

BRANCHING OUT

Maryland's Woodland Stewardship Educator



go.umd.edu/woodland



Volume 33, No. 1

Winter 2025

AI Winter Tree Advice (from Far and Near)

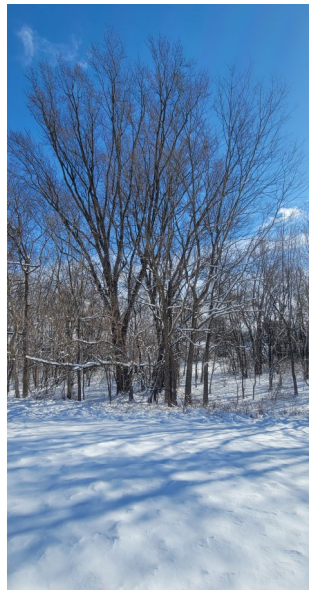
Andrew A. Kling, *Branching Out* editor

In this space in [the summer 2023 issue](#) of *Branching Out*, I mused about the future of AI and woodland management. Eighteen months later, my opinion stays the same, but I've been interested to see how the sophistication of AI has improved. At a recent workshop, fellow UME colleagues and I had the chance to work with an AI approved by the university. Intrigued by the results during the workshop, I gave it this challenge: "Compose a 200-word article on the benefits of checking your property's trees during the winter." Below is what I received:

Winter tree inspections are a critical aspect of property maintenance that can prevent potential hazards and ensure the long-term health of your trees. During the winter months, trees become more vulnerable to damage from harsh weather conditions, making professional assessments essential.

Key Benefits of Winter Tree Inspections:

- **Improved Visibility and Assessment:** Bare branches provide arborists with a clear view of the tree's structure, making it easier to identify potential issues like weak limbs, cracks, or disease that might be hidden by foliage during other seasons [1] [3]. This unobstructed view allows for more accurate and comprehensive tree evaluations.
- **Proactive Hazard Prevention:** Winter storms can cause significant damage to trees with existing weaknesses. Professional inspections help identify and remove at-risk branches before they can fall and cause property damage or personal injury [2] [4]. By addressing structural problems early, you can protect your home, vehicles, and family from potential accidents.
- **Optimal Tree Health Management:** Winter is the ideal time for tree maintenance because trees are dormant, allowing them to heal more effectively from pruning and



treatment [1]. Additionally, the cold weather reduces pest activity, making it easier to address any existing infestations or diseases before the spring growing season.

By investing in a winter tree inspection, you're taking a proactive approach to tree care that can save you time, money, and potential safety risks in the long run.

I thought, "Good, generic advice." The AI generator also cited its sources, beyond the ones in the notes. I was curious to see the websites it had scoured for the article and discovered that the sources included arborists in Pennsylvania, Massachusetts, New Hampshire... and Oregon. The latter site offers the advice, "Protect your trees from Oregon's heavy rains and strong winds by scheduling a professional pre-winter tree inspection."

Creating a similar article based on my own research, I might have discovered one or more of the sources the AI found. However, seven of them are commercial sites; the eighth was from the [Smithsonian Institution](#). Interestingly, none of the sources were from universities or from Extension programs. Further refining the query led to a text that cited Penn State and Purdue extension sites, plus the universities of Pennsylvania and Washington. However, it had none of the specific checklist items of the original. It was heavy on generic statements about the benefits of healthy tree canopies.

Finally, I requested the AI to write about "trees in Maryland," and voila! Every cited source was from UME. Plugging in other states yielded other state-specific text and sources.

AI clearly continues to evolve. The advice I received at the workshop to continue to refine queries led to improved and more specific information from closer to home. Stay tuned.

Inside this issue:

Spring Session of "The Woods in Your Backyard"	2
New USFWS Refuge to Protect Woodland Habitat in Southern MD	2
Native Trees of Maryland: Sugar Maple	3
From a Mountaintop, UMD Alum Encounters the Imperfection of Conservation	4
News and Notes	5
Invasives in Your Woodland: Incised Furmewort	6
Invasives in Your Woodland Gallery	7
The Brain Tickler...	8
Events Calendar	8

Registration is Now Open For the Spring Session of “The Woods in Your Backyard” Online Course

The Woods in Your Backyard Online Course

Registration is now open for the Spring 2025 session of “The Woods in Your Backyard” online course. Our course is designed primarily for small-acreage property owners who want to learn how to care for or expand existing woodlands, or to convert lawn space to woodlands.

The self-directed, non-credit online course runs for ten weeks, from March 24 to June 2. It is offered through the University of Maryland’s Electronic Learning Management System and is accessible from any Internet connection and Web browser.

The course closely follows the published guide of the same name but includes some important extras. Quizzes reinforce the important concepts of the text. Optional activities give participants the opportunity to share one or more of their stewardship journal entries, or photos or narratives of their woodland stewardship

accomplishments. In addition, many of the course’s units are accompanied by short videos, created and produced by Woodland Stewardship Education staff. These 2- to 5-minute videos demonstrate essential skills and techniques (such as tree identification or chosen tree release) and share the experiences of other woodland owners.

The course costs \$125.00 and each session is limited to 25 participants. Each paid enrollment includes printed copies of “The Woods in Your Backyard” guide and workbook, plus a copy of *Common Native Trees of Virginia*. [Visit our website page about the course at this link for more information, including frequently asked questions, updated registration information, and a way to preview the course at no charge.](#)

Go to [this Eventbrite link](#) for participant comments, more information, and how to register.

If you are a Maryland Master Naturalist or a Maryland Master Gardener, participating in this course can contribute to your annual hours commitment. See [this link](#) for more details.

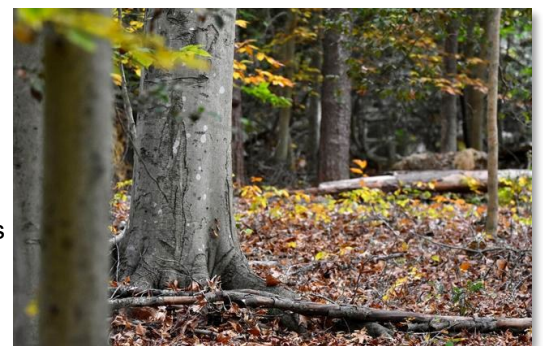
The content of the course was exactly what I wanted to focus on, which wasn't clear to me before I started the course. I'm starting to see my trees and not just the forest! It was meaningful to me to find others who share the same concerns and questions about their property, and to be introduced to a wealth of resources to help us realize our goals. I learned a lot and am walking away from the course inspired and empowered to take action. That's a huge win!

- Beth H., Maryland

New USFWS Refuge to Protect Woodland Habitat in Southern MD

In December 2024, US Secretary of the Interior Deb Haaland traveled to Nanjemoy MD to announce the creation of Southern Maryland Woodlands National Wildlife Refuge. The first donation of 31 acres from The Nature Conservancy is one of several planned over the coming months of more than 300 acres. US Fish and Wildlife Service officials will continue to work with partners and willing sellers to secure voluntary conservation of up to 40,000 acres of important wildlife habitat within four watershed-based focus areas in Anne Arundel, Prince George’s, Calvert, Charles, and St. Mary’s counties. Although the refuge’s final acreage will consist of numerous non-contiguous parcels, it will permanently protect and conserve interior forest and riparian wetlands habitat, supporting northern long-eared bats, forest-interior songbirds, box turtles and several species of salamanders that are of conservation concern.

Read more from the USFWS media release [here](#), and local coverage from [Bay Journal](#) and [Chesapeake Bay Magazine](#).



The areas targeted for protection by the new Southern Maryland Woodlands National Wildlife Refuge provide habitat for forest-interior and grassland-dependent birds as well as waterfowl and shorebirds. Photo courtesy Matt Kane/The Nature Conservancy

Native Trees of Maryland: Sugar Maple, *Acer saccharum*

Jonathan Kays, Emeritus Forestry Specialist

*It was a Tuesday, I remember
After school this last September
Walking home I chanced to see
My very favorite maple tree
- "Colors" by John McCutcheon*



Sugar maple (*Acer saccharum*).
Photo [LisaChristianson/iStock](#)

No fall season in the Northeast US and Canada is complete without the vibrant gold, yellow, and red color of sugar maple leaves dominating the landscape, while providing delicious maple syrup, and quality hardwood used for everything from furniture to bowling alleys. Sugar maple prefers to grow on noncompacted, fertile, moderately moist, well drained, slightly acid soils and is a common sight in the Appalachian Mountains to those in New England and Canada.

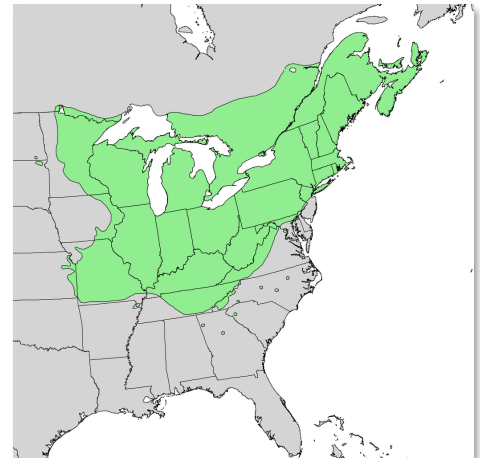
In the northern forest, sugar maple trees are often found as a dominant or co-dominant species (near top of the canopy) in mixed hardwood stands, commonly associating with other trees like white ash, northern red oak, yellow birch, beech, basswood, and black cherry. As the forest matures, it tends to become the predominant species. In Maryland, sugar maple is usually found in the western Piedmont forests and the Appalachian mountains.

Ecologically, sugar maple is capable of growth into the canopy from the forest floor. It thrives in full sunlight but is very tolerant of shade so it can establish as a seedling and grow up through the existing canopy. This ecological niche is unique and makes it one of few desirable tree species that does not require full sunlight to establish and grow to maturity.

Sugar maple can do well in residential landscapes but is not a good candidate for restricted urban sites. Dieback and decline in urban maple trees is usually attributed to soil compaction, drought, or toxic effects of road deicing salt. In its native forest environment, decline and stress are caused by insect defoliation or drought. Sugar maple is long-lived and can survive for 300 to 400 years.

Like all maples, the buds, leaves and branches lie opposite

on the stem. The leaves are distinct with five square-topped lobes but can be confused with Norway maple. Sugar maple has small, narrow brown buds but Norway buds are stout, purplish and exude white liquid when the stem is broken. The bark is light gray to gray-brown and becomes deeply furrowed and rough with age.



Sugar maple native range

Sugar maple is known to most people for the maple syrup produced from the sap in "sugarbush" forest areas. Trees in a sugarbush are thinned from an early age to create room for crowns to expand which enhances sap production and creates areas that can be managed for many decades. The process of tapping trees and hanging buckets to collect sap has been supplemented with engineered tubing systems that collect sap to a central collection area. The maple syrup season typically lasts 4-6 weeks from late winter to early spring, and it takes 40 gallons of sap to make a gallon of syrup. A few sugarbush operations are found in western Maryland but it is a major industry in the New England states. However, 80% of the world's maple syrup comes from Canada.



Vacuum tubing collecting sugar maple sap.
Photo courtesy [cdlinc.ca](#)

Sugar maple is considered a "hard maple" species compared to the softer woods of red and silver maple as it produces dense strong wood used for bowling alleys and furniture. If you want some vibrant gold, yellow, and red color in your yard, and if you have decent soil and space for the root system to spread, sugar maple is a good choice. If you are looking for seedlings to plant in an existing forest and to grow into the canopy, sugar maple may be an option.

From a Mountaintop, UMD Alum Encounters Toxin-Emitting Olive Bushes, Smothering Vines and the Imperfection of Conservation

Sala Levin '10 © 2025 Maryland Today

Those who know and love Paula Whyman '87 may have been skeptical about her well-meaning endeavors in the natural world. The perennials she planted in her suburban Maryland backyard failed to return for a second year. The fledgling robin she tried to save from a heat wave expired before she could even get it to an animal shelter. The frogs she and her children attempted to raise died after refusing to eat the crickets Whyman released into their terrarium.

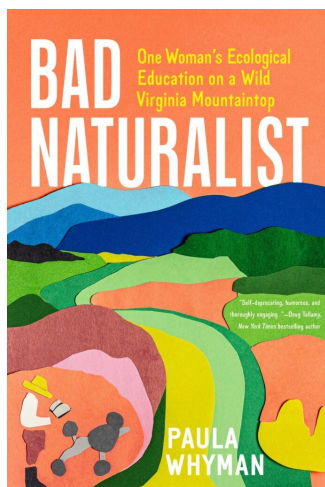
But those thwarted forays into flora and fauna didn't deter Whyman. In August 2020, after decades of sporadic searching for a home in the Virginia countryside, she and her husband purchased more than just a patch for some vegetable gardening. They bought 200 acres on a peak in the Blue Ridge Mountains, where Whyman undertook the daunting task of clearing invasive plants and encouraging native plant life on this long gone-to-seed cow pasture and orchard—an experiment she's written about in her new book, [“Bad Naturalist: One Woman's Ecological Education on a Wild Virginia Mountaintop,”](#) released by Hachette's Timber Press in January.

“I thought, ‘This is a really exciting possibility, despite the fact that I didn't know much about plants or how to proceed with making an old hayfield into a native meadow,’” she said.

Whyman had long harbored a love of the outdoors. As a child in Maryland, her parents grew exotic plants like Chinese silvergrass and a mimosa tree in their yard. (Now, Whyman knows those plants were invasive.) “I spent a lot of time letting insects crawl on me, digging for bugs, watching bees and ants under a magnifying glass,” she said. She became a junior farmer at Wheaton Regional Park's Old MacDonald Farm, where she took care of chickens, sheep and goats.

After graduating from the University of Maryland with a degree in English, Whyman worked for years as an editor and freelance writer before going back to school at American University, where she earned an MFA in literature. While there, she created an independent study to work one-on-one with a biology professor and gain foundational knowledge in conservation biology.

Whyman was inspired in her quest by the 2019 book “Wilding,” in which British author Isabella Tree tells the story of returning her farmland to an untamed state. Now, on her Virginia mountaintop, Whyman is working to tip



the balance to native plants, especially in the 75 acres of open meadow atop the mountain. There, invasives like Japanese stiltgrass and spotted knapweed competed for space and resources with native species like little bluestem, milkweed, and prairie rose.

“What if I could return this mountaintop to its natural glory?” Whyman writes. “It would serve as a living example of how to restore native meadows! Pollinators would come from all around! I pictured sheep grazing on one of the hillsides.”

Working with experts from the Smithsonian Conservation Biology

Institute and the Natural Resources Conservation Service, Whyman encountered a bushel of challenges. The prolific autumn olive bush, which emits nitrogen into the soil that can create toxic algal blooms in streams and rivers, kept popping up in new places. Thorny bramble quickly took over acres of fields. And the suffocating vine known as mile-a-minute for its ability to invade new territory sunk its leafy teeth throughout the property.

She also learned the nitty-gritty of land restoration: the critical role played by prescribed burns, the near impossibility of eradicating invasive plants, the inherent imprecision of conservation efforts.

“I thought there would be one right answer: Here's what you should do,” she said. “And people did give me guidance and say, ‘We think the best approach is X.’ And then someone else might say, ‘Well, I think the best approach is Y.’ And someone else would say, ‘It could be Z.’ That was really eye-opening—the idea that it's a science and it's also kind of an art.”

In “Bad Naturalist,” Whyman “complicates traditional conceptions of nature and belonging,” wrote Publishers Weekly. “The result is an enchanting complement to Isabella Tree's ‘Wilding.’”

Today, Whyman and her husband spend about 85% of their time at their mountaintop home. Now she is turning her attention to this year's burns and deer management. She still hopes to raise a small flock of sheep.

“I hope readers will come away with a feeling of hopefulness, that they'll be inspired to look more closely at the natural world where they live,” she said. “If you're in the city, maybe you'll see birds on a ledge, or plants growing along a sidewalk. Just ask questions, because attention breeds action.”

USDA Forest Service Releases 2024 Tax Year Tips for Forest Landowners

Private forest landowners need to recognize that not all woodlands are the same when it comes to Federal income taxes. While you might only consider timber-related Federal taxes when you have a timber sale, each forestry activity you conduct can have tax implications. Generally, all income received is taxable unless explicitly excluded by tax law. Understanding the forest-related provisions and integrating tax planning into your forest management can help lower your tax.

The US Forest Service, in conjunction with the universities of Florida and Georgia, has a new 4-page publication that summarizes a variety of tax situations and provides examples to help landowners identify what is relevant to them. [Read the publication here.](#)

Maryland Passes 1 Million Trees Planted



MD Forest Service staff, along with volunteers from MedStar Harbor Hospital and the National Aquarium, plant trees at MedStar Harbor Hospital in Baltimore.

DNR photo

Due to a substantial increase in tree plantings for 2024 versus 2023, the state of Maryland is significantly closer to meeting the 5 Million Trees Initiative by 2031. Before the close of 2024, the one

millionth tree was planted as part of a project in western Maryland, according to data from the state DNR. Overall, according to a press release, “The rate of tree plantings for the initiative increased by more than 100% from 2023 to 2024.”

March 2024 was the busiest month of the Initiative so far, with 197,000 trees planted. By the summer, the state had also planted nearly 58,000 trees in underserved urban areas, which is a major part of the overall planting effort and a way to provide urban areas with tree-related benefits such as shade, cleaner air, and additional wildlife. This amounts to 12% progress toward the total goal toward the goal of 500,000 trees in urban areas.

[Read more here.](#)

Did You Know? March 21st is International Day of Forests

The United Nations General Assembly declared March 21 as the [International Day of Forests](#) in 2012. The day celebrates and raises awareness of the importance of all types of forests. The theme for 2025 is “forests and food,” recognizing the crucial roles forests play in food security, nutrition, and livelihoods. Although forests are prized for providing habitat and wood products, they are also essential for food production around the world; ask anyone who enjoys coffee, chocolate, maple syrup, and much more!



Want to Join the Effort? Become a Maryland Tree Steward

Maryland Tree Stewards is an initiative from the Alliance for the Chesapeake Bay, the Maryland Forest Service and local partners developed to promote, enhance and increase tree canopy coverage in our urban and suburban environments. The program enables Marylanders to connect to their local trees through planting and caring for their trees. The Alliance provides workshops for individuals looking to becoming tree stewards. Additionally, several organizations across the state have active Maryland Tree Stewards groups.

[Learn more about the program at their website.](#)

Invasives in Your Woodland: Incised Fumewort

The term “Incised fumewort” may not be familiar to many readers of this column, as this plant is a relatively new arrival to North America. It was first identified in the US only in 2005. Experts are unsure how it arrived. Some speculate that it was imported for garden planting; or arrived as seeds in contaminated imported garden materials. But one thing is for certain: its range is growing. By the time it was definitely identified as a non-native plant, it had already established a viable population that defied complete removal. Since then, new populations have been identified in Pennsylvania, Maryland, District of Columbia, Virginia, North Carolina, and as far west as Tennessee and Illinois. This issue’s map from the Maryland Biodiversity Project shows its reported concentration across the state (darker shades of purple represent greater concentrations).



Incised Fumewort flowers in Washington Co., MD. Photo by Wayne Longbottom, [Maryland Biodiversity Project](#)

herbaceous spring ephemeral plant in the poppy family. It is a shade-tolerant, low-growing plant (less than 2 feet tall). Native to Asia, it was first detected in the U.S. in the Bronx, NY in 2005. This plant can form dense carpets along forest floors, woodlands, and riparian areas, suppressing and outcompeting native species, such as Virginia bluebells.

How does it spread?

Incised fumewort has several effective mechanisms for dispersal. The plant produces oblong seed pods that can explosively eject seeds up to 10 feet away when disturbed by movement or weather. Its seeds can also spread by flowing water and by ants; they contain a protein and fat-rich structure that attracts ants. Humans may also contribute to the spread by using contaminated nursery materials and by transporting contaminated soil.

How can I identify it?

Incised fumewort can be identified first by its low-growing habit. The compound leaves have a resemblance to parsley, are divided into three leaflets, which are further subdivided into three smaller leaflets. The leaves themselves are highly serrated, lobed, or incised (hence the name). In the mid-Atlantic, it begins growing in February as stems from tubers, with purple flowers emerging from March through early May. The pod-shaped fruits form shortly thereafter. The first seeds disperse about three weeks after the first flowers. See the photo gallery on the next page.

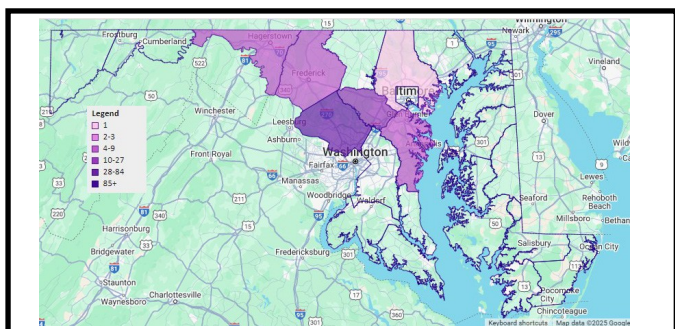
It is essential to distinguish it from the native yellow fumewort (*Corydalis flavula*). The invasive has purple flowers instead of yellow, more heavily divided lobed leaves, and up to 200 teeth on one leaflet, compared to no more than 90 on the native species.

How can I control it?

The best way to control incised fumewort is to hand pull and dig out second-year or older plants, ensuring removal of the small tuber. Avoid hand-pulling first-year individuals, as the tuber may break off and lead to further spread. Mowing several times throughout the growing season to suppress growth and prevent seed setting. Apply a foliar spray of a 3% solution of glyphosate; exercise caution when applying herbicides near wetlands or floodplains to minimize non-target impacts.

For more information:

Learn more about incised fumewort: [Have You Seen Incised Fumewort?](#) (Maryland Grows Blog) [An Incisive Invader](#) (Maryland Invasive Species Council) [Invasive Plants: Emerging Invasive: *Corydalis incisa*](#) (Research Guides at New York Botanical Garden)



Reported distribution of incised fumewort in Maryland, from [Maryland Biodiversity Project](#).

Consequently, this is an invasive plant species that has been causing concern in several states. In 2017, the USDA classified incised fumewort as a “high-risk” invasive species due to its potential to become widespread and cause significant ecological damage. Additionally, the Maryland Department of Agriculture estimates that approximately 37% of land in the U.S. could be suitable habitat for incised fumewort. Its population can potentially double in size each year, making it a rapidly spreading invasive species. The New York Botanical Garden calls it [“the latest threat to our gardens, forests and wetlands.”](#)

What is it?

Incised fumewort (*Corydalis incisa*) is an biennial

Image Gallery: Incised Fumewort



Incised Fumewort blooming in Washington County, MD.
Photo by Bill Hubick, Maryland Biodiversity Project.



Incised Fumewort foliage. Photo by Milo Pyne, USDA NRCS
PLANTS Database, Bugwood.org.



Incised Fumewort seedpods. Photo by Gary Fleming, Virginia
Department of Natural Resources, Bugwood.org.



Incised Fumewort flowers, Montgomery County, MD.
Photo by Bill Hill, Maryland Biodiversity Project.

Events Calendar

March 15, 2025, 1:00—2:30 PM

Doug Tallamy – Nature’s Best Hope Bright Side Baptist Church, Lancaster PA

Choosing the right plants for our landscapes will not only address the biodiversity crisis but help fight our climate crisis as well. Tallamy will discuss simple steps that each of us can- and must- take to reverse declining biodiversity, & why we must change our adversarial relationship with nature to a collaborative one. [Learn more & register here.](#)

April 14, 2025, 1:00—3:00 PM

A Progress Report on Resistance Breeding in Forest Trees Online

The American elm was once a common street tree, but populations have been depleted by Dutch elm disease. Ash species have suffered losses from emerald ash borer. The American chestnut was once the largest tree in eastern North America, but now mostly grows as a shrub due to the introduction of chestnut blight. Will there ever be a chance of returning iconic tree species to the landscape for future generations? That’s the goal of resistance breeding in forest trees. In this webinar, Dr. Carrie Pike (US Forest Service) will discuss the process and importance of breeding trees for pest resistance. [Click here for more information and to register.](#)

This Issue’s Brain Tickler...

Last issue we asked a 3-part question about a wood grading system. The “Janka Hardness Scale,” invented by Austrian wood researcher Gabriel Jenka, measures the species’ resistance to dents, scratches, and wear, and is widely used in the flooring industry and by woodworkers. Congratulations to our three winners, Bob Parkinson, Joanne Sheffield and Natasha Shengold!

BRANCHING OUT

Maryland’s Forest Stewardship Educator

For this issue, we need to hark back to February 2016. With the first issue of the year, *Branching Out* debuted a new feature, “Invasives in Your Woodland.” With this issue, we mark ten years of invasives in the spotlight. Name the invasive plant that was the subject of that first feature.

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

July 15 –18, 2025

The American Forest Congress Meeting Washington DC

The congress is a gathering of natural resource management leaders focused on discussing and shaping forest policy in the U.S. The decision to convene soon is driven by the congress’ goal to reduce carbon dioxide emissions and focus on the vital role forests play in providing natural climate solutions. The theme of this meeting is Equity & Climate, to highlight the congress’ commitment to diversity. [Learn more at this link.](#)

UNIVERSITY OF
MARYLAND
EXTENSION

WOODLAND
STEWARDSHIP
EDUCATION



University of Maryland Extension programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.

Branching Out University of Maryland Extension

18330 Keedysville Road
Keedysville, MD 21756-1104
301-432-2767

Editor: Andrew A. Kling
Editor emeritus: Jonathan Kays

Published four times per year and distributed to forest landowners, resource professionals, and others interested in woodland stewardship.

To Subscribe:

Via Web Site: Go to https://go.umd.edu/subscribe_here and submit the requested information.

Via Email: Email listserv@listserv.umd.edu. In the body of the message, type SUB branchingout your name (example: SUB branchingout John Doe).

You will be notified by email when a new issue is available, with links to its locations.

Hardcopy subscription: Mail check or money order for \$10 per year, payable to University of Maryland to the address above.

Selected back issues and feature articles can be found on our website at <https://go.umd.edu/backissues>.

All information, including links to external sources, was accurate and current at the time of publication. Please send any corrections, including updated links to Andrew A. Kling at akling1@umd.edu.

Send news items to Andrew A. Kling at akling1@umd.edu or 301-226-7564.