

BRANCHING OUT

Maryland's Woodland Stewardship Educator



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Some changes in our neck of the woods

Andrew A. Kling, *Branching Out* editor

Last year's winter issue of *Branching Out* included a link to a survey which invited you, our readers, to provide feedback on the content of the newsletter. One of the results of the survey was that you wanted to learn more about the native trees in our landscape. With that in mind, we have a new feature to share, starting in this issue. Our UME Forest Stewardship Educator John Hooven will be writing a new column entitled "Native Trees of Maryland." Here's what he has to say about the column:

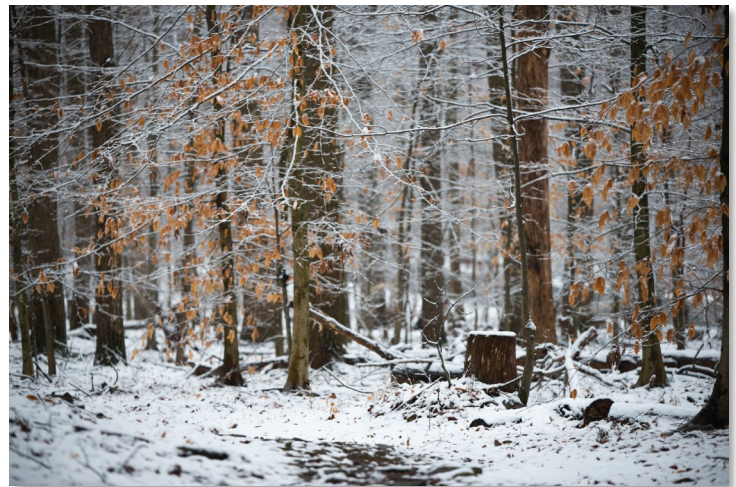
Maryland is an envious and unique state for native tree and shrub species. Geographically, it is in the mid-latitude temperate zone along the east coast of North America. It hosts not only a humid maritime climate but towards western Maryland, it also hosts a humid continental environment. The state also has elevations at sea level climbing to around 3,500 feet above sea level in the west with the Appalachian Mountains cutting across the panhandle of the state. There are many rivers and watersheds including the Chesapeake Bay estuary that run through the state. Therefore, Maryland is in a unique region for species diversity. Maryland is able to host southern species at the northern fringe of the geographic range along with northern species reaching their southern limits. Overall, there are over 120 species of trees that call Maryland home. We will be exploring many of these species in this new column.

John's first installment takes a look at the Maryland state tree, the white oak, and appears on [page 2](#).

Also inside this issue is information about a change to one of the Woodland Stewardship Education's long-running programs. Our webinar series has a new name for 2024, "Land and Wildlife Speaker Series." It reflects our interest in covering a wider range of topics related to Maryland's ecosystems. Learn more about the first three webinars in the series on [page 3](#).

In our [News and Notes](#) section on page 5, read about the state's progress towards Maryland's goals of planting five million trees by 2031. It's an ambitious program, and is making changes locally and statewide.

Meanwhile, the WSE is assisting these changes with an effort that's going on behind the scenes. The DNR contacted us last year about enrolling some of their "5



Black Hill Regional Park (Boyd's, MD) in Winter.

[Adobe Stock photo by Sizhu](#)

Million Trees Initiative" (5MT) specialists in the upcoming session of the General Forestry Course; we felt that a special off-season session would best serve the needs of both the general public and the DNR.

Consequently, several 5MT specialists and other DNR forestry and ecosystem specialists are now in the midst of an accelerated version of the course, expanding their knowledge of silviculture and the business of forestry, which is a change to our usually-quiet February.

Meanwhile, we prepare for the next session of "[The Woods in Your Backyard](#)" online. We invite you to join us so that you can make your own changes in your own woodlands.

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Native Trees of Maryland: The White Oak, *Quercus alba*

John Hooven, UME Forest Stewardship Educator

The white oak is, without a doubt, a remarkable tree species. The tree is truly an impressive specimen where older examples are found growing in the open landscape. It is no wonder that this species of oak is Maryland's state tree. The largest white oak specimen found to date was the Wye Oak at Wye Mills in Talbot County that had a circumference of nearly 32 feet. It perished in a storm in 2002 and was thought to be over 500 years old. Valued for its resources, its place in the landscape as well as its benefits for wildlife, it is hard to find any tree species upon which so many other species depend heavily.

White oaks are a native tree species in the genus *Quercus*. Here in North America, *Quercus* are divided into two groups: red oaks and white oaks. *Quercus alba* is the leading representative of the white oak group. White oak has a light gray bark and gray branches. The leaves of white oak are lobed with rounded edges and have shallow to deep sinuses, 5-9 lobes per leaf. Trees typically have shallow furrows that grow scaly with age. Indeed, when observing a mature species in the forest, the shallow furrows that we see near the ground transition further up the tree into larger scaly, flaking plates. It is one of the leading ways to identify white oak in the forest especially in the winter when the leaves are absent from the trees.

White oaks are found in the landscape throughout the entire state of Maryland. They grow in drier soils but can be found in uplands as well as drier lowlands. They are least likely to be found along drier ridge tops and in wetter bottomlands.

White oak is a slow growing tree. The species is a long-lived tree easily outlasting species in the red oak group of trees. White oaks can typically live 200-600 years, making them one of the oldest growing deciduous species in Maryland by age. Its slow growth produces a strong, tightly grained wood. This characteristic makes white oaks



White Oak (*Quercus alba*).



White Oak catkins and leaves

excellent for making barrels for ageing wine and whiskey. The species is monoecious; the female parts that develop into acorns, and the male flowering catkins, grow on the same tree. White oaks generally reach sexual maturity to start producing acorns at about fifty years of age, though some open field grown species will start producing acorns at twenty years. Acorns take a year to produce. However, as with other oaks, individual trees experience "mast years," where development of acorns will be much heavier than other years. Additionally, some years, development will be non-existent.

Many wildlife species are dependent on the white oak, including many butterflies, moths, squirrels, turkeys, as well as other insects and birds. The versatility of its wood has been used on everything from railroad ties, trim, and lumber, to furniture, cabinetry, and flooring. Its wood is also used as beams and planks in sailing ships. In fact, the *USS Constitution*, "Old Ironsides," is made with white oak. The replacement planking on Maryland's tall ship, *Pride of Baltimore II*, is also white oak. The species is considered the most important of the oaks for timber.

Changes in land management are leading to a decline in propagation of white oaks in forests. The "[White Oak Initiative](#)" was established to reverse this trend. White oak has a very long rotation cycle

when grown as timber in the forest when compared to other species. Additionally, natural regeneration is most probable only during mast years. Therefore, without prudent management and intervention, there will be a decline in white oaks in the landscape over the next century. As such an essential species in the environment, this could have a negative impact on the many species that depend on this important tree. Let us give a salute, then, to the white oak, Maryland's state tree.

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 2024 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 April 8 to June 17. 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 crop tree release) and share the experiences of other woodland owners.

The course costs \$95.00 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.

You have a terrific program that makes us better stewards of nature. It is hard sometimes to feel like as an individual I can make an impact. ...Your course gives a little hope that acting individually can lead to systems-wide improvements.

- Betsy M., Maryland

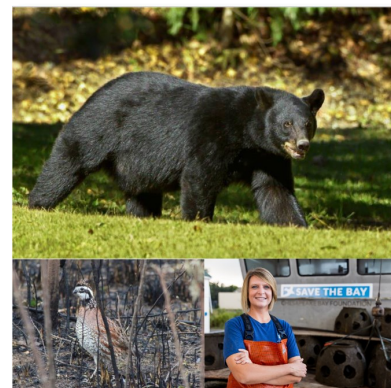
New for 2024: Land & Wildlife Speaker Series

UME’s popular Wildlife Wednesday webinar series is back for 2024 with a new name and a new lineup. Rebranded as the “Land & Wildlife Speaker Series,” the webinars will continue to share information about topics and issues of interest related to Maryland’s wildlife and ecosystems.

The next three webinars of the series:

- ◇ **February 21 A historic tale of Maryland’s Black Bear:** Jonathan Trudeau, Black Bear & Co-Deer Project Leader, Maryland Department of Natural Resources.
- ◇ **March 20 The Firebird: Northern Bobwhite Ecology and Restoration:** Kyle Magdziuk, Tall Timbers.
- ◇ **April 17 Singing the Blues: The Ecological and Economic Consequences of Invasive Catfish in Chesapeake Bay:** Allison Colden, Maryland Executive Director of the Chesapeake Bay Foundation.

For more information, [visit this link](#).



Research to Help Private Forest Owners Manage Woodlands for Ecosystem Services

Jeff Mulhollem, Penn State University

A team of forest ecologists and social scientists in [Penn State's](#) College of Agricultural Sciences, using a \$650,000 grant from the U.S. Department of Agriculture, will conduct research aimed at helping owners of small- to medium-sized forest tracts manage their woodlands for ecosystem services they deem desirable.

In addition to providing food, fuel and fiber, forests clean the air, filter water supplies, control floods and erosion, sustain biodiversity, store carbon and provide opportunities for recreation, education, and cultural enrichment. Humans rely on forests for economic and cultural well-being, noted project leader Margot Kaye, professor and interim head of the Department of Ecosystem Science and Management.

"Family-owned forests smaller than 200 acres represent the largest forestland ownership type in the United States, yet there is a lack of guidance for these small - and medium-sized private forest landowners to manage their forests," she said. "We propose to fill this gap through stakeholder engagement and experiments on Penn State's forestlands. We will answer the question, 'What is the potential of small- and medium-sized private forests to meet ecosystem service needs of landowners and society?'"

Small private forest landowners face many challenges in sustaining their forests, ranging from invasive plants and damaging insect infestations to cultural challenges such as estate planning and taxes, explained project co-leader Allyson Muth, assistant research professor and director of [Penn State's James C. Finley Center for Private Forests](#). Traditional forest management focused on timber production is often not feasible in tracts less than 200 acres, which represent over 55% of private forest area.

The volatility of the timber market makes long-term forestland planning difficult and most family-owned forests have not sold timber over the past five years, she added, noting that opportunities for carbon credits and non-timber forest

products are gaining attention. But research is needed to test how forest management can promote these products.

"Forest carbon markets are appealing to owners with smaller estates because carbon credits could provide another stream of revenue from their land," said Kaye. "Unfortunately, quantification of the capacity of eastern deciduous forests to be managed for carbon sequestration is in its infancy and in continued need of rigorous testing. Furthermore, the leading recommendation in the region for forest carbon storage is delaying harvest. We are working to identify improved forest management strategies that sustain both carbon storage and timber products, while preserving biodiversity and non-timber products."

In this study, the researchers plan to evaluate small-scale private forest landowner's desire and capacity for managing multiple ecosystem services using focus groups and surveys. And they will use data from test plots in Penn State's Stone Valley Experimental Forest to quantify the biophysical capacity of small forests to provide ecosystem services of timber and non-timber forest products, carbon sequestration, and wildlife habitat.

Lastly, they intend to combine social and ecological data to identify forest-management and landowner-assistance strategies suited for ecosystem-service provision.

"The proposed project will test the feasibility of managing forests less than 200 acres for timber and non-timber forests products, carbon and wildlife habitat to deliver concrete guidance to forest landowners on how they can achieve their goals," Kaye said. "Our research will identify forest-management tactics that can be used by owners of small private forests for multiple ecosystem services."

USDA Encourages Producers Participating in CRP to Consider Forest Management Incentive

USDA NRCS

The U.S. Department of Agriculture (USDA) is offering financial assistance to agricultural producers and private

landowners enrolled in its Conservation Reserve Program (CRP) to improve the health of their forests. The Forest Management Incentive, available through USDA's Farm Service Agency (FSA), can help participants with forest management practices, such as brush management and prescribed burning.

"Healthy forests offer many benefits, from providing habitat for wildlife to sequestering carbon," said FSA Administrator Zach Ducheneaux. "Through the Forest Management Incentive, USDA's Farm Service Agency provides an additional forest improvement tool to producers participating in the Conservation Reserve Program. This incentive enhances the Conservation Reserve Program's environmental benefits and helps protect our country's natural resources."

The Forest Management Incentive is available to participants with active CRP contracts with forest cover that are not within two years of expiring. The incentive is a payment to eligible CRP participants who properly completed authorized forest management practice activities to improve the condition of resources, promote forest management and enhance wildlife habitat.

Forest management practices include brush management, herbaceous weed control, prescribed burning, firebreaks, development of early successional habitat and forest stand improvement. Additional information is available in our Forest Management Incentive [fact sheet](#).

Participants can now submit offers for the Forest Management Incentive. Interested producers should contact the FSA at their local [USDA Service Center](#). The Forest Management Incentive was launched in 2020 and is one of the many natural resource conservation options available through CRP. Currently, the Forest Management Incentive has participants in 27 states.

Since 2021, USDA has seen a significant increase in enrollment and interest in CRP, which is a critical part of the Department's efforts to support climate-smart agriculture and forestry on working lands. In October, USDA [announced it issued more than \\$1.77 billion](#) to 667,000 agricultural producers and landowners for 23 million acres of private land enrolled in CRP.

USDA Forest Service Releases 2023 Tax Year Tips for Forest Landowners

The United States Department of Agriculture (USDA) Forest Service released its new 2023 tax tips for private forest landowners in January. Although private forest landowners may think about timber-related federal income taxes only after having a timber sale, it's important to remember that each forest activity conducted can have tax implications. Generally, all income received is taxable unless excluded by tax law, and nothing is deductible unless a provision allows it. Understanding the forest-related provisions and integrating tax planning into forest management can help lower taxes. The article breaks down the classification use of the land, timber sale, tax deductions, and other forest-related considerations. Each section thoroughly describes each factor and provides examples to help landowners identify what is relevant to them. [Read the article on the National Timber Tax Website.](#)

A Look Inside a Prescribed Burn in Frederick County

Recently, the Maryland Department of Natural Resources conducted a prescribed burn in the Frederick Watershed. The burn crew comprised DNR staff from the Maryland Forest Service, Maryland Park Service, and Wildlife and Heritage Service, as well as partners from the National Park Service and Frederick City, and environmental science students from Juniata College in Pennsylvania. The plan was to conduct the burn in a 93-acre stretch of the watershed known as the "Turkey Pens." The fire, a result of meticulous planning and coordination, aimed to restore pitch pine and oak trees in the forest.



DNR forester Sean Weaver, left, walks along the fire line shortly after the start of a prescribed burn in Frederick. Photo by Joe Zimmermann, [Maryland DNR](#)

[Read the full story here.](#)

Maryland Nears Half a Million Trees Planted Toward 5 Million Goal...



Students from Allegany College's Forestry Program participate in a tree planting at Dans Mountain State Park.

[Maryland DNR photo.](#)

With the start of 2024, the Maryland Department of the Environment shared news on the state's progress towards the ambitious goal of planting five million trees on private and public lands by 2031.

More than 180,000 trees were planted in 2023, bringing the total during the first two years of the initiative to 471,890 so far.

"It's exciting to already be at nearly 10 percent of the state's goal after just the first two years of the initiative," said Maryland Department of Natural Resources Secretary Josh Kurtz. "A massive tree planting effort like this one requires coordination between tree nurseries, volunteers, and dozens of partner organizations. We believe the infrastructure and partner development is now in place to begin accelerating our planting efforts and make sure Maryland reaches its 5 million tree planting goal by 2031." [Read more from the Department of Natural Resources here.](#)

... And a Project in Anne Arundel County Was Part of It

A recent project in Anne Arundel County resulted in 1,800 native trees being planted on ten acres in Crownsville, MD. The county partnered with the Alliance for the Chesapeake Bay at the County-owned field through the Alliance's "Healthy Forests, Healthy Waters" Program. Crews planted 15 different native species across the site, along with the installation of temporary protection shelters while the trees take root. The Alliance contracted Habitat Enhancers for site preparation and Shenandoah Habitats to plant the trees. Shenandoah Habitats completed the planting in one day and will continue to provide maintenance for five years while the trees mature.

[Read more about the project here.](#)

Invasives in Your Woodland: Wineberry

North America is home to a variety of berries prized for their taste, including native blueberries, blackberries, and raspberries. This issue's spotlight falls on a shrub in the rose family that writers describe as [very edible](#), or [delicious](#), or [amazing](#). Another describes them as "[not a sour berry in the bunch](#)." This is the wineberry, and despite its tastiness, it is non-native and invasive. This Asian native was imported to the United States in 1890 by berry growers. They wanted to use it as breeding stock with native raspberries—a practice continued to this day—but it escaped from cultivation and was first observed in natural areas in the 1970s.



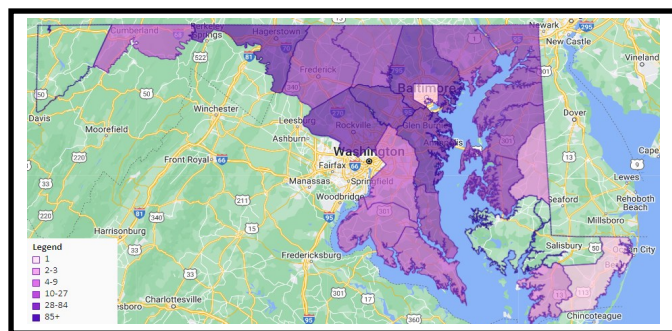
Wineberry fruit. Photo by John M. Randall, The Nature Conservancy, Bugwood.org

Today, it is found throughout most of the East Coast and Midwest states, and is considered invasive in Maryland, Pennsylvania, Tennessee, Virginia, North Carolina, West Virginia, and the District of Columbia. This issue's map from the Maryland Biodiversity Project shows its reported concentration across the state (darker shades of purple represent greater concentrations).

What is it?

Wineberry (*Rubus phoenicolasius*), also called "wine raspberry," grows as arching canes that can reach nine feet in length. It forms thickets in a variety of habitats with moist soil, including woodlands, forest margins, stream and wetland edges, where its vigorous growth can crowd out native species. It prefers open areas with abundant sunlight, but may become established in forest settings when a tree falls and opens a hole in the canopy. While wineberry's thickets may provide cover for some wildlife, other animals cannot penetrate the dense vegetation.

Wineberry canes grow in two stages. In year one, the canes are vegetative; in year two, they become woody and produce lateral branches, flowers, and fruits. While each



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

cane lives only two years, the plant produces new canes every year.

How does it spread?

Wineberries spread naturally when the tips of the canes reach the ground, rerooting at the tips. It can also spread via root buds. Additionally, seeds from the fruits can be spread by birds and other animals via droppings.

How can I identify it?

Wineberry leaves are divided into three heart-shaped leaflets that are alternate on the stem and that have a whitish and waxy underside. The margins are toothed. The species is most easily identified by its mature canes, flowers, and fruit. The woody canes appear reddish from a distance, which is caused by glandular hairs along the entire length of the stem. The flowers have five petals that emerge in June. The fruits are bright red, resembling its raspberry cousins. The canes lose their leaves in winter. See the photo gallery on the next page.

How can I control it?

The best way to control the spread of wineberry is to not plant it. As mentioned earlier, berry growers still use it as breeding stock, but under tightly-controlled conditions. If property owners find wineberry in natural areas, manage the plants as soon as possible. Removing the canes mechanically by digging can be effective as the plant does not have a vigorous underground storage system. Herbicides are also effective. Be sure to plant native species in the disturbed areas and return to ensure no wineberries resprout.

For more information:

Learn more about wineberry:

[Wineberry](#) (Plant Invaders of Mid-Atlantic Natural Areas)

[Fact Sheet: Wineberry](#) (Plant Conservation Alliance's Alien Plant Working Group)

[Invader of the Month: Wineberry](#) (Maryland Invasive Species Council)

Image Gallery: Wineberry



Wineberry stems. Photo by Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.



Wineberry flowers. Photo by Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.



Top and above: wineberry foliage. Photos by Richard Gardner, Bugwood.org.

Wineberry flowers and fruit, Washington County MD.
Photo by Derek Hudgins, Maryland Biodiversity Project.

Events Calendar

February 27, 2024, 7:00 PM

MNPS Monthly Program: Tiny Forests, Big Results? Testing the Miyawaki Tiny Forest Concept in Urban Landscapes Online

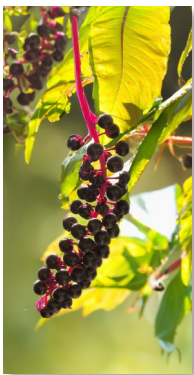
The Maryland Native Plant Society's monthly program for February features a presentation that discusses the early results observed in native plant composition and wildlife use of tiny forests over time, as well as the process of planting and maintaining a tiny forest. The program is free and open to the public. For more information and to register, visit <https://mdflora.org/event-5450029>

March 22-24, 2024

Gather to Grow: 2024 Forest Farming Conference Roanoke, VA

The Appalachian Beginning Forest Farmer Coalition's (ABFFC) Gather to Grow multi-day Forest Farming Conference will feature learning, networking, and strategic planning programs that will shape the future of forest farming of woodland crops such as botanicals, mushrooms, and decorative products in Appalachia and beyond. [Go here to learn more.](#)

This Issue's Brain Tickler...



Last issue we asked you to identify this native plant. The correct answer is *Phytolacca americana*, American pokeweed, also known as poke or pokeberry. Congratulations to our winners, Joanne Sheffield and Joel Gagliardi!



For this issue, identify the important day that will be celebrated in 2024 on April 26 in Pennsylvania, Delaware, and Virginia; on April 12 in West Virginia; and on April 3 in Maryland.

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

April 5-6, 2024

2024 Volunteer Tree Planting Relay Various locations

The Alliance for the Chesapeake Bay has engaged communities and individuals in watershed conservation via volunteer tree plantings for decades. For 2024, they are holding a 24-hour "tree planting relay" to plant thousands of trees in selected locations. For more information, visit <https://www.allianceforthebay.org/volunteer-tree-planting-relay/>.



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