



Contents

FANREP President Message	1
Nitrogen Stewardship Education for Students Living with HABs	2
Green Sports Alliance Summit	3
Improving Community Resilience To Flooding in Northwest Florida	4
2019 FANREP Awards	5—7

MESSAGE FROM THE FANREP PRESIDENT!

Hello FANREP colleagues,

Where did the year go? Can't believe it's already August and summer is almost over. I hope you took time to relax and take some time off with family.

I want to congratulate all the FANREP award winners. We had a lot of great submissions from members as always. I was happy to see Maia McGuire win the Distinguished Career Leadership award. She has had a long and successful career with Extension and I'm glad that her work is being recognized. Congrats too to Marnie Ward and her colleagues for Outstanding Team award for the Water in my Backyard program. These are just two of the many FANREP Awards given out this year. Keep up the great work!

Registration is still open for EPAF, which will be held August 26-29 at the Sanibel Harbour Marriott Resort & Spa in Fort Myers. The Dean will be providing county and state faculty \$400 to attend the conference as long as you are present for all of Wednesday and Thursday meals and sessions. At EPAF, each association will have their own lounge room for networking. If you need a space for a meeting please feel free to use this room. We also will be hosting an IST on Tuesday morning from 8:00-10:00am. Stay tuned for more details about this, but I promise it'll be fun (and we'll be going outside if the weather cooperates)!

David Nistler, EPAF Auction Chair, sent out the call for auction items for EPAF. FANREP directly benefits from the auction as proceeds are split between all the associations. If you have a great item or gift basket idea that could be put in the auction, contact Auction Co-Chair Kevin Korus at kkorus@ufl.edu with information, a picture, and approximate value of your item.

FANREP has also been challenged to raise at least \$1,000 in sponsorships for EPAF. Sponsorships can be

in the form of money or in-kind opportunities. In-kind contributions in the past have included gift cards, products, promotional items, or goody bags. Please reach out to your local partners, especially any who are located in southwest Florida, and ask them to consider being a sponsor.

Thanks to Carrie Stevenson and Linda Seals for putting this newsletter together and for everyone who submitted articles. I look forward to seeing you all at EPAF where I'll be turning the President duties over to Theresa Badurek. Let me know if you have any questions or comments. Thanks

Holly Abeels



NITROGEN STEWARDSHIP EDUCATION FOR STUDENTS LIVING WITH HABs

Center for Watershed Protection Annual Conference

Thanks in part to the FANREP Travel Scholarship; I traveled to Charleston, South Carolina for the annual Center for Watershed Protection's National Conference. The Center for Watershed Protection works with and through its network of water resource managers, practitioners, researchers and regulators from across the U.S. to provide both technical and educational training for watershed and stormwater management needs. At the conference, I presented the Nitrogen Stewardship education program, which was jointly created with colleagues to help students think through why and how it is important for humans to reduce their own nitrogen footprint.

The Nitrogen Stewardship education program was developed as a result of the recent harmful algal bloom outbreaks and was delivered in 2019 to 1,906 8th grade students from across Sarasota County.

During the presentation, I used audience polling software (polleverywhere.com) to engage the audience and learn about nutrient pollution education and outreach programs in their regions. More than half of participants indicated that their state had education and outreach programs focused on nitrogen pollution. This means that Florida Extension professionals can turn to their Extension colleagues throughout the US to model these programs in Florida.



In addition to presenting at the conference, I was also able to network with Extension professionals from around the country, hear from experts and practitioners on topics such as stormwater best management practices, social marketing strategies to decrease water pollution, and much more. Equally important, I was able to meet members of the South Carolina Stormwater Ponds Research and Management Collaborative and learn about their inception, funding, research design, and subsequent education programs.

I look forward to applying what I have learned in my upcoming programs. I hope that through this experience I am able to reduce nitrogen pollution in my community one footprint at a time.



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Green Sports Alliance Summit

UF/IFAS Green Sports Program

The sports industry is much more than the teams that are taking the field. In today's world of sports, managers must be aware of all the components of their organization. The sports industry has the ability to impact and influence our communities, and many sports organizations are evaluating their environmental impacts. The University of Florida (UF) has been a leader in implementing these sustainable practices within sports. UF was the first university from the SEC and remains the first and only Extension program in the country to join the Green Sports Alliance. The university is recognized by the National Resources Defense Council (NRDC) as one of the top 10 sustainability Collegiate Game Changers. The Gators strive to make sure every aspect of their athletics department is sustainable, including sports events, facilities and concessions.

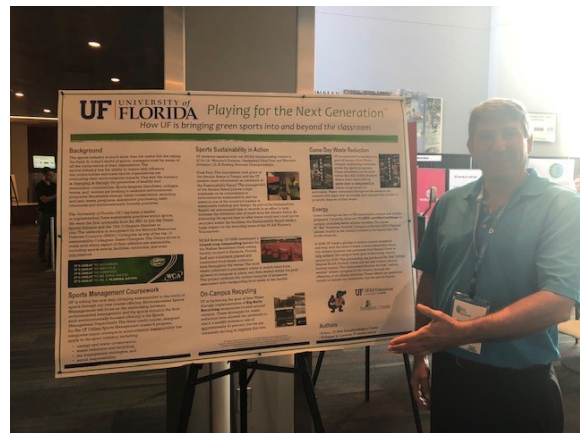
UF students assisted UF/IFAS Sarasota County's waste reduction program with the NCAA Women's Division I Basketball National Championships. At the Final Four, the UF student team volunteered as members of the Sustainability Squad. As part of the Sustainability Squad, students encouraged fans to recycle in an effort to help increase the diversion rate of waste from the Amalie Arena. By educating the sports fans on what items could and could not be recycled within the facilities, the Sustainability Squad made a huge impact on the recycling rates of this NCAA Women's Tournament.

In addition to working with UF/IFAS Waste Reduction Program, UF student interns created a poster for the 2019 Green Sports Alliance Summit. The poster highlighted the university programs including: the 75 LEED certified buildings on campus with 7 of them being athletic facilities, campus gameday recycling program at Ben Hill Griffin Stadium where every item sold is compostable or recyclable. In addition, they highlighted the UF Master's program coursework Environmental Sports Management that focuses on the relationship between environmental management and the sports industry. The first such environmentally focused offering in the Sports Management Department, it is a 3 credit course designed for the UF Online Sports Management Masters Program

that integrates major concepts in environmental sustainability that apply to the sport industry.



UF student interns: Hannah Hopper and Cayman Lanzone at Amalie Arena for the Women's Final 4



Waste Reduction Agent – Randall Penn presents student poster at the Green Sports Alliance Summit.

"Playing for the Next Generation"

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Improving Community Resilience to Flooding in Northwest Florida

Flooding threatens the social and economic sustainability of communities throughout the southeastern United States. Extreme rain events can cause widespread flood damage across a region and cost billions of dollars to recover from and restructure social systems. More commonly occurring rainfall events can cause “nuisance flooding,” which can also lead to loss of productivity and, accumulated over time, can have similar economic and social impacts on communities. Concerns over water quality can further exacerbate impacts to communities, as pollutant levels in floodwaters have potential to adversely affect human health.



The potential for communities to mitigate flooding and pollution through low-impact development and green infrastructure (GI), including vegetative swales, bioretention cells, permeable pavement, rainwater harvesting, and rain gardens, represents a mostly untapped tool to promote the resilience of many Florida communities. Community resilience—the capacity of communities to withstand disturbance and continue to thrive within their environment—can be increased through using modeling tools and outreach to illustrate how GI and low-impact development can reduce flooding on the landscape and improve water quality of floodwaters; and over time, through implementation of beneficial projects.

A collaborative team of university researchers, extension agents, and county staff from northwest Florida recently received a grant from the US EPA to increase the resilience of flood-prone communities in Escambia County and Santa Rosa County, associated primarily with rainfall events. This will be accomplished through a two-component process. In one process, we will design, calibrate, and validate the US EPA’s Storm Water Management Model for watersheds that include 12 communities in the project area to examine how GI can reduce flooding. To model, we will measure streamflow and develop discharge records at ten locations in the project area, and analyze stormwater samples from selected sites for water quality (which will serve as model inputs). In the other process, we will hold quarterly public workshops in Escambia County and Santa Rosa County to share event rainfall maps and streamflow data, and discuss the benefits of GI techniques. After the SWMM model is complete, we will share model results and obtain feedback and recommendations for other scenarios. Scenario results shared at community workshops will show how development within and near each community affects flooding, and how flooding can be reduced through GI.

This project will improve community resilience by utilizing existing tools and techniques (such as US EPA’s SWMM model) informed by local streamflow records, water quality data, and weather station data to provide information for county staff, municipalities, and other stakeholders to assess risks and vulnerabilities of flooding in local communities. It will also provide a framework to identify how GI can mitigate existing and future flooding. In addition to increasing awareness of GI and its potential to reduce flooding in northwest Florida, it will provide information that can be used to obtain funds for water quality projects.



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2019 FANREP Award Winners



Early Career Leadership – Savanna Barry - In the past 3 years as the UF/IFAS Extension Regional Specialized Agent for the Nature Coast region (Wakulla to Hernando Counties), Dr. Savanna Barry has developed a broad extension program to address timely and relevant coastal issues in the region, such as shoreline erosion, seagrass safe boating, coastal and marine habitat restoration, horseshoe crab population monitoring, and sustainable fishing and scalloping. She has utilized a variety of methods and resources to plan,

deliver, and evaluate her programs, and her early success in obtaining extramural funding for projects and programs shows immense promise. She is also an exceptional collaborator on regional and statewide teams of her peers, leading the charge on several curricula, evaluation tools, and state specialist collaborations. She possesses a high level of professionalism and leadership skills, innovative programming ideas, and she is dedicated to delivering a first-class natural resource extension program



Distinguished Career Leadership – Maia McGuire - Dr. Maia McGuire has been the UF/IFAS Extension Sea Grant agent in northeast Florida since 2001. During her eighteen years in this role, she has initiated several extension programs which have been implemented by faculty statewide. These include monofilament recycling, lionfish education, elementary curricula, and the Florida

Microplastic Awareness Project. For these and other efforts, she has been awarded the Distinguished Career Leadership award by both FANREP and ANREP in 2019. *Maia was also nationally recognized with ANREP Distinguished Career Leadership award.*



Friends of FANREP – Ravine Gardens State Park - The park has had problems with the invasive air potato, and has been organizing an “Air Potato Rodeo” which has drastically reduced the number of vines in the park, while promoting the air potato beetle biological control program. Ravine Gardens has hosted many programs for the Putnam Extension Office. Examples include a pollinator demonstration garden maintained by the Master

Gardeners, natural resource-themed youth camps, and many Arbor Day events where native trees were planted and others given away to the community. This past year the park started a 4-H Club with 20 active youth members. Additionally, the park has hosted with the agent and county forester. They also provide a free booth space to the Master Gardeners for their many festivals and events, which have been very important for our marketing and community outreach. This park and their employees deserve to be recognized for their activities with UF/IFAS, FDEP, local organizations and especially the community. Ravine Gardens State Park has been very proactive about controlling invasive species and providing education to the public about natural resources.

Innovative Program – Team: Lisa Krinsky, Andrea Albertin, Savanna Barry, Victor Blanco, Ray Bodrey, Scott Jackson, Shelly Krueger, Julie McConnell, Brittany Scharf, Armando Ubeda, Chris Verlinde, & Anna Zangroniz. The UF/IFAS Water Watch program is a volunteer coastal water quality monitor-

ing program. In 2018, 10 statewide train-the-trainer programs and 100 volunteers collected water quality data from more than 80 unique sites filling a critical gap in regional baseline water quality needs.

Innovative Program – Erik Lovstrand, Scott Jackson, Janice Becker, Jennifer Sims, Karen Shudes, Lindsey Maxwell and Ray Bodrey, along with James Moyers of FWC were nationally recognized by ANREP Innovative Program for their project “Expanding the Dark Skies to Improve Sea Turtle Nesting Beaches in Northwest Florida.”



Outstanding Specialist: Savanna Barry - Since Dr. Barry joined UF/IFAS Extension in February 2016, she has been instrumental in helping to improve and restore the Nature Coast. Dr. Barry has implemented numerous programs designed to reduce habitat destruction and increase engagement with natural resource issues by local leaders and citizens alike. These include a propeller “scarring” awareness campaign, seagrass education, wise scallop collection and shell disposal efforts, fishing guide courses, and marine debris/crab trap cleanups. These ongoing campaigns educated citizens, particularly boaters, on ways to raise awareness of our coastal ecosystems and protect the environment. Dr. Barry is also committed to mentoring and assisting agents through collaborative teaching, timely in-service trainings, committee leadership, and curricula creation.

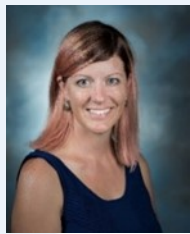


Outstanding Team – Team: Marnie Ward, Genevieve Mendoza, Olivia Zugay, & Margaret Carden. *Water in my Backyard*. The project recognized a need for youth to actively engage in the environment and expand their knowledge of local water resources. The project engaged 4-H agents in nearby counties to develop a joint summer day camp program. Programs were developed targeting increased environmental awareness and science appreciation. They also created, designed, and produced a journaling tool for campers to practice data collection, record observations and reflect on their experiences.

2019 FANREP Award Winners

Educational Materials

Promotional/Marketing Materials – 1st place - Shelly Johnson. The *Florida Master Naturalist Program Impact Report 2018* was developed to disseminate information on the impacts of the Florida Master Naturalist Program (FMNP) to potential and current participants, FMNP instructors, academic administrators, and prospective donors to the FMNP Endowment Fund.



Promotional/Marketing – 2nd place – Team: Laura Tiu Rebecca Burton, Josh Patterson, Shelly Krueger, Cortney Ohs, Erik Lovstrand, Leroy Creswell, Leslie Sturmer, Vincent Encomio, & Holly Abeels. *Infographics Promoting Florida Aquaculture*. The Florida Sea Grant Extension Agents, Specialist and Communications Coordinator



Laura Tiu, Rebecca Burton, Joshua Patterson, Shelly Krueger, Cortney Ohs, Erik Lovstrand, Leroy Creswell, Leslie Sturmer, Vincent Encomio, Holly Abeels

worked to develop, design and launch a social media campaign highlighting Florida aquaculture.

The campaign was intended to educate and empower interested stakeholders and seafood consumers to make informed decisions about Florida aquaculture products and farmers. ***This team was also nationally recognized with ANREP GOLD award for this promotional material.***

Promotional/Marketing - 3rd place – BJ Jarvis - *Growing a Healthy Environment* was created raise environmental awareness along with specific activities that participants could employ to protect the environment. In particular, water awareness for both water quality and water quantity/usage were the themes.



Short Publication – 1st place – TEAM: Savanna Barry, Brittany Hall-Scharf, & Sarah Ellis. *Best Practices for Scaloping: From the Boat to Your Plate* was created to address safety issues related to planning a day on the water, safe shucking and storage of scallop meat, and boating rules and regulations that we wanted to address with this resource.



Short Publication - 2nd place – Krista Stump Harmful Algal Blooms: Red Tide vs. Blue-Green Algae. The publication was created to help citizens understand the difference between red tide and blue-green algal blooms. Although a technical topic, the publication defines complex terms, makes use of graphics and tables, and links to outside resources to simplify the topic for the readers.



Short Publication - 3rd place – Holly Abeels The *Barotrauma and Successful Release of Fish Caught in Deep Water* EDIS publication and brochure describes the physical signs of barotrauma and what offshore anglers can do to help a fish showing signs of barotrauma. The objective is to increase adoption of barotrauma mitigation tools amongst anglers statewide.

Short Publication – Carol Wyatt-Evens and Marguerite Beckford were nationally recognized as ANREP BRONZE award for their short publication titled *Fertilizing 123s – A Homeowner's guide to Residential Lawn Fertilizing*.



Long Publication – 1st place – TEAM: Lisa Krinsky, Brittany Scharf, Betty Straugler, & Krista Stump *Addressing Frequently Asked Questions about the 2018 Florida Red Tide and Blue-Green Algae Blooms*. Florida experienced two significant algal bloom events in 2018, a red tide event that lasted nearly 16 months and a blue-green algae bloom that impacted Lake Okeechobee and the connected

coastal estuaries. Two separate blog posts were written for Florida's residents and visitors using up-to-date, science-based information to respond to their questions.

The team was also nationally recognized by ANREP BRONZE award for the long publication.



Long Publication - 2nd place – Susan Webb. *Key Program Outcomes for K-12 School Gardens Identified Through Expert Consensus; and Understanding the Barriers for School Garden Success: Expert Consensus to Guide Extension Programming*. The EDIS publications identify common barriers to Florida school garden

success, recommendations for overcoming these barriers via extension programming, and important outcomes to measure.

Long Publication - 3rd place – Lisa Hickey. *Scrub Habitat Plant Identification Pack* was created in order to address scrub plant identification questions during monthly preserve hikes. The portable photo and plant features deck contained 18 common scrub plants found in Manatee County. The card deck replaced a backpack full of books on scrub plants.



Long Publication – Andrew Koeser, Deb Hilbert, Drew McLean, Michael Andreu, Rob Northrop and Shawn Landry were nationally recognized as ANREP GOLD award for their long publication titled *City of Tampa Tree Canopy and Urban Forest Analysis*.

2019 FANREP Award Winners



Book or Comprehensive

Program Curriculum: Team: Nicole Pinson, Alicia Lamborn, Tracy Bryant, Darryl Palmer, R. Mallinger, and J. Aragon. *Pollinator Power*. The team developed

Pollinator Power! Curriculum and Safari Kit to teach students about pollinators and the role they play in producing food. The curriculum contains lesson plans and activities to introduce students to pollinators in fun, interactive ways, both inside & outside the classroom.



Newsletter or Series of Articles – 1st place – Theresa Badurek. *Florida Gardening* magazine monthly feature stories. The Agent was asked to write a series of feature stories that were impactful to the Florida gardener based on Extension programming for 2018. The four-part series were titled: *Palms in Paradise: A Look at Florida's Native Palms*, *Gardening under Your Trees*, *What's Damaging my Lawn*, and *Extreme Gardening*. Theresa was also nationally recognized with ANREP SILVER award for her featured stories.



Newsletter or Series of Articles – 2nd place – Kaydie McCormick. *Green Thumb Newsletter*. The *Green Thumb* newsletter allows for timely distribution of research based horticultural information to the residents of Seminole County. The articles are timed to correlate with upcoming classes or to address developing issues may not be covered in any of those classes.

Newsletter or Series of Articles – Krista Stump was nationally recognized with ANREP BRONZE award for *Trending Water Resource Issues Newsletter Series*.



TV/Video – 1st place – Team: Erik Lovstrand, Rebecca Burton, Laura Tiu, Vincent Encomio, Holly Abeels, and Neil Sims. *Florida #Aquataalk Facebook LIVE Sessions*. A month-long Facebook LIVE campaign was initiated during National Seafood Month highlighting the importance and diversity of Florida's aquaculture industry. Five

sessions were conducted with topics including Restoration Aquaculture, Offshore Aquaculture, Post-Hurricane Michael Oyster Aquaculture Update, Oyster Gardening, and Aquaponics.



TV/Video - 2nd place – Lara Milligan. *This or That? Video Series*. The videos were created for novice naturalist to help with misidentification of plant and animal species while focusing on invasive species that can be confused with native look-alikes and also listed species (threatened or endangered) that can be confused with unlisted species, and finally non-venomous species that can be

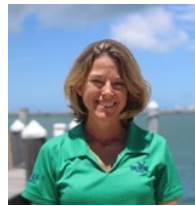
confused with venomous species.



TV/Video – 3rd place – Ana Zangroniz. *Protect Your Reefs From Marine Debris*. The public service announcements were designed to teach the Miami-Dade County boating and fishing communities the impacts of marine debris on the coral reef habitats.



Podcast/Radio – Victor Blanco. *One Minute in Marine Science*. The pilot radio campaign was created to improve and increase the reach of marine extension program outreach actions to county residents. Four initial radio spots discussed issues of Artificial Reefs, Big Bend Seagrass Aquatic Preserve, Healthy Oceans and Scallops. The spots were hosted and played in two local radio stations once a day, at noon, for a period of 2 months. Victor was also nationally recognized with ANREP SILVER award for the radio campaign.



Web Site/Apps/Ed. Technology – 1st place – Angela Collins. *Tips for Tracking Red Tide* blog. This blog was developed as a one-stop shop for relevant links and resources as related to tracking red tide blooms in Florida.



Web Site/Apps/Ed. Technology - 2nd place – Kaydie McCormick. Questions from the Seminole County Plant Clinic blogs. In order to address homeowner questions on plants, pests, and gardening techniques the Seminole County Blog's 'Questions from the Plant Clinic' series was created. The articles examples were invasive species, native plant identification, and submitting proper sample to the Plant Diagnostic Clinic.



Web Site/Apps/Ed. Technology - 3rd place – Victor Blanco. *Buckeye Reef Monitoring*. For training, educational, quality control and promotional purposes, a YouTube Channel, Buckeye Reef – Taylor County, was created. An online video series was created. The videos are also promoted within the fishing and diving communities to promote its sustainable use.

Televised Conference/Video Conference/ Webinar – David Godwin UF, Laurel Kays and Jennifer Fawcett NCS were nationally recognized for their webinar titled *Lessons Learned from Hosting Learn & Burn Events* by ANREP GOLD award