



Shades of Green
Agriculture and Natural Resources
E-Newsletter
April 2024



UNIVERSITY OF GEORGIA

EXTENSION

Athens-Clarke County

A Note from Athens-Clarke County

Agriculture & Natural Resources

Hello readers!

Spring is upon us here in Athens-Clarke County! Bulbs are blooming and the garden is waking up to warmer weather. There are many opportunities in April for you to glean some gardening know-how! On our calendar page we have events from Piedmont Gardeners, Marigold Market, Lyndon House, State Botanical Garden of Georgia, and others.

We hope you enjoy this month's issue of "Shades of Green".

Take care,

Athens-Clarke County Agriculture and Natural Resources

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SPRING FLOWERING BULB SALE 2024

Athens Area Master Gardener Association

For descriptions and photos of the bulbs and the order form, please visit:

<http://tinyurl.com/aamga2024bulbsale>

Order bulbs through May 1

*Sale proceeds benefit local community gardens
and UGA Horticultural Scholarships.*



2024 Georgia Master Naturalist Program

Exploring Nature with Experts

Remember what it felt like to go on field trips - the excitement of getting out of your normal routine and entering some new world or experience? The Georgia Master Naturalist program, developed and administered through the UGA Warnell School of Forestry & Natural Resources and UGA Cooperative Extension, was designed to give adults a way to engage with environmental education in a fun and interactive way. For those interested in learning more about the natural world around them, becoming a Master Naturalist offers a combination of hands-on activities, field trips and classroom instruction. The program explores habitats and ecosystems in Georgia as well as the issues affecting these habitats. The sessions are customized to local environments, such as swamps, ponds, rivers, wetlands, mountains, forests, farms and urban landscapes.

The Athens-Area Master Naturalist program explores themes that are relevant to the local piedmont environments. The course identifies ways to understand and engage with local conservation efforts, including:

Bats in GA, their importance, why they are threatened and what we can do to support them

Insect diversity in our landscapes, why diversity matters, local efforts and resources

Water quality assessment, sampling streams and taking a close look at the life they contain and support

The challenge of invasive plants in our ecosystems, how to identify them and best management strategies

Through expert lecturers, guided walks and trips to special sites and collections, participants build knowledge of their natural surroundings - from delving into the soil and water that give our ecosystems their foundations; to getting to know the trees that make up our forests and neighborhoods. Of course, a naturalism program would not be complete without the critters. From fish, to deer, and everything in-between, the Master Naturalist program gives participants the opportunity to get up close and personal with the living beings with whom we share our yards and worlds.

The 2024 program begins Friday, April 6th. Registration closes April 3rd. For more information, contact Laura Ney, lney@uga.edu.



Gardening in Containers

Revised by Bodie Pennisi

Extension Horticulturist



GARDENING IN CONTAINERS is a fascinating way of growing plants. It has expanded the horizons of gardening for homeowners and often has provided the only way to garden for apartment and condominium dwellers.

Planting in containers has also provided a contemporary aspect to gardening. The use of unusual plants in unusual pots and containers provides interest and color to surroundings that were once considered drab and stereotyped.

This form of gardening has been especially rewarding for those who have only a patio, deck or balcony on which to grow plants. Container plants provide the right touch needed for contrast and interest in these spaces. They are the accessories that make the scene comfortable and complete.

Flexibility and mobility are other important aspects of container gardening. You can display spring bulbs, summer annuals or fall blooming biennials almost immediately as they come into season. You can simply move seasonal plants in and out of the scene to add beauty to a treasured area.

Containers vs. Ground Beds

Growing plants in containers differs from growing plants in the ground. Field soils drain by capillary action, which pulls excess moisture downward. Soils in containers

have poorer drainage characteristics due to the shallow depth and reduced capillary pull. This is compensated for by providing a more porous planting mixture.

Poorly drained potting mixture can lead to root problems. Under conditions of excess moisture and poor aeration, roots become stressed and are easily invaded by root rotting fungi. Under these circumstances, plants fail to grow properly or even die.

Soil Mixtures

Commercial potting mixtures are ideal for container plants. These are referred to as “soilless mixtures” because they do not contain soil but rather various combinations of vermiculite and peat moss as well as either perlite or ground pine bark. The latter two components are used to improve drainage and aeration. The better commercial mixes are also fortified with fertilizer and lime as well as a wetting agent. Commercial mixtures are recommended for gardeners who require only a few cubic feet for container plant needs.

Containers

Interesting containers often make plants more picturesque, and the varieties available are almost endless. Color, size and texture are important, but the most important consideration

Gardening in Containers

(Continued)



when choosing a container is whether it has adequate drainage holes. If you choose an attractive pot without provision for drainage, use a system of “double potting.” This requires that you pot the plant in a container that has drainage holes, and then place it on gravel inside the pot without drainage holes.

Container size is also important. Outdoor container plants, especially rapidly growing ones such as summer flowering annuals, need adequate space for root development. Small pots restrict root growth, which causes limited top growth. The end result is fewer flowers. While small 6-inch flower pots are often used, gardeners should think in terms of containers holding several gallons of potting mixture. These produce the most attractive plants and by far the most flowers. They also do not require such frequent watering.

Nursery containers offer potential for container gardening. They are easy to find, economical and come in a variety of sizes ranging from 2 to 15 gallons. Containers ranging in size from 3 to 7 gallons are commonly used.

Heavy fiber pots are quite acceptable. They are attractive, reasonably priced and will last an entire season if not placed directly on the soil. Termite damage is likely if fiber pots are in direct contact with the soil.

Planting Container Plants

Several planting techniques can be used advantageously to enhance the appearance of container plants. You can achieve a more finished appearance by using larger plants or by combining several large plants in a single container. For example, a 6- to 7-inch potted geranium already in bloom could be started in a 3-gallon container. Several 6- to 7-inch potted caladiums might be used initially in a half barrel. Or a 2-gallon potted hibiscus already in bloom could be transplanted in early spring or early summer to a 5- to 7-gallon container. This gives an immediate color effect.

Another approach might be to use 4-inch potted annual flowers initially. Several 4-inch plants already in bloom can be repotted into a larger container. Three or four plants are sufficient for a 5- to 7-gallon container. Some color is obtained immediately; however, after several weeks of growth, the colorful effect is more dynamic.



Figure 6. Nursery pots are ideally suited to container gardening.

Gardening in Containers

(Continued)



Figure 7. Substantial fiber pots are ideal for container plants.

Small and more economical flowering plants also can be used at first. You will need about a half dozen plants for a 5- to 7-gallon container. Plant these close to the edge of the pot with one plant in the middle. This procedure allows ample room for growth and air circulation. From four to six weeks of growth will be required to obtain a good effect.

When filling containers, do not pack the soil. Simply bump the container in the ground lightly to settle the soil. Fill the container to within 2 inches of the top of the container. This will leave sufficient room for water to thoroughly soak the soil. Before knocking out and planting individual plants, thoroughly wet the root mass. Plant individual plants so roots are set shallowly rather than deeply and gently firm soil around the roots. Finally, water the plants in thoroughly. This may require a couple of waterings in succession to wet the mixture entirely.

Fertilizing Container Plants

You do not need to fertilize container plants the first two to three weeks after planting

if the potting mixture was amended with fertilizer. Nutritional levels usually drop after this period because plants use them and because nutrients are leached from the soil because of frequent watering.

Fertilization of annuals and perennials of a succulent or soft nature should start about two to three weeks after potting. The frequency of fertilization depends on the method you use.

For example, if you use a so-called liquid soluble fertilizer, make an application every two or three weeks during the growing season. If more rapid growth is desired, fertilize every one to two weeks.

Mix soluble fertilizer according to the label directions and apply as a normal watering. Apply enough of the solution so some drains out of the bottom of the container. If you use a dry, garden type fertilizer, apply it every three to four weeks. One-half teaspoonful of fertilizer per gallon of soil mixture spread evenly on the soil surface is adequate. Watering after applying the fertilizer dissolves the nutrients and carries them into the root zone. Watering the fertilizer in reduces chances of fertilizer damage to stems and roots.

Slow release fertilizers are popular. These are sold in the form of small, round pills. They release fertilizer gradually when wet. The type that lasts approximately three months is generally used. A teaspoonful per gallon of soil is usually recommended. Check the recommendations on the container because products differ and rates vary.

Gardening in Containers (Continued)



Figure 9. Dry, garden-type fertilizer can be used to fertilize container plants.



Figure 10. Slow-release types of fertilizer are ideal for container plants.

Fertilize containerized trees and shrubs of a woody nature as often as succulent plants. Woody plants should do nicely if fertilized in early spring (March) and again in May and July. Granular type, garden fertilizers at the rate of $\frac{1}{2}$ teaspoonful per gallon of soil mix-per application will be adequate. Slow release fertilizers that last six to nine months have proven satisfactory for shrubs and trees in containers. Apply them in early spring.



Raised Beds vs. In-Ground Gardens

By David Berle and Robert Westerfield

UGA Horticulturists

When starting a community or school garden, the first thought often turns to the building of raised beds. In the context of community and school gardens, the term “raised bed” refers to an elevated box that is relatively small in size and filled with enough soil to support plants without using the soil underneath the box.

Raised Beds

A raised bed frame can be made of wood, masonry or other building material. Raised beds can vary in size depending on the site, the materials used in their construction and gardeners’ preferences. Raised beds are typically 6 to 8 inches high, 3 to 6 feet wide and 6 to 8 feet long. Some raised bed frames are further elevated above the ground with blocks or bricks to make them more accessible to people who have difficulty bending or stooping. For community and school gardens, there are many advantages to gardening in raised beds, including:

- **Manageability:** Raised beds offer a manageable way to garden a smaller space intensively.

- **Prevention of soil compaction and plant damage:** One of the greatest advantages of raised beds comes from the protection the structure provides from foot traffic, especially from children working in a garden area. Since people work on the paths and don’t walk in well-designed raised beds, the soil does not get compacted and plants are less likely to be damaged.

- **Longer growing season:** Raised beds warm up more quickly in the spring and drain better (assuming the soil is properly prepared), allowing for a longer growing season and better growing conditions. Particularly in the South, a properly prepared raised bed allows plant roots to breathe.

- **Less weeding and maintenance:** Once the soil in a raised bed has stabilized, compaction is almost non-existent so the need for seasonal tilling is minimal. Weed populations decrease over time in a raised bed that is well cared for and mulched.



Raised Beds vs. In-Ground Gardens

(Continued)

- **Better drainage:** A well-prepared raised bed allows the soil to drain better than in an in-ground garden. In some areas of Georgia, the soil drains so poorly that raised beds enable gardening of crops that would not otherwise grow.
- **Easier soil amendments:** A raised bed can enable crop growth in an area that otherwise would not support gardening. On steep slopes, raised beds can act as a form of terracing. Raised beds can be built on parking lots and other compacted, difficult-to-garden urban soils. For specific crops that thrive in particular soils, raised beds can be amended appropriately.
- **Material conservation:** Because the gardening space is concentrated, the management of water, fertilizer, mulch and soil amendments can be more carefully controlled, leading to less waste.
- **Access for gardeners with disabilities:** Raised beds, at the proper height, can improve access for wheelchairs, or for gardeners who have a hard time bending over.
- **Reduced conflict:** In gardens where plots are leased for the year, raised beds clearly define boundaries and reduce inadvertent trampling.

In-Ground Gardens

For many school and community gardens, growing directly in the ground offers significant advantages. Gardening in the ground allows the use of tractors to initially prepare areas and the start-up costs are far lower than for raised beds. Other advantages include:

- **Use of existing soil:** Most soils are perfectly fine for gardening, provided the soil is properly tilled, mulched and watered. Even without organic amendments, most Georgia soils can produce a bountiful harvest.
- **Financially economical:** By using existing soil and not importing soil, money can be saved and used for organic amendments that would be needed to improve even the imported soil. Since it is highly unlikely to find real topsoil in Georgia, it is often better to improve what you have than import something new and possibly unknown. Purchased topsoil is usually either man-made (consisting largely of bark and sand) or similar to the soil already available on-site. If amended properly, clay soils have benefits that are not found in man-made soils. If you are uncertain of the quality of your soil or how to amend

Raised Beds vs. In-ground Gardens

(Continued)

it, take samples to your local county Extension agent for testing. See <http://aesl.ces.uga.edu/soiltest123/Georgia.htm> for information on how to do this. If there is any chance the soil has been contaminated with potentially toxic compounds, ask to have the soil tested for heavy metals.

- **Less start-up work:** A flat, well-drained area can be prepared with a tractor or large roto-tiller.
- **Less permanent:** An in-ground garden can easily be replaced with another crop or moved to another location.
- **Lower water requirements:** In-ground beds won't dry out as quickly as raised beds and will therefore require less water to maintain.
- **Easier irrigation:** Irrigation systems for flat, in-ground gardens are simple to design and easy to install compared to raised beds that require careful design and installation.

While there are many advantages to raised beds, there are also some disadvantages. Raised beds require the construction of a wall or edge restraint. While this can be built with recycled materials, it still requires additional-work, at least initially. Elevated raised beds are even more expensive and require some degree of engineering to support the weight of the soil. Raised beds also need to be filled with soil, which can become expensive and requires a good understanding of soils and soil amending. Raised beds are more permanent than in-ground gardens, so planning for future use is essential. Some crops are not well suited to raised bed production. For example, sweet corn requires larger blocks of plants to ensure proper pollination. Watermelons tend to overtake a small raised bed, unless compact varieties are grown and perhaps trellised. Finally, most raised bed gardens rely exclusively on hand labor for all tasks, including planting, fertilizing and weeding.

Before starting a community or school garden, it is important to consider which type of garden is appropriate for your current and future needs and the amount of time and resources your situation will require. See the other publications in this series for more information about planning, creating and sustaining a community or school garden.



Local April Events

Piedmont Gardeners Tour of Oconee County

April 20th

9:00—4:00 p.m.

<https://www.piedmontgardeners.org/>

ACC Green Thumb Lecture Series Beginning Beekeeping Seminar

Wednesday, April 17th

6 pm

ACC Extension Office

275 Cleveland Rd, Bogart GA 30622

R&R Secret Flowers 2024 Spring Plant Sale

Preorders now open! Plant Sale is Store
Pickup Only at:

919 N. Chase Street, Athens, GA 30601

[Plants & Bulbs | R&R Secret Flowers](#)
(rrsecretflowers.com)

UGA Extension offices around the state are working hard at developing quality online presentations on various topics.

Visit the UGA Extension [event calendar](#) to see events happening local to our county as well as virtual opportunities.

Opening Day: 2024 Marigold Market Season

Saturday, April 6th, 2024 9 a.m.—1 p.m.

Pittard Park, 115 Parkview Rd, Winterville GA

Join us for a family-friendly Springtime celebration of food, farms, friends, and fun in beautiful Pittard Park, right off the Firefly Trail!

State Botanical Garden of Georgia Spring Plant Sale

April 12th 2:00—6:00 p.m.

April 13th 8:00 a.m.—2:00 p.m.

2450 S. Milledge Avenue

Georgia Trust Spring Ramble Athens/Watkinsville

April 19th—21st

<https://www.georgiatrust.org/tours-events/spring-ramble/itinerary/>

Family Fishing Sandy Creek Nature Center

April 4th, 2:00—3:30 p.m.

<https://accgovga.myrec.com>

Green Life Art Exhibition Lyndon House Art Center

April 2—April 25th

211 Hoyt Street

<https://www.accgov.com/lyndonhouse>

Diamond Hill Farm Stand

Every Thursday, 4-6 pm

Vegetables and fresh flowers are available on hand and pre-ordered. Every Thursday, 4–6 p.m. at Authentic Brewing Company.

www.diamondhillfarmathens.com

MONTHLY GREEN THUMB LECTURE SERIES

Athens-Clarke County Extension

APRIL 2024: BASICS OF BEEKEEPING



PLEASE JOIN US FOR AN INTRODUCTION TO BEEKEEPING WITH THE ATHENS-CLARKE COUNTY BEE TEAM. TOPICS COVERED WILL INCLUDE EQUIPMENT, STARTING A COLONY, BEHAVIOR/LIFE CYCLE, AND MAINTAINING YOUR HIVES.



WHEN:

APRIL 17TH, 2024 | 6 PM – 7:30 PM

WHERE:

ACC EXTENSION OFFICE
275 CLEVELAND RD
BOGART GA 30622



TO REGISTER:

REGISTRATION IS REQUIRED. PLEASE REGISTER BY APRIL 15TH AT:

WWW.ACCGOV.COM/GARDENING



For questions:

Contact Laura Ney, Extension Agent at
706-613-3640 or lney@uga.edu

*The University of Georgia is committed to principles of
equal opportunity and affirmative action.*



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Georgia Native Plant Society

ATHENS - EAST PIEDMONT CHAPTER

Native Plant Sale

May 4, 2024 - 10am - 2pm

at Sunrise Nursery

550 Athens Rd, Winterville, GA 30683

Choose from a wide selection of native perennials, grasses, ferns, shrubs, and trees grown locally by Chapter members or by regional native plant nurseries. Plants offered will largely be straight species and have all been grown without neonicotinoids. Proceeds will be used to support local conservation and restoration projects, provide educational programming, and to promote the use of native plants to increase biodiversity and support native pollinators and wildlife. Learn more on our website, and a plant list will be posted in advance of the sale.

GNPS members will receive a 10% discount.

 <https://gnps.org/athens-east-piedmont-chapter/>

Sponsored By:

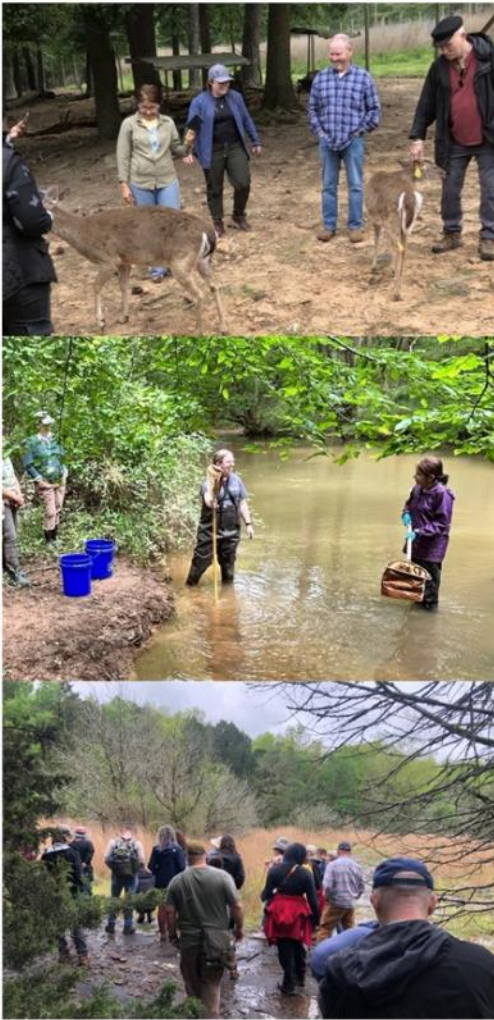


Become a Georgia Master Naturalist!

The Georgia Master Naturalist program is a series of weekly programs with specific environmental topics. This program is a hands-on environmental education course that explores habitats and ecosystems in Georgia and human impacts on those environments.

This program is a combination of lectures and outside hands-on learning through field studies and relevant resources.

After completing this fun and interactive program, Georgia Master Naturalists are encouraged to share their knowledge with their communities by volunteering in local schools or nature centers.



Course Topics May Include:

- ◇ Tree Health and Identification
- ◇ Ecology
- ◇ Environmental Awareness/Human Impact
- ◇ Native Plants
- ◇ Birding
- ◇ Wildlife Issues
- ◇ Entomology
- ◇ Herpetology
- ◇ Water Issues and Stream Monitoring
- ◇ Invasive Plants and Pests

2024 Athens-Area Master Naturalist Program

DATES:

Fridays from
April 5—May 31, 2024

TIME:

9:00 AM—4:00 PM

COST:

\$250, mail or bring cash or check to office, or pay over the phone at 706-613-3640

TO REGISTER:

Fill out registration form on website, email to vlc74120@uga.edu or include with payment.

[https://
extension.uga.edu/
county-offices/
clarke.html](https://extension.uga.edu/county-offices/clarke.html)



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Outreach
Warnell School of Forestry & Natural Resources
UNIVERSITY OF GEORGIA

Local Farmers Markets



The **Athens Farmers Market** is running year-round on Saturdays from 8am-12pm at Bishop Park, and Wednesdays from 5pm-8 pm at Creature Comforts. Make sure to visit [their website](#) for updates and details.

Find them on Facebook:

[@AthensFarmersMarket](#)



West Broad Farmers Market

Will hold markets beginning Saturday, **April 20—December 15th, 2024** from 11 am-2 pm in the West Broad Neighborhood, and on the 2nd and 4th Tuesday of the month at Authentic Brewing Company in Normaltown.

Visit [their website](#) for more information.

Find them on Facebook:

[@WestBroadMarketGarden](#)

MARIGOLD



MARKET

The **Marigold Market** is returning on Saturdays 9 am—1 pm at Pittard Park starting April 6th. The Monday Marigold Market (& Café) offers fresh produce and seasonal soup specials year-round, 9 am—3 pm weekly at the Historic Pittard Bank Building. Visit [their website](#) for more information.

Find out more on Facebook:

[@marigoldmarketwinterville](#)


Instagram: [@marigoldmarketwinterville](#)



Concerned about the state of your garden?

Are weeds taking over your landscape?

No need to fear, Clarke is here!

Follow @gardenwithclarke on Instagram  and learn how to battle pests, identify weeds, build your soil and so much more as you garden alongside Clarke, Athens-Clarke County's super gardener!



gardenwithclarke
UGA Extension Athens-Clarke County





Helpful resources online:

[Find My Local Extension Office](#)

[Georgia Turf](#)

[Free Online Webinars](#)

[Pest Management Handbook](#)

[Pesticide Applicator Info](#)

[Georgia Certified Plant Professional](#)

[Bugwood— Pest Images](#)

[UGA Center for Urban Agriculture](#)

[Extension Publications](#)

[OnlineLandscape Alerts](#)

Athens-Clarke County Extension Agriculture and Natural Resources

Mission Statement

The UGA Athens-Clarke County Extension's mission is to respond to the people's needs and interest in Agriculture, the Environment, Families, and 4-H/youth in Athens-Clarke County with unbiased, research-based education and information.

Visit us online:



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