression that multi-catch doors measurably increase the number of pigs trapped. However, data suggest that this may not be the case.

Data recently collected by researchers at Auburn University and USDA Wildlife Services have shown that multi-catch doors do allow additional pigs to enter a trap once the trap has been tripped. But, in their study, the number of pigs that pushed through the closed door was an insignificant number of the total number of pigs trapped during their experiment. By monitoring their traps with game cameras, they were able to document each pig that entered the trap, and obtain visual evidence each time a pig entered the trap or attempted to enter the trap after it

was closed. Not surprisingly, they found that some pigs did enter the traps after the doors were closed. Over the course of their experiment, they documented 222 total pigs outside of closed traps, and had 11 pigs enter a trap after it had been closed. This means that <5% of the pigs that had an opportunity to enter a trap after it had closed actually did so. Additionally, they documented 4 pigs escaping from closed doors, either by lifting the door themselves, or escaping when another pig tried to push in. What they concluded was the increased cost of multi-catch doors (over the much cheaper purchase price of simple wooden drop doors) did not outweigh the benefits of investing that money in additional traps.

This doesn't mean that you shouldn't



Give pigs time to acclimate to the trap before setting it.



Use of game cameras during the prebaiting and trap acclimation periods allows for an accurate determination of sounder size and composition.

GROW 'EM STRONG

Improving deer quality & the hunting experience in Alabama

For membership questions, please contact Belinda Kennedy:
256.990.3840 or bmk@mindspring.com

use multi-catch doors, as they can actually increase the total number of pigs you catch. But, the high cost of those doors (relative to simple, wooden drop doors) did not pay for themselves. So, if you are in the process of building traps, your money will be better spent on simple doors, and more traps.

MISTAKE #4 – Time Before Setting the Trap: The number one rule when trapping any species is to be sure that the animals have enough time to acclimate to the trap site. Most pig trappers become impatient and make the mistake of setting the trap too early. The general thought when you have to remove a lot of animals is that the faster you can gather them up, the faster you will be able to make a difference. Considering that we're talking about pigs, an animal that has an incredible rate of reproduction, it makes logical sense that time is of the essence and you need to get them quick to ensure that the hill you have to climb doesn't get any bigger before you start. But, the downside to becoming rushed when trapping is that the pigs become wary of the trap.

When a group of pigs have been identified and are coming to bait, the next step involves setting the trap and allowing the pigs to become acclimated. If the trap is set for use within a few days, there will be some initial success and pigs will be captured. The impression is given that everything is going great, and very quickly trapping success decreases because all of the pigs seem to have been captured. What most trappers don't realize is that there are probably more pigs using the site, and the capture of their brethren will cause them to become very wary of the trap and much less likely to enter the trap. In many cases, they will stop using the bait site altogether.

Once a trap is established at a site where pigs are coming to bait, patience becomes the key to success. The trap needs to be tied open, and the pigs need to be allowed to become comfortable with entering and exiting the trap. They need to feel that the trap does not pose a threat. By exhibiting considerable patience before the trap is set to catch pigs, not only will you dramatically increase the number of pigs that you catch, you will also ensure that you don't educate any and leave them to recolonize the area (See Mistake #1). The difficulty is determining when it is time to set the trigger. Game cameras are a very effective tool to document which pigs are entering the trap and cleaning up the bait, and which are displaying more caution. When you have visual evidence that all of the pigs are entering the trap, it's time to set the trap...not a day before. In fact, I would recommend waiting until all of the pigs are entering the trap regularly. In this way you increase your chances of catching them all in one shot.

Perennial Food Plots • Loafing Cover



Native
Grasses & Legumes
for Wildlife Habitat

50+ Years Experience
Regionally Adapted Seed
Prepaid Freight 200+plb lbs.

Conservation Partners
BAMERT
TRUSTWORTHY
Specializing in Native Grasses

Visit Our New Online Store at
800.262.9892 www.bamertseed.com
natives@bamertseed.com



Mid South LAKE MANAGEMENT

Maximizing
Your Lake's
Potential

Professional Management Services

- Aquatic Weed Control
- Trophy Fish Mgt.
- Fish Stocking
- Electrofishing
- Fertilizing
- Liming

Fish Feeders
Aerators

Contact: Blair Barbaree
Phone: (706) 566-0135
E-mail: midsouthlake@charter.net




MISTAKE #3 – Trapping Blindly:

What I consider to be the third biggest mistake that pig trappers make is trapping blindly. How can anyone effectively eliminate a group of pigs when they don't know the composition of the group? This mistake goes hand in hand with MISTAKE #4. If I were to get pigs on bait and set a trap, I would experience some initial success. Very quickly I would catch the less wary pigs in the group, and soon I would find little or no use of the trap site by

pigs. The logical conclusion is that I have eliminated the group. I would then move my trap to another site where there was evidence of pig activity. In all likelihood I just left some pigs untrapped, and this group, no matter how small in number, will quickly replenish the area. In a short time, I will be right back where I started...all because I was trapping blindly.

We recommend as part of any pig trapping program the use of game cameras. By setting a camera on a bait site

when pre-baiting, you can get valuable information on the size and composition of a group of pigs. By understanding the size of the group, you can best predict the number and size of the traps that will be needed to get all of the pigs in the trap (See MISTAKE #1). Additionally, by documenting the composition of the group (juveniles, adults, males, females, pigs with certain markings, etc.) you can be sure that you aren't vacating a trap site before all of the pigs have been removed. Game cameras are cheap, and



The biggest mistake in pig trapping is not catching the entire sounder. In this case, everything was done right, and the entire sounder was removed from the area.

most land managers have at least some employed for monitoring white-tailed deer. Their use with pigs is just as important, and will serve to dramatically increase the success of your pig control/eradication program.

MISTAKE #2 – Harassing Pigs:

Most pig control programs subscribe to the philosophy that every dead pig brings you one step closer to achieving your goal. As a result, in addition to trapping, most landowners will take every opportunity to kill additional pigs while hunting, driving the property, approaching the trap site, etc. Common sense dictates that if you can eliminate a few with a rifle, then there will be less to trap. However, more recent data suggests that active attempts to reduce your pig population away from the trap may in fact hinder your ability to successfully capture the rest of the group.

Recent research by Auburn University and USDA-Wildlife Services suggests that the elimination of any disturbance to pigs during the trapping period may actually serve to increase the ease with which pigs are trapped. These groups, as part of another experiment, took the approach that they would do what they could to ensure that interactions with humans would be a positive experience for the pigs they were trapping. Instead of slinging the rifle out of the truck and sniping pigs out in a field, or shooting pigs on the outside of a trap when they approached, they simply got out of the truck and poured corn on the ground. In a few short weeks, they were able to walk up to traps (with pigs inside and outside) without the pigs becoming overly excited. The pigs inside the trap would simply exit the trap when they opened the door, and the pigs outside the trap would wait around for the corn to be poured on the ground. In effect, the researchers were conditioning the animals to associate the truck with food...a positive experience.

At this time, they do not have data to compare trapping success with and

without harassment (although that research is currently being planned). But, consider your options. On one hand, you might be able to shoot a few pigs while hunting or while out and about on your property. What have you really gained other than one or two dead pigs? I would argue that you can easily catch those pigs when trapping, so you really haven't gained anything. But, you may have just educated the rest of the sounder about the danger associated with humans. On the other hand, you could pour out a little corn when you see some pigs and make them feel comfortable when there is human activity in the area. I suspect that this will allow you to successfully trap all of the pigs in the area much more quickly than if you had instilled in them a fear of humans. Keep in mind that these are extremely intelligent animals. By most estimates they are more intelligent than dogs, and thus they will be able to easily associate "punishments" and/or "rewards" with humans. While this whole idea may sound crazy, you might be surprised if you give it a try.

MISTAKE #1 – Whole Sounder

Removal: In *Wildlife Trends Journal* (Volume 10: Issues 3 and 5) in 2010, I described a strategic approach to pig control based on whole sounder removal. This strategy was based on research conducted by some of my graduate students where they approached pig eradication from a different philosophical point of view than most other control programs. Most pig eradication programs focus on maximizing a body count. My students approached it from the opposite angle: it doesn't matter how many pigs you trap, it only matters how many you leave behind.

The point of this philosophy is that the only pig that matters is the last pig. If you have a sounder containing 10 pigs coming into a trap site, you have accomplished nothing if you only trap 1, 5, or even 9 of the 10 pigs. If you leave 1 pig from that sounder, it will replace its lost counterparts in as short as a year.

Additionally, you will have successfully educated it concerning the dangers of humans and traps, and you will have an extremely difficult time coaxing it into any trap. You might get lucky and shoot it before it produces its own litter, but the odds are against you. It's more likely that you will be trapping that same sounder (albeit with mostly different individuals) next year...in essence wasting time and resources.

So...how do you ensure that you get every last pig in the trap? First, make a commitment to get them all. Second, read the articles that I referenced from *Wildlife Trends Journal* in 2010 so that you understand the trapping strategy and the steps required for successful implementation. Third, make sure that you don't make the mistakes listed in this article. They are very simple to avoid, and will go a long way to improving your trapping efficiency.

Final Thoughts: Pig trapping is not entirely different from other forms of trapping. It takes a common sense approach and attention to detail. However, for some reason pig trappers often think that it's as simple as throwing a trap in the woods and slinging around some corn. Until not too long ago, I took that approach. But, if you stop and think about it, why would we expect that a lackadaisical approach would work with the most intelligent animal we have ever trapped, or will ever trap?

I often don't give enough credit to the people that are actually developing these trapping techniques. Most of the information contained in these articles is from data collected by my graduate students (Rob Holtfreter and Brian Williams), Dana Johnson with USDA-Wildlife Services, and Dr. Mark Smith and his students with Auburn University. This group of individuals (along with some others not mentioned) comprises a team that has been focused on wild pig control programs for quite a few years. I fully anticipate that you will be hearing about their findings for years to come.

Wildlife Trends Journal Management Calendar

By Dave Edwards

August/September 2012

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 Hunting & Fishing 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.

Consistent great hunting does not happen by accident. Monitoring your deer population through camera surveys and making harvest adjustments as needed assist in achieving deer management goals.



Mow access lanes through quail hunting areas

Generally speaking, areas that are being managed for quail hunting are disturbed regularly by fire, disking, applications of herbicide to control undesirable vegetation and promote quality quail habitat. Consequently, the understory habitat in these areas seldom grows taller than 3 feet. However, even with such low growing vegetation, navigating and hunting these areas with

bird dogs and other hunters (particularly kids) can be challenging due to the relatively thick nature of this vegetation. While prescribed fire, disking, and herbicide applications are best suited for creating quail habitat, mowing can be used to increase the huntability of the habitat. That is, mowing access trails through quail habitat will allow easier access for hunting. How and where you mow trails is a personal preference. Some people like straight

line/checkerboard mowing which results in a systematic appearance and is easier for hunters to figure out where other mowed lanes are while working dogs. While it depends on the situation, I prefer randomly mowed lanes that wind through the habitat. This strategy results in a more natural look. Regardless of the method you use, mowing these trails just before the growing season ends (late summer) will allow the vegetation to grow a little

before hunting season/dormant season arrives. I generally try to time this mowing when I feel there are 2-3 weeks left of growing season. The result will be trails that are easily walked but do not appear as though they were just mowed providing a more natural/aesthetic look within the quail hunting areas.

Service tractors, ATV's, and other mechanical tools

Because early fall is a busy period for equipment use such as tractors, ATV's, and chainsaws, now is a great time to perform routine maintenance or service. I recommend developing a maintenance sheet that includes all your equipment and keeping records of service. This will ensure that equipment is taken care of and will be in good working order for the fall activities such as food plot planting and preparing your property for

hunting season. Don't forget about tractor implements such as grain drills, mowers, or harrows. We even keep a maintenance sheet for small tools like weed eaters and pressure washers. I have learned that preventative maintenance (maintenance done before something breaks) saves lots of time and money.

Manage dove fields in preparation for the upcoming season

Common dove field crops include dove proso millet, browntop millet, Japanese millet, sunflowers, grain sorghum, corn, and wheat. Dove field planting activities should be done a few months before dove season, but will depend on the time it takes for the specific crop you plant to mature. It is important to know how long it will take for the crop you plant to mature and produce seed. The goal is to have mature seed available for dove a few

weeks before the season starts to allow them time to find and begin using the field. Besides providing a crop with abundant seed for dove, below are a few things I have learned that improve dove use of fields and/or improve hunting experiences.

Maintain a clean disked strip or two through the field of bare ground. These are strips that you do not plant, rather simply keep plowed through the summer and into dove season. Dove find these bare dirt areas attractive because it is easy to walk in, exposes seeds, grit, and offers dusting areas. Disked strips offer access to seed from your plantings once they mature as well.

If you do not already have "pea gravel" (very small grit stone) along roads that either run through or around the field, add it. Dove are attracted to this gravel because they need grit in their gizzard to assist in digestion of seeds



Creating a well prepared seed bed is one of the keys in growing a successful food plot.

and other food sources. If you pay attention to where you see dove on the way to work, you will notice they are often along roadsides that have exposed dirt/grit, dirt/gravel parking lots or plowed fields. If you're not paying too much attention, however, you are seeing them on powerlines that overlook these places. I learned this trick of enhancing dove fields with pea gravel by accident. I had a client who wanted a boat landing on a lake that was adjacent to his dove field. We used pea gravel to make the landing. Because we had extra gravel, we spread it along a road that went through the field. When I drove through the field a couple weeks later, hundreds of dove flew up from the road. There were so many that I got out of my truck to check for cracked corn! No corn. They were simply using the grit in the gravel. Since then I have incorporated pea gravel in dove field management if there is not already a source in or around the field with great success. They are simply attracted to it. Pea gravel is relatively cheap – give it a try.

Once the crop is mature, begin periodic strip mowing or sectional burning

to allow access and expose seed to dove. I prefer burning if it is possible because it completely cleans the ground allowing better access for dove and exposes more seed. Only a few strips are needed at any one time. The goal is to only mow/expose enough seed for dove to use for a week or so. Add another strip or burn another section as dove need it. This method will prolong the life of your dove field by providing seed to dove over several weeks or months.

Regardless of your management efforts, dove can be unpredictable and be here today and there tomorrow which can be quite frustrating. Dove fields are kind of like boats...it's nice to have a friend with a dove field! However, providing a very attractive field with everything a dove needs will increase your chances of holding more dove and having better shoots.

Start preparations for fall food plots

It is difficult, if not impossible, to establish successful food plots without planning and adequate soil preparation. Planting quality food plots is a process

that may span over several months, not a weekend. There are several factors that influence the success of a food plot program. Among the most important are establishing a well thought out food plot plan, ensuring proper soil fertility and pH, preparing a firm, smooth seed bed, only planting under favorable conditions, and controlling weeds. Each of these activities plays an important role in the success of your food plots. Here are a few tips on planting this fall:

Test soil early and apply required lime (preferably at least 6 months prior to planting). It takes time for the chemical process to take place and effectively change the soil pH. If you didn't lime in spring or early summer, go ahead and apply it now...better late than never.

Use the results of the soil test to create the best fertilizer blend for your specific soil needs. Many people use balanced fertilizers such as 13-13-13 because they are easy. However, it is well worth your time to custom blend fertilizer to match your needs versus applying a balanced fertilizer that often requires applying extremely high



A cultipacker is a great implement for smoothing food plots and “packing” seed once planted

amounts of some nutrients to compensate for the lack of others in the soil – which results in wasted fertilizer/wasted money.

Order seed and fertilizer as early as possible to ensure it is ready when you are.

Ensure plots are relatively smooth. This takes time and should be done well ahead of planting dates. If you are broadcast planting, simply drag the field just before planting to provide good seed-soil contact. Once broadcast, cultipack the field to “mash” the seed into the soil (if you’ve never seen or used a cultipacker, check them out. In my opinion it is a “must have” implement that has many applications in food plot planting). Do NOT drag food plots if they are somewhat unsmooth or if you planted small seed such a clover. Dragging will result in burying seed too deep.

Have your seed beds ready, but don’t fall into the trap of planting too early. September is often a very dry month. Mid-October is ideal in most areas of the Southeast. This is when we start getting regular cold fronts that bring rain. Planting too early normally results in disease (mostly army worms), poor planting success due to droughty conditions, or if you receive adequate rain the food plot is knee high and less attractive to deer by the time gun season arrives.

Adding annual reseeding clovers such as crimson or arrowleaf into your fall plantings will increase the quality, nutritional value, and longevity of your food plots. With proper management, these clovers will regenerate again next fall which will save you money on seed costs.

Use exclusion cages to monitor deer use and plot performance. An exclusion cage is a small “tube” of fence staked to the plot that prevents deer from eating the crop within the exclusion cage which allows you to assess plot growth and deer use of the plot. Cages are normally 2-3 feet in diameter and 3-4 feet tall. I’ve seen many food plots where the manager thought the crop did not do well, where in fact it did but deer sim-

ply mowed it down and never gave it a chance to grow.

Check food plots for hardpan and subsoil if needed

If your food plots seem to either dry up quickly or stay wet longer than expected under normal rain conditions, or if you’ve been planting the same food plot for many years, your food plots may have developed a hardpan. Soil compaction, also called hardpan, may limit or constrain forage production and plant survival in food plots. A hardpan is a densely compacted layer of soil that lies between the topsoil and the

subsoil. Generally speaking, depth of hardpans vary but are often 4”-12” below the surface of the soil and are caused by the weight and pressure of tractors (and other equipment) on the soil and repeated disking/tillage over several years that loosen top soil allowing the finest particles of the soil (clay) to migrate downward, accumulate, and bind creating a very dense layer. Imagine it as a layer of concrete below the surface of the soil. As you would expect, water and oxygen do not travel well through hardpans. Thus, during periods of adequate rainfall, water may lie in puddles on the surface of the



Depending on the equipment used, hard pans generally develop 4”-6” below the surface in fields that have been disked and planted for many years. A chisel plow can be used to break up hardpans that restrict plant growth.

compacted soil and evaporate before it can seep down into the soil. Similarly, during periods of low rainfall, the topsoil of food plots that have a hardpan dries out quickly due to the shallow layer of topsoil and inability to draw moisture from subsoil resulting in stressed or dead food plot crops.

Hardpans can be easily be detected in food plots using a soil probe, which is a 2' to 4' metal rod - sharpened on one end to penetrate the soil, and a handle on the other end to assist in pushing the probe through the soil. As the probe is inserted, the force required to move it through the soil should remain about the same until a hardpan is reached. Upon hitting a hardpan, it will take much more effort to push the probe. From my experience, hardpans in food plots are often 4"-6" below the surface, which is the depth at which most disks plow, and may be 2"-10" thick depending on soil type and age of the field. Breaking the hardpan is often referred to as "subsoiling" which breaks up the soil to depths of 6"-12" and fragments compacted soil

allowing water and roots to penetrate into the subsoil. To subsoil, you will need to use a subsoiling chisel plow. Most chisel plows have 1-5 shanks that are set 9" to 12" apart. When pulled by a tractor the chisels dig deep into the soil and rip or break the hardpan below the surface. Generally speaking, subsoiling every 2-3 years will benefit soils, keep hardpans from developing, and enhance plant growth in food plots. If you do not own a subsoiler, many companies rent them. However, it is a valuable food plot implement I recommend owning if you manage many acres. Obviously, this is something you want to do before initiating fall disking for planting food plots.

Host a cookout for your neighbors

Whether you already know your neighbors or not, inviting them to a cookout at your property will not only be a good gesture, but will likely result in new or better relationships that will benefit wildlife on your property. Late

summer or early fall is a great time to host this because hunting season is right around the corner and on everyone's minds. These are great events to exchange ideas, share management experiences (what has worked and what has not), discuss any problems such as poaching or trespassing issues, or simply getting to know each other better. In most cases successful deer management, particularly on small properties, requires working with adjacent landowners or hunters to ensure similar herd management strategies are being applied. When several properties are working together towards common goals it is often referred to as a "deer management cooperative". Obviously the goal is to get as many landowners and hunters to participate as possible so that you have "control of the deer herd" over a larger area. Given the relatively large home range sizes of white-tailed deer, the more land under management the better, and any increase in acreage will improve management success. Other non-biological benefits of getting

"It's a Tough World Out There!"

STOP Wildlife, Wind and Weeds from Killing your Seedlings



Choose Plantra® to make sure they **Survive, Thrive, Succeed!**[™]

Tree Tubes • Bark Protectors • Weed Mats
Fertilizer Packets • Deer Repellent

 **Plantra**[®]
Plant Like You Mean It

www.plantra.com
800-951-3806

to know your neighbors may include sharing resources such as tractors, planting efforts, or other equipment. Many neighbors save money by ordering bulk fertilizer, seed, and supplemental feed. I've known of several great friendships that have developed through "neighborhood" cookouts.

Check and lubricate gates & locks

Servicing gates and locks are often overlooked, but is something that needs to be done at least annually. Unattended or poorly working gates can pose unnecessary safety hazards. The first order of business when servicing a gate, particularly one that is not used often, is to inspect for and eradicate wasps and their nests. Nothing can put a damper on a day in the woods like getting stung by a wasp at the gate! Next ensure the gate functions properly. Is it easily opened and swings level? Are the hinges in good working order? Make notes of parts needed to make repairs if you do not have them handy. To reduce the

chances of running into a "no-shoulders" (snake), ensure the gate is free of tall weeds and vines by weedeating or using herbicide (recommended). Lastly, inspect and oil the lock, locking mechanism, and hinges of the gate.

Check, repair and prepare deer stands for hunting season

While the best time of year to relocate or place new deer stands on your property is in late winter after the deer season has ended or very early spring (before green up), late summer or early fall is when you need to revisit these stands to tighten them back up, inspect for loose nuts/bolts, rotten or loose wood, or any other safety hazards. This is also a good time to check the shooting rails, padding, and trim shooting lanes where needed in preparation for hunting season. However, do not overdo the shooting lanes. Small openings are all that is normally needed to identify and shoot deer. Because we have so many deer stands on the property I hunt, we have started using flagging as

a way of ensuring each stand is safe. That is, once a stand is checked, tightened, etc, we simply tie a piece of colored flagging on the base of the stand or the ladder. We use a different color each year. For example, this year we are using blue flagging. So if you get to a stand this fall that does not have a piece of blue flagging on it, you know that it has not been through "final inspection" this year and to use caution if you use it.

Mow under and around fruit trees and orchards

Mowing around fruit trees will not only enhance the growth of the trees by reducing competition for resources by surrounding plants, but will enhance the aesthetics of your property. Mowing will also help "clean" the understory around the fruit trees so wildlife can find the fruit as it drops in the fall (acorns, persimmons, apples, etc). As fruit or nuts begin to fall, these areas provide great places to hang a trail camera to get pictures of wildlife using the trees.

RootTrapper®

The patented, bi-layer, white, soft-sided RootTrapper® traps root tips to create fibrous root systems customers expect, while providing cooler temperatures without excessive water loss.

Creates more active root tips than any other container system.



Equipped for transplant success!

The Original Root-Pruning Container System®



RootMaker® Products Co., LLC

1-800-824-3941 www.rootmaker.com

Limb roads

Because the growing season is essentially over, early fall is a great time to trim over-hanging limbs from your property's interior roadways. Interior or secondary roads can become a jungle in just one growing season if not maintained. Have you ever ripped the exhaust pipe off your tractor with an over hanging limb, or had a limb slap you across the face while driving a golf cart down an overgrown road? Trimming limbs will help prevent equipment damage and/or personal injuries while using these roads. Removing these limbs will also help these roads dry out quicker by allowing sunlight and wind exposure on the road and in some cases will enhance natural wildlife foods along the roadsides due to the added sunlight.

Develop a pre-season deer harvest plan that will maintain or improve your deer management program

Monitoring the status of your deer herd is the backbone to the success of your deer program. Hopefully, you have been collecting harvest data (weights, measurements, ages, etc), hunter observation data, as well as conducting camera surveys. Collectively, this information is used to make sound deer management decisions that will help you achieve the goals of your program. If you haven't already done so, ask a wildlife biologist to review your data or information and provide harvest recommendations before hunting season starts. Using trail cameras is a great way to assess buck quality and make buck harvest decisions before you head to the woods. Pictures from trail cameras will help reduce "mistakes" when

judging bucks in the woods while hunting (where judgments are often made in seconds while your heart is racing 200 beats per minute!) While trail cameras are useful, a true camera survey is the most accurate method available to assess the status of your deer herd. September and October are normally the best months to conduct a camera survey (after bucks shed velvet but before the majority of acorns start to drop). If you plan to conduct a survey this fall, be sure to plan ahead. If you are doing it yourself, begin gathering all the equipment and supplies needed (cameras, batteries, digital cards, film, corn, etc). If you plan to hire a professional, get on their schedule early. With the popularity of camera surveys, most wildlife consulting companies are booked well in advance of camera survey season (September – November).

Give *Wildlife Trends* as a Gift this Year

Why not give your friends and family the gift of wildlife education by giving them a subscription to *Wildlife Trends*?

Call us at 800-441-6826 to order and we will include a gift card announcing your gift.

This is the perfect gift for the person who has everything!





TEXAS TUFF

LIFETIME GUARANTEE



SERVICES INCLUDE:

- Enclosures
- Breeder Facilities
- AI Facilities
- Decorative Entrances
- Land Clearing
- Material Sales
- Storm Clean Up
- Attention to your animal's safety and well being!
- 3 Crews with New Equipment to serve you fast!



Justin Davidson
256-702-0246

Wildlife Trends Journal Pond Management Calendar

By Scott Brown,
Southern Sportsman
Aquatics and Land
Management

August/September 2012



This young man is ecstatic to catch a stunted bass. Children are always ready to help remove small bass for you if the annual number has not yet been reached.

Continue Feeding, But Adjust Accordingly

Continue feeding, but check water temperatures. If water temperature is above 90° F a couple feet below the surface, reduce feeding to twice per day, once at dawn and at dusk when fish are most active. If water temperatures have remained below 90, continue feeding four times per day, twice in early morning and twice in late afternoon. Set feeding duration time so all

feed is consumed in approximately 15 minutes to reduce waste and not create water quality issues by over feeding.

Continue Fertilization Program

Continue to check visibility and only fertilize if it is greater than 30 inches. Once you begin a fertilization program in the spring you must continue until the growing season ends. If stopped prematurely, submerged vegetation growth can be accelerated during a time

when treating large amounts of submerged vegetation is not advised.

Herbicides Should Be Used Sparingly

Only spot treat extreme problem vegetation in and around your waterbody. During summer, if large areas of vegetation (emergent or submerging) are treated, decomposing plants can cause dissolved oxygen to drop to levels that can stress fish or cause a fish kill. If a

large area must be treated, treat approximately one third each time over a three week period. Do not do the third all at one end or in a cove. Spray, skip an area twice as large as you sprayed, then spray and skip another area twice as big as the area sprayed, and so on. This will spread out the dying and dead vegetation over the whole lake as opposed to it all being at one end. Never add dye the first time once an algae bloom is present or heavy submerged plant growth is established during the summer. This again will overload the system with nutrients and can cause fish stress or a kill. Knowing the reaction from your actions is absolutely necessary to prevent negative issues in your waterbody and possible effects downstream.

Add Structure Offshore and Along Banks

Installing fish attractors into an existing pond is best done in the summer when you can get wet and enjoy it, rather than in winter when air and water



For a successful fertilization program, checking visibility weekly or every two weeks is imperative. Under or over fertilizing can have disastrous outcomes, so stick to the plan.



This nice black crappie comes from a waterbody in South Central Georgia, and is a keeper in anybody's book!

temperatures are cold. Both natural and artificial materials can be used along shore and as offshore fish attractors. Do not place where they will interfere with other activities such as swimming or boating. Keep away from docks that may be used as diving platforms, or make sure they are far enough underwater to not get hit by boat or Jet Ski.

Build a Dock

In late winter or spring you should have ordered your dock materials and now that the air and water temperatures are hot, it is time to get into the water and build the dock. Place in a location where a feeder can be placed on one corner, where it is deep, fairly close to cover so fish can come eat and head

back to their hiding areas. They do not have to be elaborate, but functional. Always use quality pressure treated lumber and galvanized hardware so it will last and require repairs later than sooner.

Organize Fall Fish Stocking

If any fish need to be stocked in the fall, make arrangements and reserve fish now so you do not miss out. No fish should be hauled any distance during summer months. Water temperatures can rise quickly in the hauling tank and the destination water can be as much as 20 degrees warmer than the hauling water, which can contribute to a low survival rate. Fall stocking of most species can be very successful,

and some species are better stocked in the fall over spring, as their spawning time may be shortly after stocking and you receive even more fish than paid for. Fall fish of some species are slightly larger, but do cost a little more.

Remove Largemouth Bass

If the target number of bass removed has not been reached for the year, continue to harvest bass to achieve your goal. Fishing early in morning or late in the day may be necessary when fish are most active and biting better. Invite friends and their children over to help reach the harvest goal or have a fish fry with small bass, catfish and nice bream. The earlier in the year the number is reached the more food left for remaining bass.



This dock is fairly simple yet functional with a fish feeder added to it. The feeder was angled to throw feed across in front of the dock rather straight out from one side or the other. No railing in front allows for easy fishing, docking a small boat, or diving in on a warm summer day. Fish attractors could be placed on both sides near or out from shore to provide habitat for fish.

MAXIMIZE YOUR LAND, *THE* WILDLIFE & YOUR TIME!

AUGUST 9-11, 2012
NASHVILLE,
TENNESSEE



**PROTECT.
PRESERVE.
ENRICH.**



We all have that one special place where the morning commute and stacks of spreadsheets are forgotten. A slice of heaven where we can pursue memories not yet made and the wildlife we love. Whether it's your land, a lease, or property you manage, you have passion for it and a commitment to make it better.

The leading conservation groups come together for the Bass Pro Shops Land & Wildlife Expo's seminar series, offering the opportunity to meet and learn from the experts who share your enthusiasm for hunting and land management. Enjoy endless aisles featuring the latest in hunting and conservation tools and 105 acres of outdoor hands-on demonstrations.

This event is hosted at the world-famous Gaylord Opryland Resort & Convention Center, which provides a special venue and access to entertainment that your entire family will appreciate.

Maximize your land's potential and register today!

★ landandwildlifeexpo.com ★

CONSERVATION PARTNERS



101 MARKET PLACE, SUITE 500
MONTGOMERY, ALABAMA 36117

Presorted Standard
U.S. Postage
PAID
Auburn, AL
Permit No. 78



BECAUSE

The Season

NEVER ENDS.

Wildlife Consulting • Hunting Lease Management • Recreational Property Development



Great hunting doesn't happen by accident. It is the result of strategic planning and proper management of wildlife populations and their habitats. Since 1951, Westervelt Wildlife Services has been committed to helping our clients optimize the wildlife and recreational value of their property and reach their land management goals.

Whether you need help tuning up your deer herd, enhancing wildlife habitats, developing your land into a dream recreational property, or someone to manage your hunting lease program, we are ready to put our talented staff of biologists and experience to work for you.



800.281.7991 • www.westerveltwildlife.com