

aqua-notes

An Equal Opportunity Institution

SOLUTIONS

VOLUME 16, ISSUE 3

150 Sawgrass Road
Bunnell, FL 32110
386-437-7464

August 2016

Mark your calendars...

- August 2-16—
Freshwater Systems
Master Naturalist
class, St. Johns
County. See
www.masternaturalist.org
for more in-
formation.
(Registration closed)
- More on back page!

Inside this issue:

CoCoRaHS	2
FMAP updates	3

So tiny, yet such a big deal...

It seems that nowhere is immune to the issue of microplastics. I visited Bermuda (my home) in July, and was distressed to find HUGE quantities of microplastics in the seagrass wrack line on the beach. In about 1.5 cups of wrack, I removed more than half a cup's worth of plastic pieces in all colors of the rainbow. To prove the connectedness of the ocean, I found a Florida Department of Environmental Protection plastic tag (dated 1997) washed up on the beach in Bermuda, too.

I expected to find shells in the wrack—sadly the contents were almost all plastic...



M. P. McGuire

Maia McGuire, PhD
Marine Extension Agent

Fuzzy dockposts

It has been several years since “fuzzy dockposts” first raised concern in Palm Coast. I’ve recently had a few calls about the topic, so thought it might be appropriate to revisit the topic in this newsletter. Pilings in brackish and marine environments are prone to developing “salt kill,” which appears as a fuzzy area on the wood, above the water line, and typically on the south-facing side of the piling. This results from a physical process in which salty water moves up the internal tubules of the piling (these are the tubes that transported water and nutrients when the tree was alive) by capillary action. Once the water is above the level of the canal/bay/ocean, the sun’s heat can evaporate the water, leaving behind salt crystals. These salt crystals cause a fracturing of the wood fibers, resulting in the fuzzy appearance. This process is not expected to shorten the lifespan of the wood, and is considered an aesthetic issue, not a structural one. For more information, see <http://stjohns.ifas.ufl.edu/Sea/dockposts.htm>.



More citizen science opportunities

Can you read a rain gauge? If so, CoCoRaHS might be a great opportunity for you to contribute data to a national network.

What is CoCoRaHS?

The Community Collaborative Rain, Hail and Snow Network, is a non-profit, community based, network of volunteers who measure and report rain, hail and snow in their backyards.

A Brief History

CoCoRaHS came about as a result of a devastating flash flood that hit Fort Collins, Colorado in July 1997. A very localized storm dumped over a foot of rain in several hours while other portions of the city had only modest rainfall. The ensuing flood caught many by surprise, caused \$200 million in damages, and resulted in five deaths. CoCoRaHS was born in 1998 with the intent of doing a better job of mapping and reporting intense storms. CoCoRaHS became a nationwide volunteer network in 2010 and is now international with observers helping provide critical precipitation observations, benefiting their country's needs.



Volunteers of all ages welcome!

Individuals and family volunteers of all ages and all walks of life are the foundation of the CoCoRaHS network. Anyone can help. It only takes a few minutes to check the rain gauge and report your observations.

Training: “the Key to our success”

It is important that all CoCoRaHS precipitation reports be accurate and consistent. Training is provided on how to install gauges, properly measure precipitation and transmit reports. CoCoRaHS precipitation reports are accurate and very useful.

Simple Measuring Tools

Volunteers use high quality rain gauges. In some states, “hail pads” are used to study hail.

CoCoRaHS is Educational

CoCoRaHS offers learning opportunities too. In addition to training materials, newsletters and the ‘Message of the Day’, members also enjoy opportunities to attend Webinars featuring experts in weather, climatology and other pertinent disciplines. CoCoRaHS offers classroom resources for K-12 teachers. Students get to collect and submit real scientific data – all while meeting State and National Standards in science, math, geography and more!

How Do I Get Involved?

To learn more or to sign up as a volunteer, go to: <http://www.cocorahs.org/Application.aspx>

Florida Microplastic Awareness Project (FMAP) updates

The Florida Microplastic Awareness Project is in its final month (wow, that year passed quickly!). I would like to give a “shout out” to the many volunteers around the state who have been helping by collecting and analyzing water samples for the presence of microplastics. At this time, at least 150 volunteers have collected over 600 samples from more than 200 locations around the state! They have donated more than 1,000 hours of volunteer time (more than twice the amount I anticipated when I wrote the grant). I’d also like to thank my colleagues and partners around the state who are helping to organize these efforts.

Thanks to these volunteers, we are getting the first data about the types and amounts of tiny plastics in Florida’s coastal waters (you can check out the data map through a link at www.plasticaware.org).

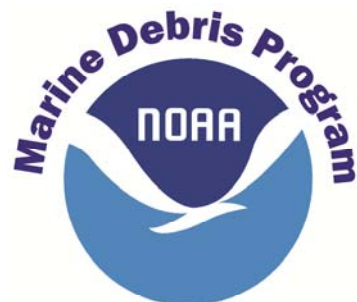
The Florida Microplastic Awareness Project is also encouraging people to change their behavior to reduce their personal contribution to plastic waste. So far, over 600 people have taken the pledge (if you aren’t one of them, please consider doing so at <http://bit.ly/plasticpledge>). We are following up with people who provide their e-mail addresses, and are thrilled to find that not only are people pledging to take certain actions, but they are actually following through with those pledges and turning them into actions!

You might recall from last quarter’s newsletter that two Flagler County school teachers worked with their high school and second grade classes last semester to help raise awareness about microplastics. Thanks to their efforts, the Flagler County School District will be switching to cafeteria trays made from recycled newspaper (instead of polystyrene) at Old Kings Elementary and Flagler Palm Coast High Schools this year. Way to go Ms. VandeBunte and Ms. Sperber, and thanks to the Flagler County Schools’ Food Services Department for being willing to pilot this effort!

Although the official end of the Florida Microplastic Awareness Project is August 31, I am anticipating that the project will continue—I’d like to see it expand into more coastal areas, and into the central/freshwater parts of the state. Several of my Sea Grant colleagues in other states are hoping to find funding to initiate similar efforts in their locations. Many thanks to NOAA’s Marine Debris Program for providing the grant to initiate this program.



Florida Microplastic
AWARENESS PROJECT



www.MarineDebris.noaa.gov
Keep the sea free of debris

We're now on Facebook—check out facebook.com/NEFLSeaGrant and “like” it to keep informed about coastal topics in the region. Don't have a Facebook account? That's OK—you can view the page without one :)

NE Florida Sea Grant Extension Program
150 Sawgrass Road
Bunnell, FL 32110

Phone: 386-437-7464

Fax: 386-586-2102

E-mail: mpmcmg@ufl.edu

<http://stjohns.ifas.ufl.edu/sea/seagrant.htm>

More “Mark your calendars”

- August 30-Oct 4—Upland Systems Master Naturalist class, Nassau County. See www.masternaturalist.org for more information or to register.
- October 7—Nov 11—Coastal Master Naturalist class, Volusia County. See www.masternaturalist.org for more information or to register.
- October 20-22—Florida Association of Science Teachers annual conference, Orlando, FL. For more information and to register, see www.fastscience.org.

Please check the calendar at <http://calendar.ifas.ufl.edu> for other environmental education programs around the state.

Aqua Notes is provided as one of the many services relating to educational programs offered by the University of Florida/IFAS cooperative extension service. This publication is available on the Web at <http://stjohns.ifas.ufl.edu>. The use of websites or product names in this publication is not a guarantee, warranty or endorsement of the sites/products named and does not signify that they are approved to the exclusion of others. For more information about this document, contact Maia McGuire at the Flagler County Extension Service at 386-437-7464.

The Foundation for The Gator Nation

An Equal Opportunity Institution