



# Know, Sow, Grow Flagler County

UF/IFAS Extension Flagler County  
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## GET TO KNOW ME

*Judy Jean, UF IFAS Urban Horticulture Extension Agent, Flagler County*

All the way from Missouri, it's me, Judy Jean, the Urban Horticulture Extension Agent with UF/IFAS Extension Flagler County. I am grateful and thrilled for this opportunity. As a child, I was fascinated by plants and was inspired to study them as an adult. However, studying plants wasn't my first aspiration. For my bachelor's I studied Biomedical Science with an emphasis in Business at Union College located in Lincoln, Nebraska. At that time, I had the opportunity to live in Thailand and shared a pet rabbit with my roommates. However, in the middle of the last semester of my bachelor's, I realized that I did not want to ever work in a hospital, or anything related to healthcare. I wanted to be outside with people and plants. So, I decided to go back to my roots and pursue a career in Horticulture. This past May, I completed my master's degree in Horticulture with a minor in Agricultural Leadership, Education, and Communication at the University of Nebraska. During my studies at the University of Nebraska, my primary focuses were extension and writing on temperate fruits like chokeberries, blueberries, and haskaps. I also had the opportunity to assist my advisor in her organic strawberry research project. If you have not noticed, I love fruits! Actually, I truly enjoy all plants, even the annoying ones! I could go on for hours just talking about them!

You may be thinking, what is a lady like me doing in Florida? Well, the Sunshine State and I have history. Growing up my family lived in the Tampa Bay area and

then moved to Missouri. Thankfully most of my family still lives all over Florida. Even though I was unable to bring my cat, Mister Beans with me, being near family has made moving here even more special. When I am not unpacking boxes, I enjoy reading, gardening, and spending time with friends and family. People have described me as someone that has an up-beat attitude with a great sense of humor. I guess you could say, I'm a succa for puns!

Even if you think you cannot grow a plant, I believe that you can! Growing plants is within everyone's reach! By providing scientifically-based information about plants for your home or surroundings, I hope to instill a fun and invigorating atmosphere. In fact, I have found that learning and growing plants with your community not only provides you with a beautiful view but can also reduce stress and help foster connections within this gorgeous community.

I encourage you to keep an eye on upcoming events and join or re-join our Flagler County Master Gardener Program. Also, feel free to stop by the extension office for any questions on plants and/or insects or see how you can get involved. I look forward to seeing you! If you have any questions or would just like to say hello you can contact me by email at [jean.cjudy@ufl.edu](mailto:jean.cjudy@ufl.edu), or call our office (386-437-7464). Thanks so much for reading, I cannot wait to grow with this community!

### Inside this issue:

<b>From the Herb Garden, Quarterly Featured Herb-</b>	<b>2</b>
<b>Growing Avocados</b>	<b>2</b>
<b>Summer Planting Guide</b>	<b>2</b>
<b>Growing Amaryllis in the Florida Garden</b>	<b>3</b>
<b>Identifying Plant Problems</b>	<b>3</b>
<b>Becoming a Florida Friendly Advocate: Build Back Habitat (Lost to Development)</b>	<b>4</b>
<b>Companion Planting</b>	<b>5</b>
<b>Magnesium Deficiency in Palms</b>	<b>5</b>
<b>Up Coming Events</b>	<b>6</b>

For current and past issues of this newsletter visit:

<http://sfyl.ifas.ufl.edu/flagler/lawn-and-garden/horticulture-newsletters/>





## From the Herb Garden Quarterly Featured Herb – Cilantro (*Coriandrum sativum*)

Joy Hudson, Master Gardener Volunteer

**Cilantro** is an annual that's both an herb and a spice. An herb because of its foliage, and a spice because it produces seeds that are known as coriander - that well known spice. The leaves of the cilantro are similar in appearance to flat leaf parsley and is from the same family known as *Apiaceae*. However, they are significantly different in both smell and taste. Unlike parsley, coriander has a very robust flavor that most people either love or hate.



Cilantro and coriander (seeds), photo credit: Iowa State University Extension

**When To Grow Cilantro.** Although best grown in the cooler months here in Florida, if you are after coriander (the seeds), the warmer months will serve you well as this plant goes to seed (known as bolting) very quickly in warm weather. On the other hand, plant cilantro in the fall to encourage a longer period of cilantro harvesting, if that is primarily what you are after.

**How To Grow Cilantro.** Cilantro may be started from seeds sown directly in the ground, sown in small pots, or by purchasing plants from a nursery. The long taproot of cilantro makes it difficult to transplant. Seeds should be sown 1/4 -1/2 inch deep and about 8 inches apart. If transplanting, plants can also be planted 8 inches apart. For best results, plants should be placed in full to partial shade and in rich, well-drained soil. After plants are established, leave them in their current location and watch them grow.

**How To Harvest and Preserve Cilantro/Coriander.** Harvest leaves frequently for both immediate and future use. This also encourages new growth and delays bolting. To preserve leaves, rinse sprigs thoroughly, carefully remove excess water, and allow to dry. Once dry, remove leaves from stems, place individual portions on a non-stick baking sheet and place in freezer. Remove frozen portions to freezer bags, seal tightly and immediately return to freezer until needed.

Once the cilantro plant begins to bloom, the coriander seeds will follow. Cut the stems when the brown seeds are evident, tie in small bundles and hang up-side-down, encased in a brown paper bag until completely dry, and seeds have collected inside the bag. To store, simply place seeds in tightly sealed jars until ready for use.

**How To Cook With Cilantro/Coriander Seeds.** Cilantro is a very versatile herb used in Latin, Asian, and Indian cuisines, and there is no shortage of recipes to be found. The seeds, which are not a substitute for the cilantro leaves, are quite different in flavor and is a primary ingredient in the classic Indian curry mix known as garam masala. These seeds are also found in the more commonly known, pickling spice.

For more information visit: <https://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/cilantro.html>.

## Growing Avocados

Sharon Smith, Master Gardener Volunteer

Yes, you can grow avocados in Flagler County. There are currently eight cold tolerant varieties. I chose to purchase a Lulu avocado tree "*Persea Americana Lulu*" after seeing one grown successfully in the "P" section of Palm Coast.



Lulu Avocado tree, photo credit: S. Smith

Avocados trees are classified into three groups: West Indian, Mexican and Guatemalan. The West Indian varieties are the dominant commercial crop in Florida, and the Mexican varieties are the dominant commercial crop in California. All avocados are self-pollinating, and the trees have both male and female flowers.

The first documented Lulu avocado tree was planted in 1915 by nurseryman George B. Celson on his Miami property. DNA analysis indicates this cultivar is a cross between Guatemalan and West Indian type avocados. He named it Lulu after his wife.



Lulu Avocado, photo credit: UF IFAS Gardening Solutions

The Lulu avocado has particularly good fruit quality, with high production and crop consistency. Although, Lulu is susceptible to scab, in the home landscape this may not be a problem which makes it a better choice for home planting.

The fruit ripens from October to mid-February and can weigh between 14-24 ounces. It is similar in size to the Hass avocado, but with a thin smooth edible skin and a slightly longer and slimmer pointed top.

This plant prefers full sun and moist, well drained soil. Its cold tolerance is 24 degrees Fahrenheit. The tree grows at a medium rate and reaches up to 30' high by 20' wide. Fertilize monthly except in November and December with 8-3-9 fertilizer or similar. Mix soil with organic material when planting.

For more information visit: [Avocado growing in the Florida Home Landscape](#) "Jonathon H. Crane, Carlos F. Balerdi, and Ian Maguire."

### Planting Guide for Summer

**Vegetables:** Chayote Squash, Malabar Spinach, Okra, Southern Peas, Okinawa Spinach, and Sweet Potatoes.

**Herbs:** Basil, Mexican Tarragon and Rosemary.

**Perennials/Annuals:** Butterfly Lily, Celosia, Gladiolus, Spider Lily, and Walking Iris.

UF/IFAS Extension provides a printable garden calendar: [Florida Gardening Calendar - UF/IFAS Extension \(ufl.edu\)](#)



## Growing Amaryllis in the Florida Garden

Barbara Scharf, Master Gardener Volunteer

Florida gardeners can grow Amaryllis outdoors as a spring flower. Amaryllis bloom and thrive without the sub-freezing dormancy that is necessary for tulips, large-flowered daffodils, and other spring bulbs that are garden staples in colder climates. Some of the older hybrids, such as Red Lion and Apple Blossom are highly successful in zone 9A. Some the species are also quite successful, such as *Hippeastrum striatum* and *Hippeastrum vittatum*. My own favorite is the “pass along” amaryllis: unnamed varieties that have been passed along from garden to garden, over many generations. My pass-along bulbs came from the front yard of an abandoned home in my neighborhood and have spread to form a large clump of April blooming flowers.



Amaryllis used in the landscape. Photo credit: Barbara Sharf

The potted Amaryllis, which we received at Christmas, can be planted directly into the ground in early spring, but is best planted during the winter months. Bulbs can also be purchased locally or from internet sites for direct outdoor planting. Plant the bulbs so the neck is just visible. Each spring, dig up any bulbs which have started to heave out of the ground, separate off the mature bulblets, and replant at the proper depth. This is not necessary but helps with crowding and will encourage uniform flowering and larger blooms. During the active growth of spring and summer, regular application of a slow-acting fertilizer and regular watering will help the bulb to recover and produce next year’s blooms. The Christmas Amaryllis bulb has been specially forced and is depleted after blooming. This bulb can take up to three years to recover and to bloom in the garden.

Amaryllis do well in a good garden soil that is well-drained. The major danger is boggy soil that stays wet, encouraging disease and fruit flies. It helps to redirect sprinkler heads away from the bulbs. Hand watering is better when rain is sparse. During the winter dormancy, lawn irrigation is especially dangerous for the bulbs, as rot is encouraged. In areas of questionable drainage, raised beds are a good solution. Amaryllis need at least 1/2 day of sun to bloom well. They can be grown under high dappled shade if they still receive early morning and late afternoon sun.

The bulbs need to be protected from a hard or prolonged freeze, which will damage the basal plate where new flowers are formed. Planting at the proper depth and mulching will help in protecting the bulbs. A frost blanket or dry leaf mulch will provide protection when a frost is expected. Amaryllis undergo a short winter dormancy in zone 9A. In response to decreasing day length, cooler nights and dryer soil, they will die back to the ground in January or February. New growth will appear, both leaves and flowers, in early March. Growing a variety of cultivars can extend the blooming season into the end of April. The leaves may die back in mid-summer, putting out a second set of leaves in late summer. In rare cases, a second flower scape will appear in the fall.

Pests and diseases seem to be a result of overly wet soil. Slugs are a problem in a wet spring. They eat holes in the buds which are evident when the flower opens. I have used a rose/

flower systemic fungicide when disease is present, seen as red blotches on the leaves. As Florida gardeners, we are incredibly lucky to be able to include the beautiful Amaryllis in our landscape design. For more information visit: <https://edis.ifas.ufl.edu/pdf/EP/EP060/EP060-Donak82c9l.pdf>.

## Identifying Plant Problems

Mary Ellen Setting, Master Gardener Volunteer

Every gardener should routinely inspect their plants to be on the lookout for problems. Catching an insect infestation or disease early on can often be the key to getting the issue under control quickly and successfully. It is not always easy to diagnose what is eating your plant, causing leaves to drop, turn yellow or brown or why flower buds or fruit are dropping off. Plant health problems result from plant pathogens, insects, or environmental factors, also known as abiotic disorders. The symptoms of these health problems are often similar. There are basic steps that can be useful to solving the puzzle and, with a little detective work, the problem can be resolved.

**Step 1. Identify the plant.** By knowing the type of plant affected, you can begin relating causes to symptoms you see on the plants. Publications about a particular plant will often list the more common diseases or insects associated with that plant. Search <http://edis.ifas.ufl.edu> using the plant name.

**Step 2. Survey the site.** How many plants are affected by the problem? Is the entire plant affected or only the newest leaves? Is the same problem happening to the same plants throughout the neighborhood? Has the recent weather or a broken sprinkler caused a drainage problem?

**Step 3. Ask questions.** Has there been a recent change in the environment? Weather patterns can influence disease development, especially after a period of rainy weather. When was the last fertilizer application? Were the symptoms present prior to the last fertilizer application? Has the plant been sprayed with a pesticide (insecticide, fungicide, herbicide, horticultural oil)? Did symptoms appear after the pesticide application?

**Step 4. Examine the plant thoroughly.** Look at the foliage. A magnifying hand lens can help detect small pests like spider mites and scale. Shake a flower over a piece of white paper to find thrips. Are leaves showing tip burn (usually environmental stress like drought)? Are there spots on the foliage (indicating a possible disease)? Do roots appear dark and decayed (possible fungus or too wet soil)?



Photo: [blogs.ifas.ufl.edu](https://blogs.ifas.ufl.edu)

If you are still stumped, collect and bring a sample of the weed, plant, insect, etc., to the Extension Office or email pictures to [mastergardener@flaglercounty.org](mailto:mastergardener@flaglercounty.org) for help from a Master Gardener Volunteer. Be sure to bring a fresh sample such as a plant stem with several leaves, a 4-inch square of grass with roots attached and pictures of the plant in the

landscape. Diagnosis is impossible when the plant or leaves submitted are already dead.

For more information, visit: [Steps to Solve Plant Problem May Include Visit to Plant Clinic -UF/IFAS Extension Okaloosa County \(ufl.edu\)](#); and [MG44100.pdf \(ufl.edu\)](#).



## Become a Florida Friendly Advocate: Build Back Habitat (Lost to Development)

Claudia Lappin, Master Gardener Volunteer

**The scene:** You just walked around your neighborhood to see where the noise has been coming from all morning, and much to your disappointment, another developer has been clearing a building lot. The trees have been piled to one side, and the debris has been trucked to a landfill presumably to be disposed of in some way. There is no shade anywhere on this lot and the soil is a mixture of sand and dirt.



Photo: C. Lappin

**The issue:** You are feeling challenged and saddened by this ongoing loss of habitat; the birds, squirrels, and butterflies, among all the insects who have been destroyed, have lost their nests, plants, and their natural environment. You have heard that 1,000 people per day are moving to Florida. Undoubtedly, they want a place to live in this beautiful state. You know you can't control what the builders are doing, but you can control what you do.

**An action plan:** Use your own landscape as an example of how to begin building back the habitat that has been lost to development in your neighborhood. With the Florida Friendly landscaping principles as a guide, think about what natural elements can be added or changed in your landscaping.

Create a planting plan. Now is an excellent time of year to do this. Take an inventory of what you want to add or change in your landscaping. Notice which areas are getting more sun as days grow longer or where you want to create more shade. It can be as simple or as complicated as you want to make it. Not sure where to start? Contact the Flagler County extension office and ask for a Master Gardener to conduct a Florida-Friendly Landscaping™ consultation. Note: It may take a few seasons to fully execute your plan.



Photo: C. Lappin

Reduce the amount of lawn in your yard. Begin by enlarging your current landscaping beds. Because St. Augustine grass is not easy to dig up, [use a soil solarization technique](#) with either landscaping fabric, black plastic, newspapers, or cardboard. You can cover this area temporarily with mulch to hide the solarizing materials. Why solarize? This technique kills grass and weed seeds. After two or more weeks, remove the mulch and materials and begin to plant.

Plant a tree and layer your plants. In our scenario above, the builder removed all the trees on the lot. You can do your part by adding some back. Include a few small trees or a large one. Plant at least 15 feet from house, cement drive or walkway, fence or side yard boundary. See our [Florida-Friendly recommendations for small, medium, and large trees](#). Please don't plant a tree under electrical wires. The tree allows you to implement a layered landscaping approach: think trees,

understory shrubs, and sun/shade plants or large trees, medium sized shrubs, and smaller sized plants.

Go native. When possible, please choose native plants, e.g., native trees can be found at most local nurseries. Examples include red cedar, southern magnolia, hollies, and red maple. Add understory native shrubs around the tree(s), such as firebush. Use native grass such as dwarf Fakahatchee, muhly grass, or Elliott's lovegrass as a border for your sunny planting beds.



Photo: C. Lappin

Provide a water source. Add a birdbath or small container of water for your birds and wildlife. If you spray and clean this water source twice a week, you won't have to worry about mosquitoes. I even do it for the turtles that visit my yard.

Include flowers for pollinators. A few ones that are attractive: tropical/red sage, Joe Pye weed, and native lantana or native verbena.

Talk to your new neighbors. They may come from an area that is in a different planting zone. Ours here is 9a/b. There is a new book that has just been published: *Adventures of a Transplanted Gardener, Advice for New Florida Gardeners*, by Ginny Stibolt, University of Florida Press, 2022. The author has many tidbits on how to make your yard Florida-Friendly.

Continue your education. Come to our plant clinic at the Flagler County Public Library that is held on the last Saturday each month for additional information or help. Use the links included here as a starting point. The University of Florida has many resources. Just add "IFAS" or "EDIS" at the end of your key word search using your favorite search engine.

Most importantly, enjoy your environment by getting outside either in your yard or by visiting a local or state park. We have wonderful outdoor resources here in Flagler County, and you will regain your equilibrium and become even more of a Florida-Friendly advocate. In the next newsletter issue we will discuss how your Florida-Friendly landscaping contributes to the ecological 'highway'.



Credit: [hernandocounty.org](http://hernandocounty.org)



## Companion Planting

Lori Powell, Master Gardener Volunteer

Companion planting is the concept of planting certain plants species together to create a mutually beneficial environment that can enhance yield and flavor as well as deter pests.

It has long been known that planting marigolds in a vegetable garden aid in repelling pests such as aphids, cabbage worms, squash bugs, nematodes, and many types of beetles.

Many herbs also give off an aroma that pests such as aphids, spider mites, flies and loopers find unpleasant. Planting herbs such as mint, dill, rosemary, and oregano in a vegetable garden can reduce the need for insecticides. There are many herbs that attract beneficial insects that pollinate plants. Rosemary, thyme, oregano, and chives attract bees and lavender, dill, parsley, and mint attract butterflies.

Tomatoes, eggplant, and peppers are good companions because they share the same growing conditions. Planting basil with tomatoes and peppers has been known to improve the yield of tomatoes and the flavor of both tomatoes and peppers.

Taller plants can be placed to provide shade for other shorter growing plants such as planting broccoli that will provide shade for lettuce or corn that will provide shade for cucumbers and beans.

Just as planting certain plants together is mutually beneficial there are some plants that do not grow well together. Plants that have similar needs for nutrients and water will not grow well together as they will compete for these which can be detrimental to their growth. For example, broccoli, potatoes, and tomatoes are example of heavy feeders that will not grow well together as they all need a high level of nutrients.

More information can be found by visiting: <https://ffl.ifas.ufl.edu/resources/ffl-minute-radio/2020-archive/august-2020/companion-planting/>, <https://www.farmersalmanac.com/companion-planting-guide>, and <https://www.motherearthnews.com/organic-gardening/companion-planting-guide-zmaz81mjzraw/>.

**Companion Planting**  
Follow these guidelines to best structure the layout of your garden

<b>Beans</b> Friends: Radish, Eggplant, Potatoes, Cucumber Foes: Onions, Peppers, Garlic	<b>Eggplant</b> Friends: Beans, Peppers Foes: Fennel	<b>Potatoes</b> Friends: Beans, Cabbage Foes: Tomatoes
<b>Beets</b> Friends: Lettuce, Pole Beans, Bush Beans Foes: Potatoes, Beans	<b>Kale</b> Friends: Onions, Peppers, Tomatoes Foes: Squash	<b>Radishes</b> Friends: Peas, Kohlrabi Foes: Beans
<b>Broccoli</b> Friends: Spinach, Peppers, Onions, Tomatoes, Squash Foes: None	<b>Lettuce</b> Friends: Spinach, Peppers, Onions, Radish, Squash Foes: None	<b>Squash</b> Friends: Lettuce, Broccoli, Kale Foes: None
<b>Cabbage</b> Friends: Potatoes, Onions, Lettuce, Cucumber Foes: Tomatoes	<b>Onions</b> Friends: Broccoli, Cabbage, Carrots, Kale, Lettuce, Peppers, Tomatoes Foes: Peas, Beans	<b>Tomatoes</b> Friends: Cucumber, Broccoli, Kale, Potatoes Foes: Cabbage, Peas
<b>Carrots</b> Friends: Beans, Onions, Lettuce, Peas Foes: Dill	<b>Peas</b> Friends: Carrots, Cucumber, Radish, Tomatoes Foes: Onions	<b>Turnips</b> Friends: Peas Foes: Eggplant

Have fun gardening!  
For more info go to: [www.gardenstead.com](http://www.gardenstead.com)

## Magnesium Deficiency in Palms

Mary Ellen Setting, Master Gardener Volunteer

Palm trees are popular ornamental plants throughout Florida landscapes. It is common to see palms with their oldest fronds exhibiting a bright yellow color along the margins of individual leaflets and the central part of the leaves (rachis) remaining distinctly green. This is a tell-tale sign that a palm is suffering from magnesium (Mg) deficiency. Magnesium deficiency is never fatal in palms, just unsightly.



Magnesium deficiency, photo credit: edis.ifas.ufl.edu

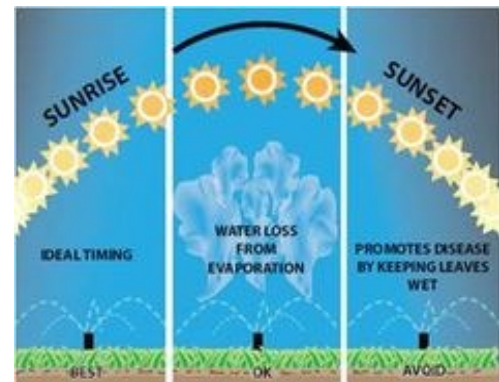
Magnesium deficiency occurs when there is insufficient Mg in the soil because of leaching from sandy soils. Most species of palms are susceptible to Mg deficiency, but the Canary Island Date Palm, *Phoenix canariensis*, is the most susceptible species to this condition. Symptoms are uniformly distributed from base to tip of the leaf.

Magnesium deficiency is difficult to correct once symptoms are present. Mg should be included in all fertilizers in a controlled-release form. Treatment of severely deficient palms can require one to two years or more and is done by broadcasting magnesium sulfate at rates of 2 to 5 pounds per tree 4 to 6 times per year to the area under the canopy. This treatment is in addition to regular applications of a balanced 8-2-12+4Mg palm maintenance fertilizer, offsetting the two different treatments by six weeks to reduce the potential for salt injury. Mild to moderately severe Mg deficiencies should be addressed with an application of the 8-2-12+4 Mg palm maintenance fertilizer at a rate of 1.5 lbs. per 100 sq. ft. of canopy area every three months.

Symptomatic leaves will never recover, but will be replaced by healthy, new leaves. Never remove yellow or dying fronds because that will push the nutrient deficiency into new growth. Only remove fronds that are entirely brown.

Proper nutrition is important for plant growth. Nutrient deficiencies are more easily prevented than corrected once they occur. Research at the UF/IFAS has shown that the regular use of a fertilizer can correct mild to moderate nutrient deficiencies. For more information, visit <https://edis.ifas.ufl.edu/pdf/EP/EP26600.pdf> and <https://edis.ifas.ufl.edu/pdf/EP/EP26900.pdf>.

## When is the Best Time to Water?





## UF/IFAS Extension Flagler County Master Gardener Volunteers

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### Our Mission

To assist Extension Agents in providing research-based horticultural education to Florida residents.

### Our Vision

To be the most trusted resource for horticultural education in Florida.

## On Going Events

Master Gardeners are at the Flagler County Public Library the last Saturday of every month from 9:30 am to 11:30 am to answer your gardening and landscape questions.

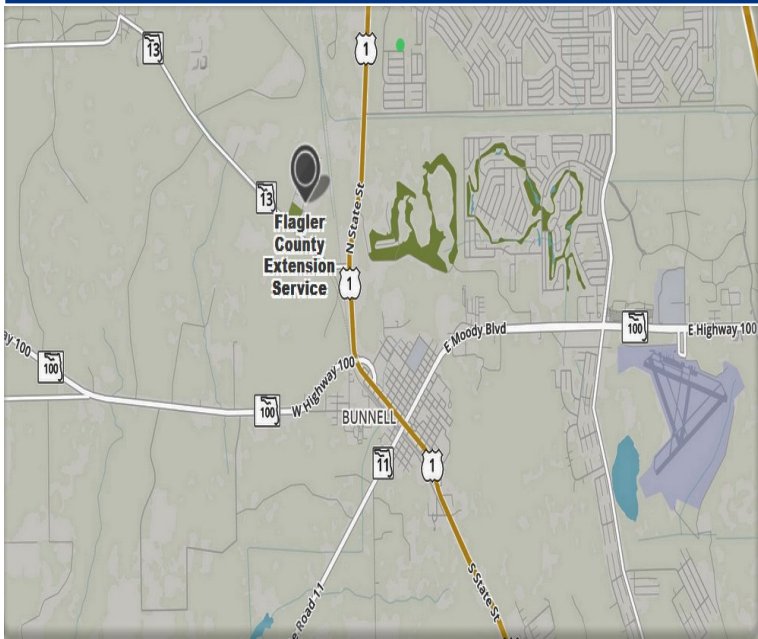
## Master Gardener Volunteers Assist Palm Coast in Tree Give Away for Arbor Day Celebration

Lori Powell, Master Gardener Volunteer

The city of Palm Coast celebrated its 17th Annual Arbor Day on May 7th in Central Park.

Master Gardener volunteers were on hand to assist in providing information and answering questions on the trees that the city of Palm Coast gave away to citizens in exchange for a non-perishable food item.

Tree species included White Ash, Witch Hazel, Fringe Tree, Chaste Tree, and Black Walnut.



Barbara Kipnis, Mary Ellen Setting, Lori Powell, and Connie Schrider



Lori Powell, Photo: Y. Gourdet



Connie Schrider and Mary Ellen Setting



## Stay Connected!

Flagler County Extension: <http://flagler.ifas.ufl.edu>

University of Florida Solutions for Your Life: <http://sfyl.ifas.ufl.edu>

Florida-Friendly Landscaping™: <http://ffl.ifas.ufl.edu>

UF/IFAS Gardening Solutions: <http://gardeningsolutions.ifas.ufl.edu/>

University of Florida Master Gardener: <http://gardeningsolutions.ifas.ufl.edu/mastergardener>

The Flagler County Master Gardener and Horticulture program is open to all regardless of gender, race, color, nationality, creed, or disability.