

# Forest Leaves

*A quarterly newsletter about Pennsylvania's privately owned forestlands*

## **Attaching Your Child to Your Land**

By Nancy G.W. Baker, PA Forest Steward, Bradford County

I remember with great fondness that you can draw with some of the stones in our creek, rubbing the wet red pebbles and the gray-green stones on the large flat rocks. The drawings are ephemeral; they either bake to a powder in the sun or wash downstream in the rain. My attachment to the stream, however, seems permanent. And the land too, under the fireflies and the spiderwebs, the pilot snakes and pines, the darn deer and the bugs, is under my skin.

Richard Louv, author of the best seller Last Child in the Woods, writes, "When people talk about the disconnect between children and nature—if they are old enough to remember a time when outdoor play was the norm—they almost always tell stories about their own childhoods: this tree house or fort, that special woods or ditch or creek or meadow. They recall those 'places of initiation,' in the words of naturalist Robert Michael Pyle, where they may have first sensed with awe and wonder the largeness of the world, seen and unseen."

Reader, it's likely you have children, perhaps grandchildren, and it's probable that you own forest land too. If you wish your offspring to have some attachment to that land, if you expect them to care for it as you do when you turn it over to them, begin now!



*Nate's Grandpa (right) draws on the rocks in the creek with his cousin, the author.*

Think of this: I have a cousin. He has forested land and family. The family lives in Ohio; he has a Pennsylvania Forest Stewardship Plan. The plan, designed by a consulting forester with the assistance of the West Virginia Office of the Nature

### *Continued Next Page*

An important family tradition that I do is going [from my home in Ohio] to Wyalusing PA. In Wyalusing my family has a cabin where we go about 4 times a year. It is a five and a half hour drive, but it is well worth it.

One of the fun-filled things that we do when we are there is hiking. There is a creek that we go to if the weather is nice. This is my favorite place to go to. We have to hike down a grass-covered cliff, which would be scary to even a dare-devil. Once you get down there though, it is so gorgeous. It's one of those things you will never forget. The sound of the creek is just incredible. There is a rock that is bigger than a Hummer than I always go to. You can even jump off of a rock that is bigger than two Hummers. I admit that it is very creepy but it was a great experience.

Hiking is so much fun [but there are also] two four-wheelers and a mule. We zoom around over 100 acres of beauty and enjoy laughing and hang-out time. It is always me, my younger brother, and my four girl cousins. Night rides are the best because you never know what you will come upon. You can see so many animals like bear, coyote, turkey, porcupine and deer.

Going to the cabin is an incredible journey. It's a great place that anybody with adventure in their blood would want to go. It's a great family time place, and you get to see your cousins. You get pumped to go a couple weeks before you actually go and you almost cry when you have to leave. In the end, the long trip is so much fun and it's a wonderful place!

Nate Conroy, April 2009, age 12  
[Nate is the fourth generation of his family to enjoy this Pennsylvania land]

## Attaching Your Child to Your Land Continued...

Conservancy, has as an objective the attachment of his grandchildren to this particular piece of Pennsylvania land. An entire section of the Forest Stewardship Plan has activities for six children, now aged 3 to 13; the explanations are detailed, and there's an appendix to help mom and pop along.

For example: (the condensed version!)

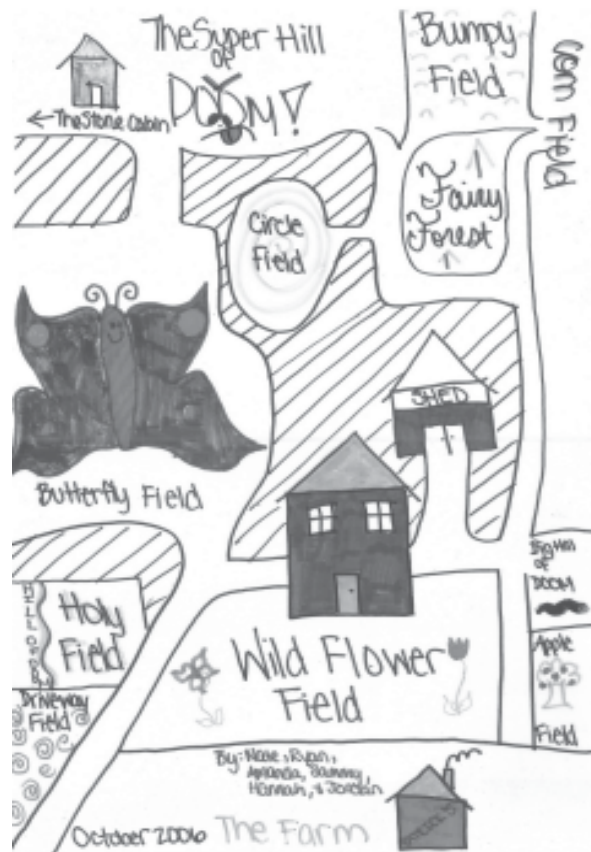
- Draw a map; give names to all the places you identify.
- Print an aerial photo of the land (magnify it, perhaps you'll need to tape it together), mount it on cardstock, cut out each field, forest block, house, barn or habitat to make the puzzle pieces. Test your knowledge of where different places lay in relation to each other.
- Go on a scavenger hunt: Assign scavenger lists that require a child to think creatively or to look very closely (e.g., A chewed leaf (not by you!), something that makes a noise, exactly 100 of something, something that reminds you of yourself....plus twenty-one more!).
- Call in predators: buy a predator call at a sporting goods store and use it to draw in animals for a closer look.
- Watch a thunderstorm move across the landscape; learn to know the clouds.
- Create a wild garden at the stone cabin: using rocks, sticks or logs, mark the garden and walking paths so visitors don't step on the plants. Identify, map, and label the plants so friends can see and learn about the natural diversity of flowers and other plants growing in your woods. Expand and maintain the garden by transplanting plants that are growing abundantly elsewhere on the property, by removing undesirable or competing plants, and by mulching with leaves in the fall to protect their roots through the winter. Keep a bucket at the cabin to water the plants during droughty times. Include wild plant nursery visits, protection from deer, studying woodland spiders and insects.
- Build a bird box, mount it in the correct habitat, and monitor the occupants.
- Identify animal and bird tracks by taking photos in mud or snow; see if you can follow their trails in the winter.
- Keep a journal with notes, pictures, drawings and found objects.
- Sleep outside (remember the bear spray).

What's happened in the seven years since the plan was created? There's a much loved children's map with the Fairy Forest and the Super Hill of Doom. There's a secret fort. There are piles of sleeping bags and a telescope for watching the stars. There's a little girl who wanted to know what all

the different caterpillars were one summer. There are new collections of stones among old collections of moths; the sand mound is seeded with wildflower mix; and it once took a whole weekend to hang up the tire swing on the highest branch. Everyone brings their friends and shares their fun in the woods and fields. And there's the essay from young Nate in the sidebar on page 1.

Begin now. Introduce your next generation to your woods; you can make it their "place of initiation." A 3-year-old can identify a cedar tree and a maple—even if she can't tell you what color pants she's wearing. And a 4-year-old can tell the difference between squirrel and rabbit tracks—even if he can't yet read any of the writing on a map. Young children learn through the sounds, scents, and seasons of the outdoors.<sup>1</sup> You will find a wonderful beginning resource guide to introducing your child to your outdoors at <http://richardlouv.com/children-nature-resources>. And if you are attached to your piece of land, share and teach your attachment to those future owners.

<sup>1</sup>Milwaukee Journal Sentinel, April 2006



*The Children's Map by Amanda Layman. Copies of this map are laminated and used as placemats for all the cousins' and friends' meals at the farm.*

# Emerald Ash Borer: Expanding Its Spread in Pennsylvania

The emerald ash borer, that invasive beetle first detected in western Pennsylvania, Butler County, in the summer of 2007, has now been documented farther east – detected in Mifflin County in February 2009. And its reach in western Pennsylvania is getting larger with Butler, Allegheny, Beaver, Mercer, Lawrence, and, in mid-June, Westmoreland Counties now under ash green wood transport quarantine – including the transport of all hardwood firewood species. The emerald ash borer is a small, metallic green beetle with stealth-like behavior patterns that make it extremely difficult to detect. Most often its presence is noted by the damage it leaves behind – dying ash trees and D-shaped exit holes from when the adult emerges.



*Emerald ash borer adult.*

*Photo by Howard Russell, Michigan State University, Bugwood.org*

The emerald ash borer, *Agrilus planipennis*, is a wood-boring beetle native to China and eastern Asia that most likely arrived here in wood packing materials used to ship consumer and other goods. It was first detected in Michigan in the summer of 2002. It has since resulted in the death of millions of infested ash trees in that state alone, and has also been found

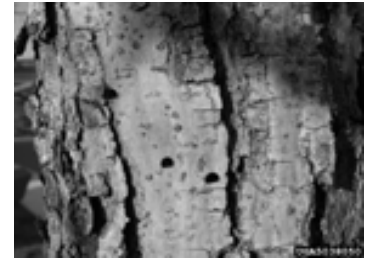
in Windsor, Ontario and several states including Indiana, Ohio, Maryland, Virginia, Illinois, Minnesota, New York, and Pennsylvania. If not managed, the beetle threatens to devastate all ash species in North America.

Don Eggen, forest health manager for the Department of Conservation and Natural Resources (DCNR) Bureau of Forestry, notes, “Emerald ash borer has been discovered in Central Pennsylvania in Mifflin County. The infestation has most likely been there for several years. The infestation was reported by a landowner who sent digital photos to our Pennsylvania [badbug@state.pa.us](mailto:badbug@state.pa.us) email address. I think this highlights the importance of public outreach and education.”

Adults are dark green, one-half inch in length and one-eighth inch wide, and fly only from early May until September. Larvae spend the rest of the year beneath the bark of ash trees. When they emerge as adults, they leave D-shaped holes in the bark about one-eighth inch wide. They attack only ash trees which usually die within four years of initial infestation regardless of the age, vigor, or species of ash. Survey efforts are underway this summer to examine the spread of the pest in western Pennsylvania and to locate new outbreaks not yet discovered.

To detect emerald ash borer, survey crews have hung purple panel sticky traps in trees. Resembling a box kite, these traps are placed in ash trees in the survey area. The traps contain a lure that mimics chemicals emitted by stressed ash trees, which may make the traps more effective in detecting low population levels of the emerald ash borer

“The purple panel traps will not bring emerald ash borer into a noninfested site,” says Greg Hoover, ornamental extension entomologist in Penn State’s Department of Entomology. “These traps help us determine if the pest is already there.”



*D-shaped exit holes.*

*Photo by Joseph O’Brien, USDA Forest Service, Bugwood.org*

Officials are asking for the public’s cooperation in ensuring these traps are undisturbed.

Unfortunately, there is no known practical control for this wood-boring pest other than destroying infested trees. Since many species of wood-boring insects, including the emerald ash borer, are spread by transporting infested firewood and logs, campers and homeowners should only use locally harvested firewood. They should burn all the firewood on-site, and not transport it to new locations.

People who suspect they have seen emerald ash borer or their “D-shaped” exit holes should call DCNR’s toll-free pest hotline at 1-866-253-7189. The local county office of Penn State Cooperative Extension will be the first point of contact for residents reporting an invasive species. Survey crews will be dispatched to investigate credible reports. Information is also available at [www.agriculture.state.pa.us/emeraldashborer](http://www.agriculture.state.pa.us/emeraldashborer) and <http://ento.psu.edu/extension/trees-shrubs/emerald-ash-borer>

Forest landowners all over the state are prime resources for detecting the spread of this invasive and destructive pest. An observant landowner found the population in Mifflin County. Keep an eye on your ash; look for ash decline coupled with evidence of wood borer damage – larval galleries carved into the cambium layer below the bark and exit holes emerging

through the bark. Contact DCNR or your local Penn State Cooperative Extension office if you suspect emerald ash borer in your area. Respect the quarantines and help halt the spread.



*Epicormic sprouts and crown dieback are typical indicators of an infested tree.*

*Photo by Daniel Herms, The Ohio State University, Bugwood.org*

*Excerpted from news releases from Penn State Ag Science News, written by Chuck Gill, 814-863-2713, and the Pennsylvania Department of Agriculture, contact Jean Kemmer, 717-787-5085.*

# Pennsylvania Forestry Association Update

By Linda Finley, PFA President

Summer often involves plans for outdoor activities, possibly a family picnic, a relaxing day canoeing, a mountain trail walk, or bike ride. Living in Pennsylvania you don't have to travel far to access our State Forest system, which is admired across the country. Some years ago PFA published an informative book by Richard R. Thorp, former State Forster, entitled *The Crown Jewel of Pennsylvania*. This is an excellent reference for Pennsylvania's State Forests where you can find locations, visitor activities, and abundant historic information about these forests. This publication is available for purchase through the PFA office.

Again this summer, PFA will share the message of forest stewardship at Ag Progress Days held at Rock Springs, southwest of State College, PA on Route 45. This event is one of the largest outdoor agricultural shows in the East. The dates are August 18-20. Look for our exhibit in the Conservation Tent.

Although we have just started the summer season, look ahead a few months and save October 3, 2009 for PFA's Annual Meeting. This year we will venture to southeastern Pennsylvania and Delaware County. With a population of more than 550,000, this urban area hosts numerous parks, protected natural areas, environmental programs, and many of Pennsylvania's champion big trees. For many years PFA has collected, registered, and published information on Pennsylvania's big trees. This year's annual meeting and field trip will highlight some of these magnificent wonders.

During the Annual Meeting field trip, we will visit Ridley Creek State Park and Tyler Arboretum, a 650-acre property with several state champion trees, as well as a giant sequoia photographed by Dr. Joseph T. Rothrock in 1902. We will also visit the John Heinz National Wildlife Refuge administered by the U.S. Fish and Wildlife Service. This area of nearly 1,200 acres includes the last freshwater tidal marsh in Pennsylvania. The day will conclude with the Awards Banquet, honoring some of Pennsylvania's men and women who have dedicated their time, talent, and energy to promoting forest stewardship and conservation education. Our keynote speaker, Julianne Schieffer, Penn State School of Forest Resources Urban Forester, will help us explore how trees really affect our social fabric, well-being, community ecology, and economic interests.

The PFA Annual Meeting and field tour is open to everyone. You can find registration information in the summer issue of *Pennsylvania Forest* magazine, the PFA website, or call the PFA office.

For more information on the Pennsylvania Forestry Association, contact the main office at 800-835-8065 or 717-766-5371, email [thepfa@verizon.net](mailto:thepfa@verizon.net) or visit the website <http://pfa.cas.psu.edu>.



## Woodland Owners Associations: Forest Stewardship Through Peers

Woodland Owners Associations (WOAs) are prime resources for forest landowners. Fellowship with other landowners followed or preceded by educational information, WOAs showcase presentations, tours, and other educational opportunities as well as networking with your peers – other private forest landowners. For a landowner new to being a landowner or not quite sure where to start on a particular project, WOAs can be a starting place to ask questions. You can get to know other landowners in your region, get recommendations on natural resources professionals, and attend talks on subjects of interest to you.

New WOAs are springing up throughout the state with six new groups forming in the last three years. New groups include: Blair Woodland Association (Blair County), York-Adams Woodland Owners Association, Clearfield-Jefferson Forest Stewardship Committee, Cumberland Woodland Owners Association (Cumberland and Franklin Counties), Women in the Woods/Pike-Monroe Landowners, and the Lancaster, Berks Chester Woodland Owners Association. WOAs can now be found in almost every county.

Visit <http://paforeststewards.cas.psu.edu/Associations.html> to see if your county has a woodland owners association and to find contact information for the groups. Consider joining other private forest landowners as they learn about and promote good forest stewardship. If your county doesn't have a group, consider starting one. Peers are one of the best resources available to the almost 750,000 landowners owning forestland in Pennsylvania. We encourage you to seek out your peers.



Counties with WOAs are colored with darker shades of gray.

# Pennsylvania Tree Farming Notes

By Dennis and Jackie Waldorf, Co-Chairs, Pennsylvania Tree Farm Committee

## Auditing the Tree Farm Inspection Process (follow-up)

As mentioned in the Spring 2009 newsletter, the Pennsylvania Tree Farm inspection process is scheduled to take place in 2012. In the meantime, we are keeping our ear to the ground to determine what auditors are finding as they evaluate other regions.

Early audits have identified missing or inadequate management plans as a major noncompliance issue. This issue arose on many Tree Farms, even recently-inspected properties. We urge Tree Farm Inspectors to review the Management Plan on every Tree Farm they inspect. We also urge every Tree Farmer to ensure his or her Management Plan is available and up-to-date. There is no National Office requirement for a management plan update; however, in Pennsylvania, we encourage using Stewardship Plans which expire every ten years. Please review your Stewardship/Management Plan now!

When a trend of major noncompliance occurs, states have sixty days to take corrective measures so all Tree Farms in the State remain certified.

## 2009 National Tree Farmer Convention

We urge all Tree Farmers and interested stakeholders to attend the 2009 National Tree Farmer Convention in Washington, D.C., Monday through Wednesday, September 28-30, 2009. The convention theme is "Growing Policy for Your Woodlands."

Convention highlights are as follows:

- Meet with your members of Congress! – A chance for attendees to let their legislators know what their forestland means to America's green future.
- Learn how you can influence policy affecting forest owners by joining with other Tree Farmers on Capitol Hill.
- Meet Tom Martin, fellow Tree Farmer and the American Forest Foundation's new President and CEO.
- Join us in congratulating this year's National Outstanding Tree Farmers of the Year.
- Experience a variety of optional tours including: Virginia's rich history; Baltimore's historic ships and B&O Railroad Museum; George Washington's Mt. Vernon; D.C. monuments at night; the U.S. National Arboretum; the Ladew Topiary Gardens; and the National Aquarium in Baltimore.

To receive the early-bird registration rate of \$265, register before August 3<sup>rd</sup>. Register online and access additional information about the Convention by visiting [www.treefarmssystem.org](http://www.treefarmssystem.org). Click on the Convention logo.

## Update on Climate Change Legislation

In an e-mail from Rita Neznok, Vice President of Public Affairs for the American Forest Foundation, we learned the House Energy and Commerce Committee passed the American Clean Energy and Security Act of 2009 (HR2454). This is a complex 900 plus page climate change bill with lots of nuances affecting family forest owners.

Rita emphasized, "The good news is that the current language doesn't preclude the possibility of family forest owner participation in carbon offset markets under the cap and trade system. However, the bill still leaves quite a bit of discretion to the Environmental Protection Agency in determining the extent of forest participation in these markets." Additionally, "more biomass from family forests can be used to meet renewable energy goals set in the bill."

"The bad news is the Committee failed to provide other incentives for U.S. forest owners (outside the carbon-offset markets) to increase carbon storage capacity in forests that don't fit into offset markets. These incentives are essential for family forest owners whose lands may be too small to participate in carbon-offset markets but still offer significant carbon mitigation benefits. Unfortunately the legislation does provide such incentives for international forest projects, but leaves out U.S. forest owners."

To review the American Forest Foundations policy on mitigating climate change and the policy priorities to fully capture the carbon benefits for U.S. family forests, please log on to <http://www.affoundation.org/public.html> and click on policy issues. Rita is offering assistance in crafting letters to your legislators and/or your local newspapers to insure that climate change legislation is workable for family forests. She may be contacted at [rneznek@forestfoundation.org](mailto:rneznek@forestfoundation.org).

## Volunteers Needed for Ag Progress Days

We are seeking volunteers to staff the Tree Farm Display at Ag Progress Days. If you can help any time from August 18 through August 20, please contact John Buzzell at [foreststew@aol.com](mailto:foreststew@aol.com) or phone him at (814) 237-1401.

For more information about the Pennsylvania Tree Farm Program, contact Dennis and Jackie Waldorf, State Committee Co-Chairs, at 814-379-3375 or [Mysti5605@aol.com](mailto:Mysti5605@aol.com), or visit the website: <http://patreefarm.cas.psu.edu/>.





# Forest Leaves Calendar



Saturday, July 18. Southwestern Pennsylvania Woodland Owners Association: Tour of the Homeplace, 12:30 p.m., Greene County, Meet at Building #10, Greene County Fairgrounds, Waynesburg. **1**

Saturday, August 1. Delaware Highlands Conservancy: Forest Botany, 10 a.m. – Noon, Milford Experimental Forest, Milford. **2**

Saturday, August 8. Delaware Highlands Conservancy: Money Can Grow on Trees. Part of the annual Festival of Wood, Grey Towers National Historic Site, Milford. **2**

Wednesday, August 12. Bradford-Sullivan Forest Landowners Association: Legislative Day, Loyalsock State Forest, Resource Management Center, LaPorte. Contact Marsha Chase, 570-363-2388.

Friday, August 14. Southwestern Pennsylvania Woodland Owners Association: Visit to a Sawmill, Summit Forest Resources, 1 p.m., Markleysburg. Meet at Building #10, Greene County Fairgrounds, Waynesburg at 11:30 a.m. **1**

Sunday, August 16. Northwest Pennsylvania Woodland Association: Timber Frame Construction Demonstration, 1 p.m., Yasenchak property, Cambridge Springs. **3**

Saturday, August 29. Wayne-Lackawanna Forest Landowners Association: Pond Workshop, 10 a.m., Wall Street Lodge. Call Joe Preate for reservations and directions, 570-430-6316.

Wednesday, September 9. Southwestern Pennsylvania Woodland Owners Association: Owls of Southwest Pennsylvania, 7 p.m., Building #10, Greene County Fairgrounds, Waynesburg. **1**

Saturday, September 12. Southwestern Pennsylvania Woodland Owners Association: Owl Spotting Tour, 6:30 p.m., Meet at 6:00 p.m. at Building #10, Greene County Fairgrounds, Waynesburg. **1**

Saturday, September 12. Pennsylvania Association for Sustainable Agriculture: Plant Your Own Ginseng Patch with Eric Burkhart, 10 a.m. – 4 p.m., Quiet Creek Herb Farm, Brookville (Jefferson County), \$25 for PASA members; \$35 for all others. Lunch will be provided. Register online: <http://pasafarming.org/our-work/educational-outreach/field-days-and-intensive-learning-programs/plant-your-own-ginseng-patch>.

Saturday, September 12. Cumberland Woodland Owners Association: Chainsaw safety, firewood cutting, and timber stand improvement, 10 a.m., Penn Forestry property, Arendtsville (Adams County). Contact Fred Peabody, 717-776-3565, for more information.

Saturday, September 19. Central Susquehanna Woodland Owners Association: Bald Eagle State Forest Tour, 9 a.m. – Noon, Laurelton Bureau of Forestry Office (Union County). **4**

Saturday, September 26. Woodland Owners of the Clarion Allegheny Valley: Woods Walk, 9 a.m., Giering property, Shippenville. Contact George Schmader for more information, [hillwood@venustel.com](mailto:hillwood@venustel.com).

Saturday, October 3. Northwest Pennsylvania Woodland Association: Carbon Credits for Private Landowners, 10 a.m. – 12:30 p.m., Troy Firth property, Wattsburg. **3**

Sunday, October 4. North Central Forest Landowners Association: Woods Walk, 1 – 4 p.m., Comstock Forest, Port Allegany. Contact Tim Pierson for more information, 814-887-5613.

Sunday, October 4. Central Susquehanna Woodland Owners Association: Trees and Tracks, 1 p.m., Fries Woodlot, Madison Township (Columbia County). **4**

Wednesday, October 7. Forest Vegetation and Invasive Plant Management Field Workshop: A Silvicultural Perspective, 9 a.m. – 3 p.m., Shaver’s Creek Outdoor Classroom and Stone Valley Experimental Forest, Huntingdon County. Contact Centre County Cooperative Extension for registration details, 814-355-4897 or [CentreExt@psu.edu](mailto:CentreExt@psu.edu).

Thursday, October 8. Dauphin County Woodland Owners Association Annual Meeting: Timbering Your Woodlot Wisely, 6:30 p.m., Dauphin County Agricultural Extension Office, Dauphin. Contact Mike Thomas, 717-469-9366, for more information.

Wednesday, October 14. Wayne-Lackawanna Forest Landowners Association: Saw Mill Tour, 9:30 a.m., RGM Forest Products, Daleville. Call Craig Olver for reservations and directions, 570-729-7683.

**1** Contact Bob Daley, [daley@cs.pitt.edu](mailto:daley@cs.pitt.edu), for more information.

**2** Contact Delaware Highlands Conservancy, 570-226-3164, for more information.

**3** Contact Tim More for more information, 412-855-3304.

**4** Contact Barbara Williams, 570-458-0157, [CSWOA1@gmail.com](mailto:CSWOA1@gmail.com), for more information.

PA FORESTS WEB SEMINAR CENTER (<http://rnrext.cas.psu.edu/PAForestWeb/>)

To participate in one of these online seminars, you must be registered and have a “Friend of Penn State” user ID and password. Visit the website to register, see the list of upcoming seminars with descriptions, and to view recordings of previously held seminars. Seminars are held the second Tuesday of every month at noon and 7 p.m. Participants need to have a high speed internet connection and speakers to attend.

Tuesday, September 8. Forest Management and Regeneration. Presentation by Susan Stout, Project Leader, USDA Forest Service Northern Research Station, Noon and 7 p.m.

Tuesday, October 13. Protecting Water Resources on Your Property. Presentation by Bryan Swistock, Water Resources Extension Specialist, Penn State School of Forest Resources, Noon and 7 p.m.

**Next deadline: September 1 for events between October 15 and January 15.**

# Exploring Your Woods: Will It Be Firewood or Lumber?\*

By Jim Finley, Pennsylvania Extension Forester

From time to time every woodlot owner finds they have to make decisions about cutting a woodlot tree. You might find a tree is competing with a crop tree, a tree died over winter or blew over, or is a risk because of a lean or other damage. Faced with this situation, there are choices.

What do you do with the wood? These incidental trees often make it into the firewood pile. However, how many times, when cutting firewood, have you considered what else you could do with that log? It may seem a shame to buck it up into chunks to warm your feet next winter. There are other choices.

Several times in the past few months we've had calls about sawing and handling those incidental logs to make lumber. Especially now, when demand for logs and lumber is down, the idea of making a few boards for your own use or to sell is appealing.

As you consider the idea of taking boards from your woodlot, THINK SAFETY. Just because you own trees, have a chainsaw, and cut firewood, you are not necessarily a lumberjack. Take the time to learn to cut wood safely. Purchase and use safety equipment. And, above all, if you don't feel safe doing something, DON'T DO IT.

Trees and logs are heavy. Maybe that is why woodlot owners often make them into firewood – it makes them easier to move. Fortunately, even relatively large logs can be moved with small scale logging equipment now finding its way into the market place. Figuring out how to move logs is the first challenge. How to get them cut to size is the next...

Increasingly, there are more and more small portable band saw mills available for custom sawing. If you have only a few trees to saw, or you would only use a mill infrequently, don't consider buying one – look to hire one. Ask around the county; check with your extension office or service forester. They'll likely know of someone with a mill. When hiring custom sawing, as with any contractor, check

references, understand what you want from the trees, write a contract, and agree on payment.

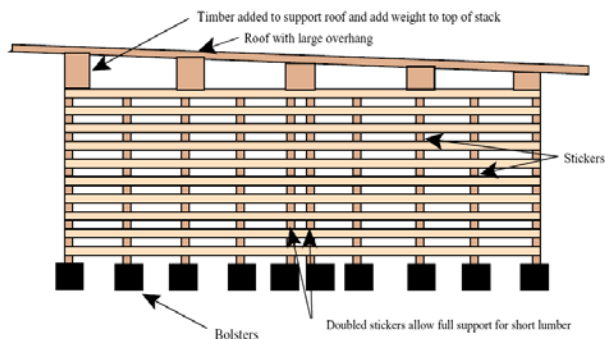
Many of the tree species we find in our woodlots can become family heirlooms. The trick is to handle the boards properly. Freshly sawn boards are full of water and are prone to staining, decay, and insect damage. As well, improperly stacked, your prized boards can become twisted, cupped, and checked. The secret to producing the best boards possible from your trees is to build a proper drying stack.

A good stack starts with a flat foundation, either inside a barn or shed or outside on a stable footing. Elevate your stack off the ground with support or bolsters (2X4s or 4X6s) at least every three feet across the stack – much like joists in your home. Don't make the stack too wide, 42 to 48 inches is a good width. As you lay boards on the bolsters, leave one or more inches between them. Separate each layer with stickers – thin boards an inch by an inch and a quarter – that line up through the stack. If the stack is outside, cover the top course with a waterproof roof that extends one or more feet beyond the pile on all sides. Inside, you still might cover the stack to keep the top layer cleaner. Handled this way, one inch boards will reach equilibrium moisture content of 15 to 20 percent in a year; it will take an additional year for each additional inch of thickness.

Boards are normally sawn at least an inch thick. Most furniture makers like to have "heavier stock" on hand to craft table tops, chair and table legs, and corner posts for case pieces; they may even want to turn a bowl or two. So, as you work with your sawyer, consider cutting a few clear, thicker boards.

If you believe you would like to take some lumber from your woodlot, it would pay to plan ahead. Know where you can find the resources you need to move logs, saw lumber, and consider how you will dry and store your treasures. It can be both fun and rewarding to make something other than firewood from your own trees.

\* As you explore your woods, what questions do you encounter? Send them to Allyson Muth, *Forest Leaves* editor, [abm173@psu.edu](mailto:abm173@psu.edu). Others may share your curiosity and we can learn something together.



*Drawing used with permission of the Vermont Department of Forest, Parks, and Recreation.*

FOREST LEAVES—Summer 2009

Editor: Allyson Brownlee Muth

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Calendar contributions and news items are welcome. Submissions for the next issue of *Forest Leaves* are due:

September 1, 2009

**Forest Leaves Publication Partners include:**

• **The Pennsylvania Forest Stewardship Program.** Administered nationally by the USDA Forest Service under the direction of the PA Bureau of Forestry in conjunction with the Forest Stewardship Steering Committee and the Penn State Forest Resources Extension.

• **The Pennsylvania Tree Farm® Program** (<http://patreefarm.cas.psu.edu/>) Administered nationally by the American Tree Farm System® under the guidance of the American Forest Foundation.

• **The Pennsylvania Forestry Association** (<http://pfa.cas.psu.edu/>).

Publication is directed by representatives from the forest products industry, the Pennsylvania Bureau of Forestry, Penn State Forest Resources Extension, and private forest landowners.

This Publication is available in alternate format upon request.

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September 1, 2009



**Summer 2009**

## Elms

By William C. Paxton, Landscape Architect and Consulting Forester

The friendly streets with high over-arching branches of the American elm are sadly missed by those older residents who remember. Only a few streets remain (one in Johnstown, and the mall proceeding to the Paterno Library on the Penn State Campus). Elsewhere, other properties might now only host one mature specimen here and there. These open-grown and “aged” trees are easy to identify by shape alone; but what about the mix of elms we find in many Pennsylvania second growth forests. They are easily picked out on moist hills or flood plains, even marsh borders, by the buttressed roots rising out of the wet soil and stretching across the surface before spreading in the shallow upper soil layers until they are often totally revealed by windthrow.

So are these American elm (*Ulmus americana*) or slippery elm (*Ulmus rubra*) and, if just a seedling, are you sure it's not a hornbeam?

If the folded leaf halves match exactly, it probably is a hornbeam, since elm leaves are always shorter on one side at the base.

If the leaf length is over 15 cm it is slippery elm, since American elm leaves on the healthiest trees only grow 14 cm long.

You can see there is some overlap here with leaf size, so in early spring you should gather the seeds. Slippery elm seeds are round thin wafers the size of a dime. American elm has much smaller seeds with the wafer edge separated on the top to resemble crab pinchers.

Still lost? Rub the leaf surface. American elm is smooth to a little scurfy on top. Slippery elm is very rough.

One last test – an excavated section of bark from American elm is layered brown/white/brown/white. Slippery elm bark layers are brown/brown/brown.

However, you have just begun if you are a tree watcher. If you only look at trees in the woods, think about what you'd miss! What about those found in towns or arboretums?

There are two fast-growing orientals: Siberian elm (*U. pumila*), and Chinese elm (*U. parvifolia*). Then there is the English elm (*U. procera*), and smoothleaf elm (*U. carpinifolia*). And when you think you have seen them all there is Dutch elm (*U. hollandica*) and the magical, magnificent Camperdown elm, which they topgrafted onto 7' trunks of Wych elm (*U. glabra*). It really doesn't end here.



Slippery Elm (*Ulmus rubra*)  
Pax View W.C. Paxton 2008