

BRANCHING OUT

Maryland's Woodland Stewardship Educator



University of Maryland Extension – Woodland Stewardship Education
<http://extension.umd.edu/woodland>



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Invasive Spotted Lanternfly and Invasive Tree-of-Heaven



As global trade flourishes, more invasive species arrive courtesy of our trading partners – it is an ongoing problem. The spotted lanternfly (*Lycorma delicatula*), a planthopper, is the next pest that promises to cause damage to agricultural crops, landscapes and the quality of life in Maryland. Native to China, India, and Vietnam, it spread to Korea around 2006. Spotted lanternfly (SLF) was detected in Pennsylvania in 2014, and has since been found to have confirmed populations in Delaware, New Jersey and Virginia. So far it has only been found in Cecil County in



Spotted lanternfly infestation. Photo by Lawrence Barringer, Pennsylvania Dept. of Agriculture, Bugwood.org

Maryland, but it is expected to spread more widely in Maryland and in other states. If you see spotted lanternfly in your area, contact the Maryland Department of Agriculture at Dont.Bug.MD@maryland.gov.

The spotted lanternfly is about 1 inch long and its bright coloration with red and black is actually quite visible appealing (see the graphic above). The nymphs and adults feed on plants using their piercing mouthparts to suck fluids from the stems or leaves. This has been shown to cause stunted growth, localized damage,

reduced yields, and, in extreme cases, even death of the plant. As the spotted lanternfly feeds, it excretes a sugary substance

called honeydew. This honeydew, in addition to being attractive to ants, wasps, and other insects, is readily colonized by sooty mold, which can cause parts of the plants to become blackened, reducing photosynthesis and affecting the quality of the plants.

The important link to Maryland woodlands is that SLF's desired host tree is the troublesome tree-of-heaven (*Ailanthus altissima*). Tree-of-heaven is a very aggressive invasive tree that sprouts prolifically from root nodules when the main tree stem is cut. Foresters have been encouraging woodland owners for years to control tree-of-heaven using foliar, stem, or basal application of herbicides such as glyphosate and triclopyr. Cutting without the use of herbicides only stimulates new trees to sprout from the roots, causing a greater problem.



Tree-of-heaven.

The press afforded the spotted lanternfly provides an excellent opportunity to encourage the location and eradication of tree-of-heaven, especially by agricultural producers and homeowners who would not be so motivated in the past. Perhaps the expansion of spotted lanternfly into Maryland can actually have a silver lining with the increased focus on tree-of-heaven and its removal from woodlands.

More information on tree-of-heaven and how to kill it can be found [here](#).

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Maryland Woodland Stewards Receive Award

Rick and Kathy Abend own Abend Hafen Farm in Dorchester County, Maryland, where they enjoy managing their woodlands, hunting, wildlife photography, and educating groups about conservation ecology. Both are longtime Maryland Woodland Stewards; Rick graduated from the program in 1990, when it was called the Coverts Project, and Kathy graduated in 2008. They are staunch supporters of the program, returning to each MWS workshop to share their stories of woodland stewardship with new program participants. (You can hear Rick's presentation at this past October's MWS workshop on our YouTube channel at <https://youtu.be/TUZaDkqnXN4>.)

In addition to their contributions to the MWS program, Rick volunteers his time to the Anne Arundel and Dorchester county Forest Boards and to the Maryland Tree Farming Committee. He currently serves as the president as the Friends of Blackwater National Wildlife Refuge's board of directors, and he and Kathy were honored in 2014 as the Maryland Outstanding Tree Farmers of the Year.

In November, the Abends' contributions were recognized by the Alliance for the Chesapeake Bay. At the annual Chesapeake Watershed Forum, Rick and Kathy were selected as one of three Chesapeake Forest Champions award winners, receiving the "Exemplary Steward Award." Congratulations!



"Trees are Terrific" Poster Contest

Calling all fifth graders! The annual Arbor Day poster contest is now open. Sponsored by the Maryland Dept. of Natural Resources and Forest Conservancy District Boards, this contest



Overall first-place 2018 winner by Annah Landry from Carroll County

invites all Maryland fifth graders to submit art that fits this year's theme, "Trees are Terrific ... and Forests are Too!"

Posters will be judged by county and then submitted to the Maryland Urban and Community Forest Committee at the statewide level.

The competition is open until Feb. 1, 2019. For more information and poster requirements, go to <https://news.maryland.gov/dnr/2018/11/20/maryland-fifth-graders-invited-to-submit-arbor-day-posters-2/>.

Upcoming "Residential Wood Heat" Webinar

The next Woodland Stewardship Education program's Woodland & Wildlife webinar will be held on January 15th, 2019 at 12 noon. University of Maryland Extension Forester Jonathan Kays will share his observations on "Increasing Adoption of Residential Wood Energy: Past, Present & Future." The one-hour presentation will cover trends in home and commercial uses of wood energy, the different types of heating devices available, and regulations to improve efficiency and reduce atmospheric particulates. He will also share a number of best practices for buying, storing, and seasoning wood for heating.



The webinar is available free of charge. Registration is requested. For more information, go to the WSE web page's Event Calendar: <http://extension.umd.edu/events/tue-2019-01-15-1200-increasing-adoption-residential-wood-energy-past-present-future>

Woodland Wildlife Spotlight: Eastern Screech-Owl

As winter days shorten, you may hear an odd call drifting through Maryland's landscapes after sunset and into the evening. The call [sounds much like the whinny of a horse](#), but in fact it belongs to one of the state's native hunters: the Eastern Screech-Owl.

This owl may be difficult to observe, due to its size and its coloration. The birds are relatively small, compared to other owls, generally measuring less than 9 inches in height. This makes them similar in size to more familiar birds, such as the robin and the starling, but are bulkier than both. But their coloration sets them apart from other North American owls. Adults may be found in two color forms, called "morphs." Both the grey and the reddish-brown (or "rufous") morph enable the owl to blend in with the woodlands' trees, and the rufous morph distinguishes the Eastern Screech-Owl from other Eastern owls; all other rufous North American owls are found in the west.

Regardless of their color form, these owls are highly adaptable to Maryland's ecosystems. They live and breed successfully in suburban landscapes, city parks, and anywhere that at least some trees are found. They prefer cavities in old trees or snags for nesting, and will occupy locations originally excavated by woodpeckers or formerly used by squirrels. They will also adopt nest boxes if they are available. Eastern Screech-Owls may disappear from an area if all the trees are removed, but will return when trees are replanted, especially if nest boxes are installed.

The bird will spend daylight hours secluded in the holes of snags or in dense cover before emerging at dusk to hunt during the night. Like many owls, they wait on perches above the ground, waiting for their prey to pass below, and then swooping down to hunt. Also like other owls, they are generalists when it comes to diet. They will consume rats, mice, squirrels, moles, rabbits, as well as amphibians and song birds. Their diet also includes a large number of insects and earthworms.

As winter moves towards spring in Maryland, Eastern Screech-Owls begin searching for mates. They have an elaborate courtship ritual, beginning with males approaching females. The male bobs and swivels his head, bobs his whole body, and may even wink at the female. If she accepts him, they will touch bills and preen each others' feathers. They breed in Maryland from mid-March to mid-May. While they often form pairs for life, the male may sometimes take more than one female partner. The birds do not form nests but make use of whatever materials exist in the tree cavity, such as wood chips or an old nest.

The female lays 2-6 eggs. Incubation lasts about 26 days, and young are fledged after an additional month. The male

Eastern Screech-Owl Vital Statistics



Rufous and grey morphs. Photo by Larry Hitchens, wildlifesouth.com



Photo © David Wade,
Macaulay Library

Appearance: Short, stocky body with large head and almost no neck. Rounded wings, short square tail. Pointed and raised ear tufts. Feather barring makes excellent camouflage. Yellow eyes.

Size: 4-9 ounces average weight. Height 8-9 inches; males smaller than females. Wingspan 29-24 inches.

Lifespan: Over 20 years in captivity. Oldest known in the wild: 14 years. Average 2-5 years in the wild.

brings food to the female as she does most of the incubation and raising the young. Once summer turns to autumn, the juveniles will disperse to find new territories.

Eastern Screech-Owl populations are difficult to determine due to their nocturnal nature. Its native range stretches from maritime Canada, west to the plains of Alberta, south to northern Mexico and the gulf coast, and along the entire eastern seaboard. The North American Breeding Bird Survey estimated that the species' numbers declined in the United States during 1966-2015, but grew in Canada during the same period. Partners in Flight estimates a global population of 900,000, with 95% of those living in the U.S.

For more information about the Eastern Screech-Owl:

[Maryland Birds: Eastern Screech Owl \(Maryland DNR\)](#)

[Eastern Screech-Owl \(Cornell Lab of Ornithology\)](#)

[Eastern Screech-Owl \(Audubon Guide to North American Birds\)](#)

[Eastern Screech Owl \(The Owl Pages\)](#)

News and Notes

The Connection Between Landscaping and Backyard Birds

Native plants, such as mountain laurel, could help increase Carolina chickadee breeding success and population growth in the D.C. metropolitan area. Photo: Desirée Narango, Smithsonian Conservation Biology Institute



A recent study by Smithsonian researchers, in partnership with the University of Delaware and the National Science Foundation, examined the interaction between backyard landscaping and native insect-eating birds.

The scientists placed nesting boxes in more than 150 yards in the Washington, DC metropolitan area and collected data from homeowners monitoring the boxes for Carolina chickadee nests, eggs, and nestlings. The results, summarized in [this article](#), showed that there the only yards that were able to produce enough chickadees to sustain the population were those with more than 70% native landscaping.

Desirée Narango, lead author of the study, said, “By using native plants, we can provide native food for not only our common Native American species, but we’re also providing vital stopover habitat and resources for migratory birds during their perilous journeys.”

NFWF Announces Grants

The National Fish and Wildlife Foundation (NFWF) announced more than \$1.4 million in grants to restore forest and freshwater habitats in Pennsylvania, Virginia and West Virginia. The funding to nine projects will enhance forest age and structural diversity; restore habitats for such species as the golden-winged warbler, American woodcock, and cerulean warbler; and improve aquatic habitats through erosion control and stream crossing improvements. The grant funds will be matched by more than \$2.1 million from the grant recipients.

[Click here](#) to learn about the program, and [click here](#) to read about the individual projects.

Important Information for Woodland Property Owners



The USDA Forest Service has released its annual fact sheet for woodland property owners. “Tax Tips for Forest Landowners for the 2018 Tax Year” provides information for family timber owners, foresters, and tax preparers. It is important to remember that Federal income tax provisions related to timber have changed, due to tax legislation passed in December, 2017.

Authored by USFS National Timber Tax Specialist Dr. Linda Wang, this document is essential reading for woodland property owners. Find it on the WSE website at [this link](#).

American Chestnuts, Past & Future



American chestnuts in the Great Smoky Mountains, 1910. Photo from Forest History Society

Ryan Davis, Chesapeake Forests Program Manager for Alliance for the Chesapeake Bay, wrote a pair of blog posts about the American Chestnut that should interest every woodland owner. A century after the arrival of a fungus that led to the widespread demise of the iconic species, it is difficult to remember how important the American chestnut was to the nation’s history and economy.

In the [first post](#), Davis recounts the history of the chestnut blight; [in the second](#), he summarizes current efforts to bring the species back from the brink of extinction, as well as speculating about the future of the species in a world of invasive species and other challenges.

Invasives in Your Woodland: Garlic Mustard

Garlic mustard is similar to several invasive plants found in the United States in that it was brought to North America with good intentions. However, unlike others, it was imported from Europe by early settlers for culinary or medicinal purposes. In its native range, it is a spice that has been used for centuries; samples have been found in pottery in Germany and Scandinavia that are more than five thousand years old. In North America, it was first recorded on New York's Long Island in 1868. Since that time, it has spread across the continent.

What is it?

Garlic mustard (*alliaria petiolata*) is also known as garlic root, hedge garlic, Jack-in-the-bush, and other names. It is a biennial flowering plant in the mustard family that is an aggressive invader of woodlands throughout the United States. In Maryland, it is recorded in every county except for those bordering the Chesapeake Bay; in most of Virginia (except for those along the Bay and most of the North Carolina border); all of Delaware and West Virginia; and all but two counties in Pennsylvania. It can also be found in lawns and other areas with enough shade for it to grow.

How does it spread?

Like all other biennial plants, garlic mustard has a two-year life cycle. Seedlings germinate in the spring and form into low clusters of heart-shaped leaves called basal rosettes by midsummer. It stays in the rosette stage most of its first year. During this time, they will continue to photosynthesize whenever the temperature is above freezing, which provides them an advantage over native species. Since it only flowers in the second year, the plants may seem less numerous, as they are simply waiting to complete their life cycle. Garlic mustard is self-fertile, needing no assistance from animals or insects. Additionally, each plant can produce thousands of seeds, which are spread by wildlife, humans, water, or other means in mid-summer.

The plant also receives assistance in its spread because of its taste. White-tailed deer in particular find garlic mustard distasteful; because they do not consume it, they contribute

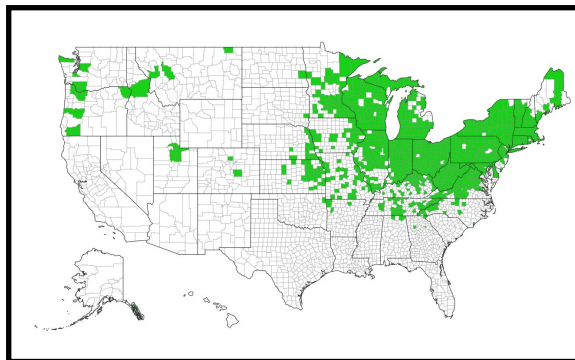
to its survival by eliminating its tastier native competitors and expose the soil and seedbed through trampling.

How can I identify it?

Garlic mustard, in every stage of its life, can be identified easily by a garlic odor that exists when any part of the plant is crushed. The rosettes are heart-shaped and measure 1-6 inches long. The leaves become more triangular and toothed as the plant matures. In the second year, the plants produce flowering stalks from 1-4 feet tall. Each flower has four small, white petals that emerge in the early spring. The mature seeds are shiny black and are found in erect, slender green pods that turn brown upon maturity. See the photo gallery on the next page.



Garlic mustard plants and flowers.
Photo by Ansel Oommen, Bugwood.org



Garlic mustard US county distribution.
Courtesy eddmmaps.org.

How can I control it?

Garlic mustard is difficult to control once it becomes established. The ultimate goal is to prevent seed development and further spreading until the existing seed bank is exhausted. Because of the biennial growth pattern, full eradication may take 2-5 years in a single location.

Cutting the plants by hand and pulling plants before they seed are effective methods but may not be practical for large areas. Be sure to remove the taproot when pulling or it will re-sprout. Controlled burns may be effective under proper conditions; if the burn is too cool, it may assist the plants' spread. A fire that is too hot may alter the soil composition.

Herbicides may also be effective, and are most effective in the fall and winter when native plants are dormant. Always check warning and safety labelling information before using herbicides.

For more information:

Learn more about garlic mustard:

[Home & Garden Information Center: Garlic Mustard](#)

[University of Maryland Extension: Garlic Mustard](#)

[Herbaceous Forbs: Garlic Mustard](#)

[Invasive Plants in Pennsylvania: Garlic Mustard](#)

[Invasive Plant Atlas of the United States: Garlic Mustard](#)

Image Gallery: Garlic Mustard



Garlic mustard infestation. Photo by Steven Katovich,
USDA Forest Service, Bugwood.org



Above and below: Garlic mustard plants. Photos by Richard
Gardner, UMES, Bugwood.org



Garlic mustard
flowers. Photo by
Chris Evans, Uni-
versity of Illinois,
Bugwood.org



Garlic mustard plants. Photo by Leslie Mehrhoff, University of
Connecticut, Bugwood.org



2018 Maryland Woodland Stewards Workshop

Agnes Kedmenecz, UME Woodland Stewardship Educator

During the weekend of October 4-7th 2018, 25 woodland owners and land managers gathered at Shepherd's Spring Retreat Center in Washington County for the latest Maryland Woodland Stewardship (MWS) workshop. It was an opportunity to learn how to use sound forest stewardship practices in order to improve wildlife habitat and enhance other forest benefits.

For the last 28 years, the University of Maryland Extension, in partnership with The Ruffed Grouse Society and other associations, has offered this comprehensive three-and-a-half-day seminar filled with dynamic educational opportunity. It features both indoor and outdoor instruction from a variety of specialists in forest and wildlife management practices and outreach skills. Collectively, this year's group owns or manages 1,047 acres across all regions of Maryland.



After completing this training, participants commit to applying these principles to property they own or manage, and actively encourage others to practice good forest stewardship using the principle of "Neighbor Helping Neighbor." So far, two months after the workshop, three recent MWS graduates have held events on their

property.

This was my first Maryland Woodland Stewards workshop after joining UME. It was a great weekend of learning and chatting with woodland owners from around the state. It was a pleasure working with UME's Jonathan Kays, who has been part of the program in Maryland since the beginning. Thank you for your mentoring.

I would also like to thank all the guest speakers from the DNR, NGOs, previous MWS graduates, Tree Farmers and historians - thank you for sharing your knowledge.

I am so glad to have been part of such a great group. I would like to thank the 2018 Maryland Woodland Stewards. Your energy and love for the woods is contagious! I look forward to attending all the educational events you plan to create!

If you are a former Maryland Woodland Steward graduate and want some inspiration or a hand with creating an event, please don't hesitate to touch base with me. I'd be happy to help!

Want to learn more? Want to bounce around some ideas? Contact Agnes Kedmenecz at 410-827-8056 or akedmen@umd.edu.



Field trips reinforce stewardship concepts presented in the classroom.



2018 Maryland Woodland Stewards workshop participants

Events Calendar

For more events and information, go to
<http://extension.umd.edu/woodland/events>

January 15, 2019, 12 noon

“Increasing Adoption of Residential Wood Energy: Past, Present & Future”

Online webinar

This one-hour webinar presented by University of Maryland Extension’s Jonathan Kays will cover trends in home and commercial uses of wood energy, the different types of heating devices available, regulations to improve efficiency and reduce atmospheric particulates, and more.

For more information, go [here](#).

March 23, 2019, 8:00 AM-3:00 PM

Spring Thaw Workshop: Watershed Moments

Wesley Freedom United Methodist Church, Sykesville MD

Presented by the Carroll County Forestry Board. Experts from state, local, private and federal agencies will present information related to flood management, including riparian forest buffer restoration, tree care for storm resilience, choosing the best trees for pollinators, and other homeowner-scale stormwater management techniques. For more information, [go here](#).

This Issue’s Brain Tickler ...



Last issue, we featured this photo and asked readers to identify the woodland management technique. The technique is called “hack n’ squirt.” Congratulations to Adeline Wilcox (who completed our “The Woods in

Your Backyard” online course last year) for being the first to submit the correct answer.

For this issue, we invite you to identify the iconic species that produces this burr.



Photo by Andrew Newhouse

Email Andrew Kling at akling1@umd.edu with your answer.

July 21-27, 2019

Natural Resources Careers Camp

Hickory Environmental Education Center, Accident MD
Application deadline is March 30, 2019.

This week-long camp in Garrett County partners high school students with professionals in natural resources to explore careers and college studies in forestry, wildlife, ecology, and much more. For more information, visit <http://www.marylandforestryboards.org/nrcc.cfm>.



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