



Extension Gardener

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NORTH CAROLINA COOPERATIVE EXTENSION

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Empowering
gardeners.
Providing
garden
solutions.

in this issue

PIEDMONT NEWS

Environmental
Protection

Asparagus

SEEDS Garden

Rain Barrels

STATE NEWS

Butterfly Gardens

'Ruby' *Lorapetalum*

Honeybees

Blueberries

Fire Ants

Butterfly Gardens Enliven the Landscape

Growing a garden is a satisfying project. When plants bloom and thrive, they bring constant pleasure to the gardener who has spent many hours on hands and knees tending them. Added pleasures in home gardens are the creatures that make their homes among the flowers. One of the most enchanting of these creatures is the butterfly. A welcome visitor to any garden, the butterfly's whimsical frolic among the plants growing there brings a smile to anyone who may be watching.

There are many different butterflies throughout the world, including the 160 species that occur in North Carolina. When they enter a garden, they are looking for two things: nectar and host plants. Nectar is a major food source for butterflies, and a host plant is a specific plant upon which a butterfly will lay her eggs. This host plant must also serve as food for hatching caterpillars. To encourage butterflies in your garden, these two requirements must be met.

What types of flowers appeal to butterflies? Brightly colored blooms will attract them, and fragrance is also a factor. Most butterflies must land on a flower to drink, so they like those with large petals or tight clusters of flowers. They also seem to prefer mass plantings of single colors rather than a hodgepodge of mixed colors. As

butterflies are present all season long, plants that flower for a long time are preferred.

To ensure the presence of butterflies, plant some host plants in or near the garden. Each species of butterfly is very specific about the types of plants its caterpillars will consume. Become familiar with the types of butterflies that frequent your area and the host plants they require. Decide where you will put your butterfly habitat and how much space to devote to it before selecting plants. Choose a sunny location. Most butterflies are active only in the sun, and many plants that host caterpillars or produce nectar for adult butterflies grow well in sunny habitats. Include some tall plants and shrubs that will help to shelter butterflies from wind and rain.

Butterflies like to have a place to get warm in the mornings, so flat, dark-colored rocks for them to sun on will encourage them to visit. Also, an area on the ground that can be kept moist is helpful so that visiting butterflies can drink water and absorb minerals from wet soil. Enjoy your butterfly garden and the visitors that it will attract. For a list of plants that attract butterflies and more information about butterfly gardens, see *Butterflies in Your Backyard*: www.ces.ncsu.edu/forestry/pdf/ag/ag636_02.pdf

— Donna Teasley



Sleepy orange skipper
JC Raulston Arboretum



Eastern tiger swallowtail
JC Raulston Arboretum



Spicebush swallowtail
JC Raulston Arboretum

Upcoming Events

April 3 – 5, Raleigh

Southern Ideal Home Show hosts the Extension's Successful Gardener Learning Center staffed by Master Gardener Volunteers; bring your plant questions and pick up soil testing kits. www.southernshows.com

April 7, Albemarle

Vegetable Gardening for Beginners focuses on techniques and tips to make your gardening experience a successful one this year. 704.983.3987

April 18, Concord

Spring Herb & Plant Festival includes speakers, demonstrations, art, plants, crafts, gardening experts and more. 704.920.3310

April 23, King

Organic Gardening explains details of this horticultural buzzword. 336.593.8179

April 25 – 26

Piedmont Farm Tour highlights Orange County Cooperative Extension's PLANT program (People Learning Agriculture Now for Tomorrow) and 39 other farms. www.carolinafarmstewards.org

April 28, Burlington

Victory Garden Planting teaches how to grow your own food. 336.570.6740

May 4, Pittsboro

Taking the Fire out of Fire Ants identifies products and procedures for managing fire ants in landscapes and pastures. Course fee is \$5. 919.542.8202

May 12, Burlington

Victory Garden Drip Irrigation demonstrates how to design and install an inexpensive drip irrigation system for your vegetable garden. 336.570.6740

May 19, Albemarle

Basic Food Preservation Workshop teaches the basics of canning and freezing vegetables from the garden. Free testing of dial-gauge pressure canning equipment is provided. 704.983.3987

Sustainable Gardening — Environmental protection

Gardeners, almost by definition, are people who care about the environment. Here are a few simple ideas to make sure your gardening practices aren't causing unnecessary harm to the natural world.

First, protect the quality of lakes, streams, and groundwater by using fertilizers properly. Slow release fertilizers are almost always preferable since there is less risk of nutrients running off or leaching. You can further reduce leaching by timing the application so that you are feeding a given plant when it most needs the nutrients. Also note that many trees and shrubs will thrive with minimal or no supplemental fertilizer.

Pesticides can also contaminate our water resources. They should be used only when needed and applied properly. Be especially careful about using insecticides when bees are foraging. Insecticide applications should also be targeted carefully so that only the pest insect is affected. Many of the insects we see in our gardens are beneficial and should be conserved.

Speaking of beneficial insects, encourage their presence by planting a wide variety of

flowering plants in your garden. This provides habitat and food sources so they will flourish.

Make every attempt to identify the weed, insect or disease problem before purchasing a pesticide. That way, you can select the right chemical, avoiding the cost and environmental effects of using the wrong product. Your county Extension Center can help with pest identification and control recommendations.

Finally, educate yourself about invasive plants so that you don't inadvertently encourage their spread. Many plants available in the nursery trade have been found to spread prolifically into natural areas, disrupting native ecosystems. Although there is some debate about which plants fall into that category, the Web site of the North Carolina Botanical Garden is a good starting point to learn more (www.ncbg.unc.edu/conservation).

Caring for the environment is a responsibility we all share. Gardeners are in the unique position of setting an example for others to follow.

—Paul McKenzie

Food Production — Asparagus

Plant asparagus from dormant crowns (the root systems of 1-year-old plants grown from seed) in March or April, when the soil has dried sufficiently for planting and soil temperatures are at least 50°F. Prepare your soil in a sunny, well-drained spot. Complete a soil test, and add lime to bring the pH up to 6.8 – 7.0. The soil test report will recommend the amounts of lime, phosphorus, potassium, and nitrogen needed to establish the plants.

Add about 1 pound of 0-46-0 fertilizer per 50 feet of row in the bottom of a 6-inch furrow, and lay the crowns on top. The phosphorus will not burn the roots and will ensure good root growth. The roots have to grow through the phosphorus to benefit as it does not move readily through the soil.

Leave 1 foot between crowns in a row and about 4 – 5 feet between rows. Locate asparagus at the west end of the garden if your rows run north-south to prevent shading of other vegetables by the massive fern growth. Cover

the furrow with soil up to the original soil level. It's not necessary to cover the furrow in stages as sometimes recommended. Don't pack down the soil over the furrow. If you do, the emergence of spears will be severely reduced.

New hybrids out-yield the older open-pollinated varieties by about 3 to 1. Asparagus is dioecious; plants have either male or female reproductive structures. Female plants produce berries. This expends energy, so the yield from a female plant is one-half that of a male. Today's "male hybrid" varieties, such as 'Jersey Giant', 'Jersey Supreme' and 'Jersey King,' produce the highest yields. A 50-foot row yields enough for a family of four, about ½ to 1 pound of spears per crown a year. Harvest by snapping for 2 weeks in the second year, then increase to 4, 6 and 8 weeks in the third, fourth, and fifth years.

For a copy of "Growing Asparagus in the Home Garden," e-mail Carl Cantaluppi: carl_cantaluppi@ncsu.edu

—Carl Cantaluppi

Garden Spot — SEEDS community garden

SEEDS (South Eastern Efforts Developing Sustainable Spaces, Inc.) is a nonprofit community garden; its goal is to teach people to care for the earth, themselves and each other through a variety of garden-based programs. Located on 2 acres in Durham's inner city neighborhoods, this charming garden offers a variety of user experiences for many different age groups.

The SEEDlings after-school program for children in 1st - 5th grade focuses on gardening, nature, exercise, and nutrition, while providing help with homework. DIG (Durham Inner-city Gardeners) is an entrepreneurial program for teens where they learn sound business practices through working in the organic garden and selling at the local farmer's market. SEEDS also rents community garden plots and has several special community events open to the general public throughout the year.

The SEEDS community garden is located



The SEEDS garden teaches people to care for the earth and each other. It offers a variety of garden plants and experiences.

at 706 Gilbert Street in Durham. To find out more, visit www.seedsnc.org/index.htm.

—Michelle Wallace

SEEDS Mission Statement

SEEDS encourages respect for life, for earth and for each other. We help individuals, neighborhoods and communities grow together through gardening, gathering and education.

Environmental Stewardship — Rain barrels

The arrival of spring means people will be preparing new garden beds, and planting new shrubs and trees. In addition, they will be tending to their established landscape, too. One of the ways you can practice good environmental stewardship, take care of your plants and save some money is to use rain barrels to capture the rain coming off your home and other buildings on your property.

Although the state's drought situation is improving, some counties are still experiencing moderate to severe drought. In addition, forecasters are predicting a dryer than normal spring. Using rain barrels helps conserve water and reduce stormwater run-off. A single 55-gallon rain barrel holds enough water to maintain a 3 × 5 foot garden for almost a week.

Most people don't realize the amount of roof run-off available during rain events. A 1,000 square-foot roof will shed approximately 600 gallons of water during a 1-inch rain event.

Rain barrels can be purchased or make great do-it-yourself projects. A purchased rain barrel will cost \$85 - \$300, depending on the construction materials and features. If you're even slightly handy with a couple of basic tools, you can build your own barrel for \$50 - \$60 dollars or less. Older kids can also help with construction, and the whole family can paint the barrels.

Speaking of families, be safety conscious. A 55-gallon rain barrel weighs approximately 450 pounds when it's full. Make sure you place it on a stable stand. Also, never leave a rain barrel uncovered. Curious children and small animals can drown in just a few inches of water.

Using a rain barrel can provide you with a source of free water for your plants while reducing stormwater run-off and conserving everyone's water supply.

—Jim Burke

Tips & Tasks

Lawns

- Apply broadleaf weed killer to lawns in March on warm days according to label instructions.
- Apply pre-emergence crabgrass products in March; do not seed or overseed when using them.
- Lightly fertilize bermudagrass or zoysiagrass in April.
- Mow fescue at 4 inches, bermuda at 2, and zoysia at 1 to 2.
- Plant warm-season grasses in May (bermuda, zoysia).

Ornamentals

- Divide perennials in March.
- Use groundcovers—pachysandra, periwinkle, ajuga, lirioppe and sweet woodruff—in areas where grass won't grow.
- Prune spring-flowering plants immediately after blooming.
- Plant annuals after the last frost. Pinch back first flowers.
- Maintain a 2- to 3-inch layer of mulch around ornamental beds.
- Scout for bagworms on Leyland cypress and junipers in May.
- Move houseplants outside after the last frost date if desired.

Edibles

- Incorporate soil amendments, lime and fertilizer in March according to your soil test.
- Plant cool-weather vegetables in March: radishes, lettuce, broccoli, cabbage.
- Plant warm-season vegetables after the last frost date in April.
- Rotate vegetable locations to prevent soil-borne pathogens.
- Lightly fertilize vegetables about 6 weeks after planting.
- Scout for cutworms around vegetables.
- Stop blossom-end rot with consistent watering. Calcium sprays may also help. A soil test will reveal any nutrient deficiencies.

—Julie Flowers



JC Raulston Arboretum

Showstopper—'Ruby' Loropetalum

Chinese fringe flower *Loropetalum chinense* 'Ruby' is an evergreen (or should we say "ever-red") shrub that adds pizzazz to any landscape. Its ruby-red new growth in spring darkens to a deep-burgundy by autumn. Each April, bright pink clusters of fringe-shaped flowers appear to complement the colorful foliage, making this plant a true Showstopper.

Loropetalum or Chinese fringe flower will grow in sun or part shade. Most will easily grow 8 feet tall and wide. 'Ruby' is considered to be one of the more compact cultivars, reaching a mature height of only 5 feet. If another variety is overgrown, prune it into a small, spreading tree.

Use this versatile shrub in an informal hedge, to screen an undesirable view, or with other plants in a shrub border. Once established, 'Ruby' and the other loropetalums are very drought tolerant. —John Vining and Mark Blevins

Sustainability

Honeybees

Be a better hive neighbor, and conserve the honeybees that pollinate our farms and gardens. Honeybees fly from early morning to early evening, collecting nectar, pollen, and water for the hive. If you must apply pesticides, do so in the evening after the bees have gone to bed. Avoid spraying flowers the bees may visit, and avoid powdered pesticides. The bees may collect the powder the next day (as though it were pollen) and return it to the hive with devastating results.

If you see a spring swarm (a large ball of honeybees hanging from a limb, a porch rail, or the eaves of your home), don't panic. Undisturbed honeybees in a new swarm are usually quite calm. Call your local beekeepers club or your Cooperative Extension center immediately to find a beekeeper who will move the bees to a new hive.

—Anne Edwards

Pest Alert — Fire Ants Must Be Monitored

North Carolina's imported fire ant infestation continues to expand, partly because of recent mild winters. Increased residential and industrial development and infestations of fire ants in sod and nursery stock are also factors.

Although red imported fire ants are a nuisance, ants in general are beneficial insects that help to degrade waste and eat other insects. Researchers recommend spot-treating each mound instead of trying to eradicate all fire ants by broadcasting baits over large areas. Native ants will defend their territory and help to prevent red imported fire ants from spreading.

Control is designed around killing the queen. While she lives, she will lay hundreds of eggs daily. It can take several weeks to kill all

the ants in a mound. Fire ant baits and liquid drenches are effective when properly applied. Apply drenches in high-use areas where people are likely to be stung. Ants that come in contact with the liquid pesticide die immediately. There are no guarantees, however, that the queen will come in contact with the pesticide. If she does not die, the mound will survive.

While you may be successful in destroying a fire ant mound, monitoring for future mounds is very important. Don't expect 100% control. New queens will always develop and start new mounds. For more information about fire ants, visit www.ces.ncsu.edu/depts/ent/notes/Urban/ifa.htm

—Karen Neill

Incredible Edible—Blueberries

Blueberries are a wonderful addition to any North Carolina yard! They can be incorporated into the landscape as hedges or planted in mixed borders. You can find out which varieties are recommended for your area from your local Extension center. Regardless of variety, all blueberries require acidic soils to grow well. Testing your soil to find out your pH before planting is critical to success. Blueberries prefer a soil pH of around 4.5. They also need good drainage, but don't like to dry out. Mix composted organic matter into your soil to help retain enough moisture to keep plants healthy.

Plant on a mound to improve soil drainage. Blueberries produce best in full sun. They will also do well in part shade, as long as they get at least 4 hours of sunlight each day.

—Charlotte Glenn



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Managing Editor **Will Strader**
 Content Editor **David Goforth**
 Regional Editors
 Coastal Plain **Anne Edwards**,
Charlotte Glenn
 Piedmont **Carl Matyac**, **Mark Blevins**
 Mountains **Donna Teasley**,
Dianne Turner
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 Designer **Karl Larson**

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Red imported fire ant