Fall is Around the Corner

As the mercury hovers close to 100°F it’s hard to imagine that fall is almost upon us. And that it’s time to line up our fall landscape and garden tasks.

In this issue you will find information on how to attract wildlife to your landscape; how trees stand up to high winds; how year-round color in your landscape can make your neighbors green with envy; seven steps to growing delicious strawberries; gladiolus rust—a new devastating disease in Florida; controlling winter weeds before they take over your lawn; flies that are beneficial and help our environment; how Southern Pine Beetles can attack and destroy pine trees; garden tips for September and November; and what to do before you place a shovel in the ground.

Ken Rudisill
Bay County Horticulture Faculty
krru@ufl.edu

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The Harvest Moon

The harvest moon, the full moon closest to the fall equinox, rises within a half-hour of sunset. Before farmers had tractors it was essential they work by the light of the moon to bring in the harvest. This moon is the fullest moon of the year. It appears very large and gives a lot of light throughout the entire night. No other lunar spectacle is as awesome as the harvest moon.
**Beneficial Flies**

When someone mentions flies, we think of buzzing around our heads, maggots in decomposing materials, and unclean conditions. It is time to change those thoughts, at least in the garden. There are several flies commonly found in landscapes that provide a valuable service in pest management.

The long-legged fly is a beautiful fly that is normally metallic copper, blue or green. It is very slender with long, thin legs and is common in most gardens. The larvae or maggots can be found in moist soil or rotted vegetation and like the adults are predaceous on aphids, thrips, mites, and other small-bodied arthropods.

The hover fly is also found around flowers and has the rare ability to hover and fly backwards. Because of their yellow-striped abdomen and similar coloring, these flies are often mistaken for bees. Adults visit flowers for nectar and help with pollination while the larvae primarily feed on aphids.

The tachinid fly, is similar to the house fly in appearance, but is an excellent parasite of pest caterpillars, beetles and bugs. The adults are gray or black in color with stiff hairs on their bodies. The larvae spend their lives feeding inside the bodies of unwanted insects and are so valuable that exotic tachinids have been introduced into North America as biological control programs.

For more information on beneficial organisms visit Featured Creatures at http://creatures.ifas.ufl.edu

To help with on-site identification, Beneficial Bugs ID Cards are available at http://ifasbooks.ufl.edu

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**Invader of the Southern Pines**

The southern pine beetle is one of the most common pests of southern pine trees. Following the 2004 and 2005 storm seasons and Hurricanes Ivan, Dennis, and Katrina, they became an increasing problem. Now, southern pine beetles are ravaging the wind damaged trees and even some trees not damaged by the storms. These beetles most commonly attack damaged or stressed trees because they can more easily enter through the cracked cambium layer. Even if a tree is stressed due to drought it is more likely to be attacked than a healthy pine receiving the right amount of water.

It is important to closely monitor your pine trees to avoid an outbreak of southern pine beetles. Some things to look for are:

- top needles that turn reddish brown;
- a sawdust-like material at the base of the trunk (this is caused by the beetle boring a pin hole into the bark and cambium layer closing off water uptake from that point on up the tree); and
- pitch tubes of the pine beetle that can be found on the outer bark of the trunk.

If you suspect you have pine beetles you can also cut back the bark and look for the trails or tunnels left by the beetle in the cambium layer.

The key is to catch the southern pine beetle early, before it takes over your pine stand. If your pines do fall victim to the southern pine beetle, there are some extermination alternatives. The first is chemical control, which at about $156 per quart can get fairly expensive if you have a mass planting. In an infested mass planting area infested pines are cut down and burned with a 50 to 100 foot buffer zone around the area treated.

To learn more about controlling southern pine beetles visit our IFAS Web site at http://edis.ifas.ufl.edu and type in “southern pine beetle” into the search box.

Eddie Powell
Walton County Extension
Assistant Horticulture Faculty
Pep5@ufl.edu

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Beth Bolles
Escambia County Extension
Horticulture Faculty
bbolles@ufl.edu

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Dorsal view of southern pine beetles, Dendroctonus frontalis Zimmermann, with male on the left and female on the right. Photograph by: David T. Almqquist, University of Florida.

Pitch tubes of the southern pine beetle (SPB), Dendroctonus frontalis Zimmermann, on outer bark. Photograph by: James. R. Meeker, FDACS, Division of Forestry.
It’s Mum Time Again!

Every year, around football time, mums make their appearance in nurseries, garden departments and even grocery stores. Mums come in a wide variety of flower shapes, sizes and colors., with hundreds of cultivars classified by flower shape. There has been much discussion in the nomenclature sector about how to classify mums, as a result they’ve been removed from the Chrysanthemum genus; and are now officially Dendranthema X grandiflorum. They are still in the Aster family. At least that hasn’t changed!

Almost all types of mums produce excellent flowers for use indoors; they are some of the longest-lasting cut flowers available, and potted mums can last for weeks indoors. These hardy perennials make great container plants that bloom when the nights become longer. Keep in mind that once the bud shows color, it will open indoors, as long as the plant does not dry out. When planted in beds, chrysanthemums are best in large groupings, where they appear majestic when in bloom.

Mums prefer slightly acidic soil, with organic components and moderate moisture, but they will grow in less than ideal conditions. Pinch back new growth throughout spring and summer to produce a broader plant with more branching. For really big blooms, eliminate side buds to allow a larger terminal flower to develop.

Divide or thin plants, preferably in spring before rapid growth begins or in fall after blooming. Chrysanthemums are relatively disease and pest free, although they may be attacked by spider mites in hot dry weather. Fungal leaf spot can be a problem if plants are crowded and have poor air circulation. Mums are mainly propagated by division. If the plants are too small to divide, new ones can be started from tip cuttings in the spring and summer.

Having Year-round Color in the Landscape

While spring is certainly one of the most colorful seasons in the north Florida landscape, fall can be a close second…if you choose the right plants.

Warm-season tropicals

- Yellow elder (Tecoma stans) is from Central and South America. The bright-yellow flowers provide non-stop color from March until the first freeze. Plant it in full sun and only apply small amounts of fertilizer and it will flower better.
- Bush allamanda has yellow flowers from spring through fall that provide a pleasant contrast to its glossy green foliage. Plant it in full sun.

Fall-blooming perennials

- Firespike (Odontonema strictum) with its tubular red flowers is a favorite of hummingbirds. This 3-foot-tall plant does best with a little afternoon shade.
- Philippine violet (Barleria cristata) is almost completely covered each fall with lavender flowers. But needs protection from the harsh afternoon sun.
Strawberries in the Home Garden

In north Florida, strawberries are planted from late September to mid-October and produce fruit starting in January and continuing into May. Here are 7 steps to a successful strawberry garden:

**Step 1.** The best site location for strawberries has well-drained, moist-but-not-wet sandy soil with adequate organic matter.

**Step 2.** Before making the beds, evenly broadcast approximately 2 lbs of a 6-8-8 fertilizer per 100 sq ft over the plot, and spade or disk it in.

**Step 3.** Prepare the bed by leveling out the soil or, in a hill system, make a raised bed 6-8 inches high and 24 inches wide.

**Step 4.** Provide another application of fertilizer in a single, narrow band in the middle of the bed, 4 to 8 inches deep, but DO NOT apply fertilizer directly below the plants, as the fertilizer may burn the young transplants.

**Step 5.** Purchase certified, disease-free plants for Florida such as Chandler, Sweet Charlie, Florida 90, Tioga, Sequoia, Florida Belle, Dover, Tufts, Douglas, Oso Grande, and Selva.

**Step 6.** When setting out the transplants:

- Keep plants moist before planting.
- Spread roots out in fan-shape
- Set plants in moist soil at the correct depth. Do not cover the plants crown with dirt or leave its roots exposed above the soil.
- Space plants 12 to 18 inches apart.
- Pack the soil firmly around the roots, then sprinkle with water. Overhead sprinkling may keep the tops from drying out until the roots can get established.

*For best results, strawberries should be mulched. Black polyethylene plastic mulch at 1 to 1½ mil thick is best (completely cover the top and sides of bed before planting). Be sure the bed is firm, formed correctly, moist, and fertilized adequatly. Place soil on the edges of the plastic to hold it in place. Cut slits in the plastic for the transplants. When using alternatives like straw, bark or other natural organic materials mulch to a depth of 1 to 2 inches, but do not completely cover the plant.*

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**Cool-season annuals**

- Numerous species of Salvia flower heavily in the fall and do best in full sun. One of the showiest is Mexican bush sage (Salvia leucanthemum) with its long spikes of purple and white flowers. Pineapple sage (S. elegans) has bright red flowers atop pineapple-scented foliage. Van Houtte’s Brazilian sage (Salvia vanhoutteii) has intense burgundy flowers.
- Cigar flower (Cuphea micropetala) tubular flowers of yellow, tipped with orange, are very attractive to hummingbirds. Planted in full sun, it is easy to grow and drought tolerant.
- Firebush (Hamelia patens) has been flowering all summer long. But seems to undergo a color boost in the fall. Many butterflies visit its fiery red-orange flowers.

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**David W. Marshall**
Leon County Extension
Horticulture Extension Faculty
davidwm@ufl.edu
Gladiolus Rust

Gladiolus rust (U. transversalis) is a plant disease that is threatening Florida's gladiola industry and home gardens. This disease is host specific to gladiolus plants and other closely related plant species. It was first detected in the US in 2006 at a floral farm in Manatee County, Florida. Additional surveys found rust on a commercial gladiolus farm 100 miles southeast in Hendry County. Surveys conducted around the areas of infestation indicated that gladiolus rust was limited to the commercial sites in Manatee and Hendry counties, and four residential gardens in the urban areas around the Manatee County farm. After the infestations were confirmed, all infected plant material was voluntarily destroyed.

Six different rust fungi infect gladiolus, U. transversalis is the most economically important. If uncontrolled, total yield losses can occur. Pustules form mostly on foliage, but can also form on flower spikes. Rust spores are spread by wind, water, people, and garden tools as well as over long distances by movement of infected plants. The disease is not harmful to humans or animals.

If you have gladiolus plants in your landscape and think the plants have gladiolus rust, call the Florida Department of Agriculture's helpline at (888) 397-1517. State plant inspectors will examine suspected gladiolus rust-infected plants at no cost or penalty. For more information on gladiolus rust visit www.doacs.state.fl.us/pi

Attracting Wildlife to your Landscape

A fun part of having a Florida-friendly yard is attracting wildlife. With over 1,200 kinds of animals, Florida ranks third in the nation in wildlife diversity. However, Florida is also third in the number of plants and animals on the federal threatened and endangered species list. The boom in construction of homes, businesses and roads leads to more space for people, but unfortunately less for plants and animals. By providing food, water, cover and space in your yard you can attract wildlife.

First consider the diets of the animals you’d like to attract. For butterflies, you’ll need particular herbs and flowers. For a variety of birds, you should have birdfeeders, bird-baths, native fruit and nut-bearing plants, and perhaps even small rodents!

Adding a little water can attract wildlife. Birds will bathe and drink from birdbaths, while lizards and frogs flock to backyard ponds. For butterflies, you can provide a “puddling” station, which can be made by filling a shallow bowl with rocks, sand and water.

Providing cover means giving animals shelter to rest, hide from predators, or care for young. Layers of vegetation such as groupings of tall trees, bushes and groundcovers help animals of all sizes find spaces to hide and live. Dead trees (called snags) provide cover for cavity-nesting birds.

Space is room for animals to move around and gain access to other resources and members of the same species. Neighbors can plan landscapes so that vegetation is adjacent to plants in the next yard or wooded area, and so on. This creates a corridor that animals can use to travel from one natural area to another, thus benefiting wildlife at a larger scale.

CARRIE STEVENSON
Escambia County
Florida Yards & Neighborhoods
Faculty
cstevenson@ufl.edu

Timing is critical when controlling winter weeds

Annual bluegrass, chickweed, henbit, hop clover, lawn burweed and Carolina geranium are some of the winter annual weeds that will germinate from seeds as the soil temperature cools and the days shorten. The small seedlings usually go unnoticed, but continue to slowly grow through the colder winter months. Approaching spring, as the days lengthen and the soil temperature warms, all of these previously inconspicuous weeds experience a growth spurt.

If you intend to use a preemergence herbicide to prevent winter annual weeds from germinating, apply it during October when nighttime temperatures drop to 55° to 60°F for several consecutive days. This will be just before the weeds emerge.

Lawn burweed
For season-long weed control, and based on the product’s label, a second application may be required about nine weeks after the initial application. To activate some products, irrigation or rain may be necessary following application. Because many preemergence products interfere with lawn seed germination, delay overseeding with ryegrass six to sixteen weeks after application. Make sure to follow all label directions and precautions when using any weed killer.

For information on weed ID and herbicide selection, contact your local UF/IFAS Extension Office or visit http://yourfloridalawn.ifas.ufl.edu.

Trees and Hurricanes

Over the last few years I have noticed an increase in concern over how high winds impact trees. Four main factors determine how well a tree will endure high winds: care of the above-ground portion of trees; care of the roots of the trees; growing trees in groups but keeping them well-spaced; and the species of tree.

Taking care of the above-ground portion of a tree means making correct pruning cuts that encourage one dominant trunk, a well balanced crown and strong unions. Prune outside the branch bark ridge when the size of the cut won’t encourage decay.

Care and management of the roots of trees includes not cutting the roots and keeping the area under the trees well-mulched and the soil porous. Remember that most tree roots are in the top 18 inches of soil and that typically grow 3 times farther out than the branches extend from a tree.

Trees that grow alone tend to do more poorly in strong winds, because trees serve to protect each other from strong winds. This is the same reasons many houses with structurally sound trees around them experience less damage than houses without surrounding trees.

Research at the University of Florida/IFAS has shown the following large trees do well in high-wind situations: live oak, post oak, shumard oak, swamp chestnut oak black tupelo, bald cypress, hickory, magnolia and sweetgum. The smaller trees that did well include dogwood, river birch, winged elm, American hophornbeam, blue beech, tree sparkleberry, red bud and fringe tree.

Remember, without proper care any species of tree can break during high winds.

New National Call Before You Dig Number: 811

On May 1, 2007 the new national “Call Before You Dig” 811 number was connected. The number was created to eliminate the confusion of multiple “Call Before You Dig” numbers across the country and to be an easy-to-remember resource. People should call 811 before attempting any digging project, whether it be small like planting a tree or installing a mailbox or a larger project like building an addition or a deck. This quick and efficient one-call service notifies the appropriate local utilities, which then send locators to the requested site to mark the approximate location of underground lines. More information visit http://www.call811.com

Source: Dr. Carol Lehtola
Associate Professor
Agriculture Safety and Health
UF/IFAS

Garden Tips for September and October

Flowers

- Cut back leggy herbaceous flowering plants and remove old flower stalks. Re-fertilize for one more bloom.
- Prepare beds for cool season annuals, including pansy, petunia, snapdragon, larkspur, bachelor button, calendula, alyssum, dianthus and candytuft.
- Divide and replant perennials and bulbs such as ajuga, amaryllis, canna, daylily, liriopoe and mondo grass.
To encourage a holiday cactus or poinsettia to bloom for Christmas be sure it is NOT getting light at night. Around October 1st, put the plants in a dark area from 5 p.m. to 8 a.m. (continue for 1 month for cactus and 6-8 weeks for poinsettia). The plant should receive sufficient light during the day.

Trees and Shrubs

- September is your last opportunity to fertilize shrubs and trees.
- Avoid late summer/fall pruning. It can stimulate tender growth that might be damaged by low winter temperatures.
- Fall-planted trees and shrubs respond well because our relatively mild winters allow for root growth. This means that our shrubs are well on their way to having their roots established before hot weather arrives next spring.
- Rake and use the pine needles that typically fall during September and October as mulch around vegetable and flower gardens as well as in shrub beds. Apply to achieve a 2 to 3 inch covering after the needles have settled.

Vegetable Garden

- Prepare fall vegetable gardens by incorporating organic amendments into the soil, and allow about 3 weeks before planting cool-season plants such as beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, Chinese cabbage, collards, kohlrabi, mustard, onions, parsley, radishes and turnips.
- Begin planting strawberries in mid- to late October (see previous article for tips).

Lawns

- September will be the last month to fertilize lawns using a nitrogen-containing fertilizer. Unless a soil test indicates that the lawn needs phosphorus, use a low or no-phosphorus fertilizer such as a 15-0-15.
- Over-seed the permanent lawn with annual ryegrass during October or early November. A well-kept winter lawn requires a regular mowing, irrigation and a couple of light applications of fertilizer.
- If winter weeds are a problem, apply a preemergence herbicide in early October. Follow label directions carefully.

Q: What are types of organisms that attack garden vegetables?
A: There are four types of pathogenic microorganisms: fungi, bacteria, nematodes, and viruses.

Q: Which is the most common disease-causing organism and how do we detect it?
A: Fungi, by far. Fungi have to be identified by species at 100-400X magnification. Many of these fungi reproduce easily by forming thousands of spores that are readily blown about by light winds.

Q: I have some late season beans and peas, and what disease(s) do I need to be on the lookout for now?
A: That would be rhizoctonia root, stem, and pod rot, caused by Rhizoctonia solani. The symptoms of the root rot include small, elongate, sunken, reddish brown lesions of the roots and hypocotyls of young plants. Lesions often occur at the soil line and appear water soaked. For control information, contact your local Extension Agricultural Agent.

Information for this article was taken from the University of Florida's publication PP-209, which is available at http://edis.ifas.ufl.edu or through your County Extension Office.

Q & A: Late-Season Diseases in Your Vegetable Garden

Q: How do I avoid late-season diseases in my vegetables—other than the act of “not planting” or “moving north”?
A: Not planting doesn’t always mean the end of the disease process. The disease process depends upon you bringing back the same crop year after year, or season after season, and putting the plants on the same rows in the same gardens. Moving north usually means you trade one set of plant problems for another—you still have the plants and the problems sometimes. So one of the answers to your question is crop rotation.

Q: What is crop rotation?
A: To the homeowner, it means rotating, every 3-4 years, where in the garden you grow a certain vegetable. It is one of the most effective and inexpensive cropping practices we have.
### Northwest District 1 Extension Offices

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<td>Bay County</td>
<td>647 Jenks Avenue, Suite A</td>
<td>Panama</td>
<td>(850) 784-6105 (850) 674-8323</td>
<td>bay.ifas.ufl.edu</td>
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<td>Calhoun County</td>
<td>20816 Central Avenue East, Suite 1</td>
<td>Blountstown</td>
<td>(850) 475-5230 (850) 674-8323</td>
<td>calhoun.ifas.ufl.edu</td>
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<td>3740 Stefani Road</td>
<td>Cantonment</td>
<td>(850) 653-9337</td>
<td>escambia.ifas.ufl.edu</td>
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<td>Apalachicola</td>
<td>(850) 653-9337 (850) 674-8323</td>
<td>franklin.ifas.ufl.edu</td>
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<td>Quincy</td>
<td>(850) 875-7255</td>
<td>gadsden.ifas.ufl.edu</td>
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<td>Wewahitchka</td>
<td>(850) 639-3200 (850) 547-1108</td>
<td>gulf.ifas.ufl.edu</td>
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<td>Bonifay</td>
<td>(850) 482-9620</td>
<td>jackson.ifas.ufl.edu</td>
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<td>Jackson County</td>
<td>2741 Pennsylvania Avenue, Suite 3</td>
<td>Marianna</td>
<td>(850) 342-0187</td>
<td>jackson.ifas.ufl.edu</td>
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<tr>
<td>Jefferson County</td>
<td>275 North Mulberry Street</td>
<td>Monticello</td>
<td>(850) 606-5200</td>
<td>jefferson.ifas.ufl.edu</td>
</tr>
<tr>
<td>Leon County</td>
<td>615 Paul Russell Road</td>
<td>Tallahassee</td>
<td>(850) 606-5200</td>
<td>leon.ifas.ufl.edu</td>
</tr>
<tr>
<td>Liberty County</td>
<td>10405 NW Theo Jacobs Way</td>
<td>Bristol</td>
<td>(850) 643-2229 (850) 639-3200</td>
<td>liberty.ifas.ufl.edu</td>
</tr>
<tr>
<td>Santa Rosa County</td>
<td>6263 Dogwood Drive</td>
<td>Milton</td>
<td>(850) 357-3500 (850) 639-3200</td>
<td>santarosa.ifas.ufl.edu</td>
</tr>
<tr>
<td>Okaloosa County</td>
<td>5479 Old Bethel Road</td>
<td>Crestview</td>
<td>(850) 639-3200</td>
<td>okaloosa.ifas.ufl.edu</td>
</tr>
<tr>
<td>Wakulla County</td>
<td>84 Cedar Avenue</td>
<td>Crawfordville</td>
<td>(850) 3237-2063 (850) 639-3200</td>
<td>wakulla.ifas.ufl.edu</td>
</tr>
<tr>
<td>Walton County</td>
<td>732 N 9 Street Ste B</td>
<td>Defuniak Springs</td>
<td>(850) 3237-2063 (850) 639-3200</td>
<td>walton.ifas.ufl.edu</td>
</tr>
<tr>
<td>Washington County</td>
<td>1424 Jackson Avenue Ste A</td>
<td>Chipley</td>
<td>(850) 3248-1602</td>
<td>washington.ifas.ufl.edu</td>
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