

A quarterly online magazine published for Master Gardeners in support of the educational mission of UF/IFAS Extension Services

Welcome to The Dirt

Welcome to the newest publication from UF/IFAS Pinellas County Master Gardeners.

The Dirt is a place to discover, share, and showcase what Master Gardener volunteers do. We invite you to learn about gardening, horticulture, and other environmentally friendly practices for Floridians.

So welcome, and "dig in" to *The Dirt*!

By Theresa Badurek, Urban Horticulture Extension Agent and Master Gardener Coordinator

April 2015 Issue 1

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Flutter Facts: Basics of Butterfly Gardening

By Linda Smock, Master Gardener Trainee

Do you enjoy walking outside and seeing butterflies fluttering around your yard, soaking in the sunshine and enjoying the nectar? If you find this relaxing, you may want to consider adding a few more plants to your garden to attract them and keep them around to enjoy. A butterfly garden is also a great place to begin gardening with children, because the plants will almost always survive; after all, many were considered weeds for years! (continued on next page...)





Flutter Facts: Basics of Butterfly Gardening continued...

Planning a Butterfly Garden

To begin, take a few minutes to answer the following questions that will help you choose the right plants and right location for your butterfly garden.

- Do you have a color scheme in your garden that you want to follow and continue? If so, you may want to select plants with blooms in your color scheme.
- Will it bother you to see plants that have leaves stripped off by caterpillars? If so, consider only adding nectar plants or planting host plants behind others so their tattered leaves won't be visible.
- Do you have a full sun location, or is your area almost all shaded? Most butterflies like the sunshine, but some lay their eggs only in the shade.



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• Since some caterpillars will form their chrysalises on whatever structure is nearby, will this be a concern? While plants are often used, they may also attach to walls, screens, tables, or other items in your landscape. If you have a fresh paint job, and will it cause you anxiety to see a chrysalises hanging from it – you'll want to site your butterfly garden away from the house.

Nectar Plants - Food for Butterflies

Nectar plant blooms provide the food butterflies want. These plants should be relatively flat and easy for butterflies to gather the nectar because unlike hummingbirds and bees, butterflies do not fly deep into a blossom to get their dinner. Some perfect nectar plants include the **native lantana (Lantana involucrate)**, as well as **pentas (Pentas lanceolata)** and even **tick weed (Bidens alba)**. Most of these plants like full sun, or at least partial sun, so keep this in mind.

Host Plants - Place to Lay Eggs

Host plants are essential to the life cycle of a butterfly – it's where butterflies lay their eggs – some of these plants include **collards** (**Brassica oleracea**), **parsley** (**Petroselinum crispum**), **dill** (**Anethum graveolens**), **and fennel** (**Foeniculum vulgare**). **Milkweed** (**Asclepias curassavica**) is well known as a host plant for the monarch butterfly but this plant can grow aggressively so consider this as you plan your location. Adult butterflies also like the nectar from the blossoms.

• Plant Florida native milkweeds including:

- + Asclepias humistrata, pinewoods milkweed
- + Asclepias longifolia, Florida milkweed
- + Asclepias tuberosa, butterfly weed

Flutter Facts: Basics of Butterfly Gardening continued...

You also may want to consider a **passion vine (P. incarnata).** It's easy to establish and will provide you with lots of butterfly activity. Gulf fritillaries will lay their eggs on the plant in the sunshine, and the zebra long wing will lay their eggs in the shade. You'll find that nurseries often carry several varieties of passion vine, so check to make sure you are selecting a Florida native before purchasing – it can spread rapidly.

There are also many varieties of **cassia** (**Sophora tomentosa**) plants that attract butterflies from the sulfur family – yellow or white flutters of beauty. Some of these butterflies will have two and a half inch wingspans while others will be less than one inch, depending on the variety.

Cassia makes a beautiful yellow blossom, often in the fall, and also provides sulfur butterflies with their favorite food. Most are picky eaters, and eat only one variety, however. If you have only one type of cassia plant, you will likely only see one size and variety of sulfur in your yard.

Caterpillars – Eating Machines

It's good to know that just one caterpillar can eat an entire plant in a very short time span and butterflies don't limit their egg deposits to just one egg – they lay many. This means you'll need lots of plants to be able to sustain a few caterpillars and butterflies. Plus, nature has lots of enemies to the caterpillars, so not all will make it – wasps, birds, lizards, and birds all survive on these little morsels.

Relax and enjoy the butterflies in your garden!

Lawn and Garden Help Available Near You!

Spring is here and so are the many pesky lawn and garden problems that come along with it. Your UF/IFAS Pinellas County Extension service has solutions for you. Master Gardeners and/or horticulturists are available at three locations to look at samples that are brought in by you to identify

plants and insects, and address many other lawn and garden problems.

Where you can go for help:

North: Master Gardener Plant Clinic at the Palm Harbor Library. This clinic is open on Wednesdays from 10am-2pm. Palm Harbor Library website: http://www.palmharborlibrary.org/

Central: The Lawn and Garden Help Desk is located at the

Extension office at Ulmerton Road. Open M-F from 8am-5pm (excluding holidays). Pinellas County Extension website: http://pinellas.ifas.ufl.edu/home_landscape/index.shtml



Andy Wilson at the Help Desk

South: Master Gardener Plant Clinic at Weedon Island Preserve. Spring dates and times are 9am-1pm on the following days: 3/27, 4/10, 4/24, 5/1, 5/22. Weedon Island Preserve website: http://www.weedonislandpreserve.org/

You can also call the Lawn and Garden Help Line on Mondays, Tuesdays, and Thursdays from 9am-12pm and 1pm-4pm, at 727-582-2110.

Get to Know Your Local Fungi

By Shannon Palmer Master Gardener Trainee



False parasol (Chlorophyllum molybdites) commonly occurs in lawns and may form fairy rings. It can cause severe gastrointestinal distress in humans and animals.

Most gardeners have unexpectedly encountered members of the taxonomic kingdom *Fungi* at some point in their gardening careers (whether they knew it or not). Maybe a cluster or circular <u>fairy ring</u> of mushrooms appeared suddenly in your lawn after a few days of heavy rain, or you were digging in a pile of mulch and your trowel uncovered a network of thin, white, cottony threads just below the surface. Or you noticed a hard, woody, half-moon-shaped "shelf" growing from the side of an old oak tree trunk. These are all examples of fungus, and they are an important but often overlooked component of our natural

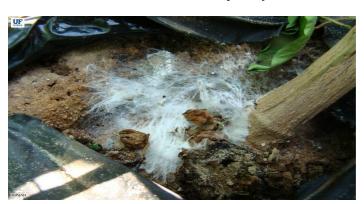
landscape.

What Are Fungi?

Often confused for plants, **fungi** (plural form of the word "fungus") are in their own separate kingdom and are actually more closely related to animals than plants! Unlike plants, they do not photosynthesize and instead break down organic matter in the environment for their food. The scientific study of fungi is called **mycology**.



Some fungi exist as single-celled organisms called **yeasts** (yes, that includes the yeasts people use to make bread, beer, and cheese...yum!) while others are multicellular. Multicellular fungi form tiny



Southern Blight (Sclerotium rolfsii) mycelial mat growing at the stem base of a pepper plant.

microscopic 'threads' called **hyphae**, which make up the bulk of the body of a fungus. A large network of many hyphae forms a **mycelium**, which is often whitish and stringy/cottony in appearance.

Some types of fungi reproduce sexually, asexually, or both ways. Many produce reproductive **spores**, which can be carried by wind, water, or animals to new habitats. What we know of, as

mushrooms are the large, visible reproductive bodies of some fungi species, which release spores.

Get to Know Your Local Fungi continued...

'Mushroom' is a general term that usually refers to the classic 'toadstool' that has a cap (also known as a **pileus**), gills, and stalk (also known as a **stipe**), though not all 'mushrooms' have these parts. It's important to note that not all fungi produce these large visible structures, and they may not always be present in the species that do. Environmental conditions like moisture and temperature need to be just right for mushrooms to form.

Are Fungi Helpful or Harmful to Plants?

It depends on the type of fungus. While about 85 percent of all plant pathogens are fungal, there are many harmless and even beneficial species in the environment as well.

Saprotrophic fungi feed on decaying organic matter like mulch, old logs, leaf litter and animal droppings. They play a crucial role in recycling nutrients from dead organisms back into the soil.

Other fungi have an even more direct relationship with plants; **endophytic** fungi live inside healthy plant tissues

without causing disease. They've been found to provide their host plants with a variety of benefits like increased stress tolerance. **Mycorrhizal** fungi live on or inside plants' roots and help them absorb nutrients.



Amanita muscaria is a mycorrhizal fungus that forms associations with certain trees.

The Bad Guys

As mentioned before, fungi cause most of the known plant diseases. **Parasitic** fungi feed on a living host plant, harming or killing the plant in the process. Molds, mildews, rusts and smuts are types of fungal plant diseases. Fungi are so common in the environment that it's very difficult or impossible to



Conk of *Ganoderma zonatum*. This species causes an incurable, lethal butt rot in palms.

completely eradicate them from your yard or garden once it's there. Preventing disease from occurring in the first place is much easier than trying to treat plants that are already sick.

Remember the Disease Triangle: there needs to be a susceptible host, a disease-causing organism present, and the right environmental conditions to allow a plant pathogen to proliferate. Removing excess moisture from your landscape can help reduce the occurrence of fungal diseases. Chemical fungicides are a last resort. For more information about

diagnosing and treating fungal plant diseases, refer to the <u>IFAS</u> <u>Plant Pathology diagnostic guide for Master Gardeners.</u>

Get to Know Your Local Fungi continued...

Mushroom Poisoning

While some mushroom species are edible, many others can be harmful or even deadly to people and pets if ingested. The false parasol (*Chlorophyllum molybdites*) pictured at the beginning of this article is an example of a very common species that also happens to be toxic. It can cause severe gastrointestinal



Many Amanita species like the aptly named Destroying Angel are extremely toxic if eaten and can cause death.

distress in humans and animals. Many members of the *Amanita* genus (such as the aptly named Destroying Angel pictured below) are very toxic and are also common throughout Florida. Do not attempt to eat any mushrooms you find without consulting with a local expert first.

Identifying Mushrooms in Florida

If you're interested in learning how to identify local species of mushrooms, the book <u>Common Florida</u> <u>Mushrooms by Dr. James Kimbrough</u> is available at the IFAS online bookstore.

Links to IFAS Publications:

Fairy Rings: http://edis.ifas.ufl.edu/pdffiles/LH/LH04600.pdf

MG Plant disease diagnostics: http://edis.ifas.ufl.edu/pdffiles/MG/MG44200.pdf

Common Florida Mushrooms by Dr. James Kimbrough: http://ifasbooks.ifas.ufl.edu/p-196-common-

florida-mushrooms.aspx

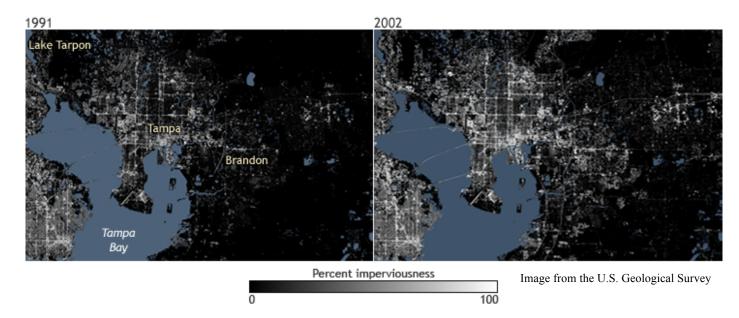
Managing Water in a Sustainable Home Landscape Rain Gardens, Bog Gardens & French Drains

By Melinda Moreschi Master Gardener Trainee

With rainy season approaching, it's a good time to think about water conservation.

Rooftops, driveways, streets and parking lots allow rainwater to runoff its surfaces, carrying all sorts of debris along the way. The tainted rainwater finds its way into the nearest stream, river, lake, bay or gulf. Seventy percent of the pollution in these surface waters is caused by stormwater runoff.

The rain that "falls" into your yard should "soak" into your yard, according to the principles of Florida Friendly Landscaping™. However, due to the explosion of growth in Florida, there are more and more impervious surfaces where rainwater is unable to penetrate and return to the earth.



There are several ways to manage the deluge of rain that explodes from our summer skies. The rain can be harvested by using rain barrels or creating rain gardens can slow the stormwater runoff, bog gardens and french drains. Increasing the pervious surfaces on our properties would be an ideal solution, however, much too impractical due to already existing rooftops, driveways, pavements and streets. The main objective in home landscape water conservation is to slow down the runoff process by helping to maintain the rainwater on our properties for longer periods of time.

Managing Water article continued...



One way to achieve this is by planting a rain garden. Rain gardens are shallow depressions planted with deep-rooted native plants and grasses. The goal is to divert the rainwater away from streets and storm drains and allow the rainwater to seep slowly into the ground, providing natural filtration and eventually replenishing the aquifer. A good site for a rain garden is near a downspout or in area of your yard where water collects during a storm. Plants

NRCS image.

best suited for a rain garden need to withstand wet conditions, in addition to the periods of drought that occur between storms.







Some suggested native, flowering plants include **blue flag iris (Iris virginica)**, **goldenrod (Soldago spp.)**, and **swamp sunflower (Helianthus angustifolius)** (shown left to right).

Native grasses and shrubs include **muhly grass**, (Muhlenbergia capillaris), wiregrass (Aristada stricta) and virginia willow (Itea virginica) (see photos left to right).



Muhyl grass photo from: (http://gardeningsolutions.ifas. ufl.edu/giam/plants_and_grass es/grasses_lawncare/muhly_g rass.html)





Managing Water article continued...

Non-native ground covers include **holly fern (Cyrtomium falcatum)**, **periwinkle (Vinca major)** and **St. Bernard's Lily (Anthericum sander)** (shown left to right).







A good resource for creating rain gardens is "Rain Gardens: A Manual for Central Florida Residents" by

Dr. Marina D'Abreau which can be found here:

http://www.casselberry.org/DocumentCenter/View/9264



Another way to collect rainwater in your yard is to create a Bog garden. If you have a soggy or muddy area that gets at least 6 hours of sunlight, you can plant a bog garden. You can also build a bog garden by lining a shallow hole (12 to 15 inches deep) with a perforated rubber material. It is important that the bog is able to drain to prevent stagnation. Add 2 to 3 inches of pea gravel, a rich good quality soil and then peat or sphagnum. Again, the goal is to keep as much rainfall in your garden as possible.

The Native Plant Garden at the Pinellas Cooperative Extension Botanical Garden recently planted a bog garden. It's worth a visit. For more information go to: Building a Bog Garden at http://leon.ifas.ufl.edu/News_Columns/2004/082204.pdf

Managing Water article continued...

Plants for a bog garden include red hibiscus (Hibiscus coccineus) and yellow cannas (Canna glauca).









These plants are tall and can be planted with shorter plants such as the **carnivorous pitcher plant** (Sarracenia spp.) and sundews (Drosera capillaries) (shown left to right).



Finally, French drains provide a way to slow the flow of storm water runoff. To create a French drain a trench is dug and a perforated drainpipe is set in the trench, covered with a fine mesh to prevent soil blockage, and then covered with rock or gravel. The purpose of a French drain is to redirect excess storm water away from one area and redistribute it along the length of the pipe. French drains are often used to prevent storm water from damaging the foundations of buildings.

Like any phrase repeated often enough, the phrase, "Save Water," when heard too often, loses its meaning. We must remember that our water

cycle is a closed system, where evaporation, condensation, precipitation, and collection occur over and over again within a bounded atmosphere. Only when we recognize that we use and reuse the same water that the dinosaurs used 65 million years ago, will the phrase "Save Water" truly be impressed upon us.

Book Review

Hot New Book on Shade Gardening

Book Reviewed by Maryellen Tilly Master Gardener Trainee

Gardening in the shade can be complicated as we seek to find a variety in plants that can reach their full potential in low-light conditions here in Pinellas County.

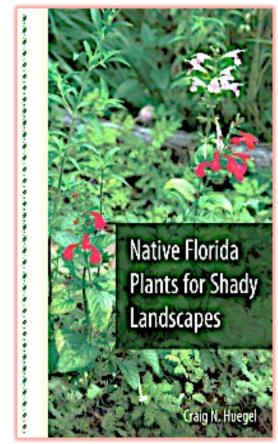
There is help. A new book, just released by bestselling author Craig Huegel, called

<u>Native Florida Plants for Shady Landscapes</u> gives Master Gardeners a comprehensive native Florida plant species guide for effective landscaping of shaded areas with the added benefit of low maintenance.

Huegel also takes in consideration the use of shade tolerant natives for functional wildlife habitat adding to outdoor enjoyment on an ecological level.

So Master Gardeners, try looking to nature for your next shade gardening design ideas and pick up Huegel's book. It will help you through the challenges of Florida shade gardening. You will be more successful at creating functional low-light landscapes and adding plant material diversity to the garden setting.

Craig Huegel is the owner and operator of Hawthorn Hill Native Wildflowers and author of *Native Plant Landscaping for Florida Wildlife,* and *Native Wildflowers and Other Ground Covers for Florida Landscapes.* You can find his books at University Press of Florida at upf.com.

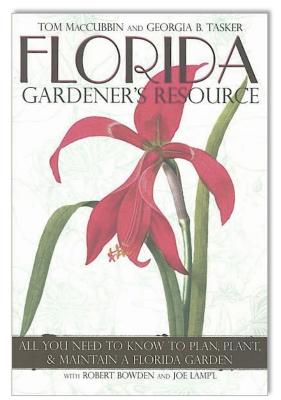


Book Review

A Trusted Resource That Never Disappoints

Book Review by Lainy McPhee Master Gardener Trainee

I have enjoyed reading and using the <u>Florida Gardener's Resource</u> for several years. The latest edition was published in 2010, but it's still a great source of essential information for successful Florida



gardening, no matter the region. This handbook has more than 300 proven plants in various gardening sections, including tropical varieties.

Beside the colorful pictures, there are helpful icons at the top of each plant description that provide keys to light requirements, as well as other benefits such as fragrance, butterfly and hummingbird attractant and tolerance of seaside conditions. Monthly calendars for each plant section advise the Master Gardeners with proper care and timing of everything from planting to watering. I especially enjoy the reminders about which garden pests may still be active and how to control them.

Author Tom MacCubbin is a retired extension environmental horticulturist with the University of Florida. He has authored more than eight gardening books for Florida.

Co-author Georgia Tasker is a Pulitzer Prize finalist for her writing on tropical deforestation, has also received the

Barbour Medal, and authored several books.

If you are looking for a good, basic, easy-to-read gardening book, I recommend the *Florida Gardener's Resource*. The book is available on Amazon <u>here</u>.

The Garden Connection

Information Complied by Jane Furman Master Gardener

This is a regular column about garden clubs, plant societies and green organizations in our area. As gardeners, it seems we never have enough plants – so you'll also find information about plant sales and auctions, garden trips, flower shows and galas.

This first issue lists only a portion of the organizations in our area. We will be adding other groups in future editions. We also plan on profiling different garden club or other organization each issue.

Many Master Gardeners play important roles in garden organizations, so please contact Jane Furman with information about your meetings or special events at mastergardener1@optimum.net.

The famous plantsman, Michael Dirr said.

"There is no greater fraternity than that bound by the love of plants."

Regular Meetings

Plant Societies

American Hibiscus Society Sat., March 28 10:00AM Sat., April 25 10:00AM

Sat., May 24

Rare Plant Network

Tues., March 24 7:30PM Tues., April 28 7:30PM Tues., May 26 7:30PM

Suncoast Bonsai Society Sat., May 23 10:00AM Pinellas Park Public Library, Corner of 78th Ave and 52nd St "Preparing for Spring: Fertilizing and Pruning" "Answering Hibiscus Questions and Planning for AHS Show" Hibiscus Show ~ see special events

Good Samaritan Church, 6085 Park Blvd. Pinellas Park, FL "Thai Hoyas" Speaker ~ Ric Moreira. Guest fee \$1 donation Will supply on Tuesday Will supply on Tuesday

Seminole Community Library, 9200 113th St N, Seminole "Defoliation, Leaf Reduction and Branch Trimming"

Garden Clubs

Belleair Garden Club

Wednesday, May 6, 1:00PM

Belleair Country Club, 1 Country Club Lane, Belleair, FL Installation of Officers & Luncheon ~ see special events

Clearwater Garden Club

Saturday, April 18 – 10 a.m. Saturday, May 16 – 10 a.m. Location: 405 Seminole Street, Clearwater, FL

"Rain Chain"

"Floral Design Program"

Dunedin Garden Club

Saturday, April 4 – 1 p.m. Saturday, May 2 Dunedin Public Library, 223 Douglas Ave, Dunedin, FL "Bromeliads and Crotons" ~ Speaker: Rick Powers Installation of officers ~ members only

Palm Harbor Garden Club

Monday, April 13 – 11:15 p.m. Monday, May 11 East Lake Community Library, 4125 East Lake Road,

Palm Harbor, FL

"Honey Bees and Leafcutter Bees" Speaker ~ Christy Linke Installation of Officers ~ members only

Safety Harbor Garden Club

Wednesday, April 15 Wednesday, May 16 1:15PM Location: Safety Harbor Museum and Cultural Center 329 Bayshore Boulevard S, Safety Harbor, FL Installation of Officers ~ members only "Gardening Q & A"

Garden Club of St. Petersburg

Thursday, April 9 – 9:30 a.m. Tuesday, May 12 – 1 p.m. 500 Sunset Drive, St. Petersburg, FL (Coconut Park)
Parking at Park Street and 5th Avenue S
"Easy to Grow Plants for Florida" Speaker ~ Dave DeGroot
"Underwater Coral Reefs in the Florida Keys"
Speaker ~ Michael Echevarri

Plant Sales and Special Events

Begonia Society of Tampa Spring Plant Festival - April 11 - 12

Botanical Garden of USF at 12210 USF Pine Drive, Tampa, FL

Belleair Garden Club Luncheon and Officer Installation - May 6 - 11:30 a.m.

Belle Terrace at Belleair Country Club, 1 Country Club Lane, Belleair, FL. Guests are welcome. Lovely Spring hats are part of their tradition, but not required. Price: \$23/person. RSVP to Claire Whitaker, 13300 Indian Rocks Rd, #1402, Largo, FL 33774.

Clearwater Garden Club Plant Sale - April 25 - 9 a.m. to 2 p.m.

405 Seminole St, Clearwater, FL

Hanging baskets, herbs, tool sharpening, vegetables, houseplants, annuals. Fun and interesting programs plus an array of vendors and displays.

2nd Annual Earth Day Event - April 18 - 10 a.m. to 4 p.m.

Dunedin Public Library, 223 Douglas Avenue, Dunedin, FL Horticulture exhibits. Cacti display. Butterfly release at noon. Tricky ticket auction, butterfly plants for adults and annuals for children. Lemonade and cookies for all - rain or shine

Hibiscus Society Hibiscus Show and Sale - May 24 - 1 to 4 p.m.

Pinellas Park City Auditorium, 7690 59th St. N., Pinellas Park, FL See beautiful Hibiscus that will be judged in six different categories. The plant sale features plants from the *Affordable* Hibiscus Company. Grower Randy Cox will offer 500 hybrid hibiscus. There will be 400 plants in 1-gallon pots and 100 plants in 4" pots. Don't miss this chance to learn about these plants and take one home for your garden. More info: sunsetchapter.org

Annual Rare Plant Sale - June 7 - 9 a.m. to 1 p.m.

Behind Good Samaritan Church, 6085 Park Blvd., Pinellas Park, FL Parking at baseball field parking lot next to church. Admission fee is \$1 or canned good for Good Samaritan Food Pantry. Plants are grown by Network Members. Gesneriads, coleus, rare flowering plants, succulents, cacti, lilies, aroids, herbs, begonias, tropicals, bromeliads. Cash only. Bring wagon or cart to get your treasures to your car.

Dunedin Garden Club

Sunset Chapter AHS

Rare Plant Network

Plant Festivals in April



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2015 Spring Festival at USF Botanical Garden April 11 – 10 a.m. to 4 p.m. April 12 – 10 a.m. to 3 p.m. 12210 USF Pine Drive, Tampa, FL 33612

Organic Vegetable Gardening Workshop, Basic Orchid Growing Talk, Beekeeping Talk, Plant Growers Talks
Plants for sale: Begonias, Orchids, Bonsai, Croton, Butterfly Plants, Bromeliads, Ferns, Herbs and more.
Benefits the botanical garden at USF.

Admission: \$5.00 children and USFBG members: free

For more info: http://gardens.usf.edu/data/springfestival.pdf

Green Thumb Festival April 25 & 26 - 9 a.m. to 4 p.m. Walter Fuller Recreation Center

Plant Auction, Flower Show, Garden Railroad, Educational Programs, Children's Crafts, Children's Plant Fair, Butterfly Tent, Tool Sharpening, Tree Sale

More info:

http://www.stpeteparksrec.org/greenthumb/index.html



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Tidbits & Other Stuff

Free Alpaca Manure for Composting

Jamie Flores is offering free alpaca manure to anyone that wants to get it. Just drop her an email at jflores2@tampabay.rr.com.

You can also make arrangements to have your children or grandchildren visit and pet 17 alpacas, goats and one miniature donkey. She lives in Largo bordering the Walsingham Park.

And yes, alpacas are vegetarians. Thanks Jamie!



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A Call for Article Submissions for The Dirt

Share your passion for gardening with fellow Master Gardeners by writing an article or two for *The Dirt*. It's super easy and you'll find we're really friendly to work with.

Send your ideas or articles to: Theresa Badurek at tbadurek@co.pinellas.fl.us Mary Laurinaitis at mlaurinaitis@verizon.net

The Dirt

Published quarterly for Master Gardeners by Master Gardeners: April, July, October & January

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