Welcome!

Welcome to “Missouri Chapter News” distributed to members of the Missouri Chapter, Walnut Council. The newsletter is intended to keep you informed about timely events while also distributing general information about the management of fine hardwoods. Members are encouraged to provide feedback about this outreach approach and suggest topics for future issues. Comments and suggestions can be emailed to Dennis Evans, Chapter President.

During the year we will also distribute “technical articles” on specific topics of interest to woodland landowners. Both the newsletters and technical articles will be archived at our chapter website.

A Word from the President: Dennis Evans

Parks, Soils and Water Sales Tax

The Parks, Soils and Water Sales Tax is up for renewal in 2016. I encourage all members of the Missouri Chapter to become involved in helping ensure a successful renewal of this very important tax to protect our soil, water and related natural resources.

The primary source of funding for the state park system is half of the dedicated constitutional tax of one-tenth-of-one-percent parks, soils and water sales tax, which provides about three-fourths of the division’s budget for operation and development of state parks. All additional funding comes from revenues generated in the state park system and some federal funds.

The parks, soils and water tax was created through a constitutional amendment and earmarked specifically for the state park system and efforts to stop soil erosion. The tax was first approved by voters in 1984, and has since been reapproved by voters three times in 1988, 1996 and 2006. Two-thirds of voters approved the tax the last three times, showing how much Missouri voters support their state park system and believe in the importance of protecting our natural resources.

Missouri landowners have benefitted from a state financed state cost-share program for over 30 years that is the envy of the nation. The direct benefits to woodland landowners have been enormous, so please do not overlook the need to support this important tax renewal on November 8th.

For more information, visit the Missouri State Parks website.
Grass Control in Tree Plantings
Scott Brundage, Consulting Forester and
Bob Ball, Woodland Landowner

Ellen Lebold and her husband Charlie own Jen-De-Le Tree Farm near Lawson, Mo., and have often stated during field days, ‘If you can’t take care of them, don’t put them in the ground,’ reminding us about the importance of first planning and then maintaining tree plantings. It’s been our experience that controlling grasses around tree seedlings may be the most critical determinant of success or failure assuming all of the other planting steps were carried out correctly. Tree seedlings simply do not tolerate competition for water, nutrients and sunlight. Especially if the competition is tall fescue, reed canarygrass, or Johnsongrass.

One of the better sources of technical information on this subject can be found in the paper (FNR-224) “Weed Competition Control in Hardwood Plantations” by John R. Seifert, Director, Indiana Division of Forestry, Indiana Department of Natural Resources and Marcus F. Selig and Robert C. Morrissey, Department of Forestry and Natural Resources, Purdue University. Their paper can be found under the heading “Planting and Care of Fine Hardwood Seedlings” at the Hardwood Tree Improvement and Regeneration Center’s website. A second excellent source of information is the paper “Weed Control” within the “Walnut Notes” series produced by the North Central Forest Experiment Station. Another excellent reference on this topic is “Weed Control for Seedlings” produced by Iowa State University Forestry Extension. Yet another outstanding reference is “Site Preparation and Competition Control Guidelines for Hardwood Tree Plantings” by Jeffrey W. Stringer, Professor, Department of Forestry, University of Kentucky, Wayne Clatterbuck, Professor, Department of Forestry, Wildlife and Fisheries, University of Tennessee and John Seifert, Director, Indiana Division of Forestry, Indiana Department of Natural Resources. This is UK Extension Publication PB1783. Before moving ahead with your plans, take the time to review all of these outstanding resources.

These publications focus on three primary means of dealing with weed competition, Mechanical, Chemical and Physical. Each option may have a place in your management plan. The use of herbicides tends to be the option used most often, yet there are questions about carrying out this approach efficiently and correctly. However, if you are planning a new planting and you want to rely on herbicides, decision making becomes more complex. You may need to use both pre-emergent AND post-emergent herbicides with a goal of killing all unwanted grasses AND broadleaf weeds while NOT killing your seedlings. For purposes of this article we are focusing on using post-emergent herbicides only. We are assuming a situation where the seedlings have been planted and it has been decided to use Chemical control to kill or suppress tall fescue...maybe the biggest enemy of young trees.

There are several herbicides on the market that can be sprayed around or over the top of hardwood (before the trees break dormancy) and/or conifer species with very minimal or no stunting damage. Be sure to read and follow label restrictions carefully! One such product is OutRider herbicide produced by Monsanto. Follow label instructions for “Non-Crop Tree Sites.” A second product to consider adding to your herbicides list is DuPont “Oust” which comes in two formulations: Oust XP and Oust Extra. The XP version is most commonly used for over the top spraying. A third product demonstrated to be very effective with minimal or no seedling stunting is Plateau by BASF. There are drawbacks when using all of these products, so follow their label recommendations closely.

Studies have been conducted for years by the corporate chemical companies, USDA Natural Resources Conservation Service Plant Materials Centers, the U.S. Forest Service and forestry departments at land grant universities on various herbicides, their formulations, concentrations, nozzle sizes, pump pressures, flow volumes and spraying over the top onto tree foliage or below foliage to target difficult weed
species. If your target weeds include hard to kill species, seek professional advice and plan carefully. Spraying gets complex when trying to avoid damaging seedlings while also knocking out these hard-to-kill weeds. Also, the over-the-top herbicides vary in their effectiveness, cost, availability and potential stunting damage. Be wary!

Looking only at cost, the price for Oust XP from “Forestry Suppliers” is $220 for a 3-pound container. Van Diest Supply Company pricing for Oust XP for $3.08 per ounce (before tax and shipping) which is $147.84 for the same weight, but you must purchase 8 boxes of 48 ounces in a case. Poast ordered from Van Diest is $400 per gallon while Plateau is $140 per gallon (before tax and shipping). As a comparison, Van Diest Supply Company sells Glyphosate for $18.40 per gallon including tax. “Forestry Suppliers” sells Roundup (Glyphosate) for $85 for 2.5 gallons and both herbicides are the 41% concentration. MFA may be more accessible, but prices are typically higher, and their selection of these specialty products is often limited. Regardless, there is a tremendous variation in the cost of herbicides, and a significant variation between the price of the same products from one source to another! In addition, if the product label mentions using a spreader/sticker the extra cost is usually minimal, but the effectiveness of that herbicide is improved. Now, you must ask yourself two questions, “Can I afford this herbicide mix? Is the herbicide even available?”

Once the trees are planted to make weed control simpler and less costly, we suggest a more basic approach to fighting the battle of killing grasses and other competing weeds. For over 10 years Scott has used a 2% solution of 41% active ingredient Glyphosate plus a 1/2 of 1% spreader/sticker. (Note: a 2% solution in a 3-gallon sprayer means first adding some clean water to your tank followed by 7.68 ounces of herbicide then adding additional water to make 3 gallons of spray.) This option is inexpensive, yet effective. If you have a high percentage of difficult to kill broadleaf weeds, you may need to boost the percentage up a little, but the stronger the concentration the more potential damage you can do to your seedlings IF you happen to get overspray on any leaves.

Scott said, “I have always gotten a 100% kill of unwanted vegetation and 0% kill of seedling trees I have just planted using a 2% solution. These results cannot be beaten!”

The key to such success is keeping herbicide spray off the newly planted seedlings (on older plantations--larger trees--there is no problem). The challenge is: How do you keep the herbicide spray off the leaves? Using tree shelters that deflect herbicide spray is one option, using a portable shield as you walk along with a backpack sprayer is another, but Scott prefers even another option, “I prefer to use a 110-degree spray tip that gives a much wider fan shaped spray than a regular tip. A regular tip puts out a 45 to 60-degree wide spray pattern that hits many of the leaves on a newly planted tree harming the tree, or worse yet, kills many of the trees. The 110-degree spray tip allows you to lower the spray wand or boom to just a few inches above ground spraying under the leaves. I use the 110-degree tips on both my ATV boom sprayer and my backpack sprayer.” Sprayers are sold with various nozzle tips and inserts for use in a variety of situations.

“Glyphosate (or Roundup) vegetation control only lasts about 60 days on very fertile sites. It has no residual value where some of the other mentioned products do. This method of chemical control may require three sprayings per summer. On average sites, it requires two sprayings per summer. On poor, infertile sites (my Christmas Tree Farm), I only sprayed one time per year (usually late April to early May). One spraying per year allows late summer foxtail, cheat grass, etc., to grow, but these annuals have shallow root systems that offer very little competition for soil moisture and nutrients. Besides, almost all tree growth is over by late summer. On poor soil sites landowners may be able to ignore late summer spraying,” advises Scott. Adding other products with pre-emergent control works, but you are adding another degree of complexity and somewhat greater cost.
“The PURPLE PAINT LAW – is the Best Thing Since Sliced Bread”  
Scott Brundage, Consulting Forester & Tree Farmer

Why would a Tree Farmer/consulting forester make such a statement? To save money and to make money, that’s why. Purple paint on boundary line trees or fence posts means NO TRESPASSING, just as a green light means go and red means stop. How can the purple paint law possibly save money for a woodland owner? Just think, in the past, if a landowner wanted to post his land against trespass, he would almost always nail a sign to a tree. I have seen black walnut, white oak, and red oak veneer logs ruined by such a practice. Think of the hundreds of thousands to perhaps over a million butt logs ruined by nailing up a NO TRESPASSING sign. Typically, a landowner always nailed the sign to the biggest tree and cost himself some big money.

In the mid-90’s, the Missouri State Legislature passed the Purple Paint Law almost as a joke, never realizing they were going to save millions of future butt logs (most valuable log in a tree). The law reads as follows: “The owner or lessee of any real property may post the property by placing identifying purple paint marks on trees or posts around the area to be posted. Each paint mark shall be a vertical line of at least eight inches in length and the bottom of the mark shall be no less than three feet nor more than five feet high. Such paint marks shall be placed no more than 100 feet apart and shall be readily visible to any person approaching the property. Property so posted is to be considered posted for all purposes, and any unauthorized entry upon the property is trespass in the first degree, and a class B misdemeanor.”

Other important advantages of purple paint over posted signs are that it cannot be torn down. Also, fast growing trees pull the nails through the sign in two or three years and then the sign falls. Slob hunters do not shoot purple paint spots as they do signs. Important! Before painting a tree, I scrape off the loose bark with a draw knife (do not wound the tree), and this will at least double the life of the paint spot from 3 or 4 years to 6 to 8 years. Also, smooth barked trees such as young hickories are perfect to paint. Please, if you must put up any sign on a tree, nail it to a low value tree of only firewood quality and use aluminum nails. Loggers, foresters, and neighbors will all benefit from you taking time to mark your property lines.

Learn more about this statute.

COMING EVENTS!

WALNUT COUNCIL ANNUAL MEETING
• The Walnut Council annual meeting will be held Sunday, July 31st through Wednesday, August 3rd in Lawrenceburg, Indiana. For conference details monitor the national website: http://www.walnutcouncil.org/annual-meeting/ or find details in the “Walnut Council Bulletin”. The annual meeting will include field trips, indoor presentations and our always popular Landowner Show and Tell plus the annual awards banquet on Tuesday. Full program information and registration begins on page 7 of the “Bulletin” that was just released. The meeting hotel is the Doubletree by Hilton Lawrenceburg
• (1-812-539-8888) at 51 Walnut Street in Lawrenceburg, Indiana. Link to hotel directions. Register by July 16th for the special “Walnut Council” group rate of $99 city view and $109 river view, rate that includes a hot breakfast buffet. This brand new hotel in downtown Lawrenceburg has beautiful views of the Ohio River and is within walking distance to bars and restaurants. It is located just a few minutes from Hollywood Casino. CALL AND RESERVE YOUR ROOM TODAY!

MISSOURI CHAPTER WALNUT COUNCIL FALL MEETING
• The Missouri Chapter fall field day is scheduled for Friday, September 30 and Saturday, October 1, 2016. The meeting will be held near Pleasant Hill, (Kansas City area). Longtime member, Phil Moore, has invited us to visit his tree farm. Several new topics will be covered at the fall meeting so stay tuned for the official invite with complete details later in the year. Mark your calendar now and we look forward to seeing you there If you have suggestions or recommendations for the local arrangements committee please notify President, Dennis Evans, or Secretary, Aaron Twombly.

IOWA CHAPTER FIELD DAY
• The Iowa Chapter of the Walnut Council has scheduled its fall 2016 field day for Saturday, Oct. 15th in the Monticello, Iowa area. Activities will include: Visiting a direct seeding plantation; participating in a hardwood harvest; potential sawing on-site; and an optional sawmill tour at the end of the day (the sawmill will not be running). Details will be available in July/August.
The Rise of the Handheld GPS (from “Branching Out”)

We had a discussion during our spring field day in Montgomery County about the importance of having property lines clearly identified as an important component of your woodland management plan. Foresters, logging contractors and your neighbors will insist on knowing exactly where your property lines are before starting a timber harvest. When you are marking those lines in the field, you should also consider recording their locations using a GPS receiver. Later you can create maps to include in bid announcements and to support your management plan.

Global Positioning System (GPS) devices were developed by the United States military at a cost of about $12 billion, and have been available to the general public since the 1980s. But until 2000, the U.S. government practiced something called Selective Availability, which meant they purposefully degraded the information that civilian GPS systems received. This meant that the devices could lead you off course by as much as 300 feet (91 meters), while the military version got you within 10 feet (3 meters) in most cases. On May 2, 2000, this practice was lifted, and the devices really took off in the civilian market, and companies like industry leader Garmin found themselves with lots of business.

GPS is actually a system with three major components that include: 1) 24 satellites orbiting the earth at any given time; 2) five ground control stations around the world; and 3) the actual GPS receiver you hold in your hand. The ground control stations continuously track the satellites and update their positions so accuracy is maintained. The GPS device receives information or radio signals from the satellites and measures how long it takes for the signal to reach the device. Since the signal travels at the speed of light (186,000 miles per second), the distance to the satellite equals 186,000 ft/sec multiplied by the time it took to receive the signal. The receiver continuously measures the distance from a number of satellites. Once a GPS device knows its distance from at least four satellites, it can use geometry to triangulate its precise location on Earth. The greater number of strong satellite signals you are able to receive the more accurate

the positioning. A quality hand-held GPS receiver can typically get down to 9 feet (+/-) accuracy. Costly survey grade equipment used by professional surveyors is extremely precise, but that degree of accuracy is typically unnecessary to simply locate your property lines.

Most people associate GPS devices with those in your car that help you get where you are going. Detailed road maps that came loaded in your GPS device made getting lost nearly impossible and stopping to ask for directions a thing of the past. Smartphones also have GPS, but unlike handheld units that read directly off of satellites, phone GPS requires a cell tower for proper operation. For most applications outside, phones are not reliable and not sturdy enough to stand up to being dropped and banged around. It is the more rugged handheld GPS units that have become so important for recreationalists, foresters, landowners, and other natural resource purposes. Very simply, handheld GPS provides an “address” no matter where you are on the Earth. Rather than a street number, it is the latitude and longitude of the exact spot when you press the button. This address is known as a “waypoint.” The GPS unit stores the waypoint and enables you to recall that location with the “Go To” command.

Handheld GPS units have evolved from the basic units sold in the early 2000s. Those devices had weak antennas that were unable to keep a signal under trees or forests or any type of cover. Today’s units work in dense forest and urban canyons. Many will keep a signal inside a structure if there is a window. Basic units are available online for around $125-$150, and the better units with more mapping capability for around $300-$350. GPS handhelds sold in the last 3-5 years can usually be purchased with marine, trail and topographic maps already installed on the memory card. This is the most user-friendly option, and usually the most cost-effective package deal. Older units lacked any detailed topographic maps; you had to purchase separate software, install it on your computer, and transfer those maps to your GPS unit. Newer units typically have topographic maps installed for the entire United States.

Creating waypoints is very useful for marking a favorite hunting stand, fishing spot, property boundaries or other important locations. You can then tell the GPS to “Go To” the waypoint at some later time, which is very useful for hunters looking for a tree stand or their car when it is dark. Topographic maps on your handheld enable you to find other locations you want to “Go To,” create a new waypoint on your screen, and then go to that location. This is especially useful in case of an emergency or if you are lost. Not only can you provide emergency responders your latitude and longitude...
location, but you could also find the nearest road or access point on the topographic map on your handheld GPS, and take a direct route to the location.

Handheld GPS also records your “track,” which is the actual route you took to go from one place to another, including the distance, time, and many other variables. This is useful for hiking or measuring the length of a road, and it will even tell you the acreage of a field or stand of timber you walk around. You can save these different tracks for later use.

Handheld GPS technology has developed to a high level since 2000 and is worth consideration by anyone who spends time in the outdoors. All GPS handheld units can be used with computers and waypoints and tracks easily downloaded into programs like Google Earth. There is a wealth of GIS (geographic information systems) software available today for little or no cost, but we will leave that topic for another day.

Missouri Department of Natural Resources
State Cost-Share Program – Tree Planting Opportunities
Kurt Boeckmann

Gov. Jay Nixon on March 1, announced that $750,000 will be made available to landowners to implement conservation practices that improve stream corridors and habitat in five counties in southeast Missouri and five counties in southwest Missouri. The funds for southeast and southwest Missouri are available from a settlement to compensate for natural resources injured by the historical mining activities of ASARCO. In addition, funds from a settlement to compensate for natural resources injured by the release of hazardous substances at the Newton County Wells Site are available in southwest Missouri.

Funds will be available to assist with planting trees, shrubs and grasses; fencing livestock away from stream corridors and providing an alternative water supply; stabilizing eroding stream banks; and, in southwest Missouri, improving and protecting karst habitats.

Soil and water conservation districts in Barry, Barton, Jasper, Lawrence and Newton counties in southwest Missouri will approve contracts for the settlement funds with landowners through voluntary cost-share conservation practices in designated watersheds.

Protecting Seedlings Using Tree Shelters
Bob Ball, Woodland Landowner

If you planted hardwood tree seedlings this spring, but made no provisions for protecting your trees from whitetail deer, you may want to invest in a little insurance. You will need to act quickly though!

Even one or two deer browsing your new tree planting can cause irreparable damage overnight. If your trees survive the first years remember deer love to rub their antlers on trees which are 1-2” in diameter. This is especially true with black walnut. Ask yourself the question “Why invest in quality planting stock and take my valuable time to prepare the site and plant these seedlings then walk away and hope for the best?” Instead, consider adding a little insurance policy and shelter your trees protecting them from deer browsing and rubbing. There is still time to shelter newly planted trees, but you need to act quickly! Grow tubes or shelters can be difficult to slide over seedlings with longer lateral branches and leaves. Directions usually suggest removing branches to prepare for “tubing”. Personally, I have never done that, but it takes longer to carefully slide the tube over the seedling.

Tree shelters are not the only form of “insurance”. It’s wise to dip the tops of your seedlings in a deer repellant before planting then reapply that product during the growing season. Some of those products repel better than others and some persist longer. Since your trees may already be planted, your only repellant option is spot spraying. Off-the-shelf repellants are very common today but costly. There are recipes for home brews that seem to provide good protection at a fraction of the cost.

Plantra SunFlex Grow Tube with three-sided flex stakes, bird net and double-wire twist tie.
commercial product cost. Regardless of how you obtain the repellant, they must all be reapplied and then reapplied again especially during periods of high rainfall. There does seem to be some benefit to this approach, but it’s an ongoing battle.

Fencing is another option. Scott Brundage, Consulting Forester and woodland landowner, has used electric fencing around one of his plantations. He also has the “deer proof” 8’ tall fence around another planting. He would be a good source for personal information on fencing. Again, this option may not fit into your plans right now, but it could be an alternative if you are willing to spend your time and money, have a design in mind and commit to getting started.

For most of us, tree shelters or grow tubes may be the quickest method of providing needed protection although this approach is not without considerable cost. Since my trees were several dollars each, I felt justified in using shelters on a portion of my plantings. I have personal experience with five brands of tree shelters, but the only brand I recommend using today is the Plantra “SunFlex Grow Tube System.” Their system includes vented grow tubes (shelters), 3-sided flex stakes, bird nets, double-wire twist ties and a metal post driver. The cost for a basic 10-pack unit is $84.90 with free shipping over $99. Yes, the cost per tree is high, but maybe you can get away with only sheltering your very best seedlings scattered throughout the plantation.

When deer damage is intense consider providing protection to at least a minimum number of trees per acre spaced throughout your planting. (See photos of two tree shelters on my farm in Ohio.) Ideally, shelters or protectors need to be at least 5’ tall to stop deer browse. Do not buy a 4’ shelter thinking you will save some money. You are better off buying 5’ or even 6’ shelters when you factor in some initial cost and your labor. Deer can browse 5’ high.

Mice can cause some problems during the winter so be sure to use mulch or place soil around the base of the shelter as well as placing mouse baits throughout the planting. Otherwise, mice can nest at the base of the seedlings inside the shelters and munch on the bark. My biggest problem has been wasp nests inside the shelters formed tightly around the seedlings, but Plantra’s “bird netting” seems to have stopped the wasps. Wasp nests can fill the tube solid near the top of the seedling usually including many leaves. Those trees do not grow well.

In researching the use of tree shelters you may find a management recommendation to raise the shelter slightly off the ground in late fall to allow the seedling to harden off just above ground level making the stem tissue stronger. I have never followed that recommendation, but I do not feel this has been an issue with my trees. I have never felt it was practical to raise shelters then lower them back down the following spring, but this is a point you may want to look into during your planning.

One brand, Blue-X Tree Shelters, claims accelerated growth. I believe that may somewhat be true in comparing with other brands of shelters. However, Blue-X is a two-part system that is very labor intensive requiring you to roll a Mylar layer and insert it into a blue plastic sleeve then punch holes and insert plastic ties for the stakes. These shelters buckle with wind or deer pressure and need to be straightened out often. Any growth advantage they may offer is offset by extra time and frequent maintenance.

Some brands tend to break down very quickly in sunlight crumbling apart in two years. Other brands (Tubex Tree Shelters) are so rigid and heavy they last for years, but the early version had a brown exterior that gets very hot inside the tube literally cooking the trees. Their current product is translucent so they should be cooler. Tubex stakes are sold separately, so remember to include that cost when price comparing.

In my opinion if you have a few trees and there is potential deer damage, buy a good shelter and use either a solid or flexible stake. Monitor these shelters often. You cannot walk away and come back in two years, but if you are not able to care for your trees often, the Plantra system provides more reliability making their initial extra cost worth it.

Four-year old Red Oak in Blue-X Tree Shelter
News from Missouri Invasive Forest Pest Council (MIFPC)

Collin Wamsley, State Entomologist, Missouri Department of Agriculture

Emerald ash borer was discovered by Vincent Shoemaker of USDA APHIS PPQ in Carter County at a National Park Service campground. Larval specimens were sent to PPQ identifiers and confirmed as EAB. See the updated Missouri EAB map showing infestations.

Missouri Department of Agriculture and USDA APHIS PPQ will continue survey efforts throughout the state in 2016, with additional traps being placed by the University of Missouri at the Columbia campus. Army Corps of Engineers will also survey along the Mississippi River north of St. Louis.

Top Ten Things Everyone Should Know About Ticks These Days

Once attached to people or pets, deer ticks are just hard to find! Their numbers are on the rise and they occur in more & more places – even your backyard! Read “Top 10 Things Everyone Should Know About Ticks These Days” and stay disease-free.

Federal Income Tax Tip

The Affordable Care Act raised the capital gains rate effective in 2016. Depending on the type of capital gain, and your income bracket, the capital gains rate will vary from -0- to 28%. In addition, if your income is over $200,000 single or $250,000 married, you will owe an additional 3.5% on top of your capital gains rate. Yes, that is why they didn’t want us to read the law!