

THE CAROLINA SANDHILLS GARDENER

www.robesson.ces.ncsu.edu/

Important Information

Homegrown Mushrooms

October 28, 2023 9:30 a.m. – 12:00 p.m.

Come out and learn how to properly produce your very own homegrown mushrooms using logs.

For more information on this class call Mack Johnson at 910-671-3276

Take Advantage of Soil Testing

Soil testing is a service provided by the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) at their Agronomic Division in Raleigh that will assess the present levels of major plant nutrients, soil pH, and micronutrients. You can pick up free kits at your local Extension Center. Soil samples are currently free through the end of November. After Thanksgiving samples will be \$4 per sample. For more info, visit <https://www.ncagr.gov/agronomi/>

If you are interested in learning more about any information in this newsletter, contact the Extension Center at 910-671-32-76 or visit our website at robesson.ces.ncsu.edu. For accommodations for persons with disabilities, contact Cooperative Extension no later than five (5) business days before the event.

Mack Johnson

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Robeson County

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Lawns and Turfgrass: Fall Management in Lawns

Jacob Barber

Horticulture Agent, N.C. Cooperative Extension - Bladen County

Lawn care in the fall is important if you want your lawn to overwinter properly and begin to green up once temperatures warm up in the spring. A great way to start fall lawn care is to take a soil sample. Soil samples are still free until Thanksgiving. You can pick up soil sample boxes and forms at your local Extension office in your county. You should use the Lawn and Garden soil sample form so that the recommendations are per 1000 square foot instead of per acre. The soil sample will be sent to the NCDA. The results that you receive back will include your soils pH, lime recommendation and fertilizer recommendations.



Fall is a great time to apply lime because that gives the soil time to complete the correct chemical reaction so essential nutrients will be available to the plant in the spring during green-up. If fertilizer is needed for your lawn, please be sure to follow the recommendations given from the NCDA.

If you over apply nitrogen on warm season grasses in the fall, there is a chance that the lawn will not be able to overwinter properly and could cause the grass to be susceptible to spring dead spot disease.

If you had some issues earlier this year with winter annual weeds, the fall is a great time to apply some pre-emergent herbicides. Winter annual weeds include henbit, chickweed, and hairy bittercress. Pre-emergent herbicides can be applied from August to October and some may state on the label that they need additional applications in January or February. Please be sure to read your labels carefully before application to any pesticide for personal protective equipment (PPE), Re-entry intervals (REI), and rate of applications. If you have any questions about labels or how to read them, please contact your local Extension office.

Below are a few pointers for management in your lawns this fall:

- Irrigate as needed. If you have an irrigation system, one-inch in the early morning once a week will suffice. You do not have to irrigate starting November once temperatures begin to fall.
- Diseases to patrol for include large patch, brown patch, leaf spot, dollar spot, and fairy rings. You can treat this with proper irrigation, thatch management, and fungicide if needed.
- Sanitation is proactive instead of reactive. Removing debris, leaves, and weeds will prevent any unwanted pests from populating in your landscape. Apply post- and pre-emergent herbicides as needed, depending on targets.

For more information visit your local Extension office in your county or visit <https://www.turffiles.ncsu.edu/>.

Plant Spotlight: Red Maple 'Acer rubrum'

Jacob Barber

Horticulture Agent, N.C. Cooperative Extension - Bladen County

The red maple is a deciduous native tree and is in the Sapindaceae (soapberry) family. In the wild, it can be found to grow up to at least 5000 feet in elevation. Red maples will be the first to change their leaves once fall begins and temperatures begin to drop. Not only will they turn red, sometimes their foliage turns orange and yellow. If you are an autumn sightseer, you can find red maples all along the east coast of the United States and as far west as Minnesota.

The red maple is an excellent choice for a shade tree in your landscape. The tree is commonly seen to be 40 to 70 feet high with a trunk that is 1-½ and 2-½ feet wide. However, there have been records of them growing to be 120 feet tall with a trunk that is 6 feet in diameter. The branch from the crown will have a 30 to 50 foot spread. Please consider the potential size of the tree before placing this anywhere in your landscape. They are fairly easy to grow in a medium to wet, well-drained soil in full sun to partial shade areas. It has a tolerance for a variety of soils but prefers moist and slightly acidic soils. This is a very cold-hardy tree and is similar to other maples, but it grows faster than Norway and sugar maples, but slower than silver maples



There are several characteristics that can help you identify a red maple. The leaves are opposite. They have 3 to 5 palmate lobes with toothed margins on long red stems. The leaf of a red maple is slightly smaller than other maples. The leaf's edges are serrated and appear saw-like.

The red maples are also known for their small red flowers in early spring. During spring, the tree creates red or light brown winged samaras which are the fruit or seeds of the tree.



Some issues that might affect your red maple would be insects, disease, and some fungal pests. If it is planted in soil with high pH then it can develop manganese chlorosis, which is a deficiency in manganese that affects the color of leaves and can be damaging to the process of photosynthesis. Similar to most trees in the landscape, borers, aphids, caterpillars, leafhoppers, and scale are all insects that need to be monitored. With timely and appropriate insecticides or other mechanical or cultural treatments, these issues can be fixed. Disease and fungal issues that need to be monitored are fungal leaf spot, root rot, and canker. Avoid planting trees next to walkways or side walks because their root system is shallow and flattened. With most of these issues listed, there are ways to be proactive and prevent the issues from occurring. For more information about this flower and more, follow this link:

<https://plants.ces.ncsu.edu/plants/acer-rubrum/>

The Incredible Edible Mushroom

Mack Johnson

Horticulture Agent, N.C. Cooperative Extension - Robeson County

Imagine being able to enjoy eating something our ancestors may have eaten 100 years ago, 500 years ago, or even 1000 years ago. Yes, incredibly, the mushroom has been consumed and enjoyed throughout history. Mushrooms were thought to provide strength for warriors during battle in ancient Greece. The Chinese culture has touted mushrooms as an “elixir of life”, a definite health food. Now we know mushrooms do fall in the health-food category. These incredible fungi are packed with nutrients, are low in calories, and to top it off, contain no cholesterol. This wonder food is low in carbohydrates, fat, and sodium as well. If this isn't enough of a selling point, mushrooms provide nutrients such as selenium, potassium, riboflavin, niacin, proteins, and fiber, and are the only non-meat that provides vitamin D.

The long history of mushrooms as a food source has shown they are important for their healing capacity. According to the National Library of Medicine, mushrooms provide nutraceutical properties to aid in the prevention and/or treatment of Parkinsons, Alzheimers, and hypertension, and to aid folks with a high risk of stroke. Mushrooms can act as an antibacterial, enhance your immune system, and may aid in lowering your cholesterol. After hearing all of that, I am ready to add more mushrooms to my diet.

We can purchase mushrooms at most grocery stores and many farmers markets, but can we grow our own? Yes we can, and it is relatively simple. I have several logs at home that are inoculated with Shitake mushroom spores. The logs are several years old and usually fruit, on average, 3 - 4 times per year. Oak and Sweet gum are the preferred wood and the logs should be about 4 feet long. The logs need to be 6 - 8 inches in diameter. There is more than one way to introduce the inoculate into the log, but basically drill holes with a $\frac{3}{4}$ -inch diameter and 1-inch deep along the length of the log about every 4 inches. The next row of holes should be 4 inches below and position the drilled holes in a diamond pattern. The inoculate is packed into the drilled holes and sealed with melted wax to prevent the inoculum from drying out. Seal the ends of the logs with melted wax also. Place the logs in a shaded area where it will be convenient to wet the logs often to keep the moisture level in the log above 60 percent. Now we wait for the mycelium to grow and start digesting the log, and the fruit or mushrooms will appear soon. The logs will continue to produce until they are entirely consumed by the mycelium.

Shitake is a common mushroom grown this way, but there are many others such as oyster, lions mane, and turkey tail to name a few. North Carolina has numerous mushroom growers and sources to purchase inoculum or spawn, inoculated logs, or you can even purchase mushrooms online. For more information and more resources please visit:

<https://newcropsorganics.ces.ncsu.edu/specialty-crops/mushrooms/>



*photo by Mack Johnson,
New 2023 inoculated logs
on top of 2-year-old fruiting
logs. The new logs are oak
and sweet gum, you can
see the spawn wells coated
with wax.*

Seasonal Tips and Tasks: Fall 2023

Mack

Horticulture Agent N.C. Cooperative Extension - Robeson County

Peonies: Plant now for summer color. The peony is a very beautiful, long-lived plant. Select carefully and plant in a permanent location in late September or October. Much like planting a tree, peonies become a permanent fixture in your garden. If you already have peonies in your garden, you know they are easy to grow and require minimal care.

Do not fertilize until plants have been in the ground for about five years. Check your soil pH with a soil test and add lime as needed. Mulch around the plants to help keep the roots cool in our hot summers. Compost and bone meal are good supplements for your peony plants.

As peonies grow in the spring, be sure to provide some type of support for the foliage and leaves. This support will keep them from falling to the ground.

When the flowers begin to fade, remove the spent flowers and place in the compost bin. This practice will minimize disease problems.

There are three basic types of peonies:

1. Herbaceous *Paeonia lactiflora* types grow to 1½-to-2-feet tall and bloom in late April.
2. *Paeonia Suffruticosa* types are tree peonies grafted onto herbaceous root stock, with many large flowers.
3. Intersectional 'Itoh' peony flowers are held upright and don't require support.

Cut back to ground level in the fall after the first frost so the plants come back larger each spring. (Source: NCSU Extension Gardener Newsletter Fall 2018 edition by Shannon Newton)

<https://www.easytogrowbulbs.com/pages/peonies-planting-guide>

Caladiums: I grow several caladiums in containers on my back deck. I have successfully overwintered them in the original containers. In the fall, when temperatures start to cool, caladiums will naturally start to go dormant. The foliage will start to wilt. Stop watering and shelter the container from rainfall. Remove the foliage by snipping each leaf at the soil line once the foliage has dried. Overwinter the dried container in a protected location that will stay above freezing. Caladium bulbs can be forced earlier in spring by warm temperatures and moisture, so you may choose to revive your caladiums in the house for several weeks before moving outside when average temperatures are above 60 degrees.

If you grow your caladiums in the ground, dig the tuberous corms once the foliage starts to wilt and before a frost. Remove the soil from the corms and allow to "cure" or dry for a week. Remove dried foliage to store the corms in dry peat moss or a brown paper bag. Corms can be started indoors in a brightly lit room 4-6 weeks before soil temperatures reach 60 degrees plus.

https://cdn11.bigcommerce.com/s-asrnch/product_images/uploaded_images/caladiums-edited-header-600-x-400.jpg/TheSouthernBulbCo



Pest Alert: Unwanted Fall Guests

Allen West

Horticulture Agent N.C. Cooperative Extension Cumberland County



Believe it not, autumn is almost here. For garden lovers, that means it's time to start getting those fall gardens going. Many of the vegetables that we like to grow in the fall are found in the Brassica genus. This includes broccoli, cabbage, collards, cauliflower, brussels sprouts, turnips, kale, and many other tasty vegetables.

Like most garden vegetables, there is a wide variety of pests that affect Brassicas. However, there are three little pests you need to be on the lookout for that can cause big damage to your fall garden. These pests are small caterpillars of the diamond back moth, cabbage looper, and imported cabbageworm.

The life cycle begins when the adult moth or butterfly lays eggs on the leaves. When the eggs hatch, small larva emerge and begin feeding on the leaves. After munching on the veggies for a couple of weeks, they enclose themselves in cocoons where they emerge as adult moths or butterflies. For gardeners, the most damaging stage for these pests is the larva stage.

The most effective way to stay ahead of your pests is through consistent scouting. Every couple of days, look closely to see if you find small round eggs either on top or the underside of the leaves. Eggs hatch within a few days and the caterpillars begin eating immediately. These caterpillars only eat 2-4 weeks, which means they can do lots of damage in a short amount of time. The sooner that you spot them, the sooner you can control them.

For gardeners that only have a few plants in their raised beds, controlling these pests can be as simple as pulling the caterpillars off by hand and putting them in a cup with soapy water. If that is not your cup of tea, then there are some organic insecticide options such as products that use Bt (*Bacillus thuringiensis*), Spinosad, or pyrethrin. These come in a wide variety of brand names, so look for these names in the "Active Ingredient" on the labels. These products are usually easy to find at your local garden center. There are also synthetic insecticide options available such as Sevin and bifenthrin. When using any insecticide, it is very important to read the label to ensure that it is safe to use on the crop you are growing and will control the pest you are targeting. Always read and follow pesticide labels directions carefully.

Though other pests may arise in your fall garden, for leafy vegetables controlling caterpillar damage is a must. Through careful scouting and timely control methods you should be able to control these unwanted guests in your home garden.

Sustainable Feature: Cover your Garden this Winter

Allen West

North Carolina Cooperative Extension

My grandpa used to say that just because you are not doing something, doesn't mean you are doing nothing. For example, sitting down to take a short rest can allow you the stamina to work harder and longer the rest of the day. Or it could be that stopping for a moment to enjoy the beauty of the natural world around you boosts your mood for the rest of the day. Momentary lack of activity doesn't always equate to lack of output.

When it comes to our gardens, the same mindset can be true. Gardeners can sometimes feel like we must fill every bare spot in our gardens with vegetables, even in the winter for fear we are somehow wasting our gardening time or space. But what if I told you that not growing vegetables in your garden this fall or winter, could help your future harvest? Instead, why not consider growing a cover crop?

Cover crops are something you hear a lot about farmers using in field crop production. However, many home gardeners may not realize that they can reap the same benefits from this practice in their growing spaces as well. Some of the benefits that cover crops provide are adding organic matter to your soil, decreasing soil erosion, adding valuable nutrients to the soil and helping to suppress weeds.

There are several cover crops known as legumes which can add nitrogen to the soil, such as crimson clover and hairy vetch. These plants can take nitrogen from the air and make it available for your next crop, reducing the amount of fertilizer you will need to apply. These crops are best planted in the fall before mid-October. Next spring you can either till the cover crop into the soil after mowing or simply till the whole plant into the soil.

Other cover crops such as annual rye grass, wheat, and oats can be beneficial as well. These do not add nitrogen to the soil, but they do help with weed suppression and add organic matter to the soil when tilled in the next spring. The added organic matter can help improve the sandy soils we see in our area. These crops can be planted a little later, up to mid-November. Oftentimes annual rye grass can be grown in combination with a legume such as crimson clover.



Legume cover crops such as Crimson Clover can add nitrogen and organic matter to your garden soil.

If you have areas of your garden or raised beds that will lay bare this winter, instead of letting the soil lay fallow, consider planting a cover crop. You can contact your local Extension agent for more information on types of cover crops, as well as best practices for growing in your area. Even when you are doing nothing in your garden this winter, you will be doing something beneficial for your garden.

For more information on the Discrimination Financial Assistance Program click:
22007apply.gov



Discrimination Financial Assistance Program

Have you experienced discrimination in USDA farm lending?

Section 22007 of the Inflation Reduction Act authorized \$2.2 billion in financial assistance to farmers and ranchers who experienced discrimination in USDA Farm Loan Programs prior to January 1, 2021.

Application Deadline

- October 31, 2023
- The application is free
- Free technical assistance is available



*USDA is an equal opportunity provider,
employer, and lender.*

How to Apply

Online

Visit 22007apply.gov to access the application, e-file, and to find resources near you.

In-person

USDA DFAP local offices are a network of brick-and-mortar locations where you can connect with in-person agents for help with applications, and where you can drop off a complete application. Office hours and locations can be found at 22007apply.gov.

Get Assistance

Call Center

Telephone assistance is available. Live agents are available and eager to help with questions about applications at 1-800-721-0970, from 8 a.m. ET to 8 p.m. PT seven days a week, except for federal holidays.

Partner Organizations

USDA has ensured that groups with extensive experience conducting outreach to farm organizations are able to support individuals who may be eligible for the program. These groups include [AgrAbility](#), the [Farmer Veteran Coalition](#), [Farmers' Legal Action Group](#), [Federation of Southern Cooperatives](#), [Intertribal Agriculture Council](#), [Land Loss Prevention Program](#), [National Young Farmers Coalition](#), and [Rural Coalition](#). Applicants may also reach out to these groups for further information and assistance.