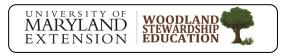


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Fall 2025

Transitioning from Fall to Winter

Andrew A. Kling, Branching Out editor

As the famous pallet of fall colors begin to fade, Maryland's forests undergo an important transformation into the winter season. This transition period unveils a subtle beauty, demonstrating the resilience and cyclical nature of the environment. The Maryland Department of Natural Resources has issued its recap of the season across the state; read it here.

As the report's photos demonstrate, Maryland's forests can present a kaleidoscope of colors, with vivid reds, oranges, and yellows painting the trees. As fall progressed, an abnormally dry weather pattern, particularly noted in 2025, has expedited this color transition, bringing early changes especially in regions like Washington County. As November advanced, these colors gave way to more muted shades. American persimmons, adorned with their seasonal fruits, stand out against the browning leaves and add a touch of color to the landscape. However, as the leaves fall, they reveal a less conspicuous yet equally beautiful landscape. Visitors can experience deciduous trees in a different way, as they now have an unobstructed view of the intricate branch patterns set against crisp blue or leaden grey skies.

The coming of winter brings a different kind of enchantment to these woodlands. The forests may appear bare, yet they are full of life preparing to spring forth once the warmth returns. As temperatures drop, the forests' ecosystem subtly shifts, preparing for the harsher conditions. Beneath the surface, roots continue to grow, while the forest floor, now visible due to the lack of foliage, becomes a showcase for cold-weather fungi like the honey mushroom and offers evidence of the wildlife still active beneath the canopy. And when snow falls, woodlands take on a new ambiance. The quiet of a deep woods after a snowstorm is something everyone should experience.

Winter is a time for the forests to rest and rejuvenate. But aboveground, challenges remain for their survival. That's because these quieter months are crucial for the health of the state's woodlands, regardless of location or ownership. With the onset of shorter and warmer winters, invasive



Piney Dam in Frostburg, Maryland. Photo by Alexis/Adobe Stock.

plants and insects survive longer and reemerge earlier in the spring. The plants can cover a forest floor before native

spring ephemerals have a chance to grow, and can stifle the growth of native seedling trees, upon which so much of the environment depends.

So, while the transition from fall to winter means a transition from a colorful to a more muted landscape, take notice of the green that remains, especially on the forest floor. Chances are that you are seeing an invasive plant. Learn how to identify them, and consider joining the efforts to remove them in your local community, county, or state public preserve as well as in your own woods. It helps the state's woodlands have a better winter and a more prosperous new year.

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Leave the Leaves for Natural Pest Control

Aaron Anderson, xerces.org

Once flowers have bloomed and your yard plants have died back in the fall, you might wonder where all the insects you saw in your yard spend the winter. Most overwinter right where they spent all summer, just hidden (and often in a different life stage!). This is why high-quality habitat for pollinators and other beneficial insects needs to include locations and materials for nesting and overwintering. We have previous blogs and factsheets on what overwintering habitat includes, including leaving the leaves, saving stems and stumps, providing rock shelters, and keeping some soil bare for ground-nesting insects. But leaving the leaves and other overwintering resources doesn't just help pollinators, it also provides year-round habitat for all sorts of beneficial insects that eat pests in your yard!

Will leaving the leaves help with pests?

Good news: the bugs that eat pest insects in your yard also use leaf litter and stems to overwinter in your yard and complete their life cycles! Providing overwintering habitat for these creatures ensures they will emerge the following year to provide free natural pest control. This can help eliminate the need for pesticides in the future! Common predatory insects include assassin bugs, minute pirate bugs, lady beetles, and

syrphid flies. These all overwinter under leaf litter, under bark, or in other sheltered areas. Predators use more than just leaves – praying mantises overwinter as eggs attached to stems or other vegetation! Parasitoid wasps overwinter either within their hosts, which often rely on leaf litter, or outside their hosts, where they rely on leaves or bark to shelter them. Most beneficial insects are sensitive to pesticides, so providing year-round habitat for them and eliminating pesticide use is the best way to control pests in an ecologically friendly way.

Are there pests in fallen leaves?

All sorts of insects rely on leaf litter to overwinter – and, yes, that does include some species that can cause issues in your garden. But that doesn't mean you shouldn't leave the leaves, especially around native plants! In a diverse and balanced garden ecosystem, predators and parasitoids will keep pests in check. These beneficial insects need fallen leaves to survive the winter, and actually benefit from having at least a few pest insects around to eat. It's worth

remembering that just because an insect is an herbivore doesn't mean it is a "pest"! A lot of beneficial insects eat or otherwise use plant material, and plants can sustain those nibbles. Only about 2% of described insect species can cause issues that lead us to call them "pests" (and usually only in certain situations). The other 98% are beneficial to us and play important roles in ecosystems, like pollination, pest control, and decomposition.

How can I safely control pests and diseases in my garden?

In general, leaving fallen leaves and dried stems where they are is the right move. But there are some cases where pests and diseases are best addressed by removing plant material from your yard. However, it doesn't need to be all-

or-nothing!

Follow these tips for deciding which leaves to tidy and which to leave alone:

- If you live in a region with ticks, you can rake the leaves away from where pets and people are likely to encounter them. If you border a forested area, putting them deeper into the woods may reduce the chance of tick encounters.
- Pick up fallen fruit, like apples, from the ground so insect pests do not continue to develop in the fallen fruit and overwinter in your yard. There are gardening tools that make this process quick and easy.
- Remove fallen leaves and standing stems of plants infected by fungi or pathogens. Removing diseased vegetation off-site lessens the chance of new growth being infected. (Home compost piles may not get hot enough to kill plant diseases, so the trash bin is a safer bet!) Be sure to sanitize any garden tools you use.
- Some species of invasive plants are easily spotted in the fall. In this case, don't worry about destroying insect habitat; it's better to tackle those invasive weeds! Be sure to replant the area with native plants afterwards.

By leaving the leaves and saving the stems, you are not only providing essential habitat for pollinators like bees and butterflies, but also creating a haven for all sorts of other beneficial insects that need shelter to survive. In the spring, keep_an_eye out for these helpful predators as they hunt pests and help with nutrient cycling in your yard!



Leaving the leaves can boost the health of your backyard ecosystem in many different ways. Spread the word with a yard sign of your own, available here.

(Photo: Kailee Slusser / Xerces Society)

Native Trees of Maryland Small Tree, Big Impact: Why the Dwarf Chinquapin Oak Deserves a Place in Your Landscape

Lisa Kuder, UME Native Plants & Landscapes Specialist



Dwarf chinquapin oak is usually 3-12 'tall and can be grown as a shrub or small tree. Photo © Drew Granville, some rights reserved (CC-BY-NC)

What adjectives come to mind when you think of oak trees? Maybe tall, lofty, or majestic? The dwarf chinquapin oak (Quercus prinoides). unlike its towering relatives, is a mere 3-12 feet tall (rarely up to 20 feet). It's one of only two shrublike oaks native to Maryland, the other being bear oak (Quercus ilicifolia). Easily grown in a variety of environments, the dwarf chinquapin oak, while small, is ecologically mighty. Explore this small tree's growing requirements, benefits to wildlife, and potential

landscape applications to see if it's a smart choice for your next gardening project.

Features and Growing Requirements of the Dwarf Chinquapin Oak

Quercus prinoides is an attractive, deciduous tree from the Beech (Fagaceae) family with an ovoid or irregular crown and a predominantly gray, scaly trunk up to 5 inches in diameter (1). Its leaves resemble those of the chestnut oak (Q. montana formerly Q. prinus), hence its scientific name Q. prinoides, which means resembling Q. prinus. As with all oaks, dwarf chinquapin oaks have both male and female flowers. In spring, yellow-green male flowers—1 to 2.5 inch long drooping catkins—appear alongside single or clusters of subtle greenish-red female flowers at branch tips (1). Come fall, dwarf chinquapin oak leaves turn a warm golden to orangey-brown, and wind-pollinated female flowers mature into sweet, highly sought after acorns.

Native to parts of the central and eastern US, as well as Canada, dwarf chinquapin oak is naturally occurring throughout Maryland's three main ecoregions: Mountain, Piedmont, and Coastal Plain (2). In the wild, it's found growing on upland ridges, rocky bluffs, and woodland edges in full sun, dry conditions, and acidic, nutrient poor soil that contains sand and rock materials. This versatile shrub/tree can easily adapt to average garden soils, although it may grow taller than in the wild (1).

A Small Tree with Huge Benefits to Wildlife

Oaks are ecological powerhouses. In the Mid-Atlantic they support over 550 faunal interactions, well above any other

plant genera (3). They serve as host plants for the larvae of many specialist insect herbivores including butterflies, skippers, moths, and beetles. Oak leaves in the canopy as well as at the base of trees are necessary for many insects to complete their life cycle. As the foundation of food webs, insects—especially caterpillars—are crucial for the nestling success of most terrestrial songbirds. Thus, planting an oak in your yard, even a small one like the dwarf chinquapin oak, is likely to invite and sustain a diversity of pollinators and songbirds.

Dwarf chinquapin oak is also valued by wildlife for its nutritious acorns. And unlike most *Quercus* species that take a decade or longer to reach sexual maturity, this small oak starts producing fruit within as few as 3-5 years. Its annual crop of acorns are eaten by many songbirds, gamebirds, waterfowl, and mammals both small and large. Also, because of its compact shrubby form it provides refuge and nesting

opportunities for prairie warblers and other songbirds (1).

An Adaptable Tree with Many Landscape Applications

Dwarf chinquapin oaks can serve as a specimen tree for smaller



The sweet acorns of dwarf chinquapin oaks are a favorite of many birds and mammals. Photo © William Van Hemessen, some rights reserved (CC-BY-NC)

gardens or be planted with other low growing vegetation. It is an excellent candidate for a biohedge, a diverse, densely planted grouping of shrubs and small trees that serves as a privacy screen and wildlife magnet. For a more uniform or formal garden aesthetic, this oak's clonal behavior lends itself well to being planted in a row to form a thicket that functions as a cost-effective wind break and a living fence to hide undesirable views (i.e., trash receptacles or roadway).

This lovely little tree is commercially available in MD. To find a MDA certified native plant nursery near you visit go.umd.edu/NativePlantCertProgram. A few things to keep in mind, there is a closely related chinquapin oak (*Q. muhlenbergii*) which grows up to 70 feet tall, so make sure to include the word "dwarf" when asking, or better yet, use the scientific name *Q. prinoides*. Also, its long tap root does not transplant well, so it's best not to relocate them once established. In closing, dwarf chinquapin oak while small can have a big impact making it well-deserving of a place in our plant palettes and landscapes.

Another Milestone for Chesapeake Forests

Alliance for the Chesapeake Bay

The <u>Healthy Forests Healthy Waters</u> program (HFHW) has planted its 2,000th acre of forest in Maryland! HFHW is a collaborative reforestation initiative between the Alliance, the Maryland Forest Service, the Maryland Forestry Foundation, and landowners throughout Maryland.

Over 389 projects have been completed under the program since its founding in 2015. HFHW provides participating landowners with a free, turnkey tree reforestation project of an acre or more on open land that they want to convert into a forest. Landowners agree to maintain this new forest for at least fifteen years.

The Alliance recently visited <u>Jug Bay Wetlands Sanctuary</u>, a planting project as part of HFHW. Located in Lothian,

Maryland, Jug Bay Wetlands Sanctuary (JBWS) lies along the tidal reaches of the Patuxent River. The sanctuary protects roughly 1,700 acres of freshwater marshes, forested wetlands, and riparian forest.

Unique ecosystems like JBWS provide habitat for diverse plants and animals, both aquatic and terrestrial. Additionally, the sanctuary was also designated an Important Bird Area in 2016, and is home to over 80 archaeological sites, giving researchers a glimpse into human activity up to 11,000 years ago.

The Alliance worked with JBWS staff to reforest 36 acres of former agricultural field and plant meadow on an additional 17 acres. By establishing new forests and a meadow, the project provides a myriad of benefits to the park, but also, to water quality. After all, the Patuxent River flows directly into the Chesapeake Bay, so this

project is very important for keeping pollution out.

The tree planting method chosen for JBWS was hand planting, as it was most appropriate. Species planted included 1,000 white oaks, 600 red maples, and 600 American Sycamore. In total Jug Bay received 9,125 tree and shrub saplings.

Another project completed under the program was 50 acres of new forest on a property in the outskirts of Westminster, Maryland, the Wakefield Valley Golf Course. Opened in the late 1970s, interest in golf waned over the years and the course, like many others, fell on hard times. Since then, the community has used the site as a passive park focused on the cart paths. The city's master plan

indicated that "the property should be maintained as a park in a manner that is safe and inviting to all members of the public".

These plans included reforestation of some of the open and mowed fairways and the riparian area along Copps Branch that flows through the park. An appropriate 35 tree and shrub species were selected for the 50 acres planted, which reflect the city's goals to improve the park's wildlife habitat and aesthetics, and improve nearby water quality. Learn more about the Wakefield project via a YouTube video here.

The HFHW program is supported by a grant through the Maryland Department of Natural Resources' Chesapeake and Coastal Bays Trust Fund as an innovative approach to reduce the amounts of nutrients and sediments entering our waterways.



Park staff at Jug Bay Wetlands Sanctuary examine previously planted trees. Photo: Alliance for the Chesapeake Bay



Some of the 15,000 trees and shrubs planted on the golf course turned into a community space. Photo: Alliance for the Chesapeake Bay

News and Notes

Food Forest Takes Root on Eastern Chickahominy Tribal Land

A recent *Bay Journal* article looked at s new project — a food forest — with an age-old concept — providing people with traditional and sustainable food. Jess Phillips, environmental director and citizen of the Chickahominy Indian Tribe-Eastern Division, is leading this effort to help her tribe build a better relationship with food at the source. That means not only providing access to ingredients but also providing access to culturally significant foods native to the region, such as persimmons, sumac and hazelnuts. It can also involve growing those plants using knowledge of the natural world passed down from their ancestors.

The Alliance for the Chesapeake Bay awarded the tribe a \$20,000 grant in November 2024 to jump-start the food forest, which will span eight acres across a parcel of tribal land and a tribal citizen's land in New Kent County, VA.

Philips notes, "Realistically, we will all continue to get our groceries from the grocery store, but I would love for people to just have the skills and the appreciation that nature itself is its own self-sustaining grocery store." Read the full article here.

NSF Funding Fuels Wildland Fire Al Research at UMD

The approximate doubling of wildfire activity across the United States over two decades has been easy enough to track, but forecasting where and when the blazes will spread to threaten communities, wildlife, and natural resources is far less straightforward.

University of Maryland computer science
Professor Heng Huang is leading a project to close
that gap using the power of artificial intelligence.
Huang was recently awarded \$1.86 million from
the National Science Foundation to advance Al-driven
methods for detecting and predicting wildland fires.

The study, conducted in collaboration with American University researchers, aims to address the extreme complexity of fire dynamics, which has limited the ability of traditional computer modeling approaches to forecast events.

Read more here from Maryland Today.

State Tree Nursery Now Taking Orders for 2026 Planting

The online tree seedling catalog for the John S. Ayton State Nursery is now open and accepting orders for spring 2026 planting at nursery.dnr.maryland.gov. This

year's catalog features more than 51 species, with a few different choices from last year. The seedling crop is growing very well and more than 3 million seedlings available. If you are not sure which species are right for your needs, please call your local forestry office.



Backpacker Writer Explores American Chestnuts in Virginia



A thriving grove of American chestnut trees in Lesesne State Forest. Photo By Cassie Stark/TACF

Backpacker writer Eric J. Wallace visited the grove of American chestnuts in Lesesne State Forest and talked to experts and researchers about the species' past,

University of Maryland Extension

present, and future. One envisions a future around the year 2130 where hikers on the Appalachian Trail and more will pass through groves of monstrous American chestnut trees as the smell of roasting nuts mixes with campfire smoke in the autumn air. In the meantime, trekkers can visit locations like Lesesne for a taste of what's to come. Read the article here.

Invasives in Your Woodland: Goldenrain Tree

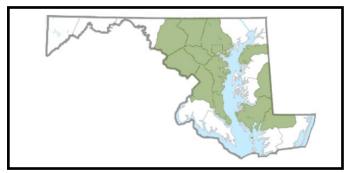
Many of the species featured in this series feature a phrase Korea, and Japan. The tree grows 30-40 feet tall with a such as "introduced to the United States" followed by an approximate date, which could be a particular decade or portion of a century, depending on both the survival of and the accuracy of historical records. The arrival of goldenrain

tree, however, is better documented — at least as far as one particular specimen is concerned. In 1811, a Virginia landowner and naturalist wrote to a friend in France that he had planted the seeds she sent him two years earlier, noting that a seedling "has germinated, and is now growing. I cherish it with particular attentions, as it daily reminds me of the friendship with which you have honored me." This letter from Thomas Jefferson is the earliest citation of goldenrain tree in the US.



Present-day goldenrain tree at Monticello. Photo courtesy Thomas Jefferson Foundation®.

Since then, goldenrain tree has become naturalized at Monticello, and in the years since, it became popular as a landscape tree. It was planted throughout the mid-Atlantic and as far away as California. While initially prized for its resilience and speed of growth, observers and researchers began to recognize its invasive nature as it outcompetes native flora, significantly altering local ecosystems. While it can still be found for sale in many locations, recent regulations and advisories in Maryland now restrict its planting. The Maryland Biodiversity Project reports that documented instances are concentrated in the center of the state. See the map below.



Goldenrain tree reported distribution. From Maryland Biodiversity Project.

What is it?

The goldenrain tree (Koelreuteria paniculata) is a mediumsized, fast-growing tree native to Asia, specifically China,

broadly spreading canopy. Once goldenrain tree seeds germinate, they grow rapidly and tolerate drought, pollution, and various soil types, which give them a significant competitive edge over native vegetation. The species'

> adaptability means that even small, isolated populations can spread rapidly, creating new stands and crowding out local plant species.

How does it spread?

Goldenrain trees spread primarily by reseeding. The seed pods release numerous small seeds, which are easily dispersed by wind and water. The seeds germinate readily in a variety of soils and conditions, particularly in open or disturbed sites. Birds and water also transport the seeds away from parent

trees, resulting in new colonies far from the original planting sites.

How can I identify it?

Goldenrain trees leaves are compound and can reach 18" long, often with deeply serrated leaflets. Clusters of showy yellow flowers bloom in summer; when the blooms are finished, the petals drop to the ground, resembling a "golden rain," hence the common name. These are followed by conspicuous brown, papery pods shaped like lanterns. These may hang on the tree's branches into the winter, aiding identification. See the photo gallery on the next page.

How can I control it?

Controlling the spread of the goldenrain tree involves a combination of mechanical, chemical, and ecological strategies. Mechanical control includes manually removing seedlings and young plants, as well as cutting down mature trees. Treat the stumps with appropriate herbicides to prevent resprouting. Plant native species in treated areas to reduce the chance of new sprouting.

For more information:

Learn more about goldenrain tree:

Koelreuteria paniculata (NC State Extension) Golden Raintree (Koelreuteria paniculata) (Virginia Cooperative Extension) Golden rain tree (The Morton Arboretum)

Image Gallery: Goldenrain Tree

Goldenrain tree. Photo by T. Davis Sydnor, The Ohio State University, Bugwood.org





Goldenrain tree flowers, Howard Co., MD (left), and seed pods, Baltimore Co., MD (right). Photos by Bill Hubick, Maryland Biodiversity Project



Goldenrain tree fruits. Photo by Rebekah D. Wallace, University of Georgia, Bugwood.org



Goldenrain tree foliage. Photo by John Ruter, University of Georgia, Bugwood.org



Events Calendar

December 6 2025, 10:00 AM—12:30 pM

First Saturdays – Invasive Plant Management Workday Kingman + Heritage Islands, Washington DC

Come lend a hand and help to remove invasive plants near the entrance of Kingman + Heritage Islands and the Anacostia River Trail. DC Department of Energy and Environment staff will provide tools, gloves, and instruction. Please wear closed-toe shoes and long pants, and bring water, sunscreen, and bug spray. For more information about other dates in this monthly series and to register, visit this page.

December 9, 2025, 7:30 AM —4:00 PM 2025 Timber Taxation Workshop Online

Presented by Dr. Yanshu Li from University of Georgia. Forest landowners, foresters, land managers, tax professionals, attorneys, and others who work with forest landowners in matters pertaining to timber taxes will benefit from this workshop that will cover federal timber taxes, forest management expenses, Income tax consideration during a timber sale, tax treatment of cost-share payments, and more. The final session is specific to Georgia state taxes. Early bird registration through December 2 is \$145.00. More information and registration here.

December 14, 2025, 1:00 PM
Winter Tree ID & Potluck
Blandy Experimental Farm, Boyce VA

This Issue's Brain Tickler...



Last issue we asked for the website address (URL) of the first website for this program that debuted in 2001. The

answer is "naturalresources.umd.edu." Congratulations to Joel Gagliardi who had the correct answer.

For this issue, name the native Texan who included the woodsy saying "You can't see the forest for the trees" in a song that became a hit three years after he wrote it.



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

The winter tree identification walk is approximately 90 minutes and led by a Virginia State Forester. Ensure you never again mistake an oak for a walnut, or a spruce for a fir. A holiday-themed potluck and social hour with fellow nature nerds will follow the walk. Please bring a snack or dessert to share! Attendance is limited to 30; visit this link for more information and to register.



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