



YOUR NORTH FLORIDA YARD & GARDEN

Flagler County Extension Service & UF/IFAS Florida
Master Gardeners

ISSUE XLI

April-June, 2013

Inside this Issue

Announcements	2
Upcoming Events	
The Good	3
Conserving Water in the Florida-Friendly Landscape	
The Bad	5
Oleander Caterpillar	
The Buggies	7
Honey Bees	
Fresh from Florida	9
Enjoying Florida Greens	
The Urban Forest	11
Blackberries	
Garden Calendar	13
April - June	
Garden Design	16
Creating a Garden We Love	
Master Gardener Spotlight	18
New Short & Sweet Programs	

From the MG Desk...

*David Tibbetts, UF/IFAS Flagler County
Master Gardener and Newsletter Editor*



With lots of sun and too little rain, Flagler County maintains its position at or near the top of the fire danger and drought indexes. As a result, an article has been included in this newsletter regarding conserving water while maintaining the landscape. In spite of the drought and water restrictions, it seems many of our neighbors have their irrigation systems on full automatic all the time - it is particularly distressing (to me anyway) to see a yard being watered in the midst of a downpour.

Other articles in this issue cover things that your editor has enjoyed or suffered since moving here almost 8½ years ago. These include oleander caterpillars, busy bees and blackberries. Hopefully, this information will be of use to many of you.

For those of you who are trying to improve your gardens and landscapes, see the article that starts on page 15, *Creating a Garden We Love*

Q. What are the blue-green growths on the trunk/limbs of my crape myrtle (or other trees woody shrubs)?

A. Typically these are lichens - they are not harmful to the tree or shrub, and belong to a type of plant known as an epiphyte. Epiphytes simply use their host plant for structural support and get their nutrients from the sun, air and any organic matter that comes to them. Other common examples of harmless epiphytes are Spanish moss and resurrec-

(Continued on page 19)



FLAGLER COUNTY EXTENSION SERVICE &
UF/IFAS FLORIDA MASTER GARDENERS

Flagler County Master Gardeners
Flagler County Extension Service
150 Sawgrass Road

Phone: (386) 437-7464

Fax: (386) 586-2102

E-mail:

mgardener@flaglercounty.org

BE SURE TO VISIT THE FLAGLER COUNTY
EXTENSION WEBSITE AT

WWW.FLAGLERCOUNTY.ORG

OR

WWW.SOLUTIONSFORYOURLIFE.COM

UF/IFAS Florida Master Gardener Newsletter Writers:

Donna Frangipane

David Tibbetts

Ruth Micieli

Sharon Treen

Newsletter Advisors:

Ruth Micieli, Horticulture Program Assistant and
Master Gardener Coordinator

Sharon A. Treen, County Extension Director and
Family & Consumer Sciences Agent

Upcoming Programs at the Flagler County Extension Service:

Short & Sweet Series—April 15, 19, 22, 29, May 6 and 9 10 am-12 noon.

\$5 per session with the exception of the April 19 session which is free — pre-registration required. Contact Ruth Micieli 386-437-7464 or e-mail rmicieli@flaglercounty.org to pre-register. All sessions will be held at Flagler Extension Office, with exception of sessions on April 19 (VerdeGo) and May 6 (Wickliffe Center, Flagler Beach). Program details posted on website flaglercounty.org.

Earth Day—April 20, 21, 10 am-4 pm.

At Washington Oaks State Park, \$10 per car.

Spring Fling Open House—Friday, May 17, 10 am-3 pm.

Come walk through the gardens, speak to the Master Gardeners, attend the educational programs and purchase some great spring plants for your garden! There is no cost to attend this program, however, we do ask that you pre-register. Please call or e-mail one week prior to program.



The Good...

By David Tibbetts, UF/IFAS Master Gardener

Water Conservation and the Florida-Friendly Landscape

Introduction. Oftentimes homeowners believe that if 1" of water is good for the lawn/landscape/plant, then 2" is that much better. The result is that many homeowners are over-watering, and stressing their landscape. This also causes overuse of one of our most precious resources. With water rate increases in Palm Coast, conservation makes sense both for one's landscape and for their wallet. Even if a home has a well, the water that is used affects the amount of water available for other uses. And, if the aquifer water resource becomes depleted, other more expensive consequences may result – e.g., desalination plants may be needed to provide our homes with potable water. As with most horticulture topics, the University of Florida has recommendations that homeowners should follow to make the most of our water and improve the care of our landscapes. The information in this article comes primarily from the following web site, Conserving Water Solutions For Your Florida-Friendly Landscape (<http://gardeningsolutions.ifas.ufl.edu/water/articles/index.shtml>).

Setting Your Irrigation Controller. Your irrigation system can be set for specific days time frames for each zone and can be altered to provide for "micro-irrigation." It is best to operate the irrigation controller in manual mode, waiting for the landscape to indicate when it needs water. Only water turfgrass when one of the three 'wilt signs' is visible: folding leaf blades, blue-gray color, and/or footprints remaining visible in grass. Established trees and shrubs do not require water as often as the lawn. So, those areas should be on separate zones. Flagler County residential water ordinance is as follows:

Daylight Savings Time: (March-November) even-numbered houses Thursday and Sunday, odd-numbered houses Wednesday and Saturday between the hours of 4pm and 10am, no more than $\frac{3}{4}$ " and 1 hour/zone.

Eastern Standard Time: (November - March), even-numbered houses on Sunday only, and odd-numbered houses on Saturday only, also with the restriction of a maximum of $\frac{3}{4}$ " or 1 hour per zone.



Grass blades folding, lawn needs water

Run Time and Amount of Water. These two items are closely related, as the amount of time the irrigation system is on is directly related to how much water is delivered. This should be determined for each zone by measuring how much water is delivered for a given period of time. Run times should be adjusted to reduce the amount of water delivered during the colder months when our grass is dormant. Less frequent, deep watering helps to develop healthier root systems that will be better able to withstand the rigors of drought periods. Running the irrigation system earlier in the day reduces the amount of evaporation, and helps avoid water remaining on leaves overnight which can cause other problems. Finally, irrigation system performance should be checked regularly to ensure there are no problems (e.g., broken sprinkler heads) and that water is

The Good...(cont.)

going to the areas in which it is needed (e.g., the driveway and road do not need to be watered). Per water restrictions, watering must be done before 10am or after 4pm – if possible, water before 10am but after sunrise so that the system can be checked visually every watering cycle.

Ten Ways To Save Water.

1. Choose the right plant for the right place. All plants must get the right amount of sun, water, and nutrients to thrive—even natives. Select plants suited for your area. Place plants in the landscape where site conditions match their needs. Group plants with similar water needs together.

2. Water thoughtfully. A drop here and a drop there can add up to a lot of water. Always follow water restrictions. Water early in the morning. Irrigate plants and grass only when they start to wilt.

3. Hand-water when possible. Hand watering is allowed during water restrictions, because it uses less water than an automatic irrigation system. Use a watering can, pail, or hose with an automatic shutoff nozzle. Hand-water potted plants, shrubs, trees, vegetables, and flower beds, and new lawns.

4. Perform regular irrigation maintenance. An irrigation system is only as efficient as it's maintained to be. Check for and repair leaks. Unclog and replace broken heads. Point heads at plants, not driveways and sidewalks.

5. Calibrate irrigation system. Even an efficient irrigation system can waste water if it's left on for too long. The ideal amount of water to apply is $\frac{1}{2}$ to $\frac{3}{4}$ inches. Figure out how long to run your system by doing a test: Place multiple coffee/tuna/other straight-sided cans throughout each irrigation zone; Run your system for thirty minutes; Average the depth of the water in all the containers; Multiply running time as needed for $\frac{1}{2}$ to $\frac{3}{4}$ inches of water.



Flat sided catch can

6. Make a Rain Barrel. Rain barrels capture rainwater that flows off your roof for use in the landscape. They're easy and inexpensive to make and can have a big impact on your water bill—instead of watering your plants with water you're paying for, you're using free water! **7. Use micro-irrigation.** Drip or micro-spray irrigation systems apply water directly to the roots of plants, where it's needed, and lose minimal water to evaporation or wind drift.

8. Mulch plants. Mulch helps keep moisture in the soil around your plants. Choose from many different kinds of mulch and apply 2 to 3 inches around trees, shrubs, flowers, and vegetables.

9. Mow correctly. How you mow your lawn can have a big impact on how much water it needs. Raise your mowing deck to promote a healthy root system. Keep your mower blades sharp; dull cuts make grass more disease-prone. Cut no more than one third of the leaf blade each time you mow.

10. Be a weather watcher. Rain is irrigation, too. Use it to your advantage—it's free! Don't water your landscape if it's rained in the past twenty-four hours. If rain is forecast in the next forty-eight hours, hold off on irrigating. Purchase a rain gauge to track how much rain your plants are getting. Install a rain shut-off device to override your irrigation system when it's raining (this is required if your irrigation system was installed after May 1, 1991).



The Bad...

By: David Tibbetts, UF/IFAS Master Gardener

Oleander Caterpillar

Introduction. Once again, a topic near and dear to my own lawn and landscape. My one oleander has had one blossom in the past four years due to my misguided efforts to control the effects of the oleander caterpillar. If you have an oleander in your landscape, you may have come across this fuzzy, orange with black hairs leaf muncher. It is voracious, and can eat its way through quite a lot of new oleander leaves every day. As I stated previously, I have tried to get rid of this pest (apologies to those of you who like moths and butterflies) by severely trimming my oleander on two occasions, then by simply picking off the caterpillars by hand and squashing them. Neither of these solutions has worked very well for me, as witnessed by the lack of flowers. Anyway, I thought I'd learn a little about this guy and pass it on to you.



Oleander caterpillars eating

The oleander caterpillar, *Syntomeida epilais* Walker, is a bright orange caterpillar with tufts of long black hairs. It is a common sight on oleanders in Florida and southern Georgia. This species is the only caterpillar pest of concern on this ornamental plant here in north central Florida.

Distribution. The oleander caterpillar is a native of the Caribbean region. Its range extends from northern South America, through Central America into Mexico, and from many Caribbean islands into Florida and coastal regions of southeastern states. It is usually killed by cold winter temperatures in northern and north-central Florida only to recolonize these areas the following spring.



Polka dot Wasp Moth

Description. Adults: The adult stage of the oleander caterpillar is sometimes called the "polka-dot wasp moth." Wasp moth is the common name given because of their resemblance to wasps. The moth's body and wings are a beautiful iridescent blue/green. Small white dots are found on the body, wings, legs and antennae, and the tip of the abdomen is red/orange. Male and female moths are quite similar in appearance, and have a wing span of 45 to 51 mm. These moths are slow-flying and active during daylight hours which contrasts them with other moth species which are usually nocturnal.

Eggs: The eggs are found in clusters on the underside surfaces of oleander leaves. They are pale cream to light yellow in color, spherical in shape, and measure less than 1 mm in diameter.

Larvae: The larvae range in length from 3 to 40 mm and are orange with clumps of black hairs arising from black tubercles (bumps) on the body.

Pupae: The pupae are smooth and brown in appearance and are aggregated in depressions on tree trunks or where the walls meet the eaves of buildings. The pupal aggregation is covered by a thin cocoon woven from silk and hairs from their larval skins.

Life Cycle. Female moths perch on oleander foliage and emit an ultrasonic acoustic signal which, alt-

The Bad...(cont.)

though inaudible to us, attracts male moths from great distances. When male and female moths are within a few meters of each other, they begin a courtship duet of acoustic calls which continues until mating occurs two or three hours before dawn. Once mated, female moths search for plants on which to lay their eggs. They oviposit on the undersides of the leaves in young growing shoots of oleander plants. Egg masses can contain from 12 to 75 eggs. First instars hatch in two to six days, depending on the temperature, and eat the shells of their eggs. The second and third instars (2 to 4 mm in length) usually feed gregariously on the underside of leaves, progressively moving down the plant. The gregarious feeding stage averages about 8.5 days in the summer.

After molting to the fourth instar, larvae begin to consume the entire leaf rather than just the underneath surface and often are solitary. It is the fourth, fifth and sixth instars that can defoliate entire oleander bushes. This solitary feeding stage averages about 19 days. The mature sixth instars leave the oleander plant and search for a pupation site. The larvae aggregate for some unknown reason and form pupal aggregations covered by a very thin silk cocoon.

Damage. Early infestation by the oleander caterpillar is easy to recognize. The young, gregariously feeding larvae turn the new oleander shoots a light brown color due to their skeletonizing feeding behavior (leaving the major and minor leaf veins untouched while eating the tissue in between). Total defoliation will not kill the plant but, if it occurs repeatedly year after year, the plant may be more susceptible to other pests such as scale insects.



Oleander caterpillar damage

Biological control. Because of the poisonous diet of the oleander caterpillar, birds and small mammals do not feed on this abundant resource. Several other insect species, however, are able to feed on the oleander caterpillar. Natural enemies include predatory stink bugs, parasitic tachinid flies and wasps, and the ever voracious red imported fire ant. Stink bugs have been observed sucking the juices out of larvae. Tachinid flies lay their eggs on large larvae and wasps lay their eggs on pupae. The progeny of these parasitic insects then devour the oleander caterpillar. Fire ants often discover the pupal aggregations and eat this immobile life stage.

Cultural control. Removal of larvae-infested foliage is the most environmentally friendly method of controlling the oleander caterpillar and is relatively easy on bushes of less than 2 m in height. Simply use a pair of scissors or pruners to snip off the damaged foliage and the group of feeding larvae. Put the infested plant material in a plastic bag and freeze for 24 hours to kill the caterpillars. Because of the poisonous nature of the plant sap, care must be taken to wash the hands immediately after disposing of the pruned plant material.

Chemical control. Application of insecticides should be considered as a last resort for this insect which, while producing unsightly damage, does not kill oleander. *Bacillus thuringiensis* (Bt), a microbial insecticide that is sold under various trade names, is a bacterium that kills only lepidopteran larvae. It has no toxicity toward beneficial insects.

Conclusion. Based on my experience, this pest is a difficult one to beat. However, I've never tried any chemical warfare against them. Maybe this year I'll try Bt.



and the Bugglies

From UF/IFAS publication EENY-006

Honey Bees

Introduction. Honey bees are amazing insects that not only produce honey, but through pollination, also help produce one-third of the food we eat. They are very social animals - a single colony can contain up to 60,000 bees, including workers, drones, and a queen. Each type of bee serves a specific role. The drones mate with the queen to produce new worker bees, and the worker bees perform all of the labor tasks like gathering pollen and nectar from flowers. We rarely see any but worker bees in our gardens.

It has been observed that honey bee workers choose pollen based on the odor and physical configuration of the pollen grains rather than based on nutritive value. A typical size honey bee colony (approximately 20,000 bees) collects about 57 kg (125 lbs) of pollen per year. A single bee can bring back a pollen load that weighs about 35% of the bee's body weight. Bees carry this pollen on their hind legs, on specialized structures commonly called "pollen baskets" or corbicula.



Worker bee gathering cit-

Importance of honey bees. The honey bee is only one of many bees and pollinators in Florida; however, it is the most important bee for Florida and the nation's agricultural economy. As stated above, honeybees supply approximately 1/3 of the national food supply through their pollination activity. Sometimes agricultural producers "rent" bee colonies for pollination, but most bee and pollination activity occurs naturally. In Florida, between 10,000 and 12,000 beekeepers manage 350,000 to 400,000 honeybee colonies. Each year the beekeeping industry is impacted by pesticide use. The impact on wild bee colonies is not quantified, but is probably significant. Foraging bees come into contact with agricultural insecticides and pesticides.



Large honey bee colony

Adult house bee: Active in the hive, tend larvae (brood), killed by contaminated stored pollen. The loss of house bees, which tend brood and larvae, contributes to further declines in hive population.

Adult field bee: Active outside the hive, forage for pollen and nectar to bring to the hive, killed by direct contact with pesticides and sprays, bring back contaminated pollen and nectar to the hive.

Protecting Bees. Understanding how bees forage helps to realize how susceptible they are to pesticides. Bees range 2–5 miles from a colony and seek out nectar and pollen in a systematic way. Once a food source is found, bees tend to collect only from that single source until it is used up before switching plants. Most major bee poisoning occurs when plants are in bloom. Bees that establish flight patterns in an area before a pesticide is applied usually are most affected. Bees that come to an area after pesticide applications are less affected since it takes time to scout and find food sources.

To reduce damage to honeybees, pesticide applicators should keep the following suggestions in mind:

1. Use pesticides only when needed. Factor in the value of beneficial insects (pollinators and predators) for crop yields when deciding whether or not to spray for pests.
2. Do not spray while plants are in bloom. Apply during bud stage or after petal drop.



Worker bee with full pollen baskets (circled in photo)

"Bugs are not going to inherit the earth. They own it now. So we might as well make peace with the landlord." ~ Thomas Eisner

and the Bugglies (cont.)

3. Identify other blooms. Look for weeds or other plants that might be blooming and attractive to bees, even if the crop being sprayed is not in bloom.

4. Apply when bees are not active. Bees fly from roughly 8 AM to 5 PM when temperatures are above 55°F–60°F. Early evening is the best time for pesticide application.

5. Do not contaminate water. Bees use water to cool the hive and feed brood.

6. Use less toxic compounds. Products hazardous to honeybees must say so on the label. Consult your local Extension agent for less-toxic compounds and use.

7. Use less toxic formulations. Microcapsules, dusts, wettable powders, and ULVs are more hazardous than liquids and emulsifiable concentrates.

8. Notify beekeepers. Beekeepers can move or confine bees if they have prior notification. Under Florida law, every apiary or bee yard must display the owner's name, address, and telephone number.

Special Problems. Two products especially harmful to honeybees are malathion and carbaryl (Sevin®). Both have been responsible for bee kills when the products have been used improperly, such as under the wrong conditions, without beekeeper notification, and with the most toxic formulations. Encapsulated methyl parathion (PennCap M®) and other microencapsulated pesticides are the most damaging to honeybees. We strongly recommend using this formulation only when honeybee exposure is not a possibility.

Cooperation and Communication. Protecting honeybees from pesticides requires cooperation not only between growers and beekeepers, but also with Extension agents and government officials. Growers need to be aware about the interactions of honeybees and pesticides, consider honeybee safety, and keep pesticide applications from affecting area bee colonies. Generally colonies are only harmed when decisions are made without knowledge of or regard for honeybee safety.

In the Garden. You can make your garden safe for honey bees by using pesticides only when needed. Don't spray when plants are flowering or in the mornings when bees are most active. You can even set up your own hive! The bees will help pollinate the plants in your garden, and you'll be able to harvest the delicious honey they produce!

Sources for this article:

Gardening in a Minute (http://gardeningsolutions.ifas.ufl.edu/giam/shows/transcripts/2011/aug/honey_bees.pdf)

The Benefits of Pollen to Honey Bees (<http://edis.ifas.ufl.edu/in868>)

Protecting Honey Bees From Pesticides (<http://edis.ifas.ufl.edu/aa145>)



Man, I am having a
REALLY bad hair
day!

"Bugs are not going to inherit the earth. They own it now. So we might as well make peace with the landlord." ~ Thomas Eisner



Fresh from Florida

Enjoying Florida Greens

Turnip Greens, Mustard Greens, Florida Broadleaf, Collards, Kale, Spinach

Nutritionally, these plants are all low in calories. They are loaded with Vitamins A and C and are important for calcium and iron. To maintain their high nutritive value, the key is to cook in a small amount of water. One serving (1/2 cup) greens can supply up to 50 percent of our daily need for vitamin A. Vitamin A is needed for vision, normal growth, reproduction, and a healthy immune system. A serving of greens can provide up to 30 percent of the recommended amount of vitamin C, also known as ascorbic acid, and is beneficial for fighting infections, keeping gums healthy and healing wounds. A serving of greens can provide up to 20% of calcium which is important for bone health. When cooking greens it is important to cook them until they just become tender. To capture the nutrients that are leached out while cooking, use the liquid in one of the following ways; as a vegetable stock, as a soup, or to dunk corn bread in before eating.

Selection: Choose greens that are bright green, moist and tender. Leaves that are injured, torn, dried, limp, or yellow are indications of poor quality and usually less nutritious. As greens get older they tend to be tougher and stronger in taste. Choose young greens when possible and prepare within a day or two of purchasing. They can be kept in a ventilated plastic bag in the refrigerator for a week if necessary but may become quite strong and leaves may go limp.

Preparing: Greens should be washed before use, since they tend to have sand and grit on them. To remove sand and grit, wash in lukewarm water in a large bowl (dirt will sink to the bottom of the bowl). It may take more than one time to remove all of the grit. Once clean, remove roots and rough ribs as well as the center stalk if it is large or fibrous. If using greens in a salad, thoroughly drain and dry them. This allows salad dressing to stick to the leaves. Mild flavored greens such as chard, kale, or spinach should be steamed until barely tender. Strong flavored greens such as collard, mustard, or turnip need longer cooking in a seasoned broth. Blanching before adding to stews or soups may be necessary to avoid bitterness.

Cooking greens: In a medium saucepan with ¼ inch of water, add washed greens. If salting, use ½ teaspoon of salt for every pound of greens. Bring to a boil, cover and cook until tender. For leafy greens, cook 1 to 3 minutes, or until they are wilted. For other greens, cook until they are crisp-tender about 5 to 10 minutes. There are many ways to season greens, some traditional seasonings include crisp bacon or left over ham.

Storing: Greens freeze well but only after being cooked. Leftovers may be stored in the refrigerator for 4-5 days, but if it is going to be longer, freeze in a vapor-proof container. They can last in the freezer up to 12 months. If you are going to freeze before cooking, it is imperative that you blanch the greens prior to freezing or they will become tough and flavorless upon thawing. The blanching time for collard greens is 3 minutes per pound and for all other greens 2 minutes. After blanching, cool, drain, and package, leaving ½-inch headspace.

Florida Greens

- ◆ Greens are an important part of southern cooking. Mustard, collard, and turnip greens all belong to the cabbage family, and they're a good source of vitamin A, calcium, and iron.
- ◆ The peak season for greens in Florida is October through March. You should plant greens in the fall, a few weeks after you've added compost or organic matter to the soil. Let the plants grow for at least six to eight weeks before you harvest them.
- ◆ Wash freshly harvested leaves well to remove all grit, and then cool them immediately in the refrigerator. They're best when cooked within a day or two of harvest. Chop your greens and boil them in a pot. Save the nutritious cooking liquid for dipping your cornbread.
- ◆ Reference: Gardening in a Minute: Greens (http://gardeningsolutions.ifas.ufl.edu/giam/plants_and_grasses/fruits_vegetables/greens.html).

Herbed Greens

Yield: 5 - 6 servings/ Time: 45 minutes

Ingredients:

2 lbs. fresh collards, turnip or mustard greens

3 slices lean pork cut in ½ - inch pieces

½ cup boiling water

¼ tsp. salt

1/8 tsp. ground black pepper

½ tsp. oregano leaves

Preparation:

1. Wash young greens carefully four or five times. Cut off root ends and coarse midribs. Place greens in a saucepan.

2. Brown lean pork pieces in a skillet and add to greens.



Fresh collard greens

3. Pour in boiling water. Water can be omitted if greens are very young.

4. Add salt, black pepper and oregano.

5. Cover and cook until greens are tender, 15 to 30 minutes. Cooking time will be less if greens are very young.

6. Cut through greens 2 to 3 times with kitchen shears before serving. Eat at once.

Spiced Mustard Greens

Yield: 6 - 8 servings; Time: 45 mins

Ingredients:

2 lbs. fresh mustard greens

¼ lb. lean pork pieces

½ cup boiling water

½ tsp mixed pickling spices

1 tsp. sugar

1 tsp. salt

¼ tsp. pepper

½ small onion, chopped

Preparation:

1. Wash mustard greens thoroughly. Rinse in clear water and slice.



Mustard greens in the garden

2. Cut pork in thin slices and brown in a large saucepan.

3. Add hot water and greens. Cover and cook about 15 minutes.

4. Add pickling spices (tied in cheesecloth bag), sugar, salt, pepper, and onions.

5. Cook about 10 minutes longer or until greens are tender.

6. Remove spice bag and serve greens hot.



The Urban Forest

Blackberries - A Luscious Home Grown Treat

Blackberries are a luscious treat that is well adapted and easy to grow in our area. There are several species of blackberries, all in the genus *Rubus*. Native species and commercial plantings extend from Florida to the Pacific Northwest. Cultivars differ as to winter chilling requirement and susceptibility to diseases. Proper cultivar selection is important for successful production. Blackberries include both erect and trailing types and are referred to as erect blackberries and dewberries, respectively. The recommended varieties for Florida are: 'Oklawaha' and 'Flordagrind,' early fruiting trailing types, and 'Brazos,' a later fruiting, semi-erect type.

A blackberry is composed of many drupelets, each of which develops from a single pistil. To obtain a large, well-formed berry, most of the pistils must be effectively pollinated. 'Brazos' does not require cross-pollination. 'Oklawaha' and 'Flordagrind' do not set fruit with their own pollen but produce well formed berries when cross-pollinated.

The blackberry is adapted to a wide range of well drained soils. A pH 5.5-6.5 should provide optimum growing conditions on mineral soils. A site with good air drainage and frost protection is especially important for the early blooming, trailing types. Mature blackberry plants are seldom damaged by cold; however, damage to flowers and young fruit is sometimes a problem in years when a late frost occurs.

The cool months are best for setting blackberry plants. Plants of trailing varieties may be spaced 5-10 feet apart in the row between posts that are 20-40 feet apart. The spacing between rows is often 10-12 feet, but optimum spacing depends largely on the method of cultivation to be used. Set plants of the semi-erect 'Brazos' 4-6 feet apart in the rows. A forty foot bed of blackberries will provide a generous harvest for a family of four.

For easy picking, and cleaner fruit, the canes should be trellised. When vigorously grown and properly pruned, the 'Brazos' requires no trellis; however, 'Oklawaha' and 'Flordagrind' require a trellis. There are a number of trellising methods. A common one consists of three evenly spaced horizontal strands of wire with the top one 5 feet high. The wire is supported by well anchored end posts with smaller posts within the row. It is best to tie at least one new cane to the top wire. Later developing canes can then be drooped over the wires, but not sharply bent. Thorns tend to hold the additional canes on the trellis without being tied.

Weed control is important in establishing and maintaining a vigorous and highly productive blackberry planting. If the plantings were made during the late fall or winter, no additional fertilizer need be applied until late February or early March when 1/5 pound of a mixed fertilizer (e.g., 8-8-8) should be applied per plant. Repeat at 8-10 week intervals until early September. During all succeeding years, make 3 applications of 1/3 pound mixed fertilizer per application. Make applications in February, June and late August.

Because of variations in frequency and amount of rainfall, irrigation is necessary for successful blackberry production. In general, 1 inch of water per application is sufficient. Irrigation is needed at weekly intervals during the dry periods of late spring and early summer.

Unlike most other fruit plants, the blackberry has perennial roots with biennial tops- tops which grow one summer and produce fruit the next spring. Fruiting canes die after harvest and are of no further use in the planting. Because of the long growing season in Florida, the general practice has been to remove all tops to ground level immediately after harvest. The brush that results harbors insects and diseases and should be burned. An easy method is to chop the vines down low and use a lawn mower to cut the plants down to ground level.



Blackberries



Wild Blackberries

Blackberry plants will normally propagate themselves throughout the summer by root suckering and natural layerage. Blackberries can also be propagated from leafy stem cuttings. Cuttings can be obtained from an established plant by using the new canes while their growth is still tender. Make cuttings 4-6 inches long, and insert them 1½ to 2 inches into the rooting media. A ½ perlite and ½ peat mixture provides a well drained, sterile medium suitable for good rooting. Rooting usually occurs within 5-6 weeks.

Trailing types can also be propagated in the summer by covering new cane tips from established plants with soil. The rooted tips are dug and planted before the following spring. All blackberry varieties will propagate from root cuttings although this method is most often used with the 'Brazos' types. Pencil size root cuttings are most likely to produce a strong vigorous plant. Sucker plants growing from roots may also be dug and planted. The 'Brazos' types sucker more readily than the trailing types, making it possible to obtain a considerable number from one plant.

Several insects and diseases may attack blackberries. Fungal diseases that commonly appear on blackberries include anthracnose, leaf spot, and rosette. Good cultural practices and sanitation including cutting back old and new canes after harvest will prevent most diseases. Insect control is not regularly needed in most areas. Occasional severe infestations may warrant chemical control.

The harvest season for 'Oklawaha' and 'Flordagrind' occurs in March-May, varying by year and location, and lasts approximately one month. 'Brazos' ripens later, thus prolonging the harvest season in a given area. Blackberry fruits bruise easily and are extremely perishable. They should be handled with care when harvested and used immediately. Blackberries are a welcome treat, coming at a time when few fruits are in season. Their adaptability, prolific nature and high price in stores make blackberries a good choice for the home garden. Good luck and good gardening.

A Wild Blackberry Tale

Some words about wild blackberries from a Florida native. Growing up, it was not too unusual to have my mother gather up one or more of her four sons and take us to the side of some road in Jacksonville where she'd seen some blackberries - we would pick as much as she could stand our whining about it (it's too hot, there are too many stickers, etc.). In spite of this experience, I still like blackberries, and it was a pleasant surprise to see them growing all around our neighborhood here. In the eight years we've lived in Palm Coast, the wild blackberries have been extremely dependent on rainfall. Two or three years ago, we had abundant winter/early spring rain and the blackberries were out in force. While walking, cycling or driving, keep an eye out for the wild blackberries and feel free to munch a few!



For information on growing blackberries go to- <http://edis.ifas.ufl.edu/pdf/HS/HS10400.pdf>

Garden Calendar

From "Guide to Successful Gardening in Florida's Zone 9A" by Flagler County Master Gardeners

April

General

If it does not rain, water twice per week, putting down approximately 1/2 to 3/4 of an inch of water each time. April is usually the start of our dry season. Fertilizer can be applied this month for your spring application, if not already done so.

Lawn

Mow weekly to ensure that no more than one third of the grass blade is cut at a time. Cut St. Augustine-grass and Bahiagrass to 3½ to 4 inches high. Do not bag grass. They recycle nutrients back to the lawn.

This is a good time to repair dead or damaged spots in the lawn. Fill uneven spots in the lawn with sand or topsoil. Repair dead areas with sod, plugs, or seeds. Keep the areas uniformly moist during the establishment period. Lightly water with 1/4 inch of water per day for the first 2 weeks. Once established and growing, switch to above recommended watering schedule.

After mid-April, most weed killers and feed products should not be applied to your lawn. Wait until cooler weather returns in the late fall.

Food Garden

Do not allow new seedlings to dry out. They should be kept moist, but not soaking wet. Vegetables that can be planted are cantaloupes, okra, tomatoes, peppers, eggplant, watermelon, squash, peppers, pumpkin, and cucumber.



Blackberries

Fruit

Oklawaha, Brazos, and Florigold blackberries should be checked for ripeness by the end of the month.

Landscape

Prune spring flowering plants: camellias, azaleas, spirea, and Indian hawthorne after they have finished flowering. You can transplant these shrubs at this time if needed.

Fertilize azaleas and camellias with an acid forming fertilizer.

Monitor your azaleas for lace bugs. If present, treat them with insecticidal soap.

Annuals and perennials to be planted are celosia, coleus, coreopsis, dusty miller, gaillardia, gazania, geranium, impatiens, Marguerite daisy, marigold, nicotiana, pentas, phlox, portulaca, rudbeckia, Persian violet, salvia, verbena, periwinkle, and zinnia.

Potted poinsettias that you've been keeping indoors since the holidays can now be planted outdoors away from artificial light sources. Since they will get bushy, leave three feet around them for growth.

Fertilize roses with a slow release fertilizer. Watch for black spot on roses. Avoid overhead irrigation. Begin weekly spraying with a fungicide for black spot as necessary. Follow the label instructions.

Add mulch to flower beds, shrubs, and trees to a depth of 2 inches. Keep mulch 3-6 inches away from trunks. Do not mulch under your citrus trees.

Garden Calendar (continued)

14

May

General

If it does not rain, water no more than twice per week, putting 1/2 to 3/4 inch of water each time.

Lawn

Mow lawns weekly to ensure no more than a third of the grass blade is cut each time. This will also help to reduce the thatch buildup.

Food Garden

Vegetables to be planted are eggplant, okra, New Zealand spinach, sweet potatoes, and southern peas. For best results, plant these crops at the beginning of the month.

Fruit

Sharpblue blueberries should be checked for ripeness by the end of the month. Watch for the various blueberry festivals...enjoy!

Peaches, nectarines, and plums begin ripening by the end of the month.

Fertilize citrus trees with a citrus fertilizer and nutritional (mineral) spray.

Landscape

If no rain, water citrus regularly to reduce fruit splitting.

Mulch all flower beds to aid in water retention for the warm weather.

Fertilize poinsettias with a slow release fertilizer.

Fertilize palm trees with palm fertilizer and nutritional (mineral) spray.

Annuals and perennials to be planted this month include celosia, coleus, coreopsis, crossandras, gaillardias, gazanias, hollyhocks, impatiens, kalanchoe, marigolds, nicotianas, ornamental peppers, pentas, moss rose, salvia, thunbergia alata, torenias, verbenas, periwinkles, zinnias, purslane, portulaca, and wax begonias.



Impatiens and hibiscus

June

General

Water no more than twice per week, if no rain, putting down 3/4 inch of water each time.

Lawn

Apply an iron product at beginning of the month

Due to spring/summer rapid growth, you may need to raise your mower height or cut more than often to ensure no more than a third of the grass blade is cut at a time. Make sure that the mower blade is sharp.

Food Garden

Tomatoes, lima beans, and cucumbers should be ready to harvest this month. Crops that should be planted are okra, southern peas, and sweet potatoes.

Fruit

Occasionally at this time of year, citrus trees may drop excess fruit they cannot support. This is a natural occurrence and not to worry.

Landscape

Check mulch levels around all landscape beds. If less than 2", add more being careful to pull it away from the stems of the plants.

If black spot is showing on your roses, avoid overhead irrigation and treat with a fungicide labeled for black spot fungus.

Annuals and perennials this month include celosia, coleus, crossandras, impatiens, kalanchoe, nicotianas, ornamental peppers, moss rose, Persian violet, salvia, periwinkles, and zinnias.

June is the last month to prune azaleas and camellias. Pruning any later in the year may harm next year's flower production.



Mop-head hydrangea



Garden Design

By Donna Frangipane, UF/IFAS
Flagler County Master Gardener

Creating a Garden We Love

The gardens we remember as exceptional are the ones that appear to have been set out with little effort. These gardens have style. Yet if we look more closely at them we will find that a considerable amount of planning has gone into the layout.

How can you make your own outdoor space distinctive? Initially, consider the architecture of your home and the natural surroundings. Carefully evaluate how your family will utilize the yard and it will become a functional and beautiful extension of your living area on a day to day basis. The addition of a lovely and sustainable landscape is an investment that can save you money short term by shading and cooling your home and long term will increase the value of your property. Inviting curb appeal is something that can make a favorable and lasting first impression.

Survey your family and list their ideas and discuss themes or types of garden that appeal to everyone involved. Will you entertain and gather with family and friends? Or have you always dreamt of having a rose garden? Will children or pets need a place to run and play or enjoy a structured recreational activity? Do you plan to simply enjoy walking through your garden and admiring what you have created or do you wish to have a spot to enjoy relaxing in the shade? Or you may wish to have a colorful spot designed to attract birds and butterflies. Maybe you would prefer admiring the view through the doors and windows of your home, patio and pool area. Perhaps your family would like to grow their own vegetables in the ground, in raised beds or vertical containers. Would the addition of a pond bring back memories of a family trip? Perhaps growing succulents, orchids or perennials and annuals in a colorful collection of pottery will be the way to go. When you have made decisions on the desired functions of the property and the wishes of the family you can then begin to design them.

Inspiration can be found in many places. Visit gardens and garden centers. Take photos of plants, hardscape and focal points that appeal to you. There are books, magazines and catalogues available as well as the internet for endless examples of yards of all sizes and shapes. The goal is to achieve a functional garden area creating a seamless flow of indoor and outdoor space to expand and enhance your day to day lifestyle.

The feasibility of renovating should be considered and a budget and timeline set. Landscaping improvements can be done by prioritizing areas of importance and carrying them out in phases. There are computerized programs and applications available to develop a plan or a graph paper and a pencil may work better for you. Whatever the method is it should be on paper along with your thoughts and ideas. Your plan should consist of the accurate house placement on the lot and placement of windows, doors, porches and patios. It should include dimensions of your property and existing driveways and sidewalks.

A complete site analysis is necessary. Existing trees and shrubbery should be evaluated as well as any drainage issues, fencing or walls, soil conditions, easements, prevailing winds and amounts of

(Continued on page 17)

Garden Design (cont.)

sunlight and shade. Do you have a view that should be enhanced and not obscured or on the other hand a privacy or sound issue that could possibly be overcome? Does an irrigation system need to be overhauled or improved with a drip system or rain barrels? Do you have enough storage or could an addition of a garden shed begin to define an area? Are the hardscapes adequate or should the initial phase of renovation be an addition of a patio, walkway or driveway? Have you checked into city, county and Homeowners Association guidelines? All of these questions should be answered. This information should all be notated whether you decide to do the work yourself or hire someone to do it or a combination of both.

Simplicity in your design is key. Complex designs usually require additional maintenance. The success of a landscape does not only include the initial installation but also the ongoing upkeep. Do you look forward to spending hours in your yard per week or does work, other interests or physical limitations require that you consider a service to do some or all of the maintenance? Before contracting out initial installations or maintenance get referrals from friends or neighbors.

The process of plant selection and placement is the final step in the design process. The selection of trees and shrubbery is important because they are the “bones” of your outdoor rooms and provide the backdrop for the rest of the plantings. The ground coverings, small shrubs, vines, perennials and annuals will follow and complete the theme. The landscape plants that you select should be ones that thrive in this area and are environmentally friendly. There are many bulletins available through the University of Florida with information on plantings. It is important to select the “Right plant for the right place”. Listings from the University include plants that are suitable to be grouped together according to sun soil and water requirements. The maximum mature size of trees and shrubs should be researched and healthy plantings purchased from local garden centers.

Focal points can be the inspiration for the design or the final piece of your garden style that you have been saving up to purchase. There are endless styles of weather resistant furniture and fabrics to choose from in today’s market and upcycling discarded items is now considered very “shabby chic”. Whatever your personal style will determine the direction of your yard. Small spaces can be just as delightful as large areas. With careful planning, proper installation and maintenance your outdoor space can be a rewarding undertaking with truly enjoyable results and a reflection of your personality and lifestyle.

Four examples of focal points:





Master Gardener Spotlight

Short & Sweet Horticulture Series, New Year, New Programs!

Thanks to your feedback over the past few years, we have taken your suggestions and put them to use!

We started the series off with "What's New (in plants) for 2013". Louise Leister showcased lots of plants that are new and underutilized for the landscape.

Then Ruth Micieli featured "Spring Vegetable Gardening" including different planting methods.

April 1st Louise presented a new workshop, "StormScaping". This program featured how to prepare your landscape for hurricane season including pruning your trees properly, how to recognize hazardous trees and selecting a healthy tree.



This was a very interactive program. Participants were able to ask questions and have discussions throughout the workshop.

The remaining classes are:

4/15/2013 Firewise Landscaping, Timber Weller Wildfire Mitigation Specialist will be presenting this program and discussing how you can have a certified Firewise community.

Florida Citrus Workshop- Growing citrus, troubleshooting pest problems, identifying diseases and disorders. This program will be held at VerdeGo Nursery on 4/19/2013, 10 am—12 noon at VerdeGo Nursery 4801 N. U.S. Hwy 1 Bunnell. Fee waived for this class.

4/22/2013 Designing Your Florida Landscape Workshop will include a "hands-on" session on how to draw a landscape plan for your yard.

Then we finish this month with "Hydroponics for the Home Gardener" on 4/29/2013. Here we will show you how to make your own system with easy

(Continued from page 1)
tion fern.

Q: Why is it important to get my soil tested?

A: Soil pH has a great influence on the ability of the plants to make use of needed nutrients in the soil. If you're having trouble getting something to grow, it may be related to the soil pH. This is a key element in determining the "right plant in the right place." Soil pH tests can be done at the County Extension Office. The test provides the pH level (acid or alkaline levels) and what actions should be taken to amend the soil for what's already planted there.

Q: When should I prune my Crape myrtles/
Azaleas?

A: In general, Crape myrtles do not need to be pruned. If they must be, Crape myrtles may be pruned just about anytime of the year. Typically in the winter, Crape myrtles are topped (also called 'Crape murder') or pollarded (yearly sprouts are cut back to the 'knuckle' created by previous years' pruning).

It is recommended that Crape myrtles be tipped, removing only dead branches and old seed heads. No wood that is larger than a pencil should be removed; this is more labor intensive and becomes virtually impossible if the tree grows to a large size. It is okay to be lazy about pruning Crape myrtles - again, they do not need to be pruned.

Azaleas can be pruned after they have finished blooming, but not past July 1st. They set their flower buds for the following spring at that time.



Gardening in the Bag

If you're a gardener, chances are you've purchased bags of potting mix before, maybe when you needed to repot other plants.

But did you know that you can grow plants directly *in* the bags?

Gardening in potting mix bags is a great way to grow eye-catching plants underneath a rooty tree, or to set up a quick and easy vegetable garden.

Purchase bags at your local nursery or garden center, and cut a few drainage holes in the back side of each bag. Lay the bags flat on the ground, and then cut holes in the top of the bags to make room for the plants. Use a hose to moisten the potting mix, and then add plants.

If flowers are your favorites, try colorful annuals or perennials. Or if you prefer edibles, try growing herbs, tomatoes, or other vegetables.

UF Resources For Gardeners

- Solutions For Your Life
<http://solutionsforyourlife.com>
- UF/IFAS Publications (EDIS)
<http://edis.ifas.ufl.edu/>
- Florida Yards & Neighborhoods
<http://fyn.ifas.ufl.edu>
- UF Environmental Horticulture Dept.
<http://hort.ufl.edu/>
- Florida Master Gardener Program
<http://mastergardener.ifas.ufl.edu>
- Florida-friendly Landscaping
<http://www.floridayards.org/>

For more information, contact your county Extension office or visit GardeninginaMinute.com.

*Gardening in a Minute is a production of the
University of Florida's Environmental
Horticulture Department, IFAS Extension, and WUFT-
FM.*

to find materials. We will also be giving each attendee a mini hydroponic seed starter set.

The programs are held from 10 am—12 noon at the Flagler County Extension Service 150 Sawgrass Road Bunnell (except the Citrus Workshop).

And for those of you on beachside we are offering a "Coastal Gardening" program. Meet us at the Wickline Center for an afternoon of helpful information on what can grow along the coast. This one is on 5/6/2013 from 2 pm—4 pm at the Wickline Senior Center 800 S. Daytona Ave. Flagler Beach.

Pre-registration required. \$5.00 per person (unless otherwise noted), pay in advance or at the door.

Fee includes refreshments and program materials. Phone (386) 437-7464 or E-mail rmicieli@flaglercounty.org

Don't forget about our ***Spring Fling! Open House and Plant Sale!***

This is our annual open house garden tour and plant sale hosted by the Flagler County Master Gardeners. Come talk with our Master Gardener Volunteers, buy some great plants for your garden and attend our programs on 'Gingers and Bromeliads' at 10:30 am, and 'Spring Gifts from the Garden' at 12:30 pm.

This event will be held on 5/17/2013 from 10 am—3 pm at the Flagler County Extension Service 150 Sawgrass Road, Bunnell.