Fire and Rain

It can be difficult to find positive advantages to fire, especially if your home has been threatened. But, in nature, fire can be a positive force by renewing habitats, promoting flowering of plants and maintaining a balance of plant species. On page 8, you’ll find an article on wildflowers in Bradford County that talks about how wildflowers benefit from fire. This is an interesting and timely start to what will be a regular feature from Master Gardener Margie Stone.

About the only things really active during the summer months in Florida are the insects! On pages 2, 3 and 4 are tips for dealing with the insects in your lawn and garden, along with calendars for planting and wildlife. We also have a great article in the Whats Buggin You section on a beneficial bug we all know—ladybeetles. On pages 6 and 7 is the 6th installment of the Florida Yards and Neighborhoods nine principles: Managing Yard Pests Responsibly. So we’ve talked about the fire—what about the rain? The wonderful afternoon rains we have been getting (finally!) will help restore the charred woodlands and animals and plants will return in abundance. What may seem like habitat degradation and wildlife displacement is only temporary and the cycle continues.

By Master Gardener Laurie Compton

Featured Plant: Eggplant

Ever wonder how eggplant got it’s name? The eggplant we see in grocery stores and roadside stands look nothing like an egg. It is called "eggplant" in the United States, Canada, and Australia because the first eggplants in these countries were purely ornamental and featured egg-shaped white and yellow fruit. Eggplant is a member of the nightshade family (Solanaceae) and is related to tomatoes, potatoes and chili peppers. It is low in fat, cholesterol and sodium, and contains nutrients invaluable for good health. Eggplants are very perishable and get bitter with age. They should have firm, taut, smooth and shiny skins. Smaller, immature eggplants are best. Their seeds will be softer, and they are less likely to be bitter. Once the skin starts to wrinkle or you feel and see soft brown spots, the quality of the eggplant has diminished. Large, oversize eggplants may be tough, seedy and bitter. Plant eggplant from February through July in North Florida.

By Master Gardener Laurie Compton
In the Garden: What to Plant in July

Summer annuals to plant now include celosia, coleus, torenia and ornamental peppers. Butterfly lily, gladiolus, and society garlic are bulbs that can be planted during the middle of summer. Watermelon, peppers, okra, southern peas, and eggplant are some of the vegetables that can be planted now as long as watering is provided during dry spells. Continue planting palms while the rainy season is in full swing. Support large palms with braces for 6-8 months after planting. Nails should never be driven directly into a palm trunk.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

In the Garden: What to Do in July

Prepare trees for hurricane season by checking trees for damaged or weakened branches and prune if needed. Lawn insects can be a problem this time of year. Before treating, find out if an insect is the culprit and treat only the affected area. Use summer heat as a tool in preparing the vegetable garden for fall planting by solarizing the vegetable garden. It takes four to six weeks to kill weeds, disease and nematodes, so start now. An inexpensive rain shut off device can save money by overriding an irrigation system when it rains. If one is already installed, check that it is operating properly. Small white dots on the leaves of azaleas and other ornamental plants may indicate lacebugs at work. Spraying forcefully with water helps control these pests on ornamental plants. Many of the new cultivars of peaches and nectarines grow well in North Florida. Newly planted trees should be fertilized now. Apply 1/2 pound per tree of 8-8-8 fertilizer.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

Wildlife Calendar: July

- Shorebird migration starts in mid-July, peaking in August.
- Later this month, young alligators and crocodiles will begin to hatch.
- Mosquitoes and chiggers are abundant, so watch out while you're camping.
- Deer mating season in the everglades.
- Sea oats flower along the Atlantic
- Scrub morning glory and butterfly weed begin to bloom.
- July 22, 1982 First Florida bog frog discovered in a panhandle wetland.

Source: http://www.wec.ufl.edu/extension/wildlife_info/happenings/july.php

Did You Know? Almost all of Florida's 24 milkweeds are native and at least two of them are native only to Florida (endemic). This one is commonly called butterfly weed. Butterfly weed is common throughout Florida, preferring to grow in dry sandy places: pasture fence rows and sandhill areas. It flowers into the fall.

Source: Center for Aquatic & Invasive Plants, UF/IFAS
In the Garden: What to Plant in August

The hottest days of summer limit planting bedding plants now to heat tolerant melampodium, salvias, torenia, and coleus. Aztec lily, butterfly lily, walking iris, and spider Lily bulbs can be planted any time of the year, even late summer. Herbs that can be planted from plants (not seeds) include bay laurel, ginger, Mexican tarragon, and rosemary.

This month is the start of the fall vegetable planting season with many varieties of cool and warm season crops to start now. Try turnips, squash, onions and cauliflower., or stop by the Bradford County Extension office and pick up a copy of the Florida Vegetable Gardening Guide.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

In the Garden: What to Do in August

Lawn insects are very active during the warm months. Mole crickets are common turfgrass pests and do the most damage from late August to early October. Check frequently for damaged areas and keep insects in check with early treatment. Also, August marks the peak of the rainy season in Florida. This is great news for replenishing thirsty lakes and underground water reservoirs, but it could be bad news for your lawn if your automatic sprinkler system is still operating routinely. If older palm fronds are yellowing, apply magnesium sulfate (Epsom Salts) to correct the problem. If not done in July, solarize the vegetable garden in preparation for fall planting. Pinch back poinsettias and mums before the end of the month to allow time for buds to form for winter bloom. Rapid growth and leaching rains may result in nutrient deficiencies in some ornamental plants. Fertilize those plants that show signs of deficiencies.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

Wildlife Calendar: August

- First flocks of blue-winged and green-winged teal arrive to winter on Florida lakes and wetlands.
- Two-year old black bear cubs will wean from their mothers.
- Thousands of great southern white butterflies are migrating through coastal areas.
- Corals along the Keys spawn at the full moon.

Source: http://www.wec.ufl.edu/extension/wildlife_info/happenings/july.php

Did You Know? Broadcast spawning usually only occurs once or twice a year, in late summer. It is often referred to as mass spawning, as all of the same type of coral colonies on a reef will release their gametes within about a one-hour window. Spawning may occur over 3 or 4 nights.

Source: Maia McGuire, Sea Grant Extension Agent
The Cutting Edge

In the Garden: What to Plant in September

By September, summer annual beds need refreshing. Some annuals to try include ageratum, celosia, zinnias, and wax begonias. These will give you color in the garden into fall. Add color, texture, and pattern to the garden with the many varieties of Elephant’s Ears (Alocasia) available now. Plant herbs that tolerate the warm temperatures of early fall, such as Mexican tarragon, mints, rosemary, and basil. Plant cool season vegetable crops such as beets, cabbage, lettuce, and onions.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

In the Garden: What to Do in September

Continue to monitor the lawn for signs of insect damage. Fall armyworms, chinch bugs, mole crickets, and sod webworms are still active this month. Divide and replant perennials and bulbs that have grown too large or need rejuvenation. Add organic matter to new planting areas and monitor water needs during establishment. Bahia, Bermudagrass, Zoysia, and St. Augustine lawns should be fertilized this month with a complete fertilizer. Choose one with slow or timed-release nitrogen for longer lasting results. Before summer rains taper off, check that irrigation systems are providing good coverage and operating properly. Dig and reset Amaryllis plants now. Divide large bulbs, remove offsets (bulblets), and replant in an area that has been amended with organic matter. If not done in August, prepare the fall vegetable garden. Using transplants from your local garden center will get the garden off to a fast start, but seeds provide a wider variety from which to choose.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

Wildlife Calendar September

- Get feeders ready for returning birds.
- Bald eagles return to nest sites and begin courtship.
- Start looking for manatees concentrated in rivers, bays, and near power plants.
- Deer breeding begins in south Florida flatwoods.
- Blue crabs migrate from the shallow panhandle coast to deeper water for the winter.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/

Did You Know? Like its crustacean cousins, shrimp and spiny lobsters, the blue crab ranks high on the list of seafood delicacies in Florida. Although blue crab meat is available year-round in the pasteurized form, live crabs are seasonal and much more plentiful during the warm-water months of the year.

Source: http://edis.ifas.ufl.edu/sg078
Lady beetles are a colorful component of the insect life in many gardens. In Florida, we have approximately 100 species of lady beetle, including the multicolored Asian lady beetle and the seven-spotted lady beetle. Some of the Florida species are native while others are non-native, some of which were introduced. Although these species are commonly referred to as “ladybugs”, they are not in the “true bug” family and are members of the beetle family of insects.

Lady beetles are easy to recognize as they are slightly oval in shape with a length ranging from 1 to 10 mm. Their hind wings are covered by their hardened fore wings (known as elytra) that vary from orange to red in color, often including black spots in different patterns. The head is typically black and white.

The adult lady beetle typically lays its eggs in areas with a large amount of prey. The larvae (i.e., young lady beetles) often feed on pests such as aphids, mites, scale insects, and thrips. The adults will also feed on common garden pests. As a result, several species of lady beetle have been introduced in Florida as biological control agents to feed on these pests and reduce the need for pesticides. Some species may even be purchased commercially for release by homeowners in their gardens. However, in some areas, adult lady beetles can become a nuisance when they enter buildings to survive through the winter. In addition, a few species of Florida lady beetles feed on plants and can be pests on those crops (e.g., squash, bean).

Lady beetles can be a benefit in the garden as they attack many insect pests and also provide a small splash of color to plants. Enjoy your observations of these creatures as most of them are beneficial predators and do not harm your plants!

By Master Gardener Wendy Helmey-Hartman


The Cutting Edge

#6 Manage Yard Pests Responsibly

Pest management in the home landscape once relied heavily on the use of chemicals. Today, that is changing because of concerns for human health and environmental safety. Scientists now recommend using Integrated Pest Management (IPM), a strategy that emphasizes smart planning, proper maintenance and natural or low-toxicity controls in ensuring plants stay healthy and resist insect and disease infestation. The way that you plant and maintain your yard either discourages pests or throws out the welcome mat for them. Follow these tips to prevent pests:

**Think before you plant:** Plants in locations not suited to them may be stressed and thus more susceptible to pests. **Start early:** IPM begins at planting time, with the selection of plants that are pest-free and pest-resistant. **Keep your plants healthy:** Using appropriate amounts of water and fertilizer is the best defense against pests. **Conduct regular scouting:** Keep an eye on your yard’s plants to detect pest problems early, before significant damage occurs. **Go easy on water and fertilizer:** Too much of either can cause excessive growth, making plants vulnerable to some insects and diseases. Encourage healthy growth by applying fertilizer and water only when they’re needed and in moderate amounts. **Mow to the proper height and prune selectively:** Mowing grass too short and severely pruning trees and shrubs weakens them, potentially inviting problems. **Encourage beneficial insects:** Learn to recognize the insects in your garden that help manage pests and let them continue their good work!

Inspecting plants frequently helps detect pest problems early. You can give plants the once-over anytime you water by hand, mow, or do other outdoor chores. Set aside a time twice or more each week to walk through your yard and look at plants. Some small insects complete their life cycles in one week, so a weekly wander through the yard may not be frequent enough. Common plant pests in Florida include aphids, mealybugs, scales, whiteflies, thrips, plant-feeding mites, caterpillars, and chinch bugs. Often you will spot evidence of a pest’s activity before you see the insect itself. If you see chewed or deformed leaves, sooty mold, many ants scurrying up and down plant stems, or discolored “trails” on leaves, you are likely to find a pest lurking somewhere. Detecting small insects and mites can be difficult. One method that works well is to flick the leaves of small branches against a sheet of white paper. Use a ten-power (10X) magnifying glass to search for movement or evidence of pests. Chinch bugs can be collected from lawn thatch using a shop vacuum. Look on the branches and on both the upper- and undersides of leaves for pests that attach to the plant, such as scales and whitefly nymphs. Sooty mold on leaves is a telltale clue to an infestation by what are known as piercing sucking insects (aphids are one example). Some piercing-sucking insects secrete a sugary substance called honeydew, on which the black-colored sooty mold fungus grows.

Beneficial green lynx spider

Beneficial assassin bug
Sooty mold doesn’t injure a plant directly, but it can block sunlight from leaves, reducing photosynthesis. Ants also signal the potential presence of pests, since they feed on honeydew and often protect the insects that produce it.

If you see plant damage but few pests, beneficial insects may already be working on your behalf. These may include lady beetles (commonly called ladybugs) and their larvae, lacewings and their larvae, assassin bugs, spiders and parasitic wasps, flies. Learn to tolerate some insect damage and leaf disease on plants. No one can maintain an insect and disease-free landscape, and a little damage will not hurt your plants. Remember, in order to have the “good guys,” such as ladybugs, there must be some “bad guys,” or pests, for them to feed on. If a pest problem persists, take a sample of the damaged plant and pest to your county Extension office for identification and suggestions on how to use IPM techniques. IPM is the best strategy for dealing with pest management, and it relies on the use of chemicals only as a last resort. Check out these IPM techniques:

When pests are heavily concentrated on a plant, you can often reduce or eliminate the problem by simply removing the affected leaves or stems. This easy step can often defeat infestations of large, slow-moving pests. Dispose of any captured insects so they do not return to feed again. Try one of these methods: Drop pests into soapy water or isopropyl alcohol, or place them in the freezer overnight (in a baggy or plastic container), or crush them and put them in your household trash.

Plants with aesthetic damage don’t necessarily need to be treated. Consider the amount of damage you’re willing to accept. Remember that there will always be insects in any healthy landscape, and don’t worry about minor damage. Always try the safest alternatives first, such as handpicking insects or pruning affected parts of a plant. If pesticide use does become necessary, choose products that are the least harmful to people, pets, and wildlife. These products include insecticidal soap, horticultural oil, botanicals such as pyrethrum, neem, and rotenone, microbials (spinosad, abamectin, and *Bacillus thuringiensis* ‘Kurstaki’), and entomopathogenic nematodes (small worms that kill insects).

Avoid using broad-spectrum insecticides: They’re not selective, meaning they also kill beneficial insects. Instead, choose targeted products, which are designed to harm only specific pests. Use pesticides to treat only the affected areas of a plant or lawn. Never use blanket applications to treat problems.

Read and follow all label instructions. Be careful and remember that the label is the law!

Source: [http://fyn.ifas.ufl.edu/handbook/Manage_Yard_Pests_Responsibly_vSept09.pdf](http://fyn.ifas.ufl.edu/handbook/Manage_Yard_Pests_Responsibly_vSept09.pdf)
It has been hard to avoid the smell of smoke in the air with all the wildfires last month, but for many Florida plant species, it is a part of their normal life cycle. The burning, smoke, and heat are all part of nature’s way to clean up and clear out space, make nutrient rich soil and stimulate growth. Much of Bradford County is considered pine flatwoods with some sandhills and wetlands thrown in for good measure. The significance of this is that pine flatwoods need to burn in order to maintain a healthy ecosystem.

Pine flatwoods are characterized by low, flat land; poorly-drained sandy soils; an open over story of pines and frequent fires. They are a fire-dependent ecosystem that require regular burning to maintain an open plant community of pines, grasses and herbs. Frequent fires are also important in helping many plants to germinate and flower. Fire reduces organic matter accumulation and prevents succession by shrubs and trees. That cleans out the underbrush, making it a better habitat for wildflowers. When you walk along exploring the pine flatwoods, and you take the time to look around, there is much more than pine needles on the ground. These are two species you can see if you look:

Rudbeckia hirta, also known as Black-eyed Susan, or cone-flower, is an erect herbaceous annual or short-lived perennial with rough, alternate leaves and showy yellow, daisy-like flowers with dark brown centers. The flowers are useful for cutting and flowering is more profuse when the faded blossoms are regularly removed. Rudbeckia is easy to cultivate, prefers moist, well-drained sites in full sun to partial shade but will tolerate poor soils with regular irrigation. Readily reseeds and is an ideal native for naturalizing. Flowers attract butterflies and other pollinators. Rudbeckia can be found in sandhills, pine flatwoods and ruderal sites.

Tarflowers, (Barjeria racemosa), are one of the few flowers that actually enjoy the sizzling summer heat. Tarflower is a woody shrub with fragrant, showy flowers found in the scrub and flatwoods of Florida, Alabama, and Georgia. The sticky flowers trap flies and other insects, giving Tarflower or Fly Catcher its common name. The sweet nectar produced by the flower is also a favorite of the Swallowtail Butterflies.

By Master Gardeners Margie Stone and Laurie Compton

Sources: [http://www.flmnh.ufl.edu/wildflower/completeWildflowerData.asp?id=37](http://www.flmnh.ufl.edu/wildflower/completeWildflowerData.asp?id=37)

[http://edis.ifas.ufl.edu/ep061](http://edis.ifas.ufl.edu/ep061)