

July to September 2019 - Volume 2, Number 3

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A Note From the Broward County's Urban Horticulture Extension Agent..

Dear "Broward Green Bites" Readers,

Happy Summer! I am very excited to share with you our new Summer *Broward Green Bites* newsletter. Our Summer newsletter is sharing some of our amazing 2019 Extension events, new projects, educational information and collaborative initiatives for new programming. The University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is a federal, state, and county partnership dedicated to developing knowledge in agriculture, human and natural resources, the life sciences and to making that knowledge accessible to sustain and enhance the quality of human life. Enjoy our Summer newsletter!

Lorna Bravo


Lorna Bravo, Urban Horticulture Agent II, CED LEED AP BD+C

Phone: 954-756-8529 | Fax: 954-357-5271

CHECK OUT THESE ONLINE RESOURCES:

UF/IFAS Extension Website: <http://sfyl.ifas.ufl.edu/broward/urban-horticulture-and-natural-resources/>
EDIS Publications: <http://edis.ifas.ufl.edu/>
Florida Master Gardener: <http://gardeningsolutions.ifas.ufl.edu/mastergardener/>
Florida Master Naturalist: <http://www.masternaturalist.ifas.ufl.edu/>
Florida Friendly Landscapes: <http://fyn.ifas.ufl.edu/>
Gardening Solutions: <http://gardeningsolutions.ifas.ufl.edu/>
Broward Master Gardener: <http://sfyl.ifas.ufl.edu/broward/urban-horticulture-and-natural-resources/broward-master-gardener/>


Upcoming Events

 UF IFAS Extension
 UNIVERSITY of FLORIDA

UF/IFAS Extension Broward County


MONDAYS, 1:00 - 4:30 PM
JULY 22, 2019
 Introduction to Sustainable Urban Agriculture & Regulations
 Workshop: Tour sites in Broward County

AUGUST 5, 2019
 Business/Marketing Plan, and Financial Resources
 Workshop: Local farm (TBD)

AUGUST 19, 2019
 Production Systems of Urban Agriculture
 Workshop: Container & Hydroponics System

SEPT. 9, 2019
 Best Management Practices
 Workshop: Composting, nutrient and disease management

SEPT. 23, 2019
 Technology Integration in Urban Agriculture

Workshop: Renewable energy & water technologies (e.g., PV, rain barrel, irrigation etc.)

OCTOBER 7, 2019
 Post Harvesting & Food Handling
 Workshop: Develop food safety plan & Hands on demo

Location
 UF/IFAS Extension
 Broward County
 3245 College Ave.
 Dade, FL 33314

 For More Information Contact
 Lorna Bravo (lbravo1@ufl.edu)
 Julio Perez (jpulio@ufl.edu) or
 954-756-8519

 Organized by: Dr. Jiangqiao Qiu, Assistant Professor, Landscape Ecology (qiu@ufl.edu)
 Jessica Ryals, UF/IFAS Extension Agent Sustainable Food Systems (jessicarials@ufl.edu)

This comprehensive UF/IFAS Extension program includes a series of lectures and hands-on workshops on sustainable urban agriculture geared for small farmers, urban farmers, community gardeners, backyard gardeners and entrepreneurs. Participants will gain a better understanding of social, environmental benefits of urban agriculture, acquire knowledge and adopt management practices to start or expand their farming operations.

Structure: 3.5 hours/length (1.5 h lecture + 2 h hands on workshop)

Materials and light refreshments included.

It is recommended, though not required, to participate in all classes.

\$15 per class, or 6 classes for \$50

Seating limited

Register online here
<https://browardurbanag2019.eventbrite.com>

URBAN AGRICULTURE WORKSHOP SERIES LAUNCHES JULY 22ND

University of Florida, Institute of Food & Agricultural Sciences (UF/IFAS), Dania Beach PATCH, and Broward and Collier County Extension, are pleased to present the 2019 Sustainable Urban Agriculture Workshops. It is a comprehensive and collaborative extension program that includes a series of lectures and hands-on workshops on sustainable urban agriculture geared for small-scale farmers, urban growers, community gardeners, backyard gardeners, entrepreneurs, planners and sustainability practitioners. This program is partially sponsored by the DeLuca Foundation and the City of Dania Beach Community Redevelopment Agency. Participants will gain a better understanding of social and environmental benefits of urban agriculture, acquire knowledge and adopt best management practices to start or expand their farming operations towards sustainability.

2019 Invasive Reptile & Crocodilian Series



Follow the UF-IFAS FLREC Croc Doc Team @ <http://crocdoc.ifas.ufl.edu/>



The American alligator (*Alligator mississippiensis*) is a keystone species inhabiting aquatic environments across the southeastern United States. Alligators play a significant role as ecosystem engineers by creating habitats and altering hydrology, which in turn provides safe haven not only for themselves but many other species of fish and wading birds. Since alligators are sensitive to changes in depth and timing of water flow, as well as availability of prey, they make an effective indicator for ecological responses. The Florida Everglades is a highly modified system undergoing restoration; monitoring the alligator population will apprise progress of restoration efforts.

To read about The American Alligator: Visit UF/FAS EDIS Publications:

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- ◆ <http://edis.ifas.ufl.edu/pdffiles/UW/UW38000.pdf>
- ◆ <http://edis.ifas.ufl.edu/pdffiles/UW/UW35800.pdf>
- ◆ <http://edis.ifas.ufl.edu/pdffiles/UW/UW28300.pdf>

Upcoming Events

UF/IFAS Broward County Extension
2019 Invasive Reptile
& Crocodilian Series

Save the Date: August 15, 2019



UF IFAS Extension
UNIVERSITY of FLORIDA

BROWARD COUNTY
FLORIDA

ARGENTINE BLACK AND WHITE TEGU
USING SCIENCE TO CONTROL THE ARGENTINE BLACK
AND WHITE TEGU POPULATION IN SOUTH FLORIDA

Special guest speaker:
Brittany Marie Mason
UF-IFAS FLREC, Croc Docs

Tegus are large, omnivorous lizards that consume small mammals, snakes, turtles, birds, and alligator eggs. They have a preference for eggs which allows them to impact every level of the food chain. Join us to learn more about our current management practices and removal efforts.

August 15th, 2019 | 7:00PM | Extension Auditorium
3245 College Avenue, Davie, Florida 33314

For more information please contact
Lorna Bravo at lbravo@ufl.edu | Julio Perez at julio@ufl.edu | Adam Pitcher at a.pitcher@ufl.edu
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UF/IFAS EXTENSION BROWARD COUNTY FFL MASTER GARDENER TRAINING

May 29, 2019



Florida-Friendly Landscaping is a collection of practices involving design, installation, operation, and maintenance which are intended to reduce irrigation water-use, protect water quality from over-use of fertilizer and pesticides, and reduce stormwater runoff.



FFL LANDSCAPE ADVISER TRAINING FOR MASTER GARDENER VOLUNTEERS

On May 29, 2019, UF/IFAS Extension Broward County Master Gardener program had its first Florida-Friendly Landscaping (FFL) advance training for Master Gardener volunteers. The advanced training covered beyond the 9 principles to teach Master Gardeners how to become yard advisors and work through the FFL checklist with confidence. Learn how you can have a beautiful landscape that could save you time, energy and money while protecting our future. Come and join our Broward County Florida-Friendly Landscaping Master Gardener Ambassador Team!

To read about the Florida-Friendly Landscaping Broward County program visit:

- <http://sfyl.ifas.ufl.edu/broward/urban-horticulture-and-natural-resources/fflresources/>
- ♦ **Contact:** Lorna Bravo at : lbravo1@ufl.edu or Anthony Gross at BrowardMG@ifas.ufl.edu

UF ROADMAP - WATER CONSERVATION- CASE STUDY PROJECT



May 29, 2019



Shady Banks is a residential neighborhood in Fort Lauderdale, Florida. With approximately 500 homes on quiet, tree-lined streets. It is located on the banks of the New River and contains Hort Park and the Bill Keith Nature Preserve. The UF/IFAS Extension Broward County Florida Friendly Landscaping (FFL) Program is working with Shady Banks community to educate residents about Florida-Friendly Landscaping principles.

UF/IFAS EXTENSION BROWARD COUNTY RAIN BARREL PROGRAM













MASTER GARDENER CLASS 2019-RAIN BARREL PROJECT





Reduce Stormwater Runoff

To protect waterways and replenish Florida's aquifer

- Connect a rain barrel to your downspouts to collect rainwater, and reduce runoff
- Use porous surfaces, such as pavers, and bricks for walkways, patios and driveways
- Aim downspouts toward porous surfaces so that water can soak into soil
- Rain gardens retain water and serve as an attractive feature within the landscape






Florida-Friendly Landscaping: Adopting Water-Conservation practices with Rain Barrels

South Florida receives an average of 62 inches of rainfall per year. Most of this water washes off green lawns and pavements carrying fertilizers and other chemicals into local waterways. A rain barrel is an inexpensive way of capturing and storing some of this water for later use. Rainwater that would otherwise be lost to run off and diverted to storm drains and streams. Start a new trend by placing artistic rain barrels around your house. You will be teaching and encouraging others in your neighborhood to do the same. Also, the act of collecting rainwater can be an inspiration to find other ways to conserve water around the home.

To read more about UF/IFAS Extension Broward County Rain Barrel program visit:
<https://blogs.ifas.ufl.edu/browardco/2019/07/01/florida-friendly-landscaping-adopting-water-conservation-practices-with-rain-barrels/>

UF ROADMAP-WATER CONSERVATION : Rain Barrels




Did you know...

Broward County averages 50-60 inches of rain annually.

You can capture and use our abundance of rain!

Rain barrels and other storage vessels can help.



Rain Barrel Workshops provided by:
 UF/IFAS Extension Broward County
 Contact: Lorna Bravo
lbravo1@ufl.edu
 (954) 756-8529






Reduce Stormwater Runoff

To protect waterways and replenish Florida's aquifer

- Connect a rain barrel to your downspouts to collect rainwater, and reduce runoff
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Sustainable Urban Agriculture Program for Master Gardeners

SUSTAINABLE URBAN AGRICULTURE SITE VISITS

UF IFAS Extension

40th FLORIDA MASTER GARDENER VOLUNTEER



Photos: Lorna Bravo. UF/IFAS. All rights reserved

URBAN FARMING INSTITUTE OAKLAND PARK CITY SPONSORED COMMUNITY GARDENS

UF/IFAS Extension Broward County Master Gardener Program is introducing a new Master Gardener class module titled 'Sustainable Urban Agriculture for Master Gardeners.'

UF/IFAS Extension is collaborating with assistant professor Dr. Jiangxiao Qiu from Landscape Ecology at the Fort Lauderdale Research Center, Francisco Rivera Small Farm Agent from Hillsborough County, assistant professor Dr. German Sandoya Lettuce cultivar specialist from Belle Glade, Florida and Vanessa Campoverde Commercial Agricultural Agent from Miami Dade County to bring this program to Broward County Master Gardeners.

SUSTAINABLE URBAN AGRICULTURE SITE VISITS

UF IFAS Extension

40th FLORIDA MASTER GARDENER VOLUNTEER



MIRAMAR COMMUNITY GARDEN



MASTER GARDENER CLASS 2019



GROWING FOOD IN URBAN COMMUNITY GARDENS

We are very excited to be collaborating with this fantastic team and create a comprehensive and collaborative extension program that includes a series of lectures and hands-on workshops on sustainable urban agriculture that connects members of our community by learning about the sources of local fresh produce and healthy living. Participants will gain a better understanding of the social and environmental benefits of urban agriculture, acquire knowledge, and adopt best management practices. Environmental sustainability starts in our backyards, and UF/IFAS Extension Broward County sees excellent potential in this project.

-Lorna Bravo

UF/IFAS EXTENSION BROWARD COUNTY VEGETABLE GARDEN PROJECT

Photos: Lorna Bravo. UF/IFAS. All rights reserved

UF IFAS Extension

40th FLORIDA MASTER GARDENER VOLUNTEER



Broward County Master Gardener Vivian Landix sharing UF/IFAS Extension Broward County Vegetable Garden Project to the new Master Gardener class 2019.



UF/IFAS Extension Small Farm Agent Francisco Rivera from Hillsborough County demonstrating Hydroponic Systems.

COMMUNITY IMPACT

Dr. Julieta Ross attended our first Sustainable Urban Agriculture workshop in April 2019, and she shared her testimony.

Thank You for the exposure that you have given me into your program. I don't have much experience in agricultural sciences, but I have been a novice home grower of vegetables for most of my life. A very frustrated one, by the way, as my veggie plants don't typically survive for long. I planted my first bell pepper plant when I was eight years old while living in Buenos Aires. Since then I've had patches of vegetable gardens in all my homes, in Nashville, Buffalo, Plantation, Wilton Manors and Madrid, Spain. I live in Fort Lauderdale, Florida, renting an apartment while looking to buy a house. One of my biggest disappointments was that I was not going to be able to grow anything as I don't have a yard. Then I attended your Saturday session and visited Marsha's house with your class. Marsha has a big yard, but yet grows everything in containers. She has 100+ varieties of tomatoes growing this way, and heirlooms of her own. She shared how to combat nematodes, solarizes the soil, and mixes her medium. How she deals with water shortages, how she uses LED lighting to grow her seedlings, how she ferments her tomato seeds.... I couldn't take notes fast enough! I know this was just one single Saturday session, but it had a significant impact on me. I leveraged her experience to start growing in containers in my apartment balcony. The success that I've had growing vegetables this time surpasses anything I've done before. My eggplants are huge; tomatoes are plentiful, green beans and cucumbers are honestly out of control!

Sincerely,

Julieta Ross, PhD



Julieta Ross, PhD

Hydroponic Solutions for Urban Food Production



MASTER GARDENERS TRANSPLANTING HYDROPONICALLY GROWN LETTUCE



5 WEEKS
5/17/19



DID YOU KNOW?

The word *hydroponics* comes from two Greek words: *hydro* meaning water and *ponos* meaning work; the combination means “working water,” as a method for growing plants without soil. On May 2019, The UF/IFAS Extension Broward County Master Gardener program launched the first hydroponic workshop to 23 Master Gardeners with a focus on water use efficiency. MGs were trained in urban agriculture aspects, water use efficiency and identify suitable cultivars for hydroponics. Participants learned to build their own hydroponic floating bed system together to test hydroponically grown Florida lettuce as an alternative crop for local food production.



EMPOWERING MASTER GARDENERS TO BUILD THEIR OWN GARDENING FLOATING BEDS



Want to join our Master Gardener program? Contact Lorna Bravo: lbravo1@ufl.edu

Upcoming Events

Come and Join us!!!



UF IFAS Extension
UNIVERSITY of FLORIDA

BROWARD COUNTY
FLORIDA

ARGENTINE BLACK AND WHITE TEGU

USING SCIENCE TO CONTROL THE ARGENTINE BLACK AND WHITE TEGU POPULATION IN SOUTH FLORIDA

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UF-IFAS FLREC, Croc Docs

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For more information please contact
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UNIVERSITY of FLORIDA

FLORIDA MASTER GARDENER VOLUNTEER

BROWARD COUNTY
FLORIDA

School & Community Gardens

JOIN US
August 7th 6:30PM - 8:00PM

Guest Speaker:
Lisa Gonzalez, Food Systems Specialist

This program will provide a general overview of school and community gardens. Participants will learn about strategies for planning, funding and maintaining their food gardens as well as tips to enhance community engagement.





All upcoming events will take place at UF/IFAS Extension Broward County
Office located at: 3245 College Ave Davie, Florida 33314

UF IFAS Extension
UNIVERSITY of FLORIDA

UF/IFAS Extension Broward County

2019 SUSTAINABLE URBAN AGRICULTURAL SHORT-COURSE

MONDAYS, 1:00 - 4:30 PM

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For More Information Contact
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Julio Perez (jpulio@ufl.edu) or
(954) 357-5270

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It is recommended, though not required, to participate in all classes.

\$15 per class, or 6 classes for \$90

Seating limited

Register online here
<https://browardfarmings2019.eventbrite.com>

Organized by Dr. Jangsan Oh, Assistant Professor, Landscape Ecology (jangs@ufl.edu)
Jessica Pyak, UF/IFAS Extension Agent, Sustainable Food Systems (jessica.pyak@ufl.edu)

UF/IFAS EXTENSION BROWARD COUNTY

ART IN THE GARDEN

Butterfly Plant Sale & Rain Barrel Workshop

November 16th 2019 from 9AM to 12PM
3245 College Avenue, Davie, Florida 33314

Learn about the importance of having a Florida-Friendly butterfly garden.
Take part in our free raffle for host and nectar plants!
Families can create + paint your own rain barrels (\$45.00)
Create + paint bee houses

Register here: <https://art-in-the-garden-2019.eventbrite.com>






To benefit Master Gardener Volunteers Training Education

BROWARD COUNTY 4H YOUTH PROGRAM

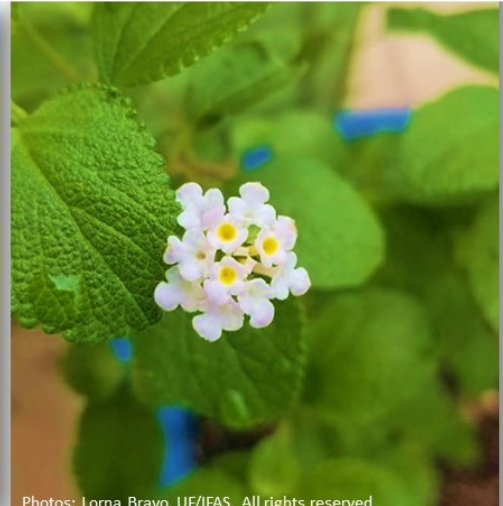
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FLORIDA MASTER GARDENER

Florida-Friendly Landscaping

Florida-Friendly Landscape Plant of The Month

Buttonsage (*Lantana involucrata*)



Photos: Lorna Bravo, UF/IFAS. All rights reserved

Family: Verbenaceae (Verbena)

Leaves are oppositely arranged, ovate to elliptical in shape, with toothed margins and a rough upper surface. They are aromatic when crushed. Its fruit is a small, purplish-black drupe.



Buttonsage (*Lantana involucrata*) is easily one of the most underutilized native plants as it epitomizes the term "Florida-Friendly." Occurring naturally throughout central & southern Florida in most sandy coastal habitats such as pinelands & dunes, this shrub requires virtually no irrigation once established & is highly tolerant of salt, alkalinity, & poor soil in general. It regularly & consistently produces small clusters of white flowers throughout the year, providing a bountiful feast for butterflies & native bees. These flowers soon become clusters of bright magenta fruits adored by many birds. With a full, low canopy (<10ft) of beautiful bright green foliage as well as a moderate growth rate, Buttonsage even makes an excellent hedge, proving it truly has something for everyone. You'll be delighted you choose to add this exceptional native plant to your landscape!- Adam Pitcher



Us on Facebook – UF IFAS Extension Broward County @ufifasextbroward

Visit our UF/IFAS Extension Broward County Website at:
<http://sfyl.ifas.ufl.edu/broward/urban-horticulture-and-natural-resources/>
<http://blogs.ifas.ufl.edu/browardco/>

Do you want to receive our quarterly newsletters?
Stay Connected @ Constant Contact: shorturl.at/tux39

Do you have an idea, question, or comment you would like to share?
Please reach out to us via the following :
E-Mail: lbravo1@ufl.edu

Visit the UF/IFAS Extension Broward County
Office today at
3245 College Ave
Davie, Florida 33314



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Single copies of UF/IFAS Extension publications (excluding 4-H and Youth publications) are available free to Florida residents from county UF/IFAS offices.

"Broward Green Bites", UF/IFAS Extension, Broward County



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