Master Gardener Class Forming by Terry DelValle

Want to Become a Master Gardener? If you enjoy working with plants and people, this program could be for you. Master Gardener volunteers go through an intensive 50 hour training class starting August 30 through November 8. Classes are held on Wednesdays from 9:30AM to 3:30PM. Once the class is completed, volunteers donate 50 hours of volunteer service during the following year to the Duval County Extension Office. Volunteers answer homeowner gardening questions at our office, set up and man plant clinics, maintain demonstration gardens, give gardening presentations, teach gardening at local schools and more! There is a fee to attend the class which covers the costs of training materials. If you are interested, call Becky @ 387-8850 and request an application packet or email Terry at delvalle@coj.net. Deadline to return completed applications is July 10th.

Upcoming Classes

Thursday, May 18 from 10AM to 12:30PM — Attend a Compost Workshop — Turn Trash to Treasure Duval Extension Office, 1010 N. McDuff Ave. Call 387-8850 to register. No charge to attend.

Wednesday, June 7 from 10AM to 2PM — 4 Hour How-to workshop. Learn how to water efficiently, check your system, install low flow and drip irrigation and harvest rainwater. There will be hands-on activities, Duval Extension Office on 1010 N. McDuff Ave. Call 387-8850 to register, cost $5.00 to attend.

Tuesday, June 13 from 5PM to 8:30PM.— Landscape Design with hands-on activities; includes drought tolerant and native plants plus low flow irrigation @ Mandarin Garden Club on 2892 Loretto Rd. Call 387-8850 to register. cost is $5.00 to attend.

Tuesday, June 20 from 5:30PM to 7:30PM — Learn how to attract Butterflies to your Landscape @ Regency Square Library, 9900 Regency Square Blvd. Call 387-8850 to register.
Despite the dry weather, many weeds are thriving. Try and stay ahead of weeds and pull them before they go to seed to avoid massive problems. Many are easy to pull especially when young, so get busy. Lawns may be damaged by herbicides if applied to lawns under stress or in hot weather.

Hurricane season runs from June 1-Nov. 30 which is less than a month away. Experts are predicting another busy season. Examine trees now that may become a potential problem to structures. Now is the time to hire an arborist to look at trees and do corrective pruning. To find a certified arborist in your area, go to http://www.isa-arbor.com/home.aspx.

Fertilize and prune gardenias following bloom. If lower leaves turn yellow and drop, this is normal when new growth flushes occur. Prune azaleas now if shaping is desired. Pruning in July will remove flower buds for next spring.

If you fertilized your lawn in March, now is the time to apply a second application. Use a fertilizer with at least 30% slow release nitrogen to avoid too much quick growth, or apply iron. Don’t use a high nitrogen fertilizer but one that has equal amounts of nitrogen and potassium like a 15-2-15. After application, apply ¼” water. If iron is used for green-up, use iron sulfate at 2 oz/3-5 gallons water. Avoid spraying on sidewalks to avoid discoloration.

Blueberries are ready to harvest. Visit some of the local U-pick businesses. Growers had a good year so they should have a bumper crop. Refer to www.florida-agriculture.com/consumers/upick.htm to find local growers.

It is incredibly dry and rain dances may now be in order. To conserve irrigation water, let your lawn tell you when water is needed. Look for the following signs:
- lengthwise folding of grass blades
- bluish-gray color
- foot prints remain long after being made.

When 30-50 percent of the lawn shows these signs, apply 3/4 inch of water in one application. Don’t water again until these symptoms reappear. During summer months, symptoms will usually occur more frequently.

To conserve water, irrigate early in the day. The best time to water is between 4 AM and 7 AM.

Brown spots in lawn. Got a spot in the lawn that is turning brown? Place some straight sided, flat bottomed cans on the spots and irrigate as usual. Check how much water is collected. Remember, ½” to ¾” wets the top 6” to 9” of a sandy soil so you may have to adjust the sprinklers or the run time to apply enough water. If the brown spots are staying the same size, it could be herbicide injury from an earlier application. If it’s not, water or herbicide related, is the area spreading? If yes, it could be chinch bugs or a disease. To check for chinch bugs, use a large open ended can and push 3” down into the grass on the outer edge of the affected area. Apply water and keep it above the grass level. Wait about five minutes and look closely for them to float to the surface. If it’s not chinch bugs, your lawn could have a disease problem. Go to http://edis.ifas.ufl.edu/LH064 to troubleshoot a lawn disease.

Keep mower blades sharp and remove no more than 1/3 the height at each mowing. Mowing heights vary depending on the type of lawn you have.

Warm weather has kicked in and it’s prime time for insect problems. Scout the landscape weekly to catch problems early. Many problems can be eliminated by pruning out the infested area or other means of physical removal. If treatment is needed, treat only the affected area and use a Florida-friendly insecticide (soaps, oils, neem, BT) to protect beneficial insects.
Things to Plant in May & June by Terry DelValle

Replace cool season plants with others that can take the heat. Annuals for May include calliopsis, celosia, coleus, crossandra, exacum, gaillardia, gazania, hollyhock, impatiens, kalanche, marigold, milkweed, nico-
tiana, ornamental pepper, pentas, portulaca, rudbeckia, salvia, thunber-
gia, torenia, verbena, vinca (periwinkle) and zinnia. In June it’s too late to plant those listed above that are underlined during our normal summers. To keep annuals blooming, fertilize monthly with a 6-6-6 or 8-8-8 type fertilizer at a rate of 1½ pounds per 100 sq. ft. or use a slow release fertilizer that will last all summer into fall. Don’t fertilize marigolds and vinca because they grow much better when fertilized less frequently and at lower rates.

Don’t forget perennials for adding color. Salvias, cone-
flowers, stokesia, gaura, porterweed, plumbago, fire-
cracker plant, verbena, lantana and many others are all great at providing color and are less maintenance than many annuals. They require less water and fertilizer which make them more Florida-friendly.

Look for new flower colors of Echina-
ceae/Coneflower with the release of two new series: Meadowbrite™ (Chicago) and Big Sky™ (Atlanta). Photo on left is Sunset. Others include Harvest Moon, Sundown, Sunrise, Twilight, Orange Meadowbrite and Mango Meadowbrite.

Bulb-type plants for May include achi-
menes, allium, alstroemeria, Aztec lily, begonia, blood lily, caladium, daylily, gladiolus, kaffir lily, moraea (African lily), spider lily, tiger flower, walking iris, and watsonia. Don’t plant those that are underlined in June but add to the list the butterfly lily.

Erythrina herbacea by Terry DelValle

Erythrina herbacea, also called coral-bean or Cherokee Bean, is in full bloom right now. It’s a Florida native shrub and is a real showstopper. It may reach 8’ tall but is typically around 3’ to 4’ in northeast Florida.

Plants grow in full sun to partial shade and will tolerate a variety of soils but prefer a rich, well-drained soil. They are drought tolerant and have some salt tolerance. Use in landscapes at the edge of a wooded area or as a specimen plant. I’ve seen them along the roadside, in front of a fence or in a natural area. Their native habitat is in upland mixed forests, thickets, coastal dunes, sandhills and pine flatwoods.

The plant is prickly, producing thorns on both leaves and stems. Beautiful tubular blooms appear in spring into summer and attract hummingbirds. Seed pods follow and split open in the fall to display bright red poisonous seeds. This plant requires very little care and is an excellent landscape plant and wildlife attractant. Fertilize once per year and prune in late winter to remove cold damage and control size.
Urban Gardening Update
By Sara Cimbalik, Urban Gardening Program Assistant

Before you know it the heat of the summer will be here. The spring vegetable gardens should already be planted. However, if you were a bit late getting the garden in, there are still a few things to be planted in May and June. Lima beans, eggplant, okra, southern peas and sweet potatoes can still be planted and harvested successfully this time of the year.

If the rest of your spring garden is continuing to thrive now is the time to be on the look out for many garden culprits. These pests include, aphids, tomato hornworms, southern green stink bugs, leaf-footed plant bugs, fruit worm, and vine borer. If left uncontrolled many of these pests will damage the edible part of the crop. You many be able to handle one or two pieces of fruit being destroyed, however a few of the previous listed pests, such as aphids and stinkbugs, can transmit harmful viruses which can eventually lead to plant death. Before treating any of the pests first identify which culprit it is! Always try to hand pick them off before treating.

Since mother nature has left us fairly dry, be sure your garden has adequate moisture. Established gardens only need 2” of water per week. Always consider normal rainfall as watering and be sure to adhere to the new watering guidelines.

Herb of the Month  Lemon Verbena
By Mary Puckett — Urban Gardening Secretary

LEMON VERBENA, Lippia Citriodora, is a tender, delicately scented perennial whose origin is Argentina and Chile. This deciduous woody plant was taken to Europe by the Spanish. The long narrow, yellowish-green leaves, pointed at the tip, grow in whorls of 3 or 4 on a graceful woody branch. The upper side of the leaf is shiny and lower is rough and rather dull. The flowers range from a bluish white to a pale lavender, and grow on slender, inconspicuous spikes. The aroma and fruity flavor of the leaves are like a delicate lime or lemon.

The Spanish are especially fond of Lemon Verbena Tea, which is as easily brewed as any tea. The whole dried leaves are infused in boiling water for a few moments and then the tea is sweetened to taste. It is best to use the leaves which have been freshly dried.

For 4 servings use approximately:
♦ 4 to 5 teaspoons dried leaves in tea
♦ 4 whole fresh leaves as flavoring or garnish

To Prepare Herb Teas from Dried or Fresh Leaves:
♦ Rinse porcelain teapot with boiling water
♦ Dry teapot thoroughly
♦ Place dried or freshly crushed herb leaves in teapot (if preferred, tie herb leaves in thin bags, as many commercial tea are packaged)
♦ Pour boiling water over herb leaves or bags
♦ Allow to steep 3 to 5 minutes only
♦ If stronger infusion is desired, use more leaves at beginning of preparation

Culture:
Lemon Verbena is best started from transplants. Plant in the spring or summer, spacing them 4 feet apart. Provide an area with sun to partial shade. Bloom in the spring, summer and fall. Do not discard the plants or allow them to dry out when the leaves disappear. They will come back in spring at the end of dormancy. During the spring, when buds swell, cut stems back to encourage new growth.
Snails in the Vegetable Garden  By Sara Cimbalik

The brown garden snail, *Helix aspersa*, can be a real pest to vegetable gardeners. They prefer an undisturbed habitat with adequate moisture and a good food supply. They like a warm damp climate in order to mate, so your garden snail population will more than likely be on the rise. During this time of the year snails will feed on crops of bean, onion, peas, and tomato. Snails like to hide under boards, bags, brush, and debris. Removing any of these materials can aid in reduction. Most snails are nocturnal and move in a gliding motion that is aided by a long flat muscular organ called a foot.

One method of controlling snails is during the night, place a board on the ground near the damaged plants. Elevate the board with 4 stones placed under the corners. The snails will take shelter under the board in the morning and can be removed and then destroyed by dropping them into a jar filled with water and a little rubbing alcohol. If dropping in the jar is too painful you could always transport the snails to an area where ducks feed, as snails are a real treat for them.

If temporarily trying to control snails in the vegetable garden these methods will work:
1. Create a barrier of diatomaceous earth or ashes around the base of a plant.
2. Place a piece of sand paper at the base of the plant.

Get Your Scouting Caps On  By Sara Cimbalik

In addition to the snails mentioned above there are many other pests that will start populating your garden this time of the year. Most vegetable garden pests can be categorized into 4 different groups:

<table>
<thead>
<tr>
<th>Insects That Live in Soil</th>
<th>Chewing Insects</th>
<th>Piercing/Sucking Insects</th>
<th>Mining Insects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutworms</td>
<td>Caterpillars</td>
<td>Aphids</td>
<td>Leafminer</td>
</tr>
<tr>
<td>Wireworms</td>
<td>Armyworms</td>
<td>Stinkbugs</td>
<td>Tomato Pinworm</td>
</tr>
<tr>
<td>Grubs</td>
<td>Tomato Hornworm</td>
<td>Leaf-footed Plant Bug</td>
<td>Whitefly</td>
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<tr>
<td>Mole Crickets</td>
<td>Loopers</td>
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Before choosing a treatment, first identify which pest you have. The following website, http://creatures.ifas.ufl.edu/, has numerous descriptions and pictures to help you identify pests. The best and most environmentally friendly way to control is by handpicking or using a horticultural soap or oil. However, this will not control everything, that’s why one must identify the problem first. Try to stay away from products that provide complete insect control, such as, Sevin dust. By reading the product label under the environmental hazards you will see that these products can kill beneficials such as bees and butterflies. By killing beneficials, pollination can be reduced, which in turn, limits fruit set. It is best to scout the vegetable garden 2 times per week and spot treat areas that are being damaged.

Vacant Position– Urban Gardening Program Assistant

A full-time Urban Gardening Program Assistant position is in need of being filled. Position is responsible for coordinating vegetable and culinary herb education efforts of the Urban Garden Program. Duties include community gardens, maintain all program area equipment and supplies, keep accurate records of program activities and accomplishments, help start school gardens, work with Master Gardener volunteers, provide educational programs to the public, and other duties. For more information contact Terry DelValle at delvalle@coj.net or 387-8850.
**It's Easy to Make a Butterfly Garden**

By Terry DelValle

Attracting butterflies to your landscape is easy. Follow a few simple steps, and they will come.

**Step 1:** Select a sunny site to plant flowering nectar plants. Butterflies are cold-blooded and bask in the sun to warm their bodies. Some butterflies prefer shady areas on the edge of forested areas, so to increase the diversity of butterflies in the landscape, place the garden adjacent to a natural area with trees. Position the garden so that it will be seen from inside the home so you can enjoy it when it's too hot to venture out.

**Step 2:** Include both adult nectar sources and caterpillar food plants in the garden. If there are specific butterflies that you want to attract, find out what food the caterpillars eat. Caterpillars, like children, can be very picky eaters. For example, milkweeds are food for both monarch and queen caterpillars whereas dill, fennel, and parsley are food for black swallowtail caterpillars. Many trees can double as shelter and a food source like citrus (giant swallowtail), red bay (laurel swallowtail), elms (question mark), and willow (viceroy).

For adult butterflies, most feed on flower nectar. A study conducted at Clemson University showed that grouping similar colors together resulted in attracting more butterflies versus mixing up colors. Select flowers that will bloom at various times throughout the year and with different flower sizes. Butterflies like cluster flowers or large solitary flowers that provide a sturdy perch. Some examples of good nectar plants include milkweed (Asclepias curassavica), butterfly bush (Buddleia davidii), firebush (Hamalia patens), impatiens, lantana, Joe-pye weed (Eupatorium fistulosum), firecracker plant (Russelia equisetiformis), pineapple sage (Salvia rutilans), Mexican sunflower (Tithonia canadensis), and plumbago.

Not all adult butterflies feed solely on flower nectar. Some feed on tree sap, rotting fruit like bananas, dung, and rotting meat. Place rotting fruit in shallow containers, clean containers and replace fruit weekly. To keep ants away from the fruit, place the container inside a larger container filled with water. This will create a moat for the ants but is still accessible for butterflies.

**Step 3:** Provide shelter for butterflies during bad weather. Select plants that have different heights and growth habits to create horizontal and vertical diversity. Planting the butterfly garden adjacent to a wooded area would serve the same purpose. Butterfly houses are not substitute shelters during bad weather. The shelters are cute but butterflies do not use them.

**Step 4:** Provide puddling areas, especially during dry weather. Male butterflies form "puddle-clubs" to extract salts and amino acids from soil necessary for mating. There are several ways to create a puddling area and still conserve water. One way is to bury a shallow, plastic storage container, cover the edges with soil, fill the container with sand, and wet thoroughly. Mix in a small amount of table salt and a capful of fish emulsion fertilizer to make the area more enticing.

**Step 5:** Last but not least, keep pesticides away from the butterfly garden. Butterflies are very sensitive to pesticides and caterpillars may die from eating plants purchased at nurseries because of past pesticide use.

Trivia: In 1996, Gov. Chiles name the Zebra longwing the official state Florida butterfly.
Tree of the Month — Live Oak *Quercus virginiana*

By Larry Figart, Urban Forester

If there were a monarchy among trees then the Live Oak would reign as king. I cannot think of another tree that has been cherished and revered as much. Many live oaks have become famous. Some local examples of notable live oaks include the Maltby Oak in Palatka, the Treaty Oak in downtown Jacksonville, the Cummer Oak in Jacksonville, and the Cellon Oak in Gainesville. The latter being the champion live oak in the State of Florida.

Live oaks also have a place in American History. The dense wood of the live oak was used for shipbuilding. The dense wood and natural bend was perfect for use in the keels of many sailing ships. The warships U.S.S. Constitution, and the U.S.S. Constellation were fortified with Live Oak planks.

A live oak grown in the open can form a wide spreading habit. In some large specimens, the spread can reach more than 120 feet. The trunks are stout and sturdy with large heavy limbs radiating out from the trunk, sometimes touching the ground. The natural form of a live oak is a dense rounded umbrella shaped head.

The leaves are simple, thick, evergreen and leathery. They are oblong, boat shaped about 2 to 4 inches in length. A distinguishing feature of live oak leaves is that they are dark green on the upper surface and a light green to grey-green on the lower surface. The edges of live oak leaves curl under to form a “canoe” when flipped over.

The bark of the live oak is dark brown tinted with some red. Large trunks and branches develop rough thick furrows that help distinguish it from other oaks. Many folks steer away from planting live oaks because they are seen as slow growing. However, a well watered and maintained tree can grow 1 1/2 to 2 feet a year. They are very pest resistant and wind tolerant but must be grown where they have plenty of rooting space. They should also be regularly pruned when young to develop a single stem with scaffold branches.

There have been some recent cultivars of live oak released that appear to have desirable characteristics. Only time will tell if the younger trees keep their unique characteristics as they grow older. ‘HighriseTM’ live oak has been developed with a more upright branching habit. It may be better suited for street tree plantings because younger trees grow taller than wide. Another live oak cultivar that has shown some promise is the ‘Cathedral TM’ live oak. It develops a single leader with smaller lateral branches. This cultivar has strikingly dark green leaves with a dense, full growth habit that will make it a specimen in the landscape.

Cabling Trees - By Larry Figart - Urban Forester

Cabling trees is a common arboricultural technique used to shore up weak crotches and branches in trees. The decision to cable or brace a tree should not be taken lightly because it is mildly invasive to the tree. It can also be expensive and therefore should only be used in high value healthy trees. The downside to cabling is that it does create wounds in the tree. A healthy tree can recover from the wounding. When used wisely, cabling can extend the useful lifespan of a tree by reducing the likelihood of branch failure. Cabling does not improve the health of a tree, only its structure. If the tree is not healthy, the root system is not sound, or the tree contains a lot of decay, other options should be considered.

Before a tree is cabled, it should be properly pruned. This reduces the weight of the limbs to be cabled so that proper cable tension is achieved.

Cabling involves the use of high strength steel cables attached to the tree using lag hooks or threaded eye bolts. The lag hooks are threaded into pre-drilled holes or the threaded bolts (Continued on page 8)
Cabling Trees (cont. from p7)

are inserted all the way through the tree. When attaching cables to the hardware, thimbles should be used to protect the cable from excessive wear. The cable should be inserted in the tree at least two thirds the distance from the weak crotch or defect to the top of the tree. The cable should also be inserted so that it is at a 90 degree angle to an imaginary line through the center of the crotch. The cable should be installed parallel with the hardware so that there is a direct pull from the hardware to the cable.

Cabling involves highly skilled knowledge of arboriculture and should only be performed by an ISA Certified Arborist. There have been many instances where improperly installed, or ill advised cables have shortened the lives of otherwise healthy trees. To find a certified arborist in your area go to www.isa-arbor.com.

Extension information and services are available to all individuals regardless of race, color, sex or national origin. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no endorsement by the Cooperative Extension Service is implied. This public document was promulgated at an annual cost of $295.20 or .82 cents per copy to inform garden center personnel and homeowners of research results in ornamental horticulture. For persons with hearing or speech impairments, when contacting our office, please use the Florida Relay Service at 1-800-955-8771 (TDD).

Once you have read this newsletter, turn “A New Leaf” and pass this information on to a friend.

Terry B. DelValle
Extension Agent-Environmental Horticulture

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