



**MASTER  
GARDENER**  
**UF** UNIVERSITY of  
**FLORIDA**  
IFAS Extension

107 Mehrhof Hall  
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Gainesville, FL 32611-0675  
Phone: (352) 392-1831 ext. 331  
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<http://mastergardener.ifas.ufl.edu>

Form 10

## Florida Master Gardener Awards and Recognition Form Awards of Excellence

Each county is allowed **ONE ENTRY PER CATEGORY**. Although your Master Gardener Coordinator may have been heavily involved in this effort, only the efforts of the Master Gardeners themselves are to be evaluated. Points will be deducted if it is perceived that most of the effort or submission of entry forms came from the Master Gardener Coordinator.

Only efforts made since the last awards ceremony will be considered by the judges. Any new or re-certified active Florida Master Gardener(s) are eligible. In the event your entry does **not** take top honors in this category this year, we would encourage you to improve your submission and resubmit your entry next year should you *repeat or continue* this project. If your project has won in **ANY** year, it **CANNOT BE RE-ENTERED** again, despite any significant changes in format or participants.

Judges for the awards shall be appointed by the State Master Gardener Program Leader, University of Florida. Decisions by the judges will be final.

### ALL APPLICATIONS MUST BE SUBMITTED IN ELECTRONIC FORMAT

#### SEE BELOW FOR APPLICATION CRITERIA:

The correct and completed award application forms including:

- A typed application form not to exceed 3 pages in length. Supporting materials (where requested may be additional pages)
  - The three pages must include the 150 word project summary.
- 12 point font
- No more than 8 photographs in addition to the three pages of text. (Photos no larger than 8 x 10)
- This form typed and completed including: appropriate category checked
- Name of MG Coordinator (The coordinator must approve application prior to admission)
- Application, photos and supporting materials must all be in PDF format and packaged into one document. Submissions are to be emailed to: [twichman@ufl.edu](mailto:twichman@ufl.edu)

County:.....

Name of Project: .....

Project start date:..... Project end date: .....

Name of person(s) typing application:.....

Name or names of Master Gardeners preparing application.....

.....

.....

Name of Agent:.....

**CATEGORY: Indicate only one category per entry form.** *You must assign your entry to a specific category to be considered for an award in that category.* **Entries are limited to the categories indicated below.**

- |                          |   |                                     |   |
|--------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Form 11 Beautification                    | <input type="checkbox"/>            | Form 18 Personal Communications           |
| <input type="checkbox"/> | Form 12 Demonstration Garden              | <input type="checkbox"/>            | Form 19 Service to 4-H and other youth    |
| <input type="checkbox"/> | Form 13 Educational Materials Development | <input type="checkbox"/>            | Form 20 Special Audiences                 |
| <input type="checkbox"/> | Form 14 Extension Awareness               | <input type="checkbox"/>            | Form 22 Written or Verbal Mass Comm.      |
| <input type="checkbox"/> | Form 15 County Displays/Exhibits          | <input checked="" type="checkbox"/> | Form 23 County Master Gardener Newsletter |
| <input type="checkbox"/> | Form 16 General Achievement               |                                     |   |
| <input type="checkbox"/> | Form 17 Outstanding Master Gardener       |                                     |   |

**Email PDF Applications to:**

Tom Wichman  
[twichman@ufl.edu](mailto:twichman@ufl.edu)

**TO BE ELIGIBLE ALL ENTRIES MUST BE RECEIVED BY AUGUST 19, 2013**



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Form 23

## FLORIDA MASTER GARDENER COUNTY NEWSLETTER

This award category recognizes Master Gardeners that produce a newsletter distributed to the Master Gardeners in the county. This document can be exclusively for the Master Gardener volunteers, or also distributed to the public.

To be considered for this award, submit the following (along with this form and Form 10). Forms must be **TYPED AND COMPLETED** for consideration by the committee. **Remember to submit Form 10 with your entry.** Entrants are limited to the category they indicate on that form and you must follow the form 10 guidelines.

1. one (1) copy of two complete newsletters published between 8-1-12 and 7-31-13

Also indicate:

- A. How often the newsletter was publishing? Please provide a listing of Master Gardeners who participated in this project.
- B. Indicate the number of newsletters distributed and method of distribution. Also include information about how this publication is funded.
- C. Indicate if this publication is limited only to the Master Gardeners, or is also distributed to the general public. What is the purpose of this document?

Entries in this category will be judged on:

1. Educational content (30 points).
2. Design and creativity in the layout including proper logos and word marks (30 points).
3. Accuracy of information (30 points).
4. Number and method of distribution (10 points).
5. A 150 word (or less) summary of your project so that we can let others know of your accomplishments. Your application will NOT be judged without this summary included.

Please add a few paragraphs describing any problems you encountered or things you might change if you were to do the project again.

**RESPONSES TO FORM 23**  
**FLORIDA MASTER GARDNERS COUNTY NEWSLETTER**

*One (1) copy of two complete newsletters published between 08/1/12 and 7/31/13.*

The September 2012 and March 2013 issues of The Master Gardening Bench are enclosed.

*A. How often was the newsletter published? Please provide a listing of Master Gardeners who participated in this project.*

The Master Gardening Bench is published monthly and distributed several days prior to the beginning of each month.

Serving on the newsletter's editorial committee and also contributing writers are Master Gardeners Carol Ann Breyer, John Dawson, Joy Derksen, Norma Kisida, Betty Ann Price, Sherri Reaume, and Amy Stripe. Master Gardener Geoffrey Todd has also contributed articles. Norma Kisida is the newsletter photographer.

*B. Indicate the number of newsletters distributed and method of distribution. Also include information about how this publication is funded.*

An electronic link to The Master Gardening Bench is e-mailed monthly by the Extension to over 2,600 recipients, an increase of over 70% from just a year ago. In addition to individuals, organizations such as the Manatee County Rare Fruit Council, gardening clubs, and homeowners associations are on the electronic mailing list; in turn, many of these groups forward the newsletter link to their own membership. For the convenience of people accessing the Manatee County Extension Service's website, issues of the newsletter are permanently posted at [http://manatee.ifas.ufl.edu/lawn\\_and\\_garden/master-gardener/newsletter.shtml](http://manatee.ifas.ufl.edu/lawn_and_garden/master-gardener/newsletter.shtml). In 2012, this site had 52,978 download hits.

Paper copies are available at the Master Gardener Plant Clinic desk in the lobby of the Extension Service and at Master Gardener tabling events, as well as all county libraries. 3,000 copies were distributed in 2012.

Monies raised through Master Gardener fundraising activities pay for printing and postage of the newsletter.

*C. Indicate if this publication is limited only to the Master Gardeners, or is also distributed to the general public. What is the purpose of this document?*

The target audience of the newsletter is the general public and as such we gear our articles to educate Manatee County residents. The newsletter is an additional venue to advance horticulture and provide timely gardening information, as well as to promote and inform the public about the Extension's monthly gardening programs and classes.

*A 150 word (or less) summary of your project so that we can let others know of your accomplishments. Your application will NOT be judged without this summary included. Please add a few paragraphs describing any problems you encountered or things you might change if you were to do the project again*

Our goal is to provide informative, accurate articles in a timely, topical and attractive / entertaining manner.

- Editorial: In order to ensure we are addressing areas of interest to our readers, in 2012 we began soliciting their feedback (see some examples attached.) We cover cultural practices, plant selection, pests and wildlife, feature local gardening clubs, and news that impacts gardening in Manatee County. Links to applicable UFL EDIS publications are always included. We also welcome original contributions from Extension Agents, Program Assistants and related agencies.
- Layout and graphics: As the bulk of our audience accesses the newsletter electronically, we design to online standards, including full use of color graphics and photographs, and navigation that makes reading easy.

Thank you, Cindy. Good newsletter. Thanks to those who take the time to write, publish, etc.  
Enjoy reading, especially the article about the Good/Bad plants and the beautiful flowering trees.  
Barbara Gard

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thank you so much for all the wonderful information  
sue h

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Greetings Cindy,

I enjoy receiving the monthly newsletter [The Master Gardening Bench](#). Please keep sending me these newsletters.  
I am glad you and your staff are available for questions about Florida gardening.

I have enclosed a photo for you of some type of ivy vine. This vine is growing wild between our palm and citrus trees.  
When my husband tried to remove it, he developed a terrible skin rash very similar to poison ivy that covered both of this arms. Do you happen to know the name of this plant and information about it? I have not been successful finding it on my Internet searches.

Hope to hear from you. Thank you for checking this out for me.

Sincerely,  
Constance Bulawka  
6834 Wagon Wheel Circle  
Sarasota, FL 34243  
[cbulawka@verizon.net](mailto:cbulawka@verizon.net)

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Ms. Mozeleski

Thank you for the newsletters, and keeping us informed as to what is going on. It is appreciated.

One issue I haven't seen addressed is using plants as natural fences, so I thought I'd ask. (In case it needs to be redirected I'll send a copy to the person identified on the web site as coordinator, Ms. Hickey.)

We have an area with larger trees, but people cutting through have created trails.

Are there plants you could recommend that could thrive without direct sunlight and stop people from walking through them. (When I find broken sprinkler heads from people walking through I start thinking about a sharp cactus!)

Thanks for any information and recommendations you can provide.

Jeff Hale

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sharlya gold sharlya1@verizon.net

**Mar 21 2012**

Wanted to tell you how much I enjoyed your February newsletter. The writing is lively and good and the articles interesting and helpful.

Please pass this on to the editor and staff.

Sincerely,

sharlya gold

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Robert McLaughlin <valkyry2811@gmail.com>

Oct 4, 2012

Good Evening,

I am a Master Gardener with Escambia County Florida. I am assisting an elementary school in building raised beds. They have several students in wheelchairs and they would need a table bed for their use and enjoyment. I saw your article on table beds on the internet and would like to request additional information. I plan to work with them on October 12 so I will need time to secure funding and materials.

Appreciate your help.

Bob McLaughlin

Master Gardener

School and Community Garden Coordinator



# The Master Gardening Bench

The Manatee County Master Gardener Newsletter  
September 2012 - Volume 11 – Issue 9

## Down the Garden Path

Story and photographs by Norma Kisida, Master Gardener 2012



If you enjoy gardens, you probably can't resist paths that take you into and around them. Garden paths invite visitors into the garden and allow you to get up close and personal to the plants. Whether you are maintaining, admiring, or scouting your plants, garden paths help meet your needs.

Materials can be as simple as mulch, gravel, crushed stone, shell, or harder surfaces such as stones, bricks, or wood. A mix of materials can also be interesting. Stepping stones are a fast and easy way to add a path and are readily available in various materials, sizes and shapes. Some of the newer synthetic stones are made from recycled tires and are lightweight, water permeable, relatively inexpensive, and also available in various sizes, colors and shapes. Materials that allow rainwater to seep into the ground are preferable since they help reduce runoff.

A simple way to lay out a path is to use a garden hose to outline both sides and then etch the path. Putting

landscape fabric down first helps prevent weeds from growing through the path. A layer of sand beneath the path helps to level and stabilize the path. If you use stones, fill between the stones with sand, soil, fine gravel or stones. An informal path does not have to be completely level but should be stable and not so uneven as to cause tripping. Edging materials are available to keep loose materials in place.

Primary paths are those that lead from the house to the garden and should be at least 48 inches wide. Secondary paths lead off from the primary path and should be at least 30-36 inches wide to allow for comfortable walking and taking equipment and materials into the garden. Paths leading off from these can be narrower depending on the function. When placing plant material, keep in mind how much overhang you will get from plants along the path as they mature.

*(continued on page 2)*



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### Manatee County Agriculture and Extension Service

1303 17<sup>th</sup> Street West - Palmetto, FL 34221

Telephone: (941) 722-4524

<http://manatee.ifas.ufl.edu>

Master Gardeners Amy Stripe & Joy Derksen, Co-editors

Contents reviewed & edited by Lisa Hickey, Extension Agent.

Send a photo or gardening problem via e-mail to the Master Gardeners at [ManateeMG@gmail.com](mailto:ManateeMG@gmail.com) or visit them at the County Extension Office

Monday – Friday 9:00 a.m. to 4:00 p.m.; closed on Wednesday.



## Down the Garden Path

*(continued from page 1)*



Straight paths are more formal while paths that curve are more casual or natural. The path should serve a function or lead to something interesting such as a garden bench, fountain or other garden feature. A path that curves and disappears makes you curious about what lies beyond. Adding a few smooth rocks to a flagstone path creates more interest and a more natural look. A repetition of plants staggered on both sides draws your eyes along the path. Ground hugging plants between the stones or next to the path help to soften it. Tucking a few fragrant plants such as rosemary, thyme or scented geraniums along the edges makes it even more delightful. Low voltage lights may be added for night strolls.

Remember to call before you dig if there is any possibility of utility lines in the area as some of these lines such as cable lines are shallow. Check for irrigation lines as well.

Helpful websites for more information and ideas:

[Reduce Stormwater Runoff from Florida-Friendly Yards](#)

[9 ways to create a garden path](#)

[Path and walkway landscaping ideas](#)

[Garden path ideas: Stepping stones and walkways](#)

[41 gorgeous garden paths](#)

### STOCK UP ON OLD FAVORITES AND NEW ADDITIONS AT THE ANNUAL MASTER GARDENERS' PLANT FAIR

The Manatee County Extension Master Gardeners will be holding their annual plant fair on Saturday, October 6, 2012 at the Manatee County Fairgrounds. The fair hours are from 8 a.m. to 1 p.m. (or until all plants are sold.) Come early for the best selection and most unusual plants! While there, enjoy the new educational gardens, take home ideas to use in your garden, and get advice from the Master Gardeners on your landscaping challenges. All proceeds go towards the continued development of the educational gardens and outreach programs.

The County Fairgrounds are located at 1303 17<sup>th</sup> Street West, Palmetto, FL (across the street from Palmetto High School.) Ample free parking is available.

# Strawberries

by John Dawson,  
Master Gardener 2007

The home garden strawberry, *Fragaria × ananassa*, is a hybrid species that was first bred in Brittany, France in the 1750s via a cross of *Fragaria virginiana* (common wild strawberry) from eastern North America and *Fragaria chiloensis*, a wild strawberry which came from Chile in 1714. There are hundreds of varieties that have been developed since. Here in Central Florida, now is the time to plant.

The berries of the strawberry plant (which aren't true berries – it's a bit complicated) are a complex arrangement of ovaries (the part which looks like seeds) sitting on top of a fleshy pulp which is actually part of the remaining flower receptacle. The actual seeds are inside the ovary casings. So in essence the strawberry carries its seeds on the outside of the fruit instead of the inside.

Strawberries are classified as "June-bearing" strawberries - which bear their fruit in the early summer - and "ever-bearing" strawberries, which often bear several crops of fruit throughout the season. They have been traditionally grouped according to their flowering habits. The three basic flowering habits are short-day, long-day, and day-neutral, which refer to the day-length sensitivity (photoperiod) of the plant, which in turn affects flower formation. Day-neutral cultivars produce flowers regardless of the photoperiod (ever-bearing).

Strawberries require temperatures between 50° and 80°F and day lengths of at least 8 to 14 hours of full sun for the development of flowers and fruit on most varieties. Successful varieties are bred specifically for their local environments. (So, rethink ordering plants from a grower up North, buy from local Central Florida suppliers!) The University of Florida suggests three varieties for the Florida home garden: 'Camarosa', 'Sweet Charlie', and 'Festival.' 'Festival' has been the most productive variety in Central Florida, producing 1 to 2 pints of fruit per plant per season.

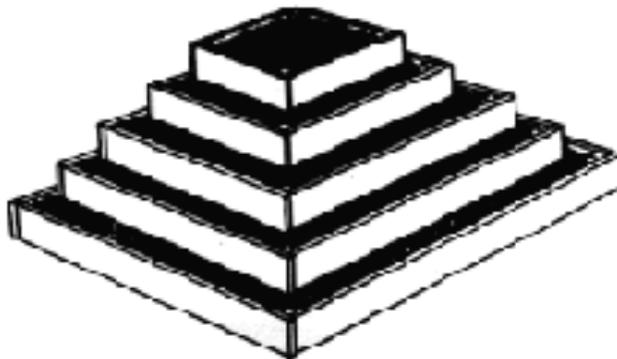
Strawberries should be grown in soil which is well drained and slightly acidic (pH 5.5-6.5). If your soil pH is within this range, you may grow your strawberries in standard mounded rows. If not, you may grow them in raised beds, boxes, pots or hydroponically, where you have greater control of soil pH. These methods are also best where growing space or soil nematodes are an issue. If you plan to grow more than a few plants, my preferred method is a raised bed pyramid, using landscape timbers.

To build a strawberry pyramid, prepare a planting site for your strawberries at the beginning of September in a full-sun location. Build the planting beds, with landscape timbers, in dimensions that suit your needs. Fill the planting bed 1/2 to 2/3 full with a well-draining top soil. Mix in 3 to 4 inches of organic compost or peat moss to increase the nutrient value and water-draining ability of the bed. Test the planting soil pH (at the Extension Office). If necessary, work ground rock sulfur into the soil to lower

the pH number according to directions on the bag. Water the planting bed well after making amendments and let it rest for two weeks. Plan to plant the strawberry plants 18 inches apart, with plants spaced alternating from those in the other tiers. Dig planting holes that are deep enough for the plant roots to spread out (about 5 to 6 inches).

Set the plants into the holes, spread the roots, and make sure the crowns are held above ground level. Gently cover the roots with soil and tamp down to hold in place, leaving no exposed roots.

Now would be a great time to add drip irrigation to your pyramid designed to soak the soil, not the leaves. Spread clean straw mulch (hence the name "strawberries") around the plants to assist with soil moisture retention and prevent weed growth (black plastic also works well). Straw mulch will decrease berry rot by keeping the leaves from sitting directly on the soil. Water the strawberries after planting by moistening the soil to a depth of 6 inches. Apply water to the soil instead of spraying it on the plants. Do not create pooling of water around the plant stems as this promotes root and stem rot.



Build a strawberry pyramid.

(continued on page 4)

*(Strawberries, continued from page 3)*

For better production, remove the plant blossoms that appear during the first year. This will promote plant growth when you want to develop good roots, not berries. In turn, this will increase berry production the following years. (Commercial growers treat strawberries as annuals and skip pinching off, allowing the plants to fruit and then discard them. If you can't wait, then pinch off only a portion of the plants and allow the others to fruit.)

Strawberries propagate themselves by either sending out runners (stolons) which extend away from the parent plant and find a new area to establish roots for a new plant or by the many seeds on the berries. You can control the placement of stolons by allowing them to root in an area you want, pinned in place in a pot for transplanting elsewhere or simply removing them. Allowing the plant to develop runners takes energy away from fruit development. Seeds are spread by consumption (mostly birds). Strawberries are ripe when about 75% of the berry turns red (a cue for birds)! To protect your ripening berries, you will need to cover them with bird netting as they begin to turn color (the netting does not prevent theft by small family members).

Strawberry plants are attacked by over 200 insect pests and a number of diseases (mostly fungal based). Frequent scouting for insect pests and a regimen of fungicide application should keep plant loss to a minimum. Plant bed sanitation and weed removal is essential in maintaining healthy crop production. Strawberries should be protected from freezing temperatures by covering with frost cloth. For more information on "Growing Strawberries in the Florida Home Garden" go to <http://edis.ifas.ufl.edu/hs403>.

For those who may be allergic to strawberries, you may want to try pineberries, a strawberry cultivar that came to the European market in 2011, and that does not contain the gene for turning the berry red (found to be the primary cause of allergic reactions.) The pineberry (from "pineapple" and "strawberry") is the result of crossbreeding, not genetic engineering. Pineberries were bred from a species of South American wild strawberry which was nearly extinct until 2003, when a group of Dutch farmers banded together to save the plant using source stock discovered in France. When ripe, it is almost completely white, but with red seeds (see photo below). Strawberry thieves leave it alone because it never turns red.



## The Rugose Spiraling Whitefly

By Joy Derksen Master Gardener 2004



Just when you thought you had the latest set of Florida invasive bugs under control, here comes another one. The Gumbo Limbo or Rugose Spiraling Whitefly (*Aleurodicus rugioperculatus*) is just beginning to appear in Manatee County. Although it was first spotted in the Florida Keys living on Gumbo Limbo trees, it has since settled on a large number of landscape plants including palm trees, banana, black olive, live oaks, cocoplum, copperleaf and wax myrtle. The longer it lives in Florida the happier it has become with more and more plants. These white flies are about three times larger than most other white flies, making them easy to see. Shown on page 5 are a group of the flies on a palm tree frond.

The "spiraling" in the name comes from the way in which the eggs are laid in a spiral pattern on plant leaves. You can identify the pest from the spiral egg patterns and the build-up of a white, waxy substance on the leaves. Large amounts of black sooty mold also build up on the insects' excrement.

Now that you know what you have, what can you do about it? Always consider that these white flies, while unsightly, will probably not kill your plant unless it is badly infested. If you take a wait-and-see approach, beneficial insects might clear up your problem. Tiny parasitic wasps and lady bugs and lacewings larvae all seem to like to eat the eggs and newly hatched flies. For small plants, the University of Florida recommends that you thoroughly wash off the plants with a strong stream of water. Follow up with an insecticidal soap or horticultural oil application sprayed once a week for 3 to 4 weeks. Be careful with oil; use when the temperature is above 90 degrees as you can damage your plant.

For larger plants and ornamental trees you may have to consider using a systemic insecticide (labeled for whitefly

*(continued on page 5)*



control in landscapes). These pesticides are costly and take several weeks to be effective, but are long lasting (9 to 12 months). Systemic pesticides come in granular or liquid forms and are most often applied to the soil around the tree. The pesticide is absorbed by the tree roots and eventually is present in the leaves and branches of the tree. Always follow label directions. The “label is the law.”

For more information, pictures, and pesticide suggestions visit <http://miami-dade.ifas.ufl.edu/documents/Thegumbolimbospiralingwhiteflyfactsheet.pdf> for a University of Florida’s information sheet.

## Invasion of the Air Yams

Lisa Hickey, Urban Horticulture Agent



**PLUCK** – there goes another potato – from a vine. (“Vine” will clue you in that we are not harvesting this potato from sub-soil roots like your kitchen spud!) This is an “air” potato, often spread by admirers of its distinctive heart shaped leaves, its deeply impressed veins, and its quick growth, and often planted as a lovely vining plant against a backyard fence.

The air potato or air yam (*Dioscorea bulbifera*) originated in Asia, was introduced to Africa, and then brought to the

Americas via slave ships. It arrived in Florida in the early 1900s and is today listed as a Florida noxious weed. Of the 6 species of *Dioscorea*, 2 are natives. But *D. bulbifera* is not; it is the only species that is identified by a vine that twines to the left or counter-clockwise, has large 8-inch rounded leaves, and seeds that are round in shape.

The vine dies back in winter and aerial tubers or bulbils attached to the vine drop to the ground to sprout in the spring. As a perennial, the underground tuber increases in size annually and re-sprouts every spring, causing management nightmares. Nationwide, tons of air potatoes are collected in an effort to eradicate the invasive species.

The best time to control the vine is when it is actively growing: spring and the summer months when rains are boosting growth up to 8 inches a day. August and September are good months to control the air potato since not many bulbils are present. Repeated herbicide applications over several growing seasons may be necessary for complete control. Applications of 1 to 2% solution of triclopyr (Garlon 3A ingredient) or of 2 to 3% solution of glyphosate (RoundUP™ ingredient) until the leaves are thoroughly covered will provide systemic control. Bulbils can be picked in early winter and frozen for 24 hours or dropped into a garbage can with bleach solution for several days to kill them.

Herbicides will cause damage to the plant material supporting the vine. But keep an eye on the bulbils! If the vine detaches from the underground tuber, immediately dig to locate the tuber. Otherwise, you may see re-sprouting in the spring. You may need to hire a certified pest control operator for the herbicide application due to product availability.

Researchers may have found a *herbivoracious* air potato beetle as a possible biological control. Until then, prevention is the best method of eradication! It is illegal to move, possess, introduce, or release noxious plant species without a permit. So - no plucking potatoes from your neighbor’s fence! Educate them and call the Extension office for a list of Florida-friendly vines to grow on your fence instead!



# Common Nuisance Wildlife

By Sherri Reaume, Master Gardener 2012

Many nuisance wildlife in central Florida are nocturnal animals that are either looking for a place that is warm and safe to set up home or digging in your yard looking for a meal. You can set up traps to capture some of these animals yourself, while others are best left to professional nuisance wildlife trappers. Wildlife trappers possess the tools and experience to get the job done quickly and humanly. The names of local professionals are listed by county at <http://www.MyFWC.com>.



## Opossums

Opossums are scavengers and frequently get into people's garbage and pet food. They are marsupials and carry their family in their pouches. Opossums rarely carry the rabies virus and are docile, nocturnal, slow moving critters.



## Raccoons

Raccoons are one of the most commonly dealt with nuisance animals here in Central Florida. Females are always looking for a place to deliver and raise their babies. They love to break into homes, garages, porches, and attics. They will defecate in your swimming pools to hide themselves from other raccoons or predators (of which there are few.) Raccoons are common carriers of rabies.



## Rats

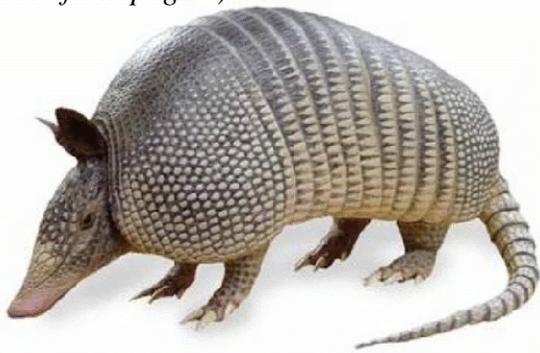
Rats are probably a Florida homeowner's biggest complaint. The most common rats in Central Florida include the citrus and roof rats. They often enter homes through small openings in the attic. Rats breed very rapidly (going into heat every four days). Rats are nocturnal and agile.



## Squirrels

Although adorable, squirrels are destructive, often chewing their way into people's homes and once inside chew on wood, ductwork, electric cables, and wires.

*(continued from page 7)*



### **Armadillos**

An armadillo is basically an anteater with a long tongue and extremely strong claws. Armadillos frequently choose to make a burrow next to or under a home or other cover, such as an AC unit or shed. They also dig under sidewalks and decks. Although they are wonderful grub and worm eaters, they can be highly destructive to lawns and landscaping while burrowing their six- to twenty-foot long tunnel.



### **Moles**

A mole looks like a mouse with a long snout and flipper-like front legs. Moles are common pest in Florida yards. They burrow through the soil with their powerful claws. Although they eat many pests in the yard, people object to the surface tunnels that they create while searching for their meal.

### **Skunks**

Obviously the objection to skunks is their strong, smelly spray. Skunks, like other Florida rodents, often make their homes under sheds and houses where they have their litters and dig up the landscaping searching for worms and grubs.



### **Snakes**

The majority of snakes in Florida are non-threatening, unless you break your neck trying to get away from one! Florida has six species of venomous snakes (only four in Manatee County) and 39 species of non-venomous snakes. Although many people find snakes scary, they are actually beneficial - eating insects, rodents, frogs, and even some venomous snakes. Most snakes are harmless, but the general rule for snakes is to leave them alone because even non-venomous snakes will bite if threatened. With all the marshes and wetlands being drained and developed, snakes are becoming more common in suburban neighborhoods.



### **Feral pigs**

Wild hogs occur in all 67 Florida counties within a wide variety of habitats. Although they prefer oak and cabbage palm hammocks, freshwater marches, swamps and pine forests, they frequently live near golf courses. They travel in small family groups or alone, feed by rooting with their broad snouts, destroy landscapes and leave some areas looking like plowed fields. Fast breeders, a healthy female can breed at six months old and continue to breed every six months producing four to fourteen piglets per litter.



It is nearly impossible to live in Manatee County without interacting with some wildlife – whether it be spiders in the house or hogs in your garden. Just be safe and smart when attempting to manage the wildlife if your life. For more information on nuisance wildlife check out UF/IFAS Extension at: [http://solutionsforyourlife.ufl.edu/hot\\_topics/environment/nuisance\\_wildlife.html](http://solutionsforyourlife.ufl.edu/hot_topics/environment/nuisance_wildlife.html)

# September Calendar of Events

Date	Time	Event
June 1 <sup>st</sup> through September 30 <sup>th</sup>		<b>Black Out Period</b> – No fertilizer containing nitrogen shall be applied to turf or landscape plants between June 1 – Sept. 30 of each year according to Manatee County Fertilizer Ordinance No. 11-21.
2 <sup>nd</sup> Saturday	10:00 am-1:00 pm	<b>Beginning September 8 – Ask a Master Gardener</b> at South Manatee Library, 6081 26 <sup>th</sup> Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 <sup>nd</sup> & 4 <sup>th</sup> Saturday	10:00 am–1:00 pm	<b>Ask a Master Gardener</b> – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton (formerly the Roaring 20's Pizza). Visit the Extension Master Gardener information table and get answers to your gardening questions.
September 12	1:00 pm-3:00 pm	<b>Fall Vegetable Gardening</b> – The summer heat is tapering off which is the signal to start preparing your fall vegetable garden. Come learn all the vegetable gardening basics from where to locate the garden, how to prepare the garden bed soil, what vegetables to put into the fall garden, and how to deal with the carrot-snatching wildlife. Presented by Lisa Hickey, Extension Agent. <b>Location: South Manatee Library, 6081 26<sup>th</sup> Street West, Bradenton.</b> Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call the Master Gardeners at (941) 722-4524.
September 15	9:00 am-10:30 am Class Full or 11:00 am-12:30 pm	<b>Hypertufa What? Make a Fun Garden Project!</b> Make your own garden containers, fake rocks, stepping stones and decorative garden accents. This lightweight artificial stone is easy to make and has many uses. You will take home the items you create in class along with the recipe to make hypertufa at home. \$10 per person, all materials provided. The \$10 materials fee is due BEFORE the day of the workshop. Bring your own rubber or latex gloves and a small trowel. Presented by Beth Komyati, Master Gardener Trainee, Class of 2012. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call the Master Gardeners at (941) 722-4524.
September 18	1:00 pm-3:00 pm	<b>Dazzling Designs</b> – This interactive, hands-on class will demonstrate how to implement the nine principles of a Florida-Friendly landscape. We will highlight dazzling landscape designs by Manatee County homeowners. Presented by Michelle Atkinson, Florida-Friendly Landscaping™ Program Coordinator. Location: Braden River Library, 4915 53 <sup>rd</sup> Avenue East, Bradenton. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call Michelle at (941) 722-4524.
September 22	9:00 am-Noon	<b>Florida Friendly Landscaping™ Combo – Compost and Rain Barrel Workshop</b> – Learn how to turn your kitchen scraps and yard waste into amendments with details on how to set up home compost bins. Leave with a bin to start creating your own compost. Fee for compost bin. Learn how to install, paint, and maintain a functional rain barrel. Bring your truck or car with a large trunk and leave with your own rain barrel. Fee for rain barrel. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call Michelle at (941) 722-4524.
October 6	8:00 am- 1:00 pm Or until sold out	<b>Manatee County Extension Master Gardeners' Plant Fair</b> – It is time again for the annual fall plant fair at the Extension Service located at 1303 17 <sup>th</sup> St. W. in Palmetto. A wide selection of plants, including natives, shrubs, trees, vines, ground covers, ornamental grasses, herbs and vegetables will be available to purchase. All proceeds help with the operations of the educational gardens and greenhouse.

## Florida Master Naturalist Program – Upland Habitats Module

Are you interested in learning about Florida's natural habitats, the flora and fauna that live within the habitats and how we have an impact on the natural habitats? Register online for the Florida Master Naturalist Program–Upland Habitats Module at <http://www.masternaturalist.ifas.ufl.edu/>. Registration closes on September 19, 2012. Class dates are September 26, October 10, 17, 24, 29 and November 6 from 8:30 a.m. to 5:00 p.m. Presented by Lisa Hickey, Extension Agent.

## Agriculture and Extension Service - Manatee County Community Services Department

Located at 1303 17<sup>th</sup> St. W., Palmetto, FL 34221 Telephone: (941) 722-4524

Web site: <http://manatee.ifas.ufl.edu> E-mail: [manateemg@gmail.com](mailto:manateemg@gmail.com)

# Plant Fair

Manatee County Master Gardeners  
Agriculture & Extension Service

Saturday, October 6  
8 AM to 1 PM or until sold out



It is time again for the annual fall Manatee County Extension Master Gardeners' plant fair. A wide selection of plants, including: natives, shrubs, trees, vines, ground covers, ornamental grasses, herbs and vegetables will be available to purchase. All proceeds from this event help with the operations of the educational gardens and greenhouse.

New this year — a wide variety of hypertufa planting pots.

Master Gardeners will be on hand to answer any gardening questions.

Free native seedlings to the first 50 customers!

This event is held at the Manatee County Agriculture and Extension Service at the fairgrounds, 1303 17th Street West in Palmetto.

We've got a good thing growing!



1303 17th Street Palmetto, FL 34221  
(941) 722-4524



## HOW I STARTED . . . GARDENING IN A SQUARE FOOT

BY Geoffrey Todd, Master Gardener 2012

HOW I STARTED. . . Gardening, that is. I would like to say that I've been a gardener most of my life, but unfortunately, I wasn't born on a farm. I lived in London, England, and my idea of a garden, apart from public parks, was a few struggling houseplants. Then in 1978, seduced by the climate and laidback lifestyle, I moved to Florida. Coming from a small city apartment, I appreciated the space, actually having some land around the house. Of course, the British people who lived outside cities were always great gardeners, but I was a city boy and a little bit nervous around cows and horses. Residence in Manatee County changed all that.

My first attempts were a few tomato plants, lettuce, and some carrots. I grew directly in the ground, knew very little about bugs and insects, and had never heard of nematodes. Fertilizer? Wasn't it already in the water that came out of the hose? Naturally, the results weren't spectacular. Funnily enough, even in those distant days, flowers and ornamentals didn't interest me – being able to eat what I grew turned me on! I immediately agitated to acquire some acreage, but my wife, being of sounder mind, wisely resisted. So I carried on for a few years with mixed results.

One day, I happened to watch a gardening show on TV called "Square Foot Gardening." I got the accompanying book by Mel Bartholomew and I was hooked, converted, blinded by the simplicity of his philosophy. Within days, I constructed an 8' x 4' raised bed, marked it off in square feet, and planted according to his instructions. A few easy months later, I was stunned by the quantity of produce that came out of that bed. All my readers are

probably acquainted with his ideas: plant only the right number of seeds or transplants in each square according to the mature size of the plants. No more rows and rows of seeds that only have to be thinned out and discarded when they sprout. Practically no weeding, fertilizer measured in tablespoons, and no more heavy tools to do the job. Rotation of crops keeps everything growing and yields are great. It's nice to be able to grow only what you can consume or give as gifts to friends. Although I'm still guilty of overproducing because I enjoy the sight of all that green stuff!

Today I have three raised beds and sundry other commercial containers and grow a wide variety of seasonal vegetables –still no flowers! Lately, Mel Bartholomew has come out with the "All New Square Foot Gardening." In it he reinforces his principles, being even more insistent on physically marking out the square foot areas in the beds as being crucial to the organization of planting, weeding, and rotating crops. It also makes for a very neat garden! He gives his recipe for a growing medium –"Mel's Mix" he calls it – claiming no fertilizer is needed. But then, one third of the mix is five different kinds of compost! There are a lot more photographs, albeit black and white, and the text and layout are very clear. All in all it's a good read and a valuable addition to my library.

All these years later, I still practice square foot gardening. Last year I was inspired to take the Master Gardener course. Now I know far too much about bugs, diseases, and nasty nematodes. Ah, ignorance was bliss!



## Manatee County Agriculture and Extension Service

1303 17<sup>th</sup> Street West - Palmetto, FL 34221

Telephone: (941) 722-4524

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Master Gardeners Amy Stripe & Joy Derksen, Co-editors

Contents reviewed & edited by Lisa Hickey, Extension Agent.

Send a photo or gardening problem via e-mail to the Master Gardeners at [ManateeMG@gmail.com](mailto:ManateeMG@gmail.com) or visit them at the County Extension Office

Monday – Friday 9:00 a.m. to 4:00 p.m.; closed on Wednesday.



# Gardens are a Winner at the County Fair

by Carol Ann Breyer, Master Gardener 2003

Without a doubt, the Manatee Master Gardeners can be justifiably proud of their garden on the property of the County Cooperative Extension Service in Palmetto. Those with track records of a decade or so recall the valiant efforts that took place to secure the land and the structures that now comprise the attractive setting of the garden. Many of the original pioneers of this project have passed away or have moved on to become Master Gardener Alumni, and all are remembered with gratitude. The Manatee County Fair, held each January, offered an excellent time to open the gates of the garden to residents and other visitors.

As guests to the Fair made their way into the garden area, they seemed willing to offer their reactions and suggestions. Responding to the request to rate their experience, over half of the surveyed visitors gave the garden unqualified high marks of approval.

Among those delighted with the gardens,” Lois and Lindsey H. of East Manatee County stated that “there is really nothing to compare it to,” and enjoyed particularly the vertical dimensions of the landscape. Sue and Wayne H. of Myakka City admired “the layout of the garden and the quiet atmosphere it provided.” Also from Myakka City, Nona D. liked the trellises and the rain barrels, and asked if it is possible to roast and use wild coffee beans. (No, it tastes nasty and actually doesn’t contain caffeine.)

Out-of-state tourists from Frederick, MD, Jim and Sandy S. found the garden to be “very informative” and will visit again. The Earth Boxes were rated super by Bonnie B., an enthusiastic gardener and volunteer

from the Manatee Lions Club. Cheryl K. of Bradenton was impressed with the fragrance of the herbal section beyond the roses, and River Club residents, Lisa K. and Sara Z. admired the “sheer beauty of the chenille plants and lobelia.” “The” helpful and friendly Master Gardeners” were commended by Keith C., who also suggested that maps of the garden be made available.

Connor and Trish of St. Petersburg “loved the garden’s landscape and general design.” Steve D. found the new bog garden unusual. Young residents of Palma Sola, Maya and Michala W. and their parents, liked the “fountain with plants and trellises.” The B. family of County Creek was impressed with the “pattern of walkways and the edible plants,” but thought that more signage was needed. Tiny Jordan F. of Palmetto gave the garden an A+, liked the maze, and enjoyed what her father termed “her first interview.”

John C. and his two shy daughters stated that “the children’s garden was the best.” Bill and Linda L. of Plattsburg, N.Y, thought the best features were the arbors and the vegetables. Renee C. liked the “statue made with pots,” while her sister, Sage, liked her namesake scarlet sage. Helpful suggestions that we received were to better identify our fruit trees, have maps with more plant ids, and have fewer insects. We are pleased to announce that the plant id signage is currently in the planning stage and will be completed this year.

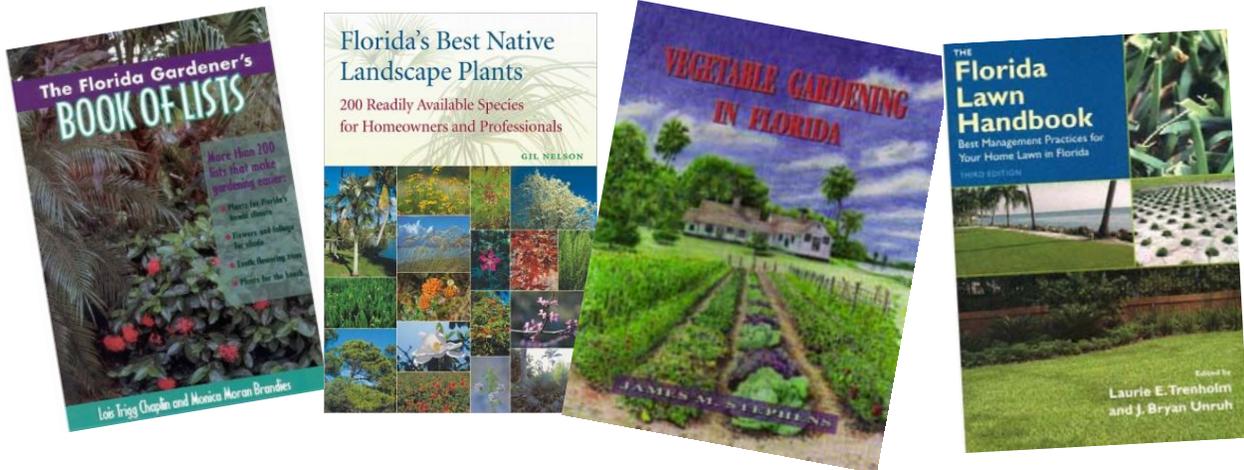
Arrange a visit to our gardens for yourself or your group by calling the Master Gardeners at (941)722-4524.



Photographs by Norma Kisida, Master Gardener 2012

# Best Gardening Books

by Amy L. Stripe, Master Gardener 2008



If you're like me, you want a definitive gardening guide for Florida yards. Well, such an animal does not exist. Gardening books tend to be specialized (no surprise there) and so you may need quite a library to help guide you.

I have resisted this idea and as such have several recommendations when you consider adding a gardening book to your home library.

1. Pictures: I have found that the vast majority of gardening books lack good photos or drawings that truly help amateurs like me identify plants. Many are replete with botanical descriptions that defy us all. Some of the old-fashioned books you might find at garage sales have the best photos, although they may not be the best guides to cultural practices for a particular plant. Also, beware a Google search of plant photos. My best advice is to consult your Extension Service in terms of plant identification.
2. Lists: A book I do recommend for every Florida gardener is *The Florida Gardener's Book of Lists* by Lois Trigg Chaplin and Monica Moran Brandies. This book is an excellent source for both the beginner and veteran Florida homeowner in terms of identifying plants that thrive in sun or shade, for particular color preferences, or habits of growth. It covers the gamut from annuals, vines, shrubs, perennials, groundcovers, trees, ferns, and even edible landscaping. The only drawback is you'll need other resources to help you with the particulars of cultural practices.

3. Native plants: After many years as a Florida gardener, I have to say that my favorite book is *Florida's Best Native Landscape Plants* by Gil Nelson. The photos and illustrations are generous and it includes a common name index, as well as a species index by category (vines, trees, shrubs, etc.).
4. Vegetables: A source I consult time and again is Dr. Stephens' *Vegetable Gardening in Florida*. It is concise and yet covers a wide variety of vegetables that can be grown in Florida. I consider this book essential to any home vegetable grower.
5. Lawns: If you are a devotee of a lush, green lawn, the very best book to have on hand is *The Florida Lawn Handbook* by Laurie E. Trenholm and J. Bryan Unruh. This book will guide you through identifying the best turf for your needs, its care, probable pests and their control. The best advice delivered by this book is that there is no "ideal" turfgrass. So read and learn accordingly!!

I also subscribe to many gardening magazines in my lifelong quest for gardening greatness. *Florida Gardening* magazine is probably the very best source of - well - Florida gardening.

Before buying any book, please visit [www.edis.ifas.ufl.edu](http://www.edis.ifas.ufl.edu) for specific questions regarding your yard or landscape. Chances are, your answers are there. However, I like settling down to an evening with a riveting gardening book.



Photographs by Joy Derksen, Master Gardener 2004

# Bromeliads

By John Dawson, Master Gardener 2007

Bromeliads are members of a plant family that contains over 3000 species, is one of the most well known families, and contains one edible bromeliad, the pineapple. The Bromeliaceae family contains a wide range of plants including some very un-pineapple like members such as Spanish Moss (which is neither Spanish nor a moss). They are easy to grow, require very little care, are easy to propagate and provide brilliant, long lasting colorful blooms and ornamental foliage in areas in your landscape that may be too shady for others, such as under an oak tree. They come in a wide range of sizes from tiny miniatures to giants and can be grown indoors or outdoors where temperatures stay above freezing.

There are three basic types of Bromeliads: Terrestrial species found growing in the ground, which may be grown in either bright sun or total shade (ask or check before planting). The Saxicolous species are found growing on rocks where they penetrate openings to locate moisture. The Epiphytic species ("Air Plants") are found

growing on other plants, usually trees, shrubs or cactus. They take their nutrition and moisture from the atmosphere, not their hosts. Most orchids share this trait but are not in the Bromeliaceae family.

All bromeliads share a common characteristic: tiny scales on their leaves called trichomes. These scales serve as a very efficient water and nutrition absorption system. They may form patterns and banding on the leaves that add to the plant's overall beauty. Be careful handling the leaves as most have very sharp serrated edges.

With few exceptions, a flower stalk is produced from the center of the rosette of leaves. The stalk (or scape as it is called), may be long with the flowers held far away from the plant or short with the flowers nestled in the rosette. With rare exceptions, bromeliads only flower a single time - once the plant stops producing leaves and produces its flower, it will not start making leaves again. It will, however, vegetatively produce new plantlets called



"offsets" or "pups". These plants will feed off the "mother" plant until they are large enough to set roots of their own and survive as a separate plant. The mother may sometimes survive a generation or two before finally dying off. Pups are usually produced near the base of the plant, inside the sheath of a leaf. Sometimes, however, pups may be produced on long stolons atop the mother plant. The green, leafy top of a pineapple is in fact a pup that may be removed and planted to start a new plant (See October 2011 Newsletter issue for directions).

A great way to learn more about bromeliads is to attend a meeting of the Sarasota Bromeliad Society (<http://sarasotabromeliadsociety.org/pages/links.php>). Our own Master Gardener David Johnson is the current President and invites you to visit on any second Monday of every month, at 7:30 PM, in the Activities Building of The Marie Selby Botanical Gardens at 811 South Palm Avenue, Sarasota, Florida. Dave said, "Before our regular meeting we normally have a workshop where basic elements of bromeliad care and development are conducted by one of our senior members usually from 6:45 to 7:30 p.m. At the regular meeting, a key item is a presentation by a regional or national expert

followed by giving a door prize plant, a 'show & tell' time when members bring unique plants to share, and a refreshment break, followed by a brief business meeting. After a plant auction, the monthly raffle is held. Rare is the time when you don't finish the evening with several plants to take home. Our group (one of 10 Societies in the Florida Council) sponsors annual Extravaganzas around the state for education, plant sales, and social enjoyment."



# Too Close for Comfort

## The Buzz on Bees

Betty Ann Price, Master Gardener 2012

When honey bees have established a hive in a dwelling, many well-intended citizens seek a beekeeper to remove and, hopefully, save the hive. However, the Florida Department of Agriculture and Consumer Services (FDACS) now recommends all wild honey bee colonies found in proximity to people (in walls, birdhouses, trees, etc.) be removed by a certified Pest Control Operator (PCO).

Why would we want to exterminate an active honey bee hive? Because many of the wild bee colonies in South Florida are now Africanized. Africanized honey bees (AHBs) are what we used to call “killer bees.” They are not easily distinguished from European honey bees. The African bee is slightly smaller than our domestic bee, but it takes a laboratory DNA test to determine the difference.

A single African bee’s sting is no more venomous than a single European bee sting; however, AHBs tend to defend themselves in larger numbers and for longer distances than the European bees. The most important difference is in their behavior, which is very defensive. AHBs react to human invasion of their environment and defend themselves accordingly. Attacks occur when people get too close to a nesting colony of AHBs.

Destruction and complete removal of the feral hive is important to minimize risk of re-colonization. When contracting a Pest Control Operator for bee removal, ask them if they are certified in bee removal by FDACS or the University of Florida.

A contract with the company should detail the colony removal procedure, the method of applying pesticides, disposal of dead bees, and complete removal of comb.

### A PCO should:

- Remove bees while wearing appropriate protective equipment;
- Apply pesticides labeled for honey bees and for the specific application area;
- Not remove established colonies during the day (unless discussed and agreed upon with you, the customer). When colonies are removed during the day, the bees that are out foraging for nectar and pollen on flowers will return to the colony location in the evening. This will result in numerous bees flying around the colony location. If daytime removal is conducted, it is recommended that the PCO leave a swarm trap or sticky trap to intercept returning bees.

### A PCO should not:

- Indicate that the bees are African bees (or European bees) because it is impossible to differentiate the two without laboratory analyses;
- Charge more for African or Africanized honey bee colonies. The procedure should be the same for removing both races of honey bees—they are, after all, the same species.

# Garden Chores for Our Snow Birds Before They Fly Home

by Joy Derksen, Master Gardener 2004

Easter is early this year, but for many of our Northern visitors, it is a sign that this is the time to return to their homes in the North. Here are some suggested garden chores to do before you leave your Florida landscape for the summer. If you are a Manatee County resident, you can also do these chores.

**Pruning:** The azaleas bloomed early this year, so now is the perfect time for pruning them back to shape them or make a fuller plant for next years blooms. Other spring blooming trees and shrubs can also be pruned back after they have flowered. Summer

blooming shrubs can be pruned back by a third at this time. Your hibiscus and bougainvillea can be pruned back into a more compact shape. Cold damaged plants (from that freeze in mid February) can also be pruned back to where new growth appears.

**Fertilizing:** Before you leave, help out your plants and shrubs by giving them the fertilizer they need for good health. Palms and citrus in particular need the different nutrients in the special fertilizers designed for them. Look for Palm Special Fertilizer with Minor Elements and Citrus Special Fertilizers. The latest information about fertilizing Palms is available from the University of Florida at <http://edis.ifas.ufl.edu/ep261>.

If you have acid loving plants like azaleas and live near the more alkaline coast you might want to give them a kick of azalea fertilizer.

**Mulching:** To keep the weeds down and conserve moisture during the hot summer months, consider

adding a three inch layer of organic mulch to your garden beds. In Florida, do not mulch right up to the stems of plants as that can cause fungal problems. Give the plants about six inches of space. Bark chips and/or pine straw break down over time and add welcomed nutrients to the soil. More information about mulches is available at <http://edis.ifas.ufl.edu/fr079>.

Have a safe trip home and think about adding some winter blooming shrubs like the Clerodendrum Yesterday-Today-and Tomorrow, Bougainvillea, or Dombeya to your yard when you come back.



Yesterday-Today-and-Tomorrow  
*Brunfelsia grandiflora*



# March Calendar of Events

Date	Time	Event
2 <sup>nd</sup> & 4 <sup>th</sup> Saturday	10:00 a.m.–1:00 p.m.	<b>Ask a Master Gardener</b> – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 <sup>nd</sup> Saturday	10:00 a.m.-1:00 p.m.	<b>Ask a Master Gardener</b> – South Manatee Library – 6081 26 <sup>th</sup> Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
March 2	10:00 a.m.–2:00 p.m.	<b>Florida-Friendly Family Festival</b> at Sutton Park, 1056 6 <sup>th</sup> Street West in Palmetto, featuring the Garbage Men Band, eco-friendly tips and information, landscape demonstrations, science and education displays, a tour of Florida’s first green street, and free food (first come first serve basis).
March 5	2:00 p.m.-4:00 p.m.	<b>Compost Happens – Home Composting Workshop</b> – Learn to turn your kitchen scraps and yard waste into useful soil amendments, along with details on how to set up a home compost bin. Presented by Michelle Atkinson, Florida-Friendly Landscaping™ Coordinator. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call Michelle at (941) 722-4524.
March 7	2:00 p.m.-4:00 p.m.	<b>Recycle the Rain – Rain Barrel Workshop</b> - Let us provide you with great water conservation tips. Learn how to install, paint, and maintain your own rain barrel. Presented by Michelle Atkinson, Florida-Friendly Landscaping™ Coordinator. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call Michelle at (941) 722-4524.
March 9	11:00 a.m.-12:30 p.m.	<b>Hypertufa What? Make a Fun Garden Project!</b> Make your own garden containers, fake rocks, stepping stones, and decorative garden accents. This lightweight artificial stone is easy to make and has many uses. Take home the items you create in class along with the recipe to make hypertufa at home. Presented by Master Gardener Beth Komyati. Limited space available, advance payment of \$10 for materials guarantees a spot in class. Check or cash only, make checks payable to Friends of Extension. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call the Master Gardeners at (941) 722-4524.
March 9	9:00 a.m.-11:00 a.m.	<b>Extension Master Gardener Plant ID Tour</b> – Stroll through the De Soto National Memorial and Riverview Pointe Preserve to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. The hike begins in the parking area of the De Soto National Memorial Park and enters into the Riverview Preserve at 8250 DeSoto Memorial Highway, Bradenton. Call the Master Gardeners at (941) 722-4524 to register.
March 16	9:00 a.m.-11:00 a.m.	<b>Extension Master Gardener Plant ID Tour</b> – Stroll through Emerson Point Preserve to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in the tower parking area at 5801 17 <sup>th</sup> St. W., Palmetto. Call the Master Gardeners at (941) 722-4524 to register.
March 17	9:00 a.m.-11:00 a.m.	<b>Extension Master Gardener Plant ID Tour</b> – Stroll through the Robinson Preserve’s salt marshes to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in parking area by main entrance at 1704 99 <sup>th</sup> St. NW, Bradenton. Call the Master Gardeners at (941) 722-4524 to register.
March 19	10:00 a.m.-12:00 p.m.	<b>Worm Composting – Vermicomposting</b> – Find out how to use worms to turn food scraps and other waste into compost. Now you can compost in an apartment, condo, or mobile home. Worms can be maintained indoors or out! Presented by Michelle Atkinson, Florida-Friendly Landscaping™ Coordinator. Workshop is free; however, there is a \$60 fee for worms and worm bin. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call Michelle at (941) 722-4524.

**Agriculture and Extension Service - Manatee County Community Services Department**  
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