



### **Soil Testing**

Soil testing is a soil-management tool we use to determine the fertility of soil as well as the optimum lime and fertilizer requirements for crops. Fall/Winter is the best time of year to test your soil. Most nutrients take some time to break down and become available to the plant. If you give them all winter to break down, by the time you are ready to plant in the spring, the plants can better absorb the nutrients.

#### **TIP #1**

When taking a soil sample, remember plants have shallow roots that lie within the top 6 to 12 inches of soil.

#### **TIP #2**

Use a trowel to dig down about 6 to 8 inches and collect approximately two cups of soil per sample.

#### **TIP #3**

A good sample should be representative of the whole space. A good technique is to take a sample from 4 corners of an area and a couple samples through the middle.

#### **TIP #4**

Test sandy-textured soils every 2-3 years and clay soils every 3-4 years.

1. Soil Testing

2. Pruning Trees & Shrubs

3. Landscaping With Edibles

4. Upcoming Classes



5. Wire Worm

6. Equipment Maint.

> 7. Beekeeping

8. KY Proud Recipes

9. Trowel and Error Plant Spotlight

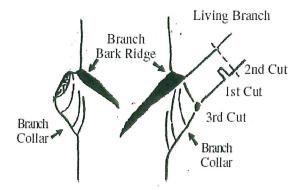
4

## **Pruning Trees and Shrubs**

Deciduous trees have lost their leaves. Does this signal a time for pruning? Generally, no. The preferred time for pruning most woody plants is late winter to early spring. These plants will be initiating growth in spring and will be better able to deal with cut surfaces. Plants pruned in fall and winter, as growth ceases, are less able to deal with pruning cuts. However, there are some types of pruning that can be practiced at any time of the year.

Damaged or diseased limbs can be removed at any time. These as well as limbs damaged by weather,

may present a hazard to people or property nearby should they fail and fall from the tree. This may especially be a problem in winter when snow and ice accumulate on limbs, adding weight, and increasing the changes of limb failure. Autumn, once leaves have fallen from trees, is a great time to inspect limbs to discern whether damage has occurred and assess the need for removal.



Branch bark ridge and branch collar

To remove a damaged limb, look for natural growth points. If only part of the limb is

damaged, prune back to where it joins the next largest branch. If the entire limb is damaged, prune back to the trunk. When pruning large limbs take care not to damage bark that remains on the tree. If you can remove the branch with hand pruners, simply cut the limb back to the next branch. If there is a swollen area at the base of the branch, allow this to remain.

If you feel you will need a hand saw to remove the branch it is best to use a 3-point cut that involves undercutting the limb before removing it. With a 3-point cut, the first cut, a partial cut less than 1 inch deep, is made under the limb several inches away from where the final cut will occur. The second cut is made a few inches further out on the limb. This cut starts from the top of the limb and completely removes the limb. If the limb is heavy it will begin to sag under its own weight and may rip the underside of the bark before the cut is complete. The first cut stops this ripping before is damages areas you wish to retain. What is left is a stub of the original limb. Leaving stubs when pruning is damaging to trees because trees are unable to deal with the cut surface. Remove the stub with the third cut by sawing through it near the point it meets the trunk or next larger limb. The cut should be fairly flush to the next branch but if there is a swollen base on the limb, allow that to remain when removing the limb.

There is no need to apply paint or oil to the cut surfaces, it is healthier to the tree to leave the cuts bare.

# Incorporating Edible Plants into the Landscape

A nice landscape of a few trees and shrubs, some flowers and well-tended turf has value. Our landscapes help define our outdoor living space, provide shade and help screen unwanted views. A well-maintained landscape may add as much as 5 to 10 percent to the value of our property. But landscapes can provide another resource that we don't often consider—food. What if it were possible to introduce edible plants to your landscape?

Growing your own food has some obvious benefits such as fresh and flavorful fruits and vegetables. Many food-producing plants can fill the roles that we usually assign to other plants in our landscape.



Trellised blackberries, for example, make a great hedge or screen. Using thorny types can also provide some measure of security. Many retain some of their leaves throughout the winter to provide some screening.

Trellising the blackberries will help define the planting and promote more upright growth. The time needed to prune and

thin blackberries is comparable to many other hedge-type plantings. Also, blackberries have relatively few problem insects or diseases.

In flower beds, you can plant fancy-leafed lettuce in early spring. Lettuce is finished by mid-May, just around the time you are adding annual flowers. For shrubs, think about incorporating figs, elderberry or blueberries around the home.

In summer, try a few rainbow chard plants, colored peppers and purple or variegated basil. All are relatively pest free and are a good contrast to flowering annuals and perennials.



Also, consider containers. Cherry tomatoes grow well in hanging baskets where vines are allowed to droop over the edge of the pot. Several herbs are well suited to containers and provide savory

flavoring for your salads and meals.

The next time you are looking to add plants to your landscape, don't overlook herbs and food producing plants. Some may provide what you need and more.

VOLUME 10, ISSUE 2 WINTER 2022

# **Upcoming Classes and News**

You MUST call the BCEO to register for free classes. Classes are subject to cancel if there are no signups.

#### **Pesticide trainings for Private Applicators**

1/24: 9AM, 2/7: 5PM, 1/8: 1PM

Private applicator certification is <u>valid for 3 years</u> and expires on December 31 of the final year. Applicators must go through the county training program to keep their certification in effect.

#### Indoor Citrus - 2/23/23 3pm

Want to try your hand at growing lemons or oranges at home? Join us for a how-to with door prizes!

#### Growing Blueberries - 3/15/23 6pm \$15

This class comes with 2 bare-root plants with each ticket. Please sign up at <a href="https://www.eventbrite.com/e/growing-blueberries-tickets-489825720917">https://www.eventbrite.com/e/growing-blueberries-tickets-489825720917</a>

#### **Landscaping With Natives & Converting Lawns to Prairies**

4/18/23 6pm

Want to minimize the area you mow? Need a low-input landscape? This class will help you get started.



#### Make Your Own Planter - 5/3/23 6pm \$20

This workshop will allow you to create your own porch planter and learn about best plants and care techniques! Please sign up at https://www.eventbrite.com/e/make-your-own-porch-planters-tickets-490621982557

#### Gourds for Drying - 6/7/23 3pm

Try something new in the garden this year with dried gourds!

#### Oyster Mushroom Workshop - 7/15/23 2pm \$20

Learn how to grow mushrooms indoors! This workshop comes with a kit to raise your own mushrooms at home. Please sign up at <a href="https://www.eventbrite.com/e/oyster-mushroom-workshop-tickets-489915158427">https://www.eventbrite.com/e/oyster-mushroom-workshop-tickets-489915158427</a>



## Wire Worm

The larval stage is the destructive stage; larvae may remain in the ground up to six years feeding on roots of grasses and other plants such as potatoes and dahlias. Most wireworm larvae are hard, smooth, and chestnut brown. They vary from 1/2 to 1-1/2 inches in length when grown. Some species are soft, and white or yellowish in color.

The adults, called click beetles, become active in the spring. This is when they lay their eggs. They are usually brown streamlined beetles, with the body tapering toward the rear. The joint between the thorax and abdomen is loose and flexible, and, when beetles are placed on their backs, they click their abdomen against the ground to toss themselves several inches into the air and flip over.

#### Damage

Although economic wireworm damage to field crops is rare, when they are a problem they can be very destructive and difficult to control. They are usually found attacking crops planted on ground that has been in sod for several years, or the second year following sod. However, wireworm populations may be reduced by half after the second year following sod. Land that has been in continuous bluegrass sod is more likely to have high numbers of wireworms than fescue sod.

Crops attacked by wireworms have reduced plant populations, since they feed on the seeds prior to germination or just after germination. The plant stand may continue to deteriorate, because wireworms bore into underground portions of the stem, causing plants to wither and die. They continue to feed upon the small roots of many plants throughout the season.





#### **IPM Techniques and Scouting Procedures**

- Since the wireworm causes damage by boring into seeds or into the base of the seedling, fields should be checked for wireworms before planting. Bait stations are used to check for wireworms. Two stations are recommended per acre.
- Bait stations, which are really solar traps, are made by digging a hole 4 inches deep and about 9 inches wide. You will need to place 1/2 cup of untreated corn/wheat mixture in the bottom of the hole. The hole is then filled with loose dirt. See Figure I. Do not pack the dirt. The area should then be covered with plastic. Gases produced by the breakdown of the corn/wheat mixture will attract wireworms to the station.
- Stations should be set at least 3 weeks before your planned planting date. The stations should be checked by digging them up in about 2 weeks. You need to record the number of wireworms found in each station.
- Fields can also be checked by digging 5 random samples. Be sure to sample suspect areas. Samples should be 1 foot square and 6 inches deep. This type of sampling should also be done before corn is planted and the number of wireworms in each sample should be recorded.
- Economic Threshold: If you find one or more wireworms per bait station, use a soil
  insecticide at planting. Rescue treatments after damage is visible are not effective. If
  damage is sufficient to justify replanting, a soil insecticide should be applied during
  replanting. Time periods, recommendations and sizes of bait stations were developed by
  the Illinois Cooperative Extension Service.

## Winter Equipment Maintenance

Just because it is cold outside, doesn't mean your lawn and landscape work is complete. There are many chores that can, and should be done during the winter months. Cold weather is the time to



service your tools and power equipment, build a new compost bin, calibrate your sprayer, or even identify some winter annuals for proper control methods later.

Starting your mower, tiller, weed eater, or blower next spring can be easy with a few winter preparations. Gasoline breaks down over time, leaving a gummy residue inside your equipment's

carburetor and fuel tank. When you start up your equipment in the spring, this residue gets sucked into tiny holes inside the carburetor called "jets" and stops them up. To prevent this, always drain fuel and add a fuel stabilizer to the tank. Pull the cord or turn the engine a couple of revolutions to work the stabilizer through the fuel system for best protection.

Many times our equipment gets neglected during the year. Winter is the best time to make sure you have a fresh oil change. Drain the oil using the drain plug typically on the side or underside of the engine. Add new oil per manufactures recommendations and change filter if applicable. Make sure you do not leave the equipment without oil or you might forget to add it in the spring.

Air filters are often overlooked and are an important item to clean on equipment. The air filter will ensure only clean, dust free air enters the combustion chamber. Many filters are disposable and will need to be replaced but some are the washable sponge type. Wash them with warm water and a small amount of soap; rinse and allow to dry thoroughly; and then add a little engine oil to the sponge. This will allow the filter to collect dirt and debris even better! If you use your equipment in a dusty environment, you probably should clean it much more often.

Look over all of your equipment for signs of wear. Often, cables get worn or rusty. A little lubricating oil will help tremendously on rusty cables before they get too stiff and break. Check for debris built up in the tines on your tiller or around your blade(s) of your mower. A clean piece of equipment is a happy piece of equipment. Take some time to clean debris and built up grime from all surfaces.

Winter is a great time to take a look at the underside of you mower. Grab the blade and push it up and down opposite the direction it turns. If you feel movement, you could have bearings bad in the spindle. Repairing them now will prevent even costlier repairs later.

Many of these maintenance items are fairly simple and will add to the useful life to your equipment. Some maintenance will prevent the need for a skilled mechanic often correlating



to costly repairs. If you find problems that you are unfamiliar with, make sure to get some expert advice from a local repair shop. Whether you do it yourself or have a repair shop do it, take a few hours this winter and take care of the equipment that takes care of your lawn and gardens!

VOLUME 10, ISSUE 2 WINTER 2022











Attend all four classes and get a free starter kit and help ordering your first nuke!

A \$200 value!

8/30/23 Beekeeping 101 6pm 9/20/23 Starting Your Hive 6pm 10/25/23 Seasonal Management 6pm 11/15/23 Enemies of Bees 6pm

All classes held at the Boyle Co. Extension Office





# Chicken and Fried Cauliflower Rice

- 4 tablespoons olive oil, divided
- 1 diced red bell pepper 1/2 medium diced onion 2 cups finely chopped carrots
- 3 cups chopped cabbage
- 1 small chopped zucchini
- 1 cubed skinless, boneless chicken breast
- 1 head of roughly chopped cauliflower
- 2 tablespoons minced
- 2 tablespoons lower-sodium sov sauce
- 1/8 teaspoon ground ginger 14 cup chopped green onions Salt and pepper to taste
- 1/2 teaspoon crushed red pepper

Heat 2 tablespoons of olive oil in a large, lidded skillet or wok over medium-high heat. Add bell pepper, onion, and carrots. Cook, stirring occasionally, until crisptender, about 5 minutes. Add cabbage and zucchini to pepper mix. Cook, stirring occasionally, about 5 minutes. Heat 1/2 tablespoon of olive oil in a second large skillet over medium-high heat. Add chicken and cook, turning occasionally, until no longer pink, about 5 minutes. Transfer chicken to skillet with vegetable mixture. Place cauliflower into a food processor. Pulse until the mixture resembles rice. Heat 1/2 tablespoon of olive oil in a skillet over

medium-high heat. Add garlic and cook about 15 seconds; add cauliflower. Cook, stirring occasionally, 2 minutes. Transfer to vegetable skillet, and stir to combine. In a small bowl, combine soy sauce, ginger, 1 tablespoon of olive oil, green onions, salt, pepper, and crushed red pepper. Add to cauliflower mixture. Cook, stirring until well mixed and heated through.

Yield: 6, 1-cup servings

Nutritional Analysis: 180 calories, 10 g fat, 1.5 g saturated fat, 15 mg cholesterol, 270 mg sodium, 16 g carbohydrate, 5 g fiber, 7 g sugars, 0 added sugars, 8 g protein

# Kale and Potato Soup

- 4 teaspoons olive oil
- 1 chopped yellow onion
- 3 cloves garlic, minced
- 1 box (48 ounce) lowsodium chicken broth
- 6 red potatoes, diced 1/2 cup chopped carrot 4 cups shredded kale
- ½ pound cooked
- chicken breast, shredded

1/4 teaspoon black pepper

- 1. In a large saucepan, heat the olive oil over medium heat for 1 minute. Add chopped onion and garlic and cook uncovered for 5 minutes.
- 2. Add chicken broth, potatoes and carrot; cover and bring to a boil.
- 3. Reduce heat and simmer for 20 minutes.
- 4. Mix in the kale, chicken and black pepper. Cover and simmer for 15

minutes or until kale is tender.

Yield: 6, 11/2 cup servings.

**Nutritional Analysis:** 270 calories, 5 g fat, 1 g saturated fat, 25 mg cholesterol, 210 mg sodium, 43 g carbohydrate, 5 g fiber, 15 g protein.

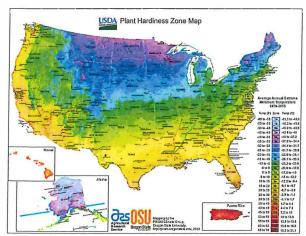
Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.



VOLUME 10, ISSUE 2 WINTER 2022

#### **Trowel & Error: Plant Hardiness Zones**

If you've ever looked at a plant tag and seen "hardy to zone (insert number)" you may have asked



what exactly that means. Well, North America is divided up into 11 planting zones. With each zone representing an average winter temperature. Each zone is 10°F warmer (or cooler) than the adjacent zone. I often find that these zone numbers are misconstrued into "this plant will thrive here" instead of the zone's actual of intention of "will it survive the winter here." Here in Central KY we flirt between zone '6b/6a for our extreme minimum temperatures. So, when purchasing plants you'd like to be perennial, make sure they are hardy to at least zone 6, zone 5 would be even better. Just know though, that just because a plant can survive our cold

temperatures, does not mean it is going to do well with our summers or even our extreme rain patterns. Areas of Kansas, Utah and Nevada are also zone 6 but we know the plant life there is very different than here. Do your research and find out if the plant tolerates weather extremes and clay soils

# Plant Spotlight

# Virginia Bluebells - Mertensia Virginia

Virginia Bluebells are native herbaceous perennial wildflowers. One of the most beautiful native

wildflowers, Virginia bluebells add a touch of class to any garden. They flower when the spring weather is warm and inviting, beckoning gardeners to come outdoors to see their subtle beauty, before going dormant in mid-summer. In early spring, they emerge and grow in compact clumps and are up to 2 feet tall. The foliage is initially purple and turns green very quickly. The leaves are oval, smooth, bluish-green to grayish-green, and 2 to 8 inches long. The pink buds open and reveal delicate, pendulous, slightly fragrant, blue bell-shaped blooms. Flowering occurs, depending on the location, from March to May and lasts about 3 weeks. The closed blooms look like deflated pink balloons. The plants go dormant in mid-summer.





Boyle County Extension Office 99 Corporate Drive Danville, KY 40422

I don't know about you but I want to enter 2023 with Dwight Schrute energy. Belief that I can accomplish any challenge that dares confront me.

... and 2022 has been a challenge. Reorganizing after COVID has been quite the transition for all of us. This year has really been about reacquainting the Horticulture Program to the needs of the Boyle Co. community and I hope our programs in 2023 reflect that. If you have any suggestions for classes you'd like to see for next year, please never hesitate to reach out to me!

Enjoy your holiday season!

Alexis A. Sheffield

Boyle Co. Agent for Horticulture

aeam222@uky.edu

"I am ready to face any challenges that might be foolish enough to face me."

> ~Dwight Schrute The Office