

Bald Cypress—A Great Native Tree

By Joe Smith Boone County Extension Horticulture Technician

The Bald Cypress (*Taxodium distichum*) is a very interesting and unique tree and also one of my personal favorites. The bald cypress is so named because of "baldness" or lack of winter foliage which is unusual for a conifer. This Kentucky native is found typically throughout the southeastern United States, where it primarily grows on swampy ground or floodplain environments. When grown in standing water or extremely wet conditions, upright structures called knees grow upward from the root system, allowing adaptation to this environment. These structures seldom develop in normal, drier landscape situations.

As a landscape tree it is considered one of the best. In fact the planting of bald cypress is becoming the latest trend in tree selection for residential landscapes, as well as parks and street plantings. Bald-cypress (USDA cold hardiness zones 4a-11) grows moderately fast, generally 1 to 2 feet per year. Although it's naturally found in floodplains, swamps, etc., the fastest growth occurs in moist, welldrained soils in full sun.

Bald cypress is a member of the redwood family and can potentially grow very large. Trees can actually sometimes grow to 100-120 feet at maturity with a narrow, upright habit. They can also readily adapt to dry and wet areas once established, and of course do great in those poorly drained and compacted landscape sites.

Aesthetically it is as beautiful as it is tough. The bright needle-like foliage turns lovely russet and copper hues in the autumn and being so fine, they often do not require extensive raking.

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The gray-brown to red-brown bark of the cypress exfoliates or peels away in long, vertical strips providing great winter interest in the landscape.

Bald-cypress is relatively maintenance-free and requires only occasional pruning to remove dead wood or unwanted lower branches. As far as pest and disease issues go, healthy well-maintained trees with good growing conditions usually have few problems. Mites, bagworms and fall webworms are sometimes encountered but are seldom serious.

Bald-cypress and its cultivars can be utilized as great specimen trees or screen plantings. They can be grouped together to create a grove or planted near ponds or stream banks, etc. Many of the newer cultivars include weeping forms and even dwarf selections that fit well into small foundation plantings.

The next time you have a difficult landscape situation to contend with, consider the bald-cypress. I don't think you will be disappointed.

Northern Kentucky Master Gardener Program is Back in Bloom in Boone County!

The Northern Kentucky Master Gardener Program is offered again in Boone County this year. The volunteer training program provides 50 hours of classroom horticulture education and opportunities for community volunteer service on local gardening projects. Learn from county agents and horticultural specialists while meeting new lifelong gardening friends and making our communities more beautiful together!

The Winter 2023 Master Gardener training program will be held at the Boone County Extension Service, 6028 Camp Ernst Road Burlington, KY 41005, on Thursdays, starting December 7, 2023, from 9:00am to 1:00pm. Master Gardener is a 15 week program (there will be a two week break during the holidays), meeting once a week, learning the following topics: *Basic Botany, Soil Science, Turf Care and Maintenance, Plant Nomenclature, Annual and Perennial Plants, Entomology, Pathology, Plant Propagation, Home Composting, Rain Gardens and Water Quality, Organic Gardening, Woody Tree Care and ID, Pruning, Pesticide Safety, Vegetable Gardening, Fruit Production, and more*!

Participants become certified Master Gardeners only after the completion of the classroom portion of the course and the fulfillment of 40 hours of volunteer service at a variety of Extension approved sites that fit the time and interest of the participant. There are plenty of fun volunteer projects from which to choose!

Class fee is \$150 with \$50 being refunded after completion of training and volunteer hours.

Application packets can be picked up at the Boone County Extension office front desk! For more information please call 859-586-6101. Northern Kentucky Master Gardener applications are due by October 16, 2023.



Fall Webworms and Other "Bagworms"

By Robert Brockman Boone County Extension Agent for Horticulture

Large silken tents are once again appearing within many trees in our areas. These tents look very similar to the webs that spiders build to catch prey. While closely inspecting one of these tents this past weekend, I even saw a couple of insects that had been caught in the webbing and died. These tents, however, are not created by spiders. Other arthropods, particularly caterpillars, have the ability to produce silken threads. Caterpillars will use these threads of silk to move throughout a tree, form pupal casings, and build protective structures. A famous example of silken pupal cases are those of the domestic silk moth, which are harvested for production of silk. The silken tents that we are seeing now in the late summer and fall are those created by the fall webworm, which feeds on many species of trees.

Fall webworms are a species of caterpillar which typically has two generations in our area. The



Fall webworms. Photo by Robert Brockman

first generation, unlike its name, occurs during the early summer. As with many species of insects, the later generations of fall webworms tend to be larger and more noticeable. Many people will call fall webworms "tent caterpillars" or "bagworms", and while it is true that they build a tent or bag, we tend to discourage these names as there are already insects with these names. The eastern tent caterpillar is a species of caterpillar that comes out in very early spring and feeds primarily on our native black cherry trees. Eastern tent caterpillars build their nests where two portions of a branch come together, while fall webworms cover leaves with webs. Evergreen bagworms are another species of caterpillar which builds silken protective structures. Unlike the others, bagworms build individual silken bags that they carry with them whenever they move around. Bagworms will camouflage their bags with parts of their host plant, and are most destructive on small-needled evergreens.

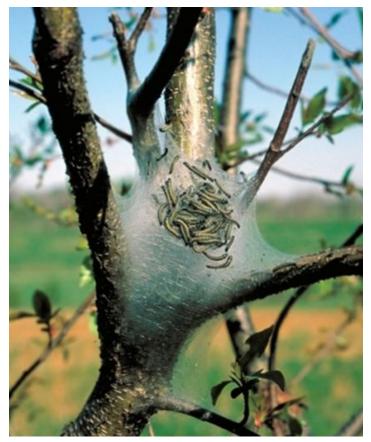
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At the end of the growing season, vegetable plants that are heavily infested with insects or diseases should be removed from the garden and destroyed... DO NOT put these on the compost pile.

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Now that you know what species of caterpillars you are seeing, lets talk about the damage caused by these caterpillars, and what you can do for management. Both fall webworms and eastern tent caterpillars form large and noticeable silk structures in trees, as well as defoliate portions of the tree. During most years, the damage caused by these two insects is minimal and no management is needed. Furthermore, the silk structures are very effective at shielding the caterpillars from insecticide sprays. Many people will tell you to light these silken structures on fire, but this is a very, very bad idea! Fire will cause much more damage to the tree than the caterpillar would, and is dangerous to you and nearby structures. If you are frustrated by the appearance of the silken structures, we recommend that you cut out tents that can be reached. These tents can then safely be smashed or disposed of. Bagworms are very different in the silk structures they build and the damage they cause. Bagworms are generally not destructive to deciduous trees, but can build up in population on small-needled evergreens. Bagworms are often quite difficult to identify on evergreens because their bags will likely



Eastern tent caterpillar. Photo by Phil Sloderbeck, Kansas State University, Bugwood.org

look similar to the cones found on many conifers. On individual evergreen bushes or small trees, it is most effective to individually cut off the bagworms as close to the stem as you can, and then smash the bagworms.



Evergeen bagworm. Photo by Ansel Oommen, Bugwood.org



Peonies, bearded iris and other perennials can be planted in early September. Remember to keep new plantings watered if the weather is dry.

Missouri Botanical Garden

By Kim Leavens Extension Master Gardener

Earlier this summer I visited the spectacular Missouri Botanical Garden, located in St. Louis, about 350 miles away from northern Kentucky. Founded in 1859, the Missouri Botanical Garden is rated as one of the top botanical gardens in the world and is the second largest in North America. I was impressed with the layout of this 79-acre garden, consisting of over 25,000 plants. Much care has been taken concerning the placement of the gardens, the walking paths to the various garden areas, and the labeling of the plants. Everywhere I looked I saw beautiful flowers and trees—so many plants to discover and enjoy.





The Hosta Garden was a wonderful find. This area includes nearly 40 hosta species, a mix of large and small hostas in an assortment of shades of green to blue-green, solid, and variegated. It was gorgeous.

The Climatron is one of the top attractions at the Missouri Botanical Garden. Entering the Climatron is like stepping into a tropical rain forest. Exotic trees, vibrant flowers, leafy ferns, and tropical cacti abound. Some of the specific

plants that caught my eye include Lobster Claw Heliconia, Jackfruit,

Jaboticaba, Inchplant, Peace Lily, Painter's Pallette, Crinum, and orchids.

The 14-acre Japanese Garden is delightful, beautifully landscaped, serene. Some of the other gardens feature roses, bulbs, lilies, and herbs.





The USDA Plant Hardiness Zones for St. Louis (6b) and Boone County (6a/6b) would indicate that we should be able to grow similar plants. The beauty of the Missouri Botanical Garden inspires me to look for flowers to enhance my own gardens.

For more information about the Missouri Botanical Garden, check out the website, <u>www.missouribotanicalgarden.org</u>. For this article, all photographs were taken on location at the Missouri Botanical Garden, St. Louis, Missouri.



Why Are My Trees Defoliating So Early?

By Joseph Morgan Boone County Extension Horticulture Technician

Although many gardeners come into October excited to see peak fall foliage, we often see many trees in the landscaping picking up color and defoliating much earlier in the year. Some trees are notorious for dropping leaves early, while others may be experiencing this for the first time in your landscape, so what can cause this out of season defoliation? In many instances, environmental stress is the key factor in early defoliation. Unfavorable conditions such as high temperatures, low soil moisture (longer periods without substantial rain), and heavier wind may all contribute to leaf scorch commonly seen in birches, buckeyes, Japanese maples, sycamores, elms, and hackberries. Buckeye and birch early defoliation is extremely common in our area and is not grounds for immediate concern as this is the result of our consistently hot summers. In some cases, there may be a different cause of trees dropping leaves, Anthracnose in black walnut, sooty mold if pest pressure is high, nutrient deficiency, or Phytophthora root rot.



Figure 1https://www.purduelandscapereport.org/article/phytophthorableeding-canker/



Anthracnose may refer to several fungi that regularly impact shade trees common to our region, especially maples and tulip polars. Infection is aided by our cool wet springs; however, symptoms may often continue to manifest late into the summer. These fungi cause brown or black spots on foliage which eventually lead to deep lesions, foliage distortion and the dropping of leaves. Anthracnose detracts from the appearance of the tree but rarely causes long

term damage to the tree's health, in most cases no treatment is warranted.

Sooty mold is another common cause of

early defoliation among a wide variety of plants in our area. Depending on the presence of honeydew producing pests, fungi may form on the foliage causing a deep black discoloration. Some may even notice black residue on nearby concrete, lawn furniture or decks after a heavy rain. Like Anthracnose, there are no long-term implications regarding the tree's health with sooty mold, just a large mess.



Symptoms of nutrient deficiency may manifest in a wide array of discoloration patterns. Whereas early shades of red may generally be related to moisture stress, shades of yellow (unless it naturally turns yellow) may be a sign of low iron, manganese, or nitrogen levels. Fortunately, this cause of defoliation is one that we can readily work on remediating. Regularly testing your soil around trees and in the garden is the best approach in preventing nutrient deficiencies from appearing. Submitting the samples to the local Extension office is free and will return useful and readable results as well as a recommended course of action.



Easily the worst cause of defoliation in this list, and quite possibly the last thing

you want to hear diagnosed for any tree in the landscape, is Phytophthora root rot. Many trees and shrubs are susceptible to these fungi and there is no remediation. This excerpt from a Missouri Botanical Garden article best describes the reality of Phytophthora: "Root rot-causing *Phytophthora* species can survive in the soil for years, as long as moist conditions persist. It can spread through splashing rain, irrigation water, and runoff water. Disease fungi can spread through contaminated soil and garden equipment as well. Rot is more likely to spread in early spring and late fall during cool, rainy weather. But symptoms are more likely during stress periods of low rainfall. Flooded and saturated soil conditions for 6–8 hours are especially conducive to the spread of root rots. Wounds are not required for infection." While phytophthora should only truly be diagnosed in a lab, there are several key giveaways it may be the underlying problem: wilted foliage, early fall color, complete dieback of limbs and twigs, and a sparse canopy with dead and falling foliage. If you are noticing these symptoms, particularly in maples, it is best to bring a sizeable root and twig sample to the Extension office for testing.

Source: "PHYTOPHTHORA ROOT ROT OF TREES AND SHRUBS." Missouri Botanical Garden, missouribotanicalgarden.org.



Wait until trees and shrubs are fully dormant before fertilizing. This is usually around Thanksgiving. Otherwise, you are dehardening the tree, since fertilizing also puts trees and shrubs into "growth" mode.

for more information or if you have questions, contact us-we are here to helpl

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For More Information... For more information or to register for any of our classes, visit our website at boone.ca.uky.edu. Click "Online Class Registration" or call us at 859-586-6101.



Fall Lawn Care & Renovation Techniques

September 7, 1:00-3:00pm Enrichment Center, Upper Level Come learn about fall seeding and lawn maintenance techniques suited for our local growing conditions.

Introduction to Permaculture: Fruit Tree Guilds

 September 21, 1:00-2:00pm Nature Center Barn
Interested in sustainable design?
Join us at the nature center as we install a fruit tree guild and discuss permaculture concepts.

The Right Plant Right Place

 September 27, 10:00am-12:00pm, Zoom class
Learn about selecting the right plants for the right growing conditions. We will also discuss
proper planting techniques & maintenance.



Planting a Legacy Tree—Fall Tree Planting Demo

► October 5, 10:00am-12:00pm Enrichment Center, Upper Level Planting trees in your landscape can benefit you as well as future generations .This involves selecting the right species and by planting the tree correctly. Come to this demonstration to see it done in person.

Selecting Plants for Fall Colors

October 11, 1:00-2:00pm Enrichment Center, Upper Level Join us as we discuss options beyond red maples to add excellent fall color to your garden

Composting & Vermicomposting

► October 18, 1:00-2:30pm Enrichment Center, Upper Level Have you ever had questions about how to start a compost or vermicompost (earthworm) bin? Or do you have some experience with composting but always run into the same problems? Join us and bring your questions!

Putting Your Garden to Bed

 November 6, 6:30-7:30pm
Florence Branch Library
The gardening season has finished but there are still chores to do to prepare your garden for the winter months. Fall planting and landscape maintenance will be covered in this program.
Register with the Boone County
Library at bcpl.org

Basics of Fertilizers and Soil Testing

► November 9, 6:00-7:30pm Enrichment Center, Upper Level Have you ever wanted to soil test but don't know how? Or perhaps you have tested your soil but don't know what your results mean or how to read a fertilizer table? Join us as we talk about the basics of soil testing and fertilizers.

Extension Campus Location Key:

Virtual via Zoom, Must register to receive Zoom link A Extension Service office, 6028 Camp Ernst Rd., Burlington Enrichment Center, 1824 Patrick Dr., Burlington Farmers Market, 1961 Burlington Pk., Burlington Environmental and Nature Center, 9101 Camp Ernst Rd., Union Boone County Arboretum, 9190 Camp Ernst Rd., Union; Register at: www.bcarboretum.org/

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