

Pennsylvania Forest Stewards News



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Applications for PA Forest Stewards Class of 2013 Are Out!

We want to let you know that applications for the Class of 2013 are out to your nominees! We sent out 194 applications and materials to these folks and asked them to return their applications to us by May 15. If you nominated someone in recent years, make contact with them to see if they have any questions or if they need encouragement to join us! We look to you to help grow and strengthen our organization.

PA Forest Stewards Steering Committee Changes

We are exceedingly grateful for the support and efforts of PA Forest Stewards Volunteers who step up to serve as regional representatives on the Steering Committee. We wanted to take a moment to acknowledge the contributions of several volunteers who have recently stepped off the committee: Walt and Marie Petrick, our committee Chair and Secretary and representatives from the North Central region, both stepped down with the end of their terms. We will miss their leadership and willingness to lend a hand to whatever project was going on!

Bill and Margaret Baber, representatives from the Southwest region, also decided to step off the committee at the end of their terms. We are grateful for their years of contribution to our organization!

At our November meeting (November 1, 2013), Fred Peabody will step into the position of Chair, working with Jim and Allyson and the committee to ensure progress and continued growth.

We currently have several vacancies on the steering committee and are looking for volunteers, to join the steering committee. If you have interest in being a part of the committee, or would like to nominate someone, we have openings in the following regions:

- North Central Region (Cameron, Centre, Clearfield, Clinton, Elk, Jefferson, McKean, and Potter Counties)
- Northwest Region (Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, and Warren Counties)
- Southwest Region (Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Somerset, Washington, and Westmoreland Counties)

If you would like to learn more about the responsibilities of regional representatives and what joining the committee entails, please contact Allyson at abm173@psu.edu or 814-865-3208. Many thanks to all who give of their time in support of the PA Forest Stewards!

South Central Region

Volunteers from the South Central region contributed to this issue of the PA Forest Stewards Newsletter. Here are the resources available in that region.

Woodland Owners Associations:

Woodland Owners of the Southern Alleghenies, 311 Oakview Road, Bedford, PA, <http://www.orgsites.com/pa/wosa/>
Allegheny Mountains Woodland Association, PO Box 42, Ebensburg, PA 15931, <http://amwa.treesofpa.com/>
Mifflin County Woodland Owners Association, c/o Gerald Hoy, 18865 Old Turnpike Road, Millmont, PA 17845

Perry-Juniata Woodland Owners Association, 4455 Big Spring Road, Blain, PA 17006

Service Foresters:

Bedford and Fulton Counties: Dave Scamardella, dscamardel@pa.gov, (717) 485-3148.

Blair and Cambria Counties: Chris Jones, chrijones@pa.gov, (814) 472-1862.

Huntingdon County: William Bow, wibow@pa.gov, (814) 643-2340.

Juniata and Perry Counties: Lucas Book, lbook@pa.gov, (717) 536-3191.

Mifflin County: Gerald Hoy, gehoy@pa.gov, (570) 922-3344.

PGC Wildlife Diversity Biologist: Clay Lutz, clutz@pa.gov, (814)-643-1831.



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717-248-9618.

Dave Swartz (Perry), Extension Dis-
trict Director, dls19@psu.edu, 717-
582-5150.

Mitigating the Loss of Hemlock Woolly Adelgid

By *Cindy Iberg*, '12

What luck! In 1982 I found, in Juniata County, 10 acres of mixed hardwood forest with a Class A cold water native trout stream. A stream sheltered by dark green, soft needled hemlocks, decorated with their lovely miniature cones. The hemlock is a foundation species in many locations.

What sadness. Now, these hemlocks are bare of needles, fallen to the forest floor, or only holding onto a tiny crown of green.

But as anyone who deals successfully with a challenge in their forest land, you look for solutions.

The culprit of this destruction, the hemlock woolly adelgid, (HWA), first appeared in Pennsylvania in the late 1960s and spread by wind, birds, and mammals. The HWA attaches to the underside of the needle base, feeds on the trees nutrients, and can kill the tree in four to several years. Presently available control methods are not appropriate in a forest setting.

But the hemlock death can have some unintended positive consequences and because their death has been slow, the deciduous trees have expanded in the canopy. This has decreased somewhat a potentially ex-

treme fire hazard as has happened in our western states experiencing dead conifers. Due to many large, dead hemlocks near my home and driveway, in 2011 I was awarded a grant from the Bureau of Forestry through their Firewise program to remove trees near my home and drive. This created a defensible space in case of fire.

I also worked with the local NRCS office and in 2012 received a grant for plantings along the stream. This is important not only to keep the water cool as trout may not survive at a temperature greater than 70 degrees, but the food chain starts with leaves and debris from the adjacent forest. Bacteria and fungi feed on a rich tea made by the decaying leaves. In turn, they are eaten by insects, which become food for the trout and the land wildlife.

Some of the programs require the land to have a Stewardship Management Plan. I had this completed in 1992. Penn State's College of Agricultural Sciences can be a source for many publications. I used PA Woodlands #7: Deadwood for Wildlife, and #16: Riparian Buffers for Wildlife, and other sources on tree shelters and stream protection.

The dead hemlocks can become a landscape asset: chipped it is a mulch for paths, logs laid crosswise to water flow prevent erosion, and they make excellent raised garden bed frames. The underside of a log across a stream is home to insect larvae. Left standing the tree is a snag for someone's home or restaurant, and the final gift from dead trees is returning nutrients to the soil as it decomposes. A recent study by the University of Illinois found that the dead hemlocks release phosphorus into the soil. This in turn stimulates hardwood trees to take up nitrogen and increase their growth.

There is increasing interest in making biochar as a beneficial soil amendment. It helps to retain nu-

trients in the soil. Gary Gilmore, a service forester with the DCNR, demonstrated at the PASA conference a practical way to create biochar at home and said hemlocks can be used for this purpose. There is an International Biochar Institute on the internet.

For the plantings along the stream, I used all native plants and focused on diversity. Since every site has its own micro-environment, it is important to observe what is re-generating naturally and replant with the same species or those that require the same growing conditions. I have found buttonbush, viburnums, mountain laurel, white spruce, eastern white pine, and swamp milkweed doing well. The USDA's booklet, Crop Tree Management in Eastern Hardwoods, lists species that are water tolerant in its appendix. I also try to include pollinators in the plantings and have worked in a pollinator program with my local RC&D organization. Tree shelters may be needed for protection. I have had success with a commercial rotten egg, hot pepper, and garlic spray.

Contact your local state forester for plant sources and your county conservation district office for their spring plant sale. The Pennsylvania Game Commissions Howard Nursery sells bundles of one year-old bare root seedlings for a very reasonable price.

Remember, a streamside forest is highly productive. It traps nutrients, filters pollutants, stabilizes the stream bank, contributes to the food chain, and recharges groundwater.

I considered a salvage harvest of some large hemlocks that had some live crown, but one cold, sunny day they shimmered in the light and gently waved with the breeze. I just couldn't do it. As Charles Fergus writes in his *Trees of Pennsylvania*, "In winter, they are a green island in a forest otherwise gone drab and gray."

There may be a solution some day for this HWA, but until then, we will just have to do our best.

Protecting Biodiversity

By Mike and Laura Jackson, '00

Since becoming PA Forest Stewards in 2000, we have learned a lot about forest management from the excellent workshops that we've attended the past 13 years. We make wiser management decisions on our mostly forested property of 113 acres in Bedford County. We have also gained a better understanding of the importance of biodiversity, so we manage our land to benefit all sorts of wildlife – from timber rattlesnakes, spotted salamanders, box turtles, birds and bats, to bears.

Bats and bears may not be everyone's favorite woodland animals, but we are thrilled when we see bears in our forest – and even in our backyard. Last summer we photographed a sow with four cubs three different times. It was fascinating to watch the cubs interact with each other and their mother, and amazing to see how fast the cubs grew. We are glad that Pennsylvania's black bears are doing so well.

Bats, however, are in trouble and need our help. According to Bat Conservation International, Pennsylvania has lost more bats than any other state in the country. Both white-nose syndrome and industrial wind turbines kill thousands of bats in Pennsylvania each year. The cumulative impact is not sustainable.

That means we have a lot to lose in terms of natural pest control, as bats are #1 when it comes to controlling nocturnal insects. It is estimated that natural pest-control services provided by insect-eating bats in the United States likely save the U.S. agricultural industry at least \$3 billion a year. In Bedford County, where we live, it has been estimated that bats provide a natural pest control worth over \$7 million dollars. In all of Pennsylvania, bats saved farmers over \$277 million dollars in avoided costs for pesticides. Bats are also an important

part of our forest ecosystems, as they eat many harmful forest insects. Since bats eat many moths, up to one-third of our tree species depend on bats to keep leaf-hungry caterpillars under control.

The little brown bat, at onetime the most common and widespread bat in Pennsylvania, is perilously close to extinction in our state. Although many researchers are working to solve the mysteries of white-nose syndrome, thousands of bats continue to die every year. This means the Pennsylvania Game Commission, which is charged with managing almost 500 species of wild birds and mammals in Pennsylvania, has a duty to consider the best way to protect the few remaining individuals of little brown bats, northern long-eared bats, and tri-colored bats.

We understand that representatives from industry, as well as some legislators, objected to the Game Commission's proposal in the PA Bulletin to add greater protection for three bat species. We have found, from talking to foresters and the Pennsylvania Forest Products Association executive director that they thought the restrictions would be similar to those currently in place for the federally endangered Indiana bat.

There is a lot of misinformation in the forestry industry on this issue, because foresters do not understand the difference between state and federal listing for endangered species. It is hard to find any information about state protection versus federal protection, so I spoke with biologists at the Pennsylvania Game Commission and the U.S. Fish and Wildlife Service who explained that state listing is not as restrictive as federal listing. Several news articles described the timber industry as fearful for their very existence, if protective measures for the bats were enacted. These appear to be genuine concerns, but based on incorrect assumptions and information. State listing is not as re-

strictive as federal listing, so many of the fears held by industry appear to be unfounded. The Pennsylvania Game Commission is working on guidelines for greater protection and plans to hold a meeting this spring.

Since so many bats are being killed by white-nose syndrome during hibernation, the bats that survive need even greater protection when they are outside the hibernacula. Protecting these species needs to involve forest management; it isn't just a matter of trying to stop the fungus that causes white-nose syndrome. Foraging areas, summer roosting sites, and maternity colonies should be identified and protected to a reasonable degree that will not cripple landowners and the timber industry. It is critical to help the few remaining survivors of white nose syndrome. These survivors may be immune to the disease, so their reproductive success could help these species avoid extinction. Bats are not prolific breeders – they only have one offspring per year, at the most, and they have specific habitat needs for successful reproduction.

As forest landowners, we can help bats by protecting their roosting trees. Bats seek shelter during the day in trees with deep crevices like black locust and chestnut oak, and with exfoliating bark, like the hickories (especially shagbark hickory), maples, oaks, sycamore, and eastern red cedar. Some snags are also good roosting sites, since they often have loose bark and numerous cavities.

We are planning to do a two-stage shelterwood cut on our property, as part of the Young Forest Initiative to help golden-winged warblers and other species that depend on early succession habitats, but we plan to spray invasives in the fall and harvest in the winter – after bats have either migrated or are hibernating in caves. That way we won't disrupt any nesting birds, either. If we had perennial streams on our property, we would protect 100 feet on both sides. We do

have an intermittent stream, so we will protect at least 50 feet on both sides.

As forest stewards, we need to recognize cumulative impacts to a forest when it is timbered – not just how much money we can make. Aldo Leopold expressed it this way, “We abuse land because we see it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.”

Regional Foci for PA Forest Stewards News – Southeast Region, You’re Up!

Just a gentle reminder for those of you in the Southeast region of Pennsylvania... Your region is responsible for an article in the May/June issue of the PA Forest Stewards News. Fred Peabody (Fredp5@earthlink.net), Carl Martin (cmartin@wildlandspa.org), or George and Patricia Kaufman (gapdkaufman@gmail.com) are taking the lead in compiling the region’s piece(s). Please contact them if you have items of interest to share.

And heads-up to the Northwestern region! You’re on tap for the July/

August newsletter. Please contact Bob Slagter (slags@zoominternet.net) and Blaine Aikin (blaine@fi360.com) with your items for that future newsletter.

We’re looking forward to hearing from you all!

Dates for Your Calendar

May 10-11– 2013 Private Forest Landowners Conference: the Future of Penn’s Woods, Blair County Convention Center, Altoona.

Please note: The May 10 and 11 conference is happening in lieu of the PA Forest Stewards Annual Meeting. While we won’t be gathering in July, we hope to see you in Altoona in May!

September 13-15 and October 4-6 – PA Forest Stewards Basic Training, Camp Krislund, Madisonburg, PA (Centre County).

October 4 – Forest Vegetation Management In-service Training, Camp Krislund, Madisonburg, PA (Centre County).

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