

BRANCHING OUT

Maryland's Woodland Stewardship Educator



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Plans

Andrew A. Kling, *Branching Out* editor

We are surrounded by plans, either those that we make for ourselves or those that have been created by others. Some of the latter may impact our lives directly and unexpectedly— such as road construction along a favorite commuter route. Others are more predictable and may only affect us temporarily — such as the publicity related to an upcoming movie release. You can take a different way to work, or change the channel or the website, and thereby minimize any inconvenience.

Then there's the media blitz touting seasonal sales, which seem to begin before Halloween takes place. These are planned in conjunction with whether Thanksgiving is "early" or "late," which many believe affects the holiday shopping season. ([This has been debated for decades and even involved the federal government.](#)) How impactful the blitz is depends on your own planned holiday shopping.



Golden Autumn Foliage in Cunningham Falls State Park, MD. Photo by [Liz Albro Photos/Adobe Stock](#)

This is also a good time of year to plan for 2025 and beyond. While a New Year's Resolution is, at its heart, a plan for action, if you are a land owner or manager, you don't have to wait until January. Now is a good time to assess the property and make a plan, starting with some simple questions.

Do you plan to plant trees in the coming year? State tree nurseries across the region are now taking orders for delivery in time for spring planting — and the nursery managers always recommend making your purchases early for best availability. Read more about this in our [News and Notes](#) section, and plan your planting now.

Do you plan to improve the health of your woodlands? Now is a good time to assess the impacts of invasive plants, as many species continue to stay green after natives have become dormant for the winter. It's also a good time to check for egg masses on your trees from invasive insects such as the spongy moth or the spotted lanternfly. Plan to reduce emerging insects by removing the egg masses now.

Do you plan to generate more income from your woodlands? Perhaps that involves a timber harvest; be sure to understand all the tax implications by consulting the [National Timber Tax website](#) and the updated publications from US Forest Service experts. Also be sure to work with an accountant who is familiar with timber tax regulations. Perhaps your plan includes opening your woodland to recreational activities for a fee; be sure to understand the legal liability issues involved by reading [this publication from UME](#) and consulting a legal professional for the most up-to-date advice.

However, as the saying goes, "[The best laid plans of mice and men often go awry.](#)" Many situations, particularly when it comes to adverse weather, are beyond your control. Although, for example, our region was spared the worst of the damage inflicted by Hurricane Helene, the potential impact of such storms should be assessed in your plans for your natural areas, especially when it comes to property insurance.

It's also a good time of year for me to set the schedules for our program's online courses, as I have started to receive emails from folks planning to attend one or more sessions next year. So if you'll excuse me, I'm going to pull out my 2025 calendar and start making my own plans.

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UME Welcomes Two New Educators

Dr. Stacy Small-Lorenz



Dr. Stacy Small-Lorenz joined UME as a Residential Landscape Ecologist focusing on promoting practices to improve wildlife habitat and water quality in the Chesapeake Bay Watershed. She has studied, taught, and practiced conservation science in the Northeastern, Midwestern, and Western U.S. for over three decades, but has called Maryland home for almost 15 years. She holds

a Ph.D. in Biological Sciences from the Avian Ecology Lab of University of Missouri-Columbia and a B.A.S. in Ecology and Photography from Yale University and The Evergreen State College in Olympia, WA.

Her doctoral dissertation evaluated songbird population response to riparian habitat restoration in the Sacramento River Valley of California, in conjunction with Point Blue Conservation Science, U.S. Fish and Wildlife Service, and The Nature Conservancy. She has worked professionally in many facets of wildlife habitat restoration including design, implementation, research & monitoring, education, outreach, and environmental advocacy. After work in conservation practice, she served for nearly a decade in senior science positions at the Environmental Defense Fund and The National Wildlife Federation. For the past several years, she has taught secondary science for Montgomery County Public Schools while raising her 12-year-old son to become a bright young scientist, adventurous musician, and champion speedskater. In her down time, Stacy enjoys singing, tending her native plants and bird habitat, documenting visiting pollinators on iNaturalist, dabbling in botanical illustration, cross-country skiing in the winter and gazing at dragonflies from a kayak in the summer. She is happily settled with her husband Eric, son Avery, one dog and three strictly indoor cats in Olney, MD. She is extremely excited for the opportunity to work with Maryland residents to help ensure healthy future outcomes for Chesapeake Bay ecosystems and communities.

Stacy's contact information is:

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Lisa Kuder



Lisa Kuder is our new Native Plants & Landscapes Specialist. She is a UMD alum with an MS in Entomology and a 2nd MS from Hood College in Environmental Biology. While at UMD, she worked with the Maryland Department of Transportation on Integrated Vegetation Management strategies that support pollinating insects via natural regeneration of native wildflowers. She also partnered with the UK

company Wildflower Turf, Ltd. leading efforts to grow Maryland natives using their rapid meadow technology. This partnership included exploring the market potential for native wildflower sod in the Mid-Atlantic through 100+ customer discovery interviews with growers, retailers, and landscape professionals. Lisa has also served as a high school teacher in Frederick, MD teaching all levels of chemistry and Advanced Placement environmental science. In her spare time, she loves going to concerts with her kids, helping her daughter at regional dressage shows, reading, and exploring the world. She is thrilled to be a part of our amazing UME team and looks forward to spreading her passion for native landscapes.

Lisa's major responsibilities will align closely with the recently legislated Maryland Native Plants Program (MNPP). The Program, designed to increase the understanding of the importance and supply of native plants in Maryland is the result of a state legislatively approved bill and will involve several partners including the Maryland Department of Agriculture (MDA), the Maryland Department of Natural Resources (DNR), and the Maryland Native Plant Society (MNPS). More information on the MNPP Bill can be found at [this link](#).

Lisa can be contacted at:

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Native Trees of Maryland: American Holly, *Ilex opaca*

John Hooven, Cape Atlantic (NJ) Conservation District forester

Presenting American holly, *Ilex opaca*, a real show stopper of a tree especially during the winter holidays. American holly is a slow growing, evergreen gymnosperm (flower producing). *I. opaca* is the hardiest of the broadleaf evergreens. The species distribution in Maryland is restricted by elevation, being found mostly along the eastern and western Chesapeake Bayshores and the I-95 corridor, but naturally absent in the piedmont and mountainous western Maryland. The species continues northward in coastal areas in the coastal plain north to Massachusetts. Its range expands dramatically to the south of Maryland. The American holly is dioecious, having female and male trees.

Since the pilgrims first settled in New England, American holly was noted for its striking similarity to English holly that is known to be used for decorating during the Christmas holiday season. And, to this date, American holly is primarily used as ornamental greenery. The plant is also used as a specimen species in the landscape.

American holly is a species extremely valuable to wildlife, particularly, birds and migratory birds overwintering in the region. Mammals will also consume its berries. The nectar from its flowers is also considered excellent for honey production. While the spiny leaves would be difficult for deer to browse, deer that are hungry enough will eat its foliage at times in a hard winter. Both male and female trees flower but only the female produces the familiar red holly berries.

Holly is a slow growing species with very good salt tolerance. It is not uncommon to find the species growing in coastal



American holly in the snow. Photo by Andrew A. Kling.



American holly. Photo by Karan A. Rawlins, University of Georgia, Bugwood.org



Wye Island holly tree, 2022. Photo courtesy [Bit | Hiker 65](#).

maritime forests, in dunes, and especially lowlands and swamps in the Delmarva Peninsula. In fact, in these areas, it is not uncommon to find stands of pure holly growing along with northern bayberry. While not considered a pioneer species, holly is an opportunist and will quickly sprout in cut over areas. It is usually and quickly shaded out by other quicker growing tree species. But holly will continue to persist in the understory well after the dominant forest of trees has established a canopy. Hollies are associated with forest covers that included loblolly, sweet gum and common hardwoods found in lowland, swampy areas.

Due to its slow growth, holly produces tight indistinguishable growth rings. This produces a tough and hard wood that is not particularly strong and is moderately heavy. The wood of holly is characteristically one of the whitest woods in nature. It has white sapwood and ivory white heartwood. The wood is used occasionally for pulpwood and lumber but more so as a veneer. Its primary use is in specialty purposes such as inlays, furniture, handles, novelties, wood engravings and carvings, among other uses. The wood can be dyed black and used as black keys on pianos, violin pegs and fingerboards.

Holly is unmatched in the landscape garden setting. By far, an impressive tree in the open landscape is a holly that has been growing for decades, or a century. One of the oldest growing hollies on record in Maryland is growing at the Wye Island Natural Resource Management Area. The tree is around 300 years old. Impressive trees in the landscape can also be found in areas of old farmsteads.

Source: Burns, R., and Honkala, B. *Silvics of North America Volume 2. Hardwoods. United States Department of Agriculture (USDA), Forest Service, Agriculture Handbook 654.*

Conservation Efforts Get Boosts from Maryland Board of Public Works

David M. Higgins II, *Southern Maryland Chronicle*

In a recent effort to bolster conservation efforts and recreational access across Maryland, the Board of Public Works approved grants totaling \$900,000 to local governments and land trusts. The funding, allocated by the Maryland Department of Natural Resources (DNR), supports park improvements and land preservation through perpetual conservation easements aimed at protecting critical natural areas.

Significantly, Charles County received more than \$380,000 from the state's Rural Legacy Program, ensuring the protection of two ecologically vital properties covering 103 acres within the county. The conservation easements, established with the help of the Southern Maryland Resource Conservation and Development Board, serve to maintain forested areas, protect water quality, and preserve habitats for endangered wildlife species.

The funding was part of an agenda reviewed and approved by the Board of Public Works on October 30, 2024, during which Governor Wes Moore, Treasurer Dereck E. Davis, and Comptroller Brooke E. Lierman collectively sanctioned various conservation and recreational projects across the state.

In the Nanjemoy-Mattawoman Rural Legacy Area of Charles County, a 50-acre tract of land will now be preserved through an easement. The property is predominantly forested and includes more than 5,000 feet of riparian stream buffers along tributaries of Mattawoman Creek. These stream buffers play a crucial role in protecting water quality and fostering the health of the ecosystem by preventing runoff and erosion.

An additional 53-acre forested area in the Zekiah Rural Legacy Area of Charles County will also benefit from a new easement. This property supports a habitat essential for forest interior-dwelling birds, species that rely on large, undisturbed forest blocks for successful nesting. With the easement in place, the county will preserve 3,500 feet of riparian stream buffers along a tributary feeding into Zekiah Swamp Run, which eventually drains into the Potomac River. This area's preservation not only helps protect water quality but also safeguards biodiversity within Charles County, contributing to the overall ecological health of the region.

These grants reflect Charles County's alignment with Maryland's conservation priorities, which aim to safeguard critical environmental resources and prevent urban development from encroaching on valuable landscapes. Conservation easements, by ensuring that land remains undeveloped and maintained, protect ecosystems from degradation while promoting Maryland's longstanding conservation goals.

Alongside the Charles County projects, Frederick County received a \$470,000 grant for a permanent conservation

easement on a 75-acre property. Through the Conservation Reserve Enhancement Program (CREP), the easement will enhance water quality in the Israel Creek and Lower Monocacy River watersheds, safeguarding forested and grassed buffers on the property. These watersheds are vital resources, as Israel Creek serves as a designated recreational trout water area and public water supply for the county. This preservation project highlights the Board of Public Works' commitment to sustainable practices and ecological stewardship across Maryland's counties.

Furthermore, Worcester County received \$45,000 from Program Open Space – Local for beach sand replenishment and rip rap maintenance at Homer Gudelsky Park. This funding will enable better public access and recreational use of the beach. Program Open Space, established in 1969 under the Department of Natural Resources, continues to support Maryland's dedication to enhancing outdoor recreational spaces through grants for planning, acquisition, and development of parklands. This program divides funding into Local and Stateside projects, addressing the unique needs of both community-based and statewide recreational areas.

Maryland has long been at the forefront of conservation through its various land preservation initiatives, including the Conservation Reserve Enhancement Program, Rural Legacy Program, and Program Open Space. Established in 1997, the Rural Legacy Program preserves large working landscapes across 36 designated areas in the state, emphasizing sustainable agricultural practices, natural habitat preservation, and protection of water resources. The CREP, meanwhile, has acquired conservation easements from willing landowners since 2009, ensuring continued conservation practices after the expiration of federal contracts.

Program Open Space, recognized for its dual Local and Stateside programs, enables counties and municipalities to develop parks, protect natural landscapes, and enhance recreational facilities. The Board of Public Works, a three-member body responsible for overseeing the allocation of state funds, continues to reinforce Maryland's mission of conservation and public access to natural resources.

These recent approvals underscore the state's commitment to conservation and environmental protection while supporting local communities' access to nature. With these newly protected lands and enhanced recreational spaces, Maryland's landscape preservation and public use initiatives are set to benefit future generations, preserving the state's natural resources and biodiversity.

Order Now for Spring Tree Planting Projects

Traditionally, fall is the time when state tree nurseries begin taking orders of bareroot seedlings to be used in spring planting projects. For 2024, the state nurseries in Maryland and Virginia are now open and have new selections for their customers.

In Maryland, the John S. Ayton State Tree Nursery offers more than 55 species designed for Maryland ecosystems. According to the state Department of Natural Resources Forest Service, they have “more than three million seedlings available.” The Virginia Department of Forestry’s Seedling Store offers bareroot seedlings as well, along with specialty seedling packs “to meet specific goals like fall colors, riparian buffers, or pollinator and wildlife habitat.”

Learn more:

[John S. Ayton State Forest Tree Nursery](#)

[Virginia Department of Forestry Seedling Store](#)



New Addition to National Old-Growth Forest Network



Erie Bluffs State Park. Image from Pennsylvania DCNR.

Pennsylvania’s Erie Bluffs State Park was recently inducted into the national Old-Growth Forest Network (OGFN). The park is the 33rd forest in the state to be recognized for its ecological significance. The park consists of nearly 430 acres along the Lake Erie shoreline, and boasts a canopy of oaks, sugar maples, and the rare pumpkin ash, and includes rare black oak woodland/savanna ecosystems, Great Lakes sand barrens, and a forested wetland.

[Learn more here.](#)

13 Species Added to Virginia Invasives List

The Virginia Department of Conservation and Recreation recently added thirteen new species to its Virginia Invasive Plant Species List. The list now includes 103 different species that the DCR determines are threats to Virginia’s ecosystems, and are ranked by their threat level (low to high). While the DCR list has no regulatory authority, the agency provides it for educational purposes. To read the full list with photos, [visit this site](#).

VIRGINIA INVASIVE PLANT SPECIES LIST	
EFFECTIVE DATE: SEPTEMBER 2024	
	<p>The list is for administrative purposes and does not have regulatory authority. The Virginia Code (28.1-290) states that the Department of Conservation and Recreation may not have the authority to regulate the sale or distribution of invasive species and control measures for their management.</p> <p>The Virginia Invasive Plant Species List is a list of 103 different species of plants that are considered to be threats to Virginia's ecosystems. The list is ranked by their threat level (low to high). While the DCR list has no regulatory authority, the agency provides it for educational purposes.</p> <ul style="list-style-type: none">• All are non-native species.• All are capable of spreading under about any conditions.• Cause substantial impacts on native species.• Are highly adaptable to various environments.• Are highly mobile, distributed and generally difficult to control.• Disrupt local ecosystems.• Are difficult to control.

Food Forests Help People and Ecosystems

[A recent article from the Maryland Department of Natural Resources](#) examined the expanding practice of agroforestry in the state. Agroforestry incorporates native fruit and nut-bearing trees and shrubs to create multi-purpose areas that benefit people and ecosystems. One of the examples in the article is a new concept on state public lands: the Edible Trail at White Marsh State Park in Centreville. The trail is designed to have fruits and nuts available for the public during various times of the year; although the paw paw trees are not yet mature, visitors can take home hazelnuts, blueberries, or persimmons in season. The article also highlighted food forests created by individuals using a variety of techniques, grant sources, and resources to consult.

Invasives in Your Woodland: Osage-orange

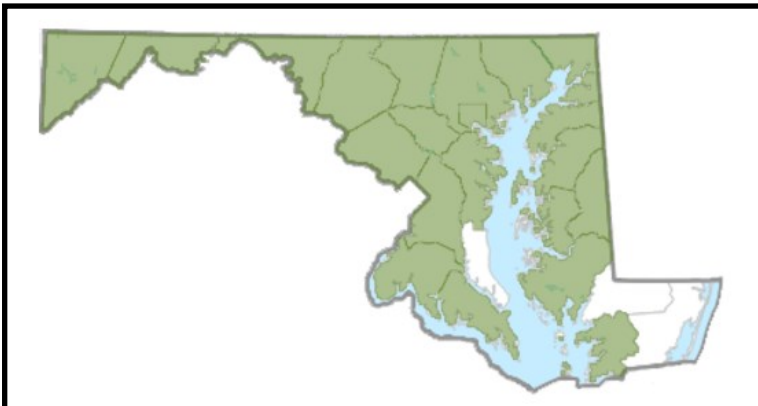
Regular readers of this feature will note that the vast majority of species highlighted here are not native to North America. For whatever purpose, they were brought to this continent, and have since escaped from their original intent and location to be unwelcome additions to local ecosystems, affecting both plants and wildlife.

Other species, such as native grapevines, can be considered invasive if they exist in such numbers as to adversely impact the health of woodlands. This issue, however, looks at a species that is both native to North America and that has been introduced to new environments in such numbers that it is considered invasive in many areas. The species is a member of the Mulberry family called by several names, including Osage-orange, osage orange (without the hyphen), bowwood, and hedge apple. We will use the first form here, as it is not an orange tree.

Regardless of the spelling, Osage-orange (*Maclura pomifera*) is native to the central southern United States, from Texas to Oklahoma and Arkansas. Its dense, rot-resistant wood was used by both Native and European Americans for a variety of uses, including hunting bows and wagon wheels. Entrepreneurs started to transport the tree outside its native range for use in hedgerows ([a practice still advocated by some](#)) to the point that it escaped into new ecosystems. In Maryland, observers report it in all counties except Calvert, Worcester, and Wicomico (see below).

What is it?

Osage-orange trees are considered medium-sized,



Reported distribution of Osage-orange in Maryland, from [Maryland Biodiversity Project](#).



Osage-orange in Harford County, MD.

Photo by Dave Webb,

[Maryland Biodiversity Project](#)

generally growing 35 to 65 feet tall. The species is dioecious, with both male and female trees. It prefers full sun but in some cases, where it has been planted as hedgerows, it can tolerate some shade. It grows vigorously if exposed to disturbed areas, such as idle agricultural areas and roadsides. The species can tolerate a wide variety of soil types, including wet and dry, and all but the most acidic soils.

How does it spread?

Historically, the greatest method of spreading Osage-orange was

by humans, who intentionally transported seedlings to cultivate for use as hedgerows or windbreaks. Trees that have escaped from cultivated areas spread via seeds found in the apple-shaped fruit produced by female trees. Animals such as birds and wild animals consume the fruit and excrete the seeds.

How can I identify it?

Osage-orange trees have short trunks which split into several limbs with upward arching branches with prominent thorns. (Recent thornless male hybrids are being touted as urban street trees for their fast growth, dense wood, and resistance to deer.) The bark is deeply furrowed with a somewhat orange interior. The trees are deciduous, with simple leaves approximately 2" in length and alternate on the stem. Perhaps the easiest way to identify Osage-orange is its fruit. Each large green fruit produced by the female is the size of a baseball and ripen from September to early November. In fact, one of the easiest ways to identify Osage-orange trees in disturbed areas is to look for the fallen fruit. See the photo gallery on the next page.

How can I control it?

The easiest way to control the spread of Osage-orange is to not plant new seedlings. Collect and dispose of fruit that has fallen to reduce the spread by animals. Selectively removing male trees can reduce the spread, as female trees will not receive windblown pollen for fertilization; the resulting fruit will be seedless.

For more information:

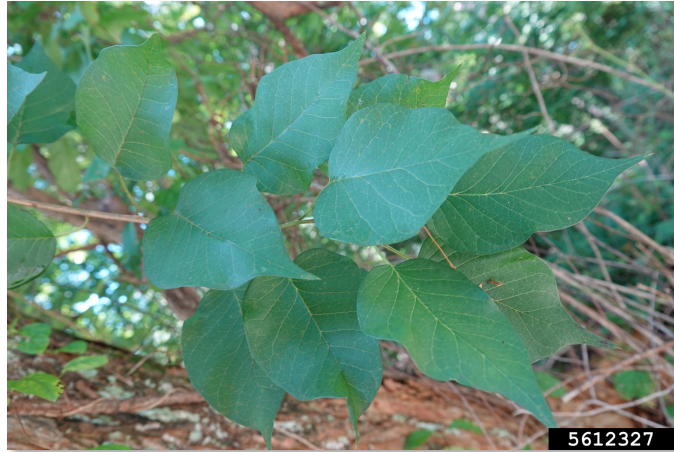
Learn more about Osage-orange:

[Maclura pomifera](#) (North Carolina Extension Gardener)

[Osage-Orange](#) (USDA Forest Service)

[Osage Orange Maclura pomifera](#) (Maryland Biodiversity Project)

Image Gallery: Osage-orange



Osage-orange bark (left) and foliage (above). Photos by Rebekah D. Wallace, University of Georgia, Bugwood.org



Thorns on Osage-orange branches. Photo by Paul Wray, Iowa State University, Bugwood.org



Osage-orange fruit, Montgomery County MD. Photo by Kerry Wixted, Maryland Biodiversity Project



Osage-orange bark. Photo by T. Davis Sydnor, The Ohio State University, Bugwood.org

This Issue's Brain Tickler...

Last issue we asked you to identify the yellowish growth shown on this tree at Blackwater NWR. The correct answer is [fusiform rust](#).

Congratulations to Can Vatandaslar for his correct answer.



The answer to this issue's challenge assigns Eastern white pine the number 380, yellow poplar the number 540, and beech the number 1,300. For full credit for this end-of-the-year Brain Tickler, name the scale that assigns these numbers, the scientist who developed it, and what the numbers represent.

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

Events Calendar

December 12 2024, 11:00 AM –12:30 PM

Prescribed Fire and Wetlands: an Important but Rarely Told Story Online

Wetlands are the forgotten sibling of the prescribed fire world. While upland ecosystems across the Eastern U.S. have received significant attention for their fire-dependency, wetlands—characterized by their more episodic encounters with fire—rarely receive much attention. This panel discussion will explore the role and challenge of fire in wetland ecosystems. [Learn more here](#).

January 28, 2025, 7:30 PM

Introduction to Winter Tree Identification Online

Presented by the Maryland Native Plant Society. Join Bradley Simpson, Habitat Manager at Nature Forward, to learn how to identify woody plants using buds, stems, lenticels, leaf scars, bark, and more! We will focus on terminology related to these features and then apply them to a few of our common native tree species. [Learn more and register here](#).

July 20-26, 2025

Natural Resources Career Camp 2025 Garrett County MD

The Maryland Forestry Foundation, in collaboration with Allegany College of Maryland and the Maryland Department of Natural Resources-Forest Service, again offers an immersive, co-educational experience led by industry professionals for high school students seeking to explore exciting career paths and college opportunities in the realm of natural resources.

Applications are now being accepted; visit <https://www.marylandforestryfoundation.org/programs/students-educators/nrcc/> to learn more.

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