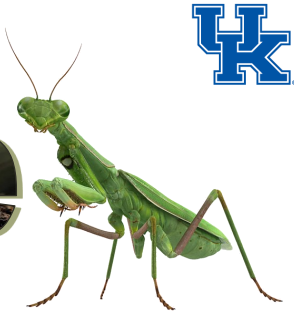
Boone County
Horticulture Newsletter
January-February 2025



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Native Trees Add Variety to Your Landscape

By Bill Fountain, Extension Professor Emeritus, UK Department of Horticulture

Yellowwood Tree (https://www.flickr.com/photos/ahlness/10233702626/in/photostream/)

Sure, we love our dogwoods and redbuds in the spring, but why limit ourselves to using only those two trees? There are many native trees that could add beauty and variety to your landscape over all four seasons. Plus, a diversity of plantings will attract and sustain more native wildlife. Well-landscaped homes can improve resale values by 7% to 10%.

Here are some native trees that could work well in your landscape.

Yellowwood is thought to be our best medium-sized, native flowering tree. Its white, fragrant, pea-like flowers hang in 15-inch-long clusters in spring, and the tree offers attractive yellow fall foliage. Its fruit is a typical yellow-green legume pod and ripens in the fall. Yellowwood also has a beautiful framework of branches with smooth, gray bark that provides winter interest, but the tree's multiple trunk habit can make it prone to limb breakage at the crotch. It must be pruned to ensure good branch angles.

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Quick TIP

Keep your Thanksgiving and Christmas Cacti in a room with cool night temperatures (55 to 60°F). Night temperatures above 70°F will reduce flowering and may cause buds to drop. Site plants in direct sunlight over the winter and let them dry out between waterings.

Allegheny serviceberry is a multi-stemmed small tree reaching up to 25 feet tall. It produces large white flowers very early in spring and bluish green fruit that attracts birds. Allegheny serviceberry grows best in partial shade; it will show signs of stress if grown in full sun in dry areas. The cultivar A. Laevis 'Cumulus' usually grows from a single stem and has a moderately columnar growth habit. It is offered more commonly than the species. Allegheny serviceberry is especially attractive when planted in front of an evergreen background. There are many other types of serviceberries. You can't go wrong with any of them.

Allegheny Serviceberry Amelanchier laevis (https://www.flickr.com/photos/8583446@N05/4584422822)

Blackgum, with its waxy spring foliage, brilliant orange to scarlet red to deep purple fall color and striking winter form, has great ornamental value. As it grows older, its graceful drooping branches add to the distinct form and beauty of this tree. Blackgum adapts to extreme climates, tolerates wet conditions and is resistant to drought. Although it will grow in full sun or partial shade, its fall color is enhanced by sunny conditions. Flowers are small and insignificant. The bitter, half-inch blue-black drupes are not particularly ornamental but are favored by wildlife.

Sourwood. Truly a tree for all seasons, sourwood is one of our most beautiful natives and is ideal as a small specimen tree. It has lovely flowers that open in mid-summer, excellent fall color and hanging clusters of fruit in the winter. Fall color ranges from red to purple to yellow, and all three colors are often on the same tree. It has the best red of any of our natives. The tree can be grown in full sun or partial shade although flowering and fall color are best in full sun. Sourwood trees are very attractive to bees and sourwood honey is common in the South. In order to grow well, it requires an acidic soil high in organic matter. Limestone in the soil or soils derived from limestone are a prescription for failure.

Green hawthorn is an adaptable, urban-tolerant tree that offers winter interest with its abundant and attractive orange-red fruit. It has pretty red to gold foliage in fall and handsome silver-gray peeling bark that shows orange underneath. Its lower branches need to be pruned to a height of 6 to 8 feet in high-traffic areas because of the tree's inch-long thorns. 'Winter King' is an excellent cultivar for the landscape and is superior in flower and fruit production.

Carolina silverbell is a good small tree for shrub or woodland borders. It may have a rounded, pyramidal or vase-shaped habit. Its white bell-shaped flowers bloom in April and May and are best seen from below the tree, since they hang on pendulous stalks. Carolina silverbell is relatively pest resistant as long as it is in a good soil and not stressed by drought. The tree is especially attractive when set off against an evergreen background. Rhododendrons, which also require a good, organic soil, grow well beneath it.

Simple Pruning Tips for Your Fruit Trees During the Dormant Season

Delia Scott,
UK, Department of Horticulture Extension Associate

All fruit trees must be pruned and trained to enhance fruit production, as the way the tree is shaped will impact fruit yield, fruit size and ripening. In Kentucky, the ideal time to prune fruit trees is in late winter or early spring.

Both newly planted and mature fruit trees must be pruned to maintain size and shape. Here are some easy tips:

- For young trees, pruning to a strong central leader with four to five lateral branches is most common.
- Heading cuts can be done on mature trees to control the tree's height; thinning cuts can open up the canopy and maximize sunlight and airflow. For older, overgrown trees that need heavier pruning, removing up to 1/3 of the larger branches over several years will help rejuvenate the tree.
- Pruning cuts should be made at the base of the branches, leaving a ¼" to ½" branch collar intact for proper healing. Dead and diseased shoots and limbs should be removed, as well as any shriveled or 'mummy' fruit remaining on the tree. Sharp pruners or loppers should be used to ensure clean cuts. Sanitize the tool blades between each cut with rubbing alcohol or a 10% bleach solution so as not to spread any disease that may be present.

For more information on pruning apple trees, visit the UK Martin-Gatton College of Agriculture, Food and Environment YouTube channel at https://www.youtube.com/user/UKAgriculture.

Pruning Central Leader Apple Trees (https://bit.ly/48VR31Q) discusses trees that are pruned to the classic pyramid or oval shape.

Pruning Tall Spindle Apple Trees (https://bit.ly/4bh85JA) focuses on the high-density supported training system with trees planted on dwarf rootstocks, producing a crop as little as a year after planting.

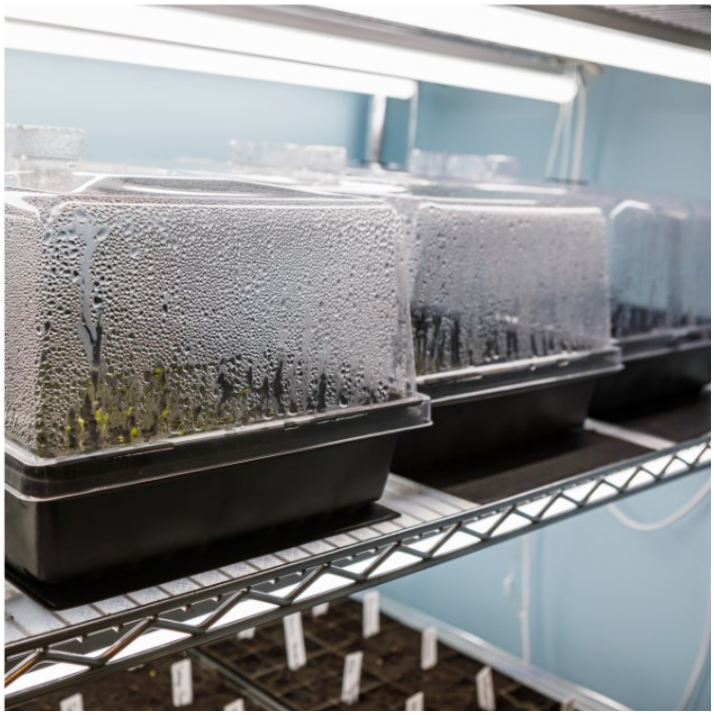
For more information on horticulture success, contact the Boone County Cooperative Extension office.

Quick TIP

Winter pruning of shrubs and trees can be done now for indoor forcing of flowers. January to early February is a great time to force forsythias and witch hazels. By mid-February, try eastern redbud, cherry, and red maples. By mid-to-late February, consider lilacs, willows, and magnolias.

Choosing a Grow Light for Seed Germination

By Melissa Pilcher
Boone County Cooperative Extension
Horticulture Assistant



After the hustle and bustle of the holiday season, many gardeners turn their attention to making the new year the best garden year ever. With stacks of seed catalogs, thoughts quickly turn to starting seeds to jumpstart the season.

There are many factors that determine the success of seed starting from choosing the right soil, watering correctly, and timing when to start the seeds. Selecting the right grow light is crucial for nurturing healthy seedlings and ensuring a successful gardening season.

After germination, lighting plays a vital role in growing healthy plants. While outdoor plants get their energy from the sun, seeds grown indoors often don't receive enough light even when placed next to a window. To remedy that, artificial lighting is generally required. With so many products on the market, it can be hard to know how to choose.

A big factor in choosing a fixture is making sure the light is evenly distributed over the entire seed tray. Seedlings that don't receive enough light will stretch to grow toward the light, making them leggy and weak.

Depending on your budget, fluorescent lights or LED lights are good options. Choosing either full spectrum fluorescent bulbs or using one cool and one warm bulb offers adequate light. The downside is that fluorescent bulbs fade over time and need to be replaced more frequently.

LED bulbs are generally more expensive than fluorescent, but they are energy efficient and last longer. Incandescent bulbs are not recommended as they create heat and are not full spectrum, which causes seedlings to stretch.

Assess the light's color temperature, known as kelvin; a range between 5000K to 6500K is ideal for seed starting, as it encourages strong, vibrant growth.

Light fixtures should be adjustable to ensure seedlings are kept 5-10 inches away from the light. Browning on the edges can indicate that seedlings are too close. Leggy seedlings indicate that lights are too far away.

Most seedlings require 12-18 hours of light each day. Using a timer helps ensure ideal light conditions.

By carefully considering these factors, you can create a thriving indoor seed-starting environment. Find previous articles about seed starting from BooneHortNews:
https://boone.ca.uky.edu/newsletters/hort-news-january-and-february-2024—Starting Seeds Indoors
https://boone.ca.uky.edu/newsletters/hort-news-march-and-april-2024—Hardening Off Transplants

Ordering Seeds for Vegetable Gardens

Kim Leonberger, Extension Associate

and Emily Pfeufer, Extension Plant Pathologist

Cool temperatures and gray days may make spring feel far away, but planning for vegetable gardens begins during winter months when seeds are ordered. Looking through a seed catalog, store rack, or online product offering, it's easy to become overwhelmed by options. But, for gardeners who have had issues in the past, choosing different varieties is one way to preventatively manage disease.

Varieties can be referred to as tolerant or resistant, both of which can result in better yields, but are two different plant properties. **Tolerance** is the ability of the plant to endure disease, while still producing yielding fruit. **Resistance** is the ability to prevent or slow disease development by way of naturally occurring aspects of the plant. The majority of hybrid vegetable varieties have been "improved" through natural breeding methods for these traits. Selection of resistant cultivars can reduce the impact diseases may have on plant vigor and yield, as well as reduce or eliminate the need for chemical management practices. Disease resistance is especially important for the home garden, which many either cannot or prefer not to spray.

No single cultivar is known to have resistance to all diseases of concern, and resistance is specific to a particular disease. Thus, gardeners should select varieties with resistance to diseases that are most common for their area or those that have been diagnosed as an issue in the past. Common diseases of major vegetable garden plants are listed below.

Information about which disease(s) a variety is resistant to can be found on seed packets or in catalogs. Disease names may be listed as an abbreviation. For example, the letter 'V' may follow the tomato variety name, indicating resistance to Verticillium wilt. Seed catalogs and online retailers sometimes detail disease resistance codes on a separate page. Take care to thoroughly read seed packets if purchasing in-store.

(Continued)

Quick TIP

A pH of 6-7 is good for most vegetable crops. A soil test will tell you whether you need to add sulfur (to lower your pH) or lime (to raise pH). It takes several months for these products to work, so soil test now. Remember soil testing is a free service for all Boone county residents.

Tolerant and Resistant Cultivars:

✦ **Tomato**

Early blight: is the most common disease of tomatoes in Kentucky, and often co-occurs with Septoria leaf spot. Tomatoes with some resistance to early blight are 'Jasper,' 'Matt's Wild Cherry,' 'Mountain Magic,' and 'Sun Gold' (small cherry tomatoes), 'Indigo Rose,' 'Plum Regal,' and 'Verona' (Roma size), and 'Defiant,' 'Iron Lady,' 'Mountain Fresh Plus,' 'Mountain Merit,' and 'Stellar' (slicing size).

✦ **Pepper**

The bacterial spot pathogen causes the most common disease of peppers. There are at least ten races of the pathogen, and pepper resistance is race-specific. Commonly occurring races can vary by location, so the safest route would be to choose varieties with resistance to as many races as possible. Some suggested varieties include: 'Boca,' 'Ninja,' 'Outsider,' 'Playmaker,' 'Samurai,' and 'Tracer.'

✦ **Cucurbits** (Cucumber, Squashes, Muskmelon, Watermelon, Pumpkin, and Zucchini)

Many powdery mildew resistant varieties of picklers, slicers, pumpkins, and squash are available.

Varieties that are less susceptible to bacterial wilt include the pickle cukes 'Cross Country' and 'County Fair,' 'Howden' pumpkins, and 'Waltham Butternut' squash. Manage cucumber beetles for best management of bacterial wilt. All watermelons have natural resistance to bacterial wilt.

✦ **Leafy Greens**

Many lettuces have been bred for resistance to downy mildew. Consider head lettuces 'Kweik,' and 'Pirat,' green leafed lettuces 'Black Seeded Simpson,' and 'Nevada,' and red leafed lettuces 'Galactic,' 'Red Zin,' and 'Rustica' for their additional resistance to bacterial disease and/or white mold.

Powdery mildew-resistant lettuces to try include 'Jericho' and 'Super Jericho' (romaines), 'Sandy' (oakleaf), 'Loma,' 'Red Salad Bowl,' and 'Skyphos' and 'Red Cross' (red butterheads).

'Regal' and 'Samish' spinaches are resistant to downy mildew and white rust.

Kale, collards, turnip greens, and mustards are naturally less susceptible to many diseases, so variety selection should rely on purchasing certified or treated seed and choosing varieties that will perform well under site and seasonal conditions.

✦ **Legume Vegetables** (Beans and Peas)

Many French and green beans have been bred for resistance to anthracnose, but resistance in other types of beans is unavailable.

'Caprice,' 'Espada,' 'Kentucky Blue,' 'Romano II,' 'Volunteer,' and 'Goldkist' are fungal leaf spot and/or rust resistant bean varieties, with additional resistance to various viral diseases (not common in KY).

'Green Arrow,' 'Cascadia,' 'Sugar Daddy,' and 'Oregon Sugar Pod II' are pea varieties suggested for their resistance to powdery mildew, Fusarium, and Verticillium wilts.

✦ **Cole Crops** (Cabbage, Broccoli, Cauliflower, Kohlrabi, and Brussel sprouts)

Black rot is the most common disease of cole crops in KY. Cabbage varieties 'Bilko,' 'Blues,' 'China Pride,' 'Blue Vantage,' and 'Bronco' carry resistance to a broad range of diseases, such as **downy mildew, Fusarium yellows,** and/or **black rot**.

Broccoli varieties 'Emperor,' 'Pinnacle,' and 'Green Magic', as well as cauliflower variety 'Majestic' are resistant to **downy mildew** and/or **black rot**.

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.

Upcoming Horticulture Events Please Register!

Please Note:

► For most Horticulture classes, registration opens one month prior to the class.

Soil Fertility
► January 14 , 6-7:30pm
Enrichment Center, Upper Level
Have you ever wondered how much fertilizer your soil needs, if your soil is healthy, or how to help your soil out? Come and join us as we explore the building blocks of a healthy garden.

Garden Planning 101
► January 28 , 6-7:30pm
Enrichment Center, Upper Level
This program will be about how to pick the optimum gardening site and what to do with a garden site that has challenges.

Ornamental Plant Selection & Propagation
► February 11, 6-7:30pm
Enrichment Center, Upper Level
This program will focus on plant selection, early care, and how to start beginner plants from seed.

Tree Pruning Demonstration
► February 18 , 6-7:30pm
Boone County Arboretum
Join us as we demonstrate how to prune both young and old trees! **Register with the Boone County Arboretum at bcarboretum.org/events**

Starting Your Vegetable Garden
► February 25, 6-7:30pm
Enrichment Center, Upper Level
This program will focus on the essentials of how to start your vegetable garden and the timeline of when different tasks need to be completed.

Fruit Tree Pruning Demonstration
► March 6 , 6-7:30pm
Boone County Nature Center Barn and Gardens
Come and join us as we demonstrate how to make cuts on peach, plum, apple, and pear trees.

To Grow In the Ground or In a Container?
► March 11 , 6-7:30pm
Enrichment Center, Upper Level
This program will focus on the pros and cons of growing in containers versus in the ground.

The Basics of Plant Insects & Diseases
► March 25, 6-7:30pm
Enrichment Center, Upper Level
Join us as we discuss common insects and diseases you may find in your garden. When relevant, we will also discuss management!

Starting a Butterfly Garden
► April 3, 6:30-8pm
Boone County Public Library - Walton Branch, 13000 Towne Center Drive, Walton, KY 41094
Join us for a program on how to start a butterfly garden. We will discuss common plants to add and what host plants attract which butterfly species. **Register with BCPL - Walton online at boone.libnet.info/events**

Find us here...

Extension Campus Locations:

Virtual via Zoom, Must register to receive Zoom link
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/

Amazing Pancakes

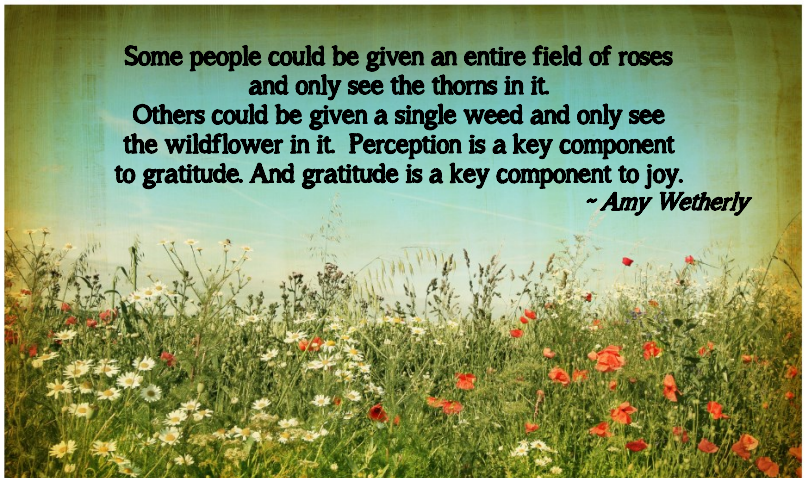
1 cup self-rising flour
½ cup whole-wheat flour
2 tablespoons sugar
1 teaspoon cinnamon
¼ cup chopped nuts (optional)
1 cup sweet potatoes, cooked and mashed
3 eggs, beaten
1 cup fat-free milk
2 tablespoons olive oil
1 tablespoon vanilla
Cooking spray

In a medium bowl, combine flours, sugar and cinnamon. Add ¼ cup nuts, optional. In a separate medium bowl, mix sweet potatoes, eggs, milk, oil and vanilla. Pour liquid mixture into the flour mixture and stir until the dry ingredients become wet. Be careful not to over stir.

Preheat a griddle or skillet over medium high heat. Spray with cooking spray. Drop batter mixture onto the prepared griddle by heaping tablespoon. Cook until golden brown, turning once with a spatula when the surface begins to bubble. Continue cooking until the other side is golden brown. Repeat process, making 12 pancakes.
Servings: 6; 2 pancakes each

Source: Brooke Jenkins-Howard, Curriculum Coordinator for Kentucky Nutrition Education Program, University of Kentucky Cooperative Extension Service
https://www.planeatmove.com/recipes/recipe/amazing-pancakes/

Snow Policy:
The Boone County Extension Service does not follow the Boone County Schools closure schedule. In case of inclement weather, contact the office if you question whether a class will be held. (859-586-6101)



For more information or if you have questions, contact us—we are here to help!
859-586-6101 • boone.ca.uky.edu

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