

BRANCHING OUT

Maryland's Woodland Stewardship Educator



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Beware of “Treewashing”

Andrew A. Kling, *Branching Out* editor

Several years ago, as a means of using the power of the internet to find stories of interest for this newsletter, I created a few Google Alerts. They were designed to look for stories in the mid-Atlantic area that were related to trees and forests. While they weren't always perfect (for example, it took me a while to train them that I wasn't looking for stories related to Wake Forest University athletics), they have sent me to stories that I never would have found otherwise. One such story sent me down a rabbit hole that resulted in learning about a term I'd never heard before: “treewashing.”

Years of researching and writing non-fiction books taught me the importance of not just primary sources but also corroborating sources. It also taught me to be skeptical of news stories based on only one source. [One such story](#) led me to that new term, treewashing. Treewashing is a subset of the more familiar greenwashing. It's the practice of using tree planting or forest projects as a marketing shield for business-as-usual pollution. While tree planting campaigns can help the planet in lots of ways, they are beneficial only when they're carefully designed, transparent, and backed by science. (See [page 5](#) for one such effort by the Smithsonian Environmental Research Center.)

[Researchers at Stanford University](#) write that poorly designed mass tree planting drives can actually do more harm than good, especially when they replace naturally diverse ecosystems with single-species plantations. These projects may store less carbon, increase fire risk, and undermine local biodiversity. Similarly, [environmental scholars from Yale University](#) caution that large monoculture plantations may hold only a fraction of the carbon that natural forests can store and can reduce wildlife habitat. So, when a company promotes such projects as a cure-all to offset its emissions, that's what's called treewashing.

US regulators such as the [Federal Trade Commission](#) and the Environmental Protection Agency have begun to address this kind of misleading environmental marketing. If you're trying to evaluate the claims made by a particular

company or service for yourself, start with this: Treat tree planting promises as a starting point for questions,



not as a proof of responsibility. Look for details on what species were planted, who is managing the land, and whether the company is also cutting emissions elsewhere. You'll also want to determine if possible, the survivability of the tree planting efforts.

That brings us back to the story that started all of this. The story touted the efforts by a heavy equipment company to plant trees on reclaimed mining lands in West Virginia. Was this treewashing? A few factors seem to argue against it. First, this was a multi-year project covering more than 100 acres and several hundred thousand trees. The company was providing not only staff but also heavy equipment to rip the densely packed soil so the seedlings had a better chance of surviving. Finally, they were working in partnership with the U.S. Forest Service and a local non-profit. However, the jury is out as to the long-term survivability of what has been planted; only time will tell if this was treewashing or a genuinely beneficial reforestation effort.

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AI Found Ghosts in our Forests: The Truth of Ghost Forests in Maryland and Beyond

Sigal Goldstein, University of Maryland Class of 2028

Ghost forests – haunting reminders of once-lush woodlands, now reduced to bleached, lifeless trees – are becoming increasingly common along the U.S. East Coast. The killer of the forests? Saltwater intrusion and coastal flooding are both intensified by rising sea levels. While the damage on the ground is visible, artificial intelligence (AI) is giving scientists a bird's-eye view of these tree graveyards. AI provides maps and insights to synthesize the causes and future risks across the millions of dead trees at unprecedented speed and detail (Dinneen, 2025).

time, guiding targeted conservation and management efforts before more forests disappear.

While the damage to moribund forests is visible on the ground, AI provides perspectives and data that would otherwise go unnoticed. In this way, AI acts like a doctor, alerting us (the patients) to the severity of forest loss. Although AI infrastructure has many environmental impacts, the resulting technologies offer scientists a significant advantage in analysis and decision-making by enabling them to identify trends in large datasets,



A ghost forest in the Blackwater National Wildlife Refuge in Maryland. Photo by Henry Yeung, science.org

In Maryland, the Blackwater National Wildlife Refuge is an example of an area where marshland and rising waters have created significant acres of ghost forests, marking a shift from forested land to expanding wetland ecosystems. Marshlands filter pollution, provide wildlife habitats, and buffer shorelines against erosion. Forests work in concert with marshland to enhance these services. The death of these trees threatens all three services and the delicate balance of Maryland's coastal habitat. To tackle the mortality problem, the University of Virginia's Environmental Institute is using AI to analyze satellite imagery from 430 miles above Earth (Bahorsky, 2025). This technology has counted roughly 12 million dead trees along the East Coast and translated the data into detailed maps- a task impossible for human teams to complete quickly enough to prevent further losses (Bahorsky, 2025). Ghost forests are rapidly spreading across the landscape; AI's contributions to our understanding of them are invaluable, as the technology rapidly tracks mortality in real

anticipate outcomes, and simulate intricate scenarios. The accelerated analysis enables faster paths to solutions. Such capabilities are critical as forests produce oxygen, store carbon, and sustain ecosystems, yet they are disappearing at spooky rates. The rise of ghost forests is more than an environmental anomaly; it is a clear signal that climate change is already haunting our landscapes, and demands urgent action.

Works Consulted

Bahorsky, R. (2025, December 2). AI Maps "ghost forests" from Maine to South Carolina. University of Virginia. UVA College and Graduate School of Arts & Sciences. <https://as.virginia.edu/news/ai-maps-ghost-forests-maine-south-carolina>

Dinneen, J. (2025, October 1). AI reveals vast 'ghost forests' along U.S. coast. SCIENCEINSIDER, 390(6768), 2. <https://doi.org/10.1126/science.z1xe4no>

Native Trees of Maryland

The Tree That Sings: American Basswood (*Tilia americana*)

Lisa Kuder

I passed our neighborhood basswood many times without giving it much thought, until the day the tree was undeniably humming. It was awe-inspiring to witness so many insects in one tree, their activity blending into a harmonious sound. *Tilia americana*, known as American basswood, basswood, or linden, is a versatile tree, making it ideal for many landscape applications.



Underside view of American basswood. (Photo credit: Mia Menni - [Adobe Stock](#))

Growing 60-80' tall and 30-50' wide, basswood is often planted as a specimen or shade tree in parks and residential areas. It's also naturally occurring in Maryland's mountain and Piedmont ecoregions. There it grows alongside maples, white ash, tulip poplar, and other woodland species that prefer less acidic to slightly basic soils [1].

Growth Requirements

A member of the Malvaceae (mallow) family, basswood is a fast-growing tree that performs best in full sun to partial shade, in average, medium moisture, well-drained loamy soils. However, it can adapt to clay, rocky, dry soils, and occasional drought once established.

Supports Pollinators Around the Clock

Basswood is known as a "bee tree" because its flowers produce copious nectar and pollen, which honey bees use to make basswood honey. Wild bees and other local insects are also drawn to the flowers' sweet fragrance. As evening approaches, the scent gets even stronger,



American basswood in full bloom (Photo credit: andybirkey - [Adobe Stock](#))

attracting lightning bugs and a variety of nighttime pollinators. Basswood leaves serve as larval host plants for many butterfly and moth species.

Benefits Beyond Pollinators

Birds and humans also benefit from basswood. The tree supports caterpillars that parent birds feed their fledglings, and its seeds can help fuel migration. As basswood trunks age, they often develop small cavities,

serving as nesting sites for woodpeckers and other animals. And its light, workable wood is used to make crates, cabinets, and parts for musical instruments, while its fibrous inner bark is used for making rope and baskets [2].

Basswood is more than a beautiful shade tree. From supporting pollinators around the clock to providing food and habitat for birds and other wildlife, it plays an important role in healthy Mid-Atlantic landscapes. *Tilia americana* is a native tree well worth considering.



American basswood seeds (Photo credit: Lee - [Adobe Stock](#))

Resources

[1] Harrison, J. W. (2016). The Natural Communities of Maryland: 2016 Natural Community Classification Framework. Maryland Department of Natural Resources, Wildlife and Heritage Service, Natural Heritage Program, Annapolis, Maryland. Unpublished report, 4.

[2] Native Plant Trust. (n.d.). *Tilia americana* (American linden). Native Plant Trust GO BOTANY. Retrieved May 2, 2026, from <https://gobotany.nativeplanttrust.org/species/tilia/americana/>

The Short Life of Cherry Blossoms: Beauty in Bloom

Sigal Goldstein, University of Maryland Class of 2028

Cherry blossoms (*Prunus serrulata*) are widely associated with the cycle of life and death, symbolizing both renewal and the fleeting nature of existence. The Japanese term “sakura” captures this dual meaning, reflecting beauty alongside temporality (Kamiyama, 2026). While cherry blossoms are seen as a natural symbol of spring in the wider Washington, D.C. area, their consistent beauty is actually the result of careful scientific management and human intervention. Cherry blossoms reliably return each year, despite their short, two-week bloom period. This consistency is achieved through scientific practices such as grafting and the deliberate control of environmental conditions. In Washington, D.C., the region's climate and the concentration around the Tidal Basin create the conditions for a distinct “peak bloom” that marks a visible and celebrated transition into spring, which occurred on March 26th this year.

What makes cherry blossoms appear uniform and predictable is the application of controlled propagation methods. Consistent blooming refers to the reliable, year-to-year return of blossoms with predictable timing and quality, while synchronous blooming describes how many trees flower at the same time within a single season. The combination of consistent and synchronous blooms creates the dramatic “peak bloom” effect. Techniques such as grafting and stem cuttings are among the most common methods for achieving this outcome. Grafting involves inserting a dormant twig into a living tree to exchange genetic material, enabling genetically identical coloration, faster growth, and greater disease resistance. Additional methods, such as cross-pollination and selective cultivation, further ensure that cherry blossom trees maintain their signature appearance and resilience. Rather than occurring naturally, these trees are carefully reproduced and managed to preserve their iconic look.

Even with human control, cherry blossoms remain highly sensitive to environmental conditions. The typical lifespan of the flowers is only 7-10 days, though under ideal conditions, such as cool, calm, and dry conditions, they can last up to 14 days after peak bloom. However, adverse conditions, many of which are intensified by climate change (e.g., hot,

rainy, windy, and stormy weather), can shorten the blooming period by 3-5 days, ending it earlier than normal (National Park Service, 2026). Not all trees bloom at the same time, either; some follow a staggered pattern, greeting a gradual spread of blossoms rather than a single simultaneous moment (Coleman, 2026).

Ultimately, while cherry blossoms may appear to be a natural and effortless symbol of spring, their beauty depends on a delicate balance of scientific intervention and environmental stability.

Works Consulted

Coleman, D. (2026, March 5). A Photo Timeline of the DC Cherry Blossom Bloom. *Cherry Blossom Watch*. <https://cherryblossomwatch.com/cherry-blossoms-progression/>

Kamiyama, R. (2026). Understanding Marginal Landscapes Through Japanese Cherry Blossoms. *The IAFOR International Conference on Arts & Humanities in Hawaii 2026 Official Conference Proceedings*, 51–71. https://papers.iafor.org/wp-content/uploads/papers/iicah2026/IICAH2026_100777.pdf?t=8

National Park Service. (2026, March 26). Bloom watch—Cherry blossom festival. U.S. Department of the Interior. National Park Service. <https://www.nps.gov/subjects/cherryblossom/bloom-watch.htm>



Washington, D.C.'s famous cherry blossoms are illuminated by sunrise over the Tidal Basin. Photo by National Park Service

Planting Tree Combinations to Create Flourishing Woodlands

Researchers at the Smithsonian Environmental Research Center (SERC) in Edgewater, MD, are planting 33,518 saplings from 20 species in a 22-acre forest. The intention is to create a carefully planned patchwork of plots with tightly controlled variables, such as certain species combinations, to test how they might affect the trees' growth and environmental benefits. The planting marks the beginning of what is expected to be a decades-long experiment called the Functional Forests project. SERC scientists aim to explore how tree biodiversity merges multiple reforestation goals, such as building fire-resistant and climate resilient forests; recruiting new animals, like vital pollinators; producing food and increasing timber. [Read more about this new forest here.](#)



SERC ecologist Jamie Pullen and volunteers use dibble bars to plant trees. Photo by Sergio Ibarra/smithsonianmag.com

Can Wood-Based Sunscreen be a Sustainable Skincare Innovation?

An article featured in the February 2026 issue of *The Boar* highlighted research scientists are conducting to develop a novel sunscreen made from wood-derived compounds. The research centers particularly on lignin, a natural polymer found in plant cell walls that can absorb ultraviolet radiation. The study further builds on the work of international researchers and other materials science partners. The scientists hope to replace or reduce synthetic UV filters with biodegradable, plant-based alternatives that maintain effective SPF protection while lowering environmental impacts. The goal of the research is to advance more sustainable and environmentally friendly sunscreen technologies. [Read the full article here.](#)

Maryland Forest Service Launches "Maryland 250" White Oak Contest

The Maryland Forest Service and the Maryland Forestry Foundation have launched the "Maryland 250" White Oak Contest in celebration of America's 250th anniversary. The contest, which runs through December 31, 2026, invites residents and visitors to search Maryland's state forests for the largest white oak trees. The challenge is administered by the Maryland Big Tree Program committee. According to the DNR, white oaks are among Maryland's most ecologically significant tree species, "providing wildlife habitat, supporting water quality, and contributing to the structural character of the state's forests." However, only one white oak has been identified as a "Big Tree" within state forest lands.

Full contest details, including how to measure the candidate trees, are available at [this website](#).

The Untold Story of Black American Forestry

Since professional forestry began in the early 20th century, the cultural narrative about who cares about, works on, and belongs in America's forests has been dominated by white men. And yet, the first Black professional forester, Ralph Brock, was one of the first men of any race to graduate with a forestry degree in the United States.

According to a recent article from the National Forest Foundation, "Black Americans' relationship with public lands have long been overlooked in the story of land management. But Black Americans have always contributed to the stewardship of forests and grasslands – as conservationists, foresters, firefighters, and leaders."

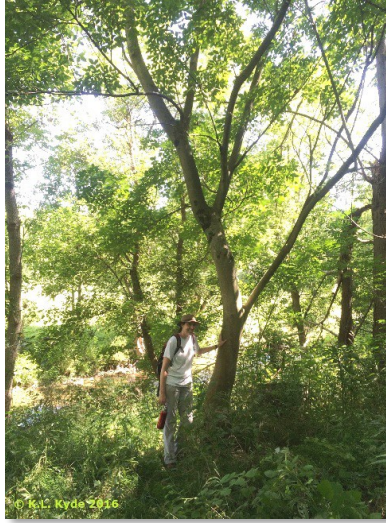
The article documents the contributions of Black men in the nation's forests, including those working for the Civilian Conservation Corps to establish and enhance national forests in California and Illinois, U.S. Army service members during World War II who pioneered the field of smokejumping, and those who have more recently risen to roles of leadership in the U.S. Forest Service. [Read more on the National Forest Foundation's website here.](#)

Invasives in Your Woodland: Bee-Bee Tree

In the last issue of *Branching Out*, we mentioned in this feature that the Maryland Department of Agriculture (MDA) had updated its Maryland Prohibited Invasive Plant list” of invasive species that were now banned for sale across the state. Along with several invasives that are familiar to readers of this feature is a species less well-known but no less deserving to be included: the bee-bee tree.

The bee-bee tree (also known as Korean Evodia) came to the United States as many other now invasive plants did. It is native to East Asia and arrived in the US in 1905, when seeds were sent to [Harvard University's Arnold Arboretum](#) in Massachusetts for ornamental evaluation. In the 1920s, additional seed was imported from China by the U.S. Dept. of Agriculture's research station in Beltsville, Maryland, further establishing it in horticultural collections and trial plantings. From these early arboretum and research sites, scattered landscape use and intentional planting by beekeepers led to escapes into nearby forests in states such as Ohio, Pennsylvania, Virginia, and Maryland. For example, it became invasive at the Penn State Mont Alto campus and the neighboring Michaux State Forest, and has naturalized at the Morris Arboretum in Philadelphia and in disturbed forest fragments nearby. In 2015, a Washington County, MD homeowner reported to the Maryland Invasive Species Council that bee-bee tree infested 4 acres of her property. She had identified the species from bee-keeping websites after a DNR forester completed a forest stewardship plan for the property. A later [MDA investigation](#) stated that it posed a minor threat for infestation. Since then, that threat has increased, leading to its inclusion on the 2026 invasive plant list.

Why, then, are there so few confirmed reports of bee-bee tree in MD (see the map above)? First, it was not deliberately planted as prolifically as some now-invasives (think Callery pear). The other reason is that it may be subject to misidentification when young or not in bloom.



Bee-bee tree in Washington Co., MD, 2016. Photo includes Dr. Vanessa Beauchamp to show size of mature tree. Photo by Kerrie Kyde, MDA via Maryland Biodiversity Project.



Bee-bee tree reported distribution. From [Maryland Biodiversity Project](#).

What is it?

The bee-bee tree (*Tetradium daniellii*) is a deciduous, medium-sized tree, typically 30–50 feet tall and nearly as wide, with multiple low lateral branches. It produces abundant seed, spreads beyond cultivation, forms dense understory thickets, and alters habitat structure and species composition in natural areas.

How does it spread?

This species spreads primarily by seed. Male and female trees both produce white flowers; female trees then produce showy clusters of red-to-purple fruits. Each small fruit contains shiny black seeds that resemble BB pellets and are produced in large numbers. Seeds can be dispersed by gravity, water, and birds or other wildlife that consume the fruits. Seedlings then establish in disturbed forests, forest edges, and along rights-of-way.

How can I identify it?

Bee-bee trees have smooth grey bark at all ages. Leaves are opposite and pinnately compound with 7–11 oblong, entire leaflets on a central stalk. Young trees may resemble ash or tree-of-heaven, but ash has a different fruit and TOH leaflets are alternate. The best diagnostic is the large clusters of small,

fragrant white flowers in mid- to late summer when many trees are not blooming. See the photo gallery on the next page.

How can I control it?

Control small seedlings and saplings by hand-pulling or digging, if the entire root is removed and the soil is moist. For larger trees, use a cut-stump treatment by cutting the tree near ground level and immediately applying a systemic herbicide such as triclopyr or glyphosate to the fresh stump to prevent resprouting. Girdling combined with systemic herbicide can also be used where felling is difficult.

For more information:

Learn more about bee-bee tree:

[Invasive Plants in Pennsylvania: Bee-bee tree](#) (PA DCNR)
[The Buzz About Bee-Bee Tree: A New Invader in Maryland](#) (Maryland Grows blog)

Image Gallery: Bee-Bee Tree



Dense growth of Bee-bee tree seedling and saplings fill the shrub layer in Washington Co., MD. Photo by Kerrie Kyde, MDA via Maryland Biodiversity Project.



Bee-bee tree leaves and female red flowers.
Photo by Missouri Botanical Garden.



Close-up of Bee-bee tree female red flower follicles. Photo by
Arnold Arboretum/Harvard University.

Bee-bee tree (male flowers) in Washington Co.,
MD. Photo by Kerrie Kyde, MDA via Maryland
Biodiversity Project.



Events Calendar

June 6-7, 2026

Wild Turkey & Ruffed Grouse Habitat Workshop Blooming Grove Hunting & Fishing Club, Hawley, PA

Presented by the Pocono Wildlife Foundation. This immersive two-day program brings nationally recognized scientists, state wildlife biologists, and conservation leaders together to deliver practical science-based land management strategies tailored for private landowners and hunting clubs. Participants will develop a property-specific habitat plan and the skills to implement lasting improvements for wildlife populations on their land. [Learn more and register here.](#)

June 29, 2026, 12:00 PM—1:15 PM

Oak Wilt, Bacterial Leaf Scorch, or Something Else? Online

Many factors can cause oak leaves to scorch, wilt, and defoliate, making accurate diagnosis challenging. This webinar from Penn State Extension will help participants distinguish between oak wilt, bacterial leaf scorch, and abiotic stressors such as drought by focusing on key symptoms and field patterns. Timed to coincide with the onset of these issues, this session offers practical guidance on field evaluation, sampling, and management strategies. Participants will build confidence in diagnosing oak health problems and learn about free tools and resources to support accurate identification and effective management. [Learn more and register here.](#)

July 19 - 25, 2026

2026 Natural Resources Careers Camp

This Issue's Brain Tickler...

Last issue, we asked about why James Thurber's great-uncle Zenas was treated by a tree surgeon. Joanne Sheffield correctly answered that Zenas was afflicted by chestnut blight. (Click the cartoon to read the short story.)



For this issue, we visit the Warner Bros. catalog of classic cartoons. Name the title of the 1950s bestseller that Bugs Bunny used to fend off a gang of marauding dogs. Bonus points: name the invasive species featured in the book.

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

Hickory Environmental Education Center, Accident, MD

This week-long adventure, nestled in the mountains of Garrett County, MD, is designed for high school students seeking to explore exciting career paths and college opportunities in the realm of natural resources. In collaboration with Allegany College of Maryland and the Maryland Department of Natural Resources-Forest Service, the camp offers an immersive, co-educational experience led by industry professionals. [More information here.](#)

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University of Maryland Extension

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

Editor: Andrew A. Kling

Editor emeritus: Jonathan Kays

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