

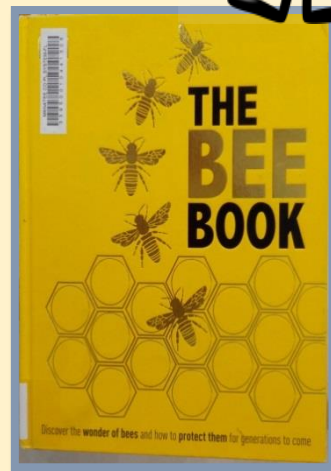
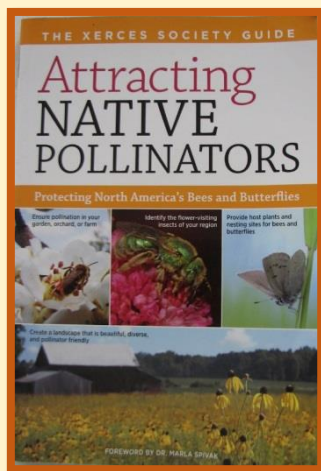
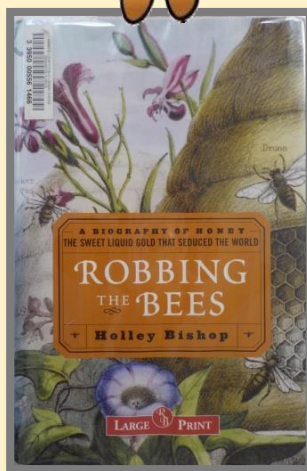
The Master Gardening Bench

The Manatee County Master Gardener Newsletter
July 2017 - Volume 16 – Issue 7



Summer Reads to Get Your Bees Buzzing

By Norma Kisida, Master Gardener 2012



Native bees and honey bees, which are major pollinators of food plants and flowers, are under pressure from diseases, pesticides, pests, and loss of forage and habitat. As home gardeners there is much we can do to help. Whether you are interested in improving your garden to support bees and other pollinators, becoming a beekeeper, or just learning more about bees, these books are interesting and informative resources.

Robbing the Bees is not a new book but an interesting way to learn about bees and beekeeping. Holly Bishop is a writer who bought a farm in Connecticut, became fascinated with bees and beekeeping, and started a couple of hives. Wanting to learn more and to write about bees, she sought the expertise of a seasoned professional beekeeper. Over the course of three years, she visited and followed bee keeper Donald Smiley in the Florida Panhandle, (a region famous for tupolo honey). Although the descriptions of her time with Donald are enlightening and interesting, this book is so much more. Woven skillfully into the fascinating storyline is extensive information about bees: their history, habits, and importance.

The Xerces Society is an environmental conservation organization that focuses on invertebrates essential to a healthy ecosystem. The focus of their book, ***Attracting Native Pollinators***, is on pollinators other than honeybees. It is divided into four parts. "Pollinators and Pollination" includes information on the history and benefits of our native pollinators such as bees, butterflies, flies, beetles,

and wasps. "Taking Action" gives guidance for helping pollinators in private gardens, natural areas, school gardens, conservation areas, recreation areas, and others. "Bees of North America" has great photos and information for identifying some of the more important and common bees. The last section, **"Creating a Pollinator-Friendly Landscape,"** describes how to put this information into practice with diverse pollinator populations and offers sample planting designs. I refer this book again and again.

Whether you just want to learn more about bees or are interested in becoming a beekeeper ***The Bee Book*** is a great newly published resource. The first section is all about bees and their incredibly elaborate and choreographed society. The second section is devoted to attracting bees, including what to grow as well as bee structures and habitats. The final section details instructions for starting and caring for hives.

Suncoast Beekeepers Association is the local association for beekeepers. (<http://www.suncoastbeekeepers.org>) Bishop, Holly (2005). *Robbing the Bees: a biography of honey – the sweet liquid gold that seduced the world*. MD: Scribner.

The Xerces Society (2011). *Attracting Native Pollinators: Protecting North American Bees and Butterflies*. MA: Storey Publishing.

Laing, Alastair, senior editor (2016). *The Bee Book*. New York: DK Publishing.



What's This? Balsam Apple Vine

Text and photos by Norma Kisida, Master Gardener 2012



Blossom and seedpods of balsam apple.

I was recently visiting a friend who described a vine that was growing on a fence and difficult to keep under control. We were able to identify it as balsam apple (*Momordica charantia*), also known as "balsam pear," "bitter melon," and sometimes "stink vine," because of the unpleasant smell when handled.

This vine has been classified by the University of Florida as a "caution" invasive plant in our area. This means it has increased in abundance or frequency but has not yet been shown to alter plant communities and should be used with caution.

This non-native vine is in the cucumber family and grows in sunny areas in a large variety of habitats, in at least 30 Florida counties. It is a threat due to its aggressive nature of covering shrubs, competing with air plants in trees, and forming dense thickets. Once this vine is established it can be very difficult to contain and eradicate as it seeds profusely. Although it has been used medicinally, the bright red seeds are toxic as are other plant parts if eaten at the wrong stage of ripeness.

For more information see:

Balsam Apple Vine

[http://lee.ifas.ufl.edu/FYN/News_Press_Q&A/Balsam Apple_Vine102012.pdf](http://lee.ifas.ufl.edu/FYN/News_Press_Q&A/Balsam_Apple_Vine102012.pdf) or

<https://assessment.ifas.ufl.edu/assessments/momordica-charantia/>.

Air Potato Vine

By Lisa A. Hickey, Urban Horticulture Extension Agent



Air Potato Beetle
Lilioceris cheni



Air potatoes get their name from potato like roots that allow them to come back year after year. Photos provided by the Florida Department of Agriculture and Consumer Services.



Open House: Air Potato Leaf Beetles Available for the Public

The University of Florida IFAS Manatee County Agriculture and Extension Office will be conducting an Open House: Air Potato Beetles for the Public on August 8, 2017 between the hours of 11:00 a.m. and 2:00 p.m.

Manatee County residents are invited to come out to the UF/IFAS Extension Manatee County Office located at 1303 17th Street West in Palmetto to learn more about the invasive air potato vine and a biological control, the air potato leaf beetle. We will be distributing a free supply of the beetles for use on your property. Pre-registration is necessary to determine how many beetles are needed for distribution. For those who are working, please stop by during your lunch break. To register, go to <https://airpotatobeetle.eventbrite.com>.

Air potato vine is one of Florida's most problematic invasive plants. The air potato leaf beetle is a small but formidable enemy of this invasive plant. It is a bright red insect about the size of a pinky fingernail. It has a big appetite for the air potato plant, whose vines can completely consume natural areas, smothering other plants and native habitats. The air potato leaf beetles are host-specific to air potato and they are not interested in other plants. The beetles chew through air potatoes leaves, leaving them riddled with holes.

During this event, residents struggling with invasive air potato can come to the UF/IFAS Manatee County Extension Office to learn about this invasive pest plant and receive a supply of air potato leaf beetles for use on their properties. There is no charge for this program. The insects will only be available for pick up during this event. Residents are encouraged to bring a cutting of air potato for confirmation. For more information, contact Lisa Hickey, Urban Horticulture Extension Agent at (941) 722-4524.



Rainfall

What's Average, What's Normal?

By John Dawson, Master Gardener 2007

If you receive a local paper, you will find weather information that shows local rainfall numbers for yesterday, totals for the month, totals for previous months with comparisons to last year and comparison to what is called normal average for our area. But what does all that mean? And, if you are like me, how come it doesn't reflect what's happening at my house?

Average rainfall is the total amount of rainfall collected at a certain location over a period of time divided by specific time periods.

Our local official weather station is located at the Bradenton/Sarasota (SRQ) airport, which provides the rainfall numbers you will find in the local papers. Anyone who lives in our area may have noticed that the rainfall amounts at the airport don't agree with what you got at home.

It may have rained like crazy at your place, but the paper shows no accumulated rainfall or the opposite may have occurred where the paper shows several inches and your property it is bone dry. So what gives?

First, consider that the data at the weather station

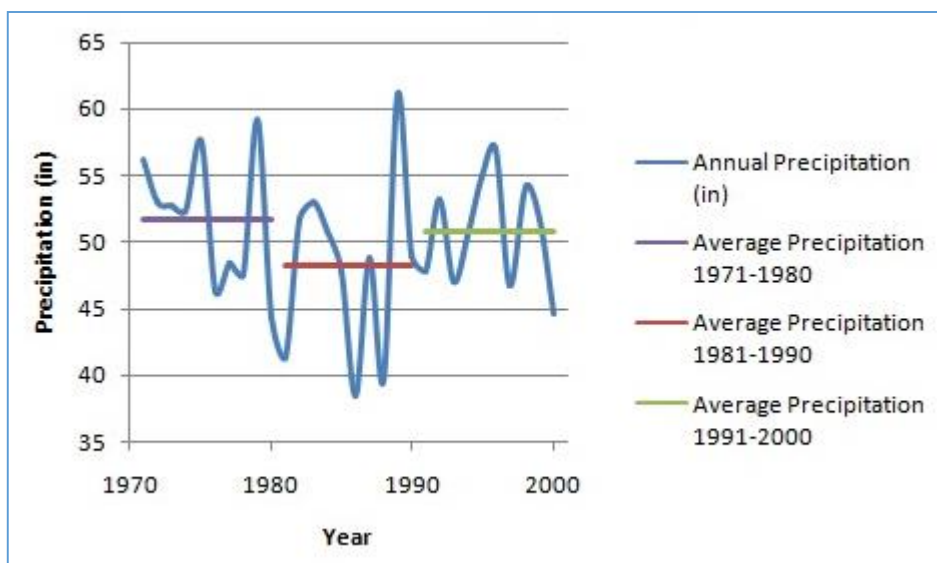
is collected at the same time each day (5:00 P.M.), so any rain falling before then is tallied on the day, and any rain falling after 5:00 P.M. is attributed to the next day.

Then, remember that weather patterns during the summer (our rainy season) are very sporadic, with small storms here and there. It is not uncommon to pass through a downpour close to home and arrive to find things hot, sunny and dry, or see it rain on one side of your street and not on the other.

As of May 2017, SRQ shows that our Year To-Date (YTD) rainfall is 4.83" below normal, which means we have had one of the driest 3 month periods since 1980. "Normal" in this case is the average of three decades between 1971 to 2000. So if you moved here after 2000, you have seen the same normal yearly average of 53.01" and not a continuing running average over the last 30 year period. The next new normal will be from 2001 to 2030.

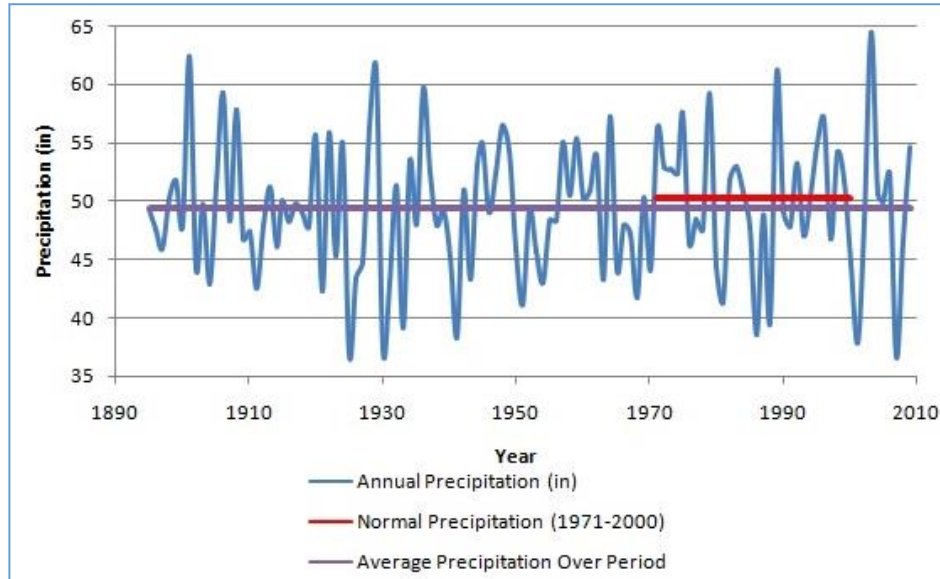
The charts in this article illustrate how widely average rainfall can vary from year to year, but the averages over a longer time period tend to be less fluctuating.

Average Rainfall over a 3 Decade Normal



Continued on page 5

Long Term Average vs. Normal Rainfall Amounts



Charts adapted from NC State University Climate Education website.

The daily rainfall measurements for every day since 2007 for SRQ can be found at US Climate Data

<http://www.usclimatedata.com/climate/bradenton/florida/united-states/usfl0047>.

There are several other local amateur weather websites that may provide data for an area closer to your home. One that provides more weather information than anyone could ever want, with updates every 10 minutes can be found at <http://www.bradentonwx.com/>.

So how does all this information help the local homeowner? Other than showing you what has happened in the past at SRQ, that's about it.

None of this information will tell you how much rain you will get in the next few days, months, or years but it will show you that for as long as they have been keeping records for this area, you can expect on average 53" +/- 1" of rainfall annually, with most of that occurring between the months from May to September.

If you want to keep track of rainfall at your home, stop by the Manatee County Agriculture and Extension Office and we will provide you with a free rain gauge, while supplies last.

Like my grandfather used to say, "If you want to know what the weather is like, stick your head out the window."

Free rain gauge, while supplies last!



Basket of okra. Photo credit: UF/IFAS



Seminole pumpkin.
Photo credit: Miranda Castro, Edible Project



Malabar spinach.
Photo credit: James M. Stephens, UF/IFAS

Summer Veggies for Florida Gardens

By Nancy Hammer, Master Gardener 2014

Here are some vegetables that can thrive in Florida's heat and humidity:

Okra: Recommended varieties: Clemson Spineless, Emerald, Annie Oakley II, Cajun Delights. Plant through the summer until September.

Sweet Potato: Centennial, Beauregard, Vardaman, Jewel. Plant through summer until September.

Southern peas (field peas, cow peas, crowder peas): California Blackeye No. 5, Pinkeye Purple Hull, Texas Cream. Plant through the summer until October.

Yard long beans: Plant throughout the summer.

Luffa (*Luffa* spp.): Plant until September. (This is the source of the famous luffa "sponge" but is also an edible gourd.)

Seminole Pumpkin: (*Curcubita muschata*): Plant until September.

Malabar spinach: (*Basella rubra*) Plant in summer.

Okinawa spinach: (*Gynura crepioides*) Plant in summer.

Other options include **lima beans** and **watermelon**.

If you currently have **cherry tomatoes**, **peppers**, or **eggplant** and they are still healthy, they may continue to produce fruit into the summer months.

Should you want to explore other options, consider trying varieties from Southeast Asia, Caribbean countries, Israeli varieties, and Southern heirlooms. Sources for seeds include Southern Exposure Seed Exchange, Seed Savers Exchange, and ECHO.

Detailed information on Florida vegetable gardening, including a table of planting dates can be found in the Florida Vegetable Gardening Guide at <http://edis.ifas.ufl.edu/vh021>.

If you and your vegetable garden prefer to take a break for the summer, take advantage of the heat and solarize the soil which will kill harmful nematodes, other insect pests, and weed seeds in the top few inches of soil. Look online at UF/IFAS Gardening Solutions-Soil Solarization for how-to information at <http://gardeningsolutions.ifas.ufl.edu/care/pests-and-diseases/pests/management/soil-solarization.html>.

Alternatively, consider cover crops for the summer which will prevent erosion during heavy summer rains, discourage weed growth, add nutrients and organic matter, improve soil texture, and interrupt insect and disease cycles. More information, including suggested cover crop plants can be found online at UF/IFAS Gardening Solutions-Cover Crops: <http://gardeningsolutions.ifas.ufl.edu/care/fertilizer/organic-matter.html>.

We invite you to tour our educational gardens at the Manatee County Agriculture and Extension office. We have examples of how to successfully grow vegetables and herbs in raised beds, a variety of containers, and salad tables. The okra is spectacular in the summer!



Orchids of Manatee

By John Dawson, Master Gardener 2007

Last year I used a new cheaper source of mulch for my landscape. It wasn't long before I realized that many stinkhorn mushrooms (*Phallaceae*) were popping up (you get what you pay for). Months later, while weeding behind some shrubs, I found what I thought was the invasive *Sanseveria* (*Sanseveria trifasciata*). With a minor exception, it had small orchid-like pinkish colored flowers; nothing like the white flowers of *Sanseveria*. After a Google search, I realized the plant was a monk orchid (*Oeceoclades maculate* spp.) which is on the Florida Exotic Pest Plant Council's (FLEPPC) category 2 invasive list. It has naturalized in Florida from its origins of Africa. Its leaves look almost identical to young *Sanseveria*.

While on the website www.flnativeorchids.com, I found another orchid; grass-leaved ladies tresses (*Spiranthes praecox*), that I had pulled a year earlier thinking it also to be a weed. At that time, something caught my eye and I noticed the flowers were orchid-like. I tried replanting it, but I had damaged it too severely and it died. Ladies stress are native to Florida.

Native orchids can be very fragile and should not be uprooted/removed, for they will likely not survive. Too many native orchids are being destroyed and displaced by destruction of their native habitat and lack of recognition. Some of the natives in our area just do not look anything like the cultivated orchids we find in nurseries, especially when they are not flowering. Some are small and easily overlooked, while others are camouflaged by surrounding plants or hidden in trees.

There are state laws that protect threatened and endangered native orchids (a list is on the flnativeorchids.com website), so please enjoy them where they live and take all the pictures you want, but leave them alone! There are at least 20, and possibly more, native orchids that grow here in Manatee County.



Monk Orchid
Photo: UF/IFAS



Grass Pink
Photo: FWS



Crested Fringe Orchid
Photo: USDA



Grass-leaved
Ladies Tresses
Photo: USF

My Shrub Has BO?!?

By Joy Derksen, Master Gardener 2004

Help! My ligustrum is dying! Some of my viburnum hedge plants are suddenly turning brown. The leaves are turning yellow and falling off my oleander and I don't see any of those caterpillars. Is it possible to kill a wax myrtle? My topiary has dead spots; what can I do?

With wet, hot conditions homeowners are calling the Plant Clinic with various plants affected by fungal problems. One particular fungus that we are seeing and hearing about frequently is **Botryosphaeria dieback**, also known as **BO** or "**Bot-rot**." This family of fungi affects tropical and subtropical shrubs like the ones listed above. Plants under stress from drought and then subjected to hot, rainy weather are susceptible to the fungus which enters through cuts. Dirty pruning tools, air movement, and water splash dispersal of spores can spread the fungus.

Symptoms of **BO Dieback** are: (1) yellow, spotted, and blighted leaves, (2) dried leaves that stay on the plant for about a week, (3) defoliated plants, (4) cankers, (5) tip dieback, (6) branch die backs, and finally (7) death.

Pictures of these symptoms are available at http://lee.ifas.ufl.edu/Hort/GardenPubsAZ/Eugenia_Disease.pdf

Chemicals cannot cure this fungal infection. They can only be used to prevent BO on unaffected plants. You can, however, manage this disease by pruning off the infected parts of the plant. You must cut at least 4 inches below the lowest affected branch. Check the stem for discoloration-if you see grey or black or red instead of clear white plant material inside the stem -- you will need to prune again lower down. Since your pruning tools can carry the infection you must sterilize the cutting surface between each cut. (Home disinfectants include: 3 parts water to 1 part chlorine bleach or 3 parts water to 1 part Pine Sol or equal parts water and 70% denatured alcohol).

Plant material needs to be disposed of away from your landscape plants. An application of a contact fungicide (like copper, captan, chlorothalonil, or mancozeb) on newly pruned surfaces will help minimize reinfection with the fungi.

July

CALENDAR OF EVENTS



Date	Time	Event
Starting Wednesday August 9	8:30 a.m.-4:00 p.m.	We've Got A Good Thing Growing! Become a Master Gardener and "get a good thing growing!" We are accepting applications for the Manatee County Master Gardener Volunteer Training Program. This is a 14-week course that will meet weekly on Wednesdays. The \$200 fee covers all textbooks and program materials. Call Cindy Mozeleski (941) 722-4524 to have an application mailed to you or download an application today! Visit: http://manatee.ifas.ufl.edu/lawn_and_garden/master-gardener/index.shtml .
1 st Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Island Library – 5701 Marina Drive, Holmes Beach. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd & 4 th Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Tuesday July 18	10:00 a.m.	Monthly Guided Tours of the Master Gardener Educational Gardens - Join us for a guided tour lasting about one hour. The gardens illustrate a variety of garden styles and techniques, demonstrate Florida-Friendly Landscaping™ principles, educate residents about plants that perform well in Florida landscapes, and inspire garden visitors to follow recommended gardening practices at home. Register by calling the Extension Master Gardener Plant Diagnostic Clinic (941) 722-4524.
Tuesday July 18	10:00 a.m.-Noon	Drought Tolerant Plants 101 – Note Location: Palma Sola Botanical Gardens 9800 17th Ave. NW, Bradenton. Learn how to choose beautiful drought tolerant plants for your landscape and know what to put back on the shelf! Valrie Massey, Horticulture Program Assistant, will show samples of Florida friendly plants suitable for Manatee County residents and discuss the difference between the good and the bad plant. Register online at http://manatee.ifas.ufl.edu or call Joann (941) 722-4524.
Wednesday July 19	10:00-11:30a.m.	Orchid "Make and Take" - A "make and take" workshop where you will mount a <i>Phalaenopsis</i> orchid on a piece of wood. Learn about these beautiful epiphytes and how they can enhance your home and landscape. Registration and advance payment for materials due by July 10 guarantees your spot in class (cash or check only, payable to Friends of Extension). Register online at http://manatee.ifas.ufl.edu or call the Extension Master Gardeners (941) 722-4524.
Thursday July 20	10:00 a.m.-Noon	Irrigation Designing - Note Location: Palma Sola Botanical Gardens 9800 17th Ave. NW, Bradenton. Join Michelle Atkinson, Environmental Horticulture Extension Agent, as she discusses the basics of great irrigation designing and learn some helpful tips and tricks for installing your new or retrofitted in-ground irrigation system! This is a hands-on class and most of the instruction will be outside. Register online at http://manatee.ifas.ufl.edu or call Joann (941) 722-4524.
Tuesday August 8	11:00 a.m.-2:00 p.m.	Open House: Air Potato Leaf Beetles Available for the Public – Manatee County residents are invited to visit the Manatee County Extension Office to learn more about the invasive air potato vine and a biological control, the air potato leaf beetle. Receive a free supply of beetles for use on your property. Register online at https://airpotatobeetle.eventbrite.com .



University of Florida IFAS Extension - Manatee County
1303 17th St. W., Palmetto, FL 34221 Telephone: (941) 722-4524
Web site: <http://manatee.ifas.ufl.edu> E-mail: ManateeMG@gmail.com



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