



## 2021 FANREP Awards Winners

### Achievement Awards

#### **Early Career Leadership** - Julie McConnell



Julie McConnell has served as the Horticultural Extension Agent in Bay County, Florida since 2012. Her Extension programs are client centered. She teaches environmental horticulture practices that conserve our natural resources. Julie has trained numerous landscape professionals to properly apply fertilizer and pesticides in order to receive state certification. Her targeted efforts benefit Florida's valuable water resources. Julie has responded effectively when her community needed help the most. Post Category 5 Hurricane Michael, she worked with her Master Gardener

Volunteers to deliver a landscape recovery education series. Julie taught the series along with other Extension Agents and Specialists. During the COVID-19 pandemic she used technology to deliver innovative educational programs like "Gardening in the Panhandle LIVE!" series using social media and webinar software. Julie is a graduate of Auburn University with a BS Degree in Horticulture and also earned MS Degree from the University of Florida in Entomology.

**Innovative Program** - Great Savings with the Mobile Irrigation Lab (Michelle Atkinson)



The Manatee Mobile Irrigation Lab (MIL) is a unique program geared toward residential clients. The goals are to provide homeowners with an understanding how to conserve water in the landscape and to provide them with knowledge for incorporating outdoor irrigation water saving techniques in their landscape so that they can change their outdoor irrigation behaviors. The on-site evaluation encourages outdoor water conservation and best management practices in the landscape. The mobile irrigation lab team works one on one with clients and provides

them information on water conservation techniques and an irrigation system maintenance checklist. In 2020, residents modified their landscape and irrigation system designs to increase water conservation. The total water savings among potable water participants was 5 million gallons in 2020 this would translate into \$17,283 in savings to all potable water MIL clients.

**Outstanding 4-H/Youth Development** - Touring Florida: Wildlife, Water and Climate Change (Holly Abeels, Marnie Ward, Brandi Yancy, Paula Davis, Sarah Davis, Alicia Betancourt, Ronnie Cowan, Ashley Smyth)

The Touring Florida virtual educational youth camp program began as a month-long summer 2020 camp. Transitioning what would normally have been an in-person youth camp to virtual allowed for team members from across the state to collaborate and offer this innovative program over an extended period of time and to a geographically wider audience. In addition, because the materials are online, the program later transitioned into an asynchronous virtual environmental science project. The main goal of the program was to teach school-aged youth science, technology, engineering, arts and math skills while they explored Florida flora and fauna and analyzed the impacts on Florida's environment. To accomplish this, youth had the opportunity to investigate four main topics with many subsections on the google site created. The four topics were wildlife, both coastal and freshwater ecosystems, and climate change. Youth explored opportunities to become civically engaged in service learning and investigated potential career opportunities related to each topic.

**Outstanding Team** - Healthy Ponds Certification Program Team (Michelle Atkinson, Abbey Tyrna, Eban Bean, Charles Cichra, Mary Lusk)



Extension agents are faced with the need to communicate stormwater pond best management practices to audiences that do not understand the functions of these systems. Until recently, the pesticide licensing programs were the only training program that worked with pond managers

to teach proper chemical application. The goal of the Healthy Ponds Certification program is to expand the tools in this audience's toolbox to increase pond function while making them easier to maintain. A team of five worked with over 18 specialists to create the curriculum. The program was designed to help improve water quality and wildlife habitat in and around stormwater ponds. Extension agents around the state can access and offer the program in their area. Of the graduates, 70% reported that they are able to communicate better with their clientele. After the field day, 30% of the graduates will incorporate water testing into their maintenance protocols.

**Friend of FANREP** - Ms. Gail Cowie



Florida's "Water Workshops for Decision-Makers." The program's target audience is the county and municipal decision-makers. Ms. Cowie's contributions to the program team discussions allowed for the following: (1) Improved linkages between outreach programs implemented for local decision-makers in Florida and Georgia; (2) Improved program design more reflective of the needs of local decision-makers, and (3) More flexible approach to the extension program implementation, when group discussions need to immediately integrate and respond to the audience members' viewpoints.

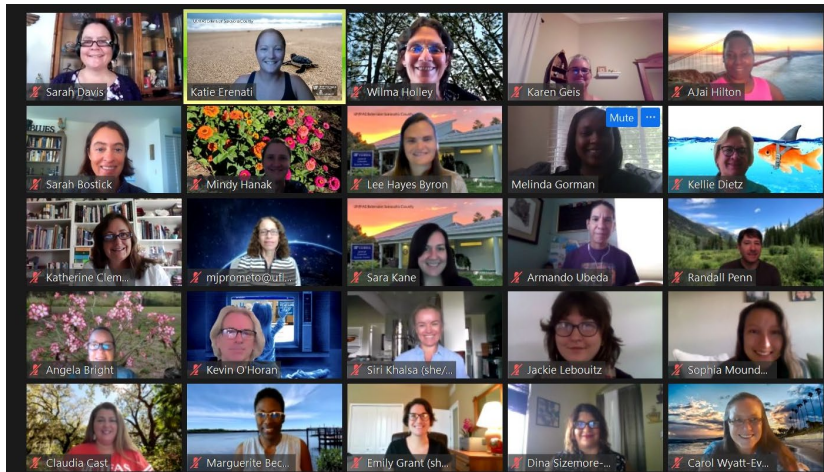
**Outstanding Extension Specialist** - Dr. Mark Clark



From the Florida Keys to Tampa Bay, from the Nature Coast to the Florida Panhandle, Dr. Mark Clark's extension programs and collaborations with agents have improved the lives of Floridians and increased capacity and impacts of agents. However, this award is related to his herculean efforts to assist the Cedar Key community with coastal resilience and water quality in the past several years. Dr. Clark has worked on a series of projects that have culminated in the construction of five living shoreline (coastal habitat restoration) projects, three of which are major living shorelines in Cedar Key's

Daughtry Bayou. During this multi-year collaboration, Dr. Clark has been beyond generous with his time and expertise on collaborative projects. He is seen as an expert on, well, everything by the City of Cedar Key government and is often stopped on the road so people can ask his advice. As such, he has assisted the City of Cedar Key with several needs related to coastal wetlands, water quality, and waterway maintenance that are over and above the work he has done on living shorelines. Dr. Clark has been an unparalleled collaborator who has dedicated enormous amounts of his own and his staff's time, involved stakeholders and students, and pushed the boundaries of what most specialists would be willing to undertake. His creative mind and willing attitude always ensure the most efficient and effective solution to problems facing our coastline. This, paired with his extreme generosity with his time, have led to amazing impacts in Cedar Key and beyond.

## Office Sustainability Award - Sarasota County



UF/IFAS Extension Sarasota County defines sustainability as satisfying our present needs without compromising the ability of future generations to meet their needs. To achieve the balance necessary for a sustainable community, this means: replenish the resources

we use or consume; ensure our values guide us into the future; and invest in our community to ensure future prosperity. The facility uses two forms of renewable energy: geothermal and solar. By completing a comprehensive energy audit, UF/IFAS Extension Sarasota County look to reduce their footprint and address future projects related to energy reduction. The office building was designed with a high-performance building envelope and glazing system provides improved insulation and energy efficiency. As an organization we recycle all paper, plastic and cardboard generated at the office, as well as collect printer cartridges, electronics, plastic bags and packaging, and developed a staff composting program. A container is available for compostable food in our break room. We also offer composting bins for events that employees hold. Food waste is composted in our Compost Learning Center. Being a LEED certified facility; the building uses 58% less water than a new code compliant office building. Stormwater runoff is reduced by utilizing pervious concrete for sidewalks and patios, as well as pervious parking lot using open grid system with gravel. The office also implements sustainable purchasing, travel, and meeting food service practices (reduce/eliminate plastic items).



## Outstanding Educational Materials

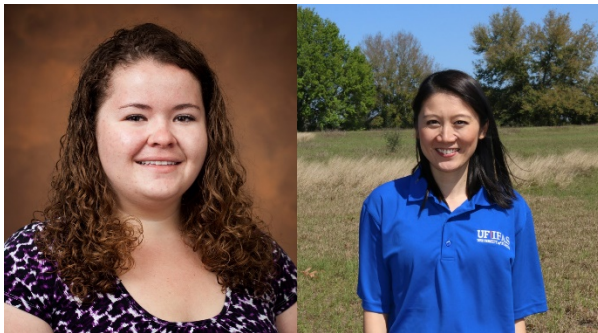
### **Promotional or Marketing**

#### **1<sup>st</sup> Tina McIntyre *Nutrient Management in A Wild & Scenic River Basin***



These Public Service Announcements (PSA's) were created in partnership with Seminole County Watershed Division to target our communities biggest nutrient issues, urban turfgrass fertilizer. With many of our precious waterways being impaired for nitrogen and phosphorous, it is important for me to work with partners to educate the public and professionals on proper fertilizer use. These PSA's were developed for us by WKMG Local Channel 6 to run on their station and many social media platforms throughout 2020.

#### **2<sup>nd</sup> Yilin Zhuang, Caroline Warwick *Water Wednesday Webpage***



Facebook is the world's largest social media platform and their live streaming feature Facebook Live has been widely used for broadcasting, however, it's still new in Extension education. The Central District Water Resources Regional Specialized Agent partnered with other Extension

faculty and started a Facebook Live series, Water Wednesdays, aimed at educating homeowners on water conservation and protection practices. We live stream a 30-minute talk about Florida's water resources and what we can do to protect them at 2 PM ET on Facebook Live every Wednesday. Topics have ranged from building your own rain barrel to calibrating your irrigation system and agricultural best management practices. We have also created a Water Wednesday webpage to promote the program and highlight recent webinar recordings and recap blogs.

### **3rd      Brittany Scharf *Florida Friendly Fishing Guide Educational Marketing Series***



The Florida Friendly Fishing Guide Certification program is an online certification course that teaches charter captains in Florida science-based techniques in an effort to promote environmental stewardship. To date, this program has certified roughly 70 guides. To encourage the certified guides to implement the recommended fishing practices and to help the guides market their certification, a monthly educational marketing series was created that touches on the course chapters: catch and release fishing, sustainable waste management and fueling, environmental ethics, and fisheries management and research. In addition, this educational series is provided to guides to use on their personal social media outlets to market their business and is shared throughout multiple fishing groups and other Florida Sea Grant Agents.

#### **Short Publication**

### **1<sup>st</sup> Abbey Tyrna, Dail Laughinghouse *Best Management Practices for Blue-Green Algal (cyanobacterial) Blooms in your Stormwater Pond***

The best practices guide was created to assist Floridians living, recreating, and working around stormwater ponds to know what to do if a blue-green algal bloom occurs. This guide will fill in the regulatory gap for stormwater ponds because these waterbodies do not fall under the responsibility of state regulating agencies, and therefore, do not have any associated monitoring or public notice protocol.

### **2<sup>nd</sup> Tina McIntyre *Ring of Responsibility Fact Sheet***



This one-page county fact sheet was developed in partnership with the county to respond to repeated violations of water quality standards (outlined in the county fertilizer ordinance as illegal) by landscape professionals. The landscapers were blowing leaves, grass clippings and other debris into the storm drains, which leads to water quality degradation. This factsheet plays off the industry standardized "Ring of Responsibility" to remind professionals how not to dispose of the debris. It was used in conjunction with on-going classes that target residents and landscape professionals to teach about landscape best management practices that positively affect water quality.

**3<sup>rd</sup> Linda Seals, Lisa Krimsky, Mary Lusk, Holly Abeels *Florida-Friendly Landscaping™ Report Card***

Development along Florida's Indian River lagoon has resulted in significant degradation of water quality over time. A research study was conducted on ten residential properties in a waterfront community to assess the source and concentration of nutrients from surface water in Florida-Friendly versus non Florida-Friendly landscapes. As a reward for participating in the study, and as a way to increase adoption of practices that would protect water quality, the homeowners who participated in the study were given a customized two-page educational report card on the state of their landscape at the end of the study. The report cards provided fertilizer recommendations based on the study results as well as the nitrogen sources. The report card also included a list of Florida-Friendly landscape practices the homeowner could implement to protect the water quality of the Indian River Lagoon.

**Long Publication**

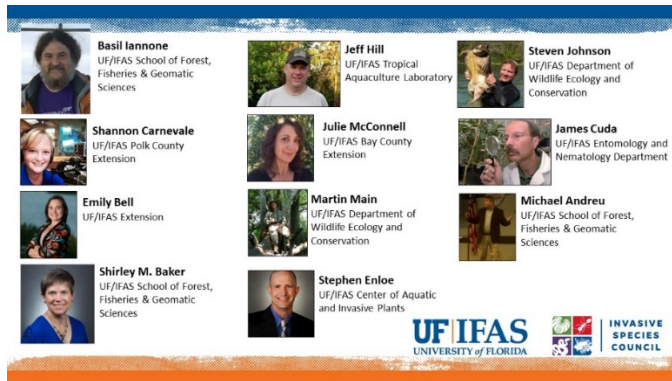
**1<sup>st</sup> Martha Monroe, Gabby Salazar, Kristen Kunkle, Judy Braus, Cathy Jordan, Nicole Ardoin**

***Practitioner Guide to Assessing Connection to Nature***

Environmental educators around the world want to know if their programs enhance participants' connection to nature, but the number of tools that measure similar constructs is bewildering and the differences between them are esoteric. We created a simple, straightforward manual to assessing connection to nature with a decision tree to help users select one of 11 tools for their situation. The Guide originated with a participatory workshop of researchers and practitioners. Formative evaluation of the materials was conducted with practitioners at 3 conferences. The 11 tools use interviews, drawings, journals, and scales. Each tool is described and all scales are included, with authors' permission to replicate them. The Guide also provides strategies for assessing audiences in 3 age categories. A pdf of the Guide is available at no charge. Webinars and presentations have been given to audiences around the world to introduce the Guide and answer questions.

**2<sup>nd</sup> Basil V. Iannone III, Shannon Carnevale, Martin Main, Jeff E. Hill, Julie B. McConnell, Steve A. Johnson, Stephen F. Enloe, Michael Andreu, Emily C. Bell, James P. Cuda, Shirley M. Baker, Martin Main, Jeff E. Hill, Steve A. Johnson, James P. Cuda, Shirley M. Baker *Iannone III et al. Invasive species terminology: standardizing for stakeholder education***





The excessive amount of terms associated with invasive species, and their often-incorrect usage, hinders stakeholder education about invasive species impacts and control. The natural resource extension professionals tasked with invasive species education a concise, common language for stakeholder education. Our Journal of

Extension (JOE) paper introduces, and demonstrates the utility of, a standardized list of seven terms: native, nonnative, introduced, established, invasive, nuisance, and range change. This paper does not to resolve scientific debate, but instead provides a tool to improve stakeholder understanding about the causes, consequences, and control of invasive species. These terms are applicable across all invasive taxa, typically understandable and used correctly and can describe most situations involving invasive species. We also list terms to avoid that create confusion and define often-encountered legal terms. The standardized language we propose will help to strengthen the impacts of invasive species extension programing.

**3<sup>rd</sup> Savanna Barry, Joshua Patterson, Shelly Krueger, Scott Jackson, Laura Reynolds, Shelly Johnson,**



**Marty Main *FMNP Marine Habitat Restoration Manual***

A new manual for the Florida Master Naturalist Program Marine Habitat Restoration Course provides detailed information on the ecology, benefits, restoration methods, and monitoring of marine habitats in Florida. A team of six faculty created a manual with an introductory chapter on marine habitat restoration concepts and four focused content chapters on 1) seagrass restoration, 2) coral restoration, 3) sponge restoration, and 4) artificial reefs. Two train-the-trainer courses based on the manual yielded between 45 – 51% knowledge gain about marine restoration topics. Knowledge gain will likely be higher among general public audiences. As with other courses in the FMNP restoration series, participants in the course will likely be eager to volunteer on marine habitat restoration projects. Those who read the manual during courses are entrusted to share the information they gain with others and use the skills they acquire to contribute to conservation education and restoration initiatives.

## **Book or Comprehensive Program Curriculum**

### **Tie - 1<sup>st</sup> Michelle Atkinson *Natural Areas Weed Control ID and Study Guide***



Natural areas weed managers must implement management practices that control the growth of invasive plants that may negatively impact our preserves and native habitats. When these areas are properly maintained weed and invasive plant pressures are reduced. Using integrated weed management strategies encourages sustainability in ecosystems and biodiversity. Historically, individuals seeking Natural Areas Weed Management certification have been challenged by the math, plant identification and key concepts resulting in less than 63% of individuals passing the exam. The Natural Areas Weed Control Weed ID and Study Guide curriculum was developed in early 2020 and resulted in an increase in certification pass rate and attendees reporting significant knowledge gain and confidence in integrated weed management strategies.

### **Tie - 1<sup>st</sup> Savanna Barry, Joshua Patterson, Shelly Krueger, Scott Jackson, Laura Reynolds, Shelly Johnson, Marty Main *FMNP Marine Habitat Restoration Special Topics Course***



A new course in the Florida Master Naturalist Program series, Marine Habitat Restoration, provides detailed information on the ecology, benefits, restoration methods, and monitoring of marine habitats in Florida. A team of six faculty created the course curriculum, focused on restoration of seagrasses, coral reefs, sponges, and marine enhancement through artificial reefs. Two train-the-trainer courses yielded between 45 – 51% knowledge gain about marine restoration topics. Knowledge gain will likely be higher among general public audiences. As with other courses in the FMNP restoration series, participants in the course will likely be eager to volunteer on marine habitat restoration projects. Those who take the course are entrusted to share the information they gain with others and use the skills they acquire to contribute to conservation education and restoration initiatives.

**Tie - 2<sup>nd</sup> Nicole Pinson, Judi Whitson, Lynann Hudson, Kerri Leffler, Coley Riley, Heather Riley, Stephen Gran, Chanel Campbell, Brandi Yancy, Charles Poliseno, Lynn Barber, Adrian Bowden, Jacqlyn Rivas, Lisa Meredith, Julia Palaschak, Eric Cassino, Lynann Hudson, Kerri Leffler, Coley Riley** ***Virtual Ag-Venture Sustains Interest and Participation in Local Agriculture Education***



Ag-Venture is a 2-week, hands-on learning experience designed to teach the importance of agriculture to Hillsborough County 3rd graders. Ag-Venture is held annually at the Florida State Fairgrounds. Its popularity among schools has made it a special field trip for students as they rotate through stations and learn about agriculture and natural resources. Due to COVID-19, in-person school tours for the 2020/2021 school year were cancelled. Team members pivoted quickly to

create an innovative curriculum called Ag-Venture in a Box. Ag-Venture in a Box includes links to nine videos. The program is available virtually October – November, when in-person field trips would normally occur. This program relies on strong public – private partnerships, which include the Hillsborough County Farm Bureau, Florida State Fair, UF/IFAS Extension Hillsborough County, Hillsborough County Schools, nurseries, and small businesses.

**Tie - 2<sup>nd</sup> Tina McIntyre, Kaydie McCormick, Chelsea Woodard, Morgan Pinkerton, Chelsea Woodard** ***Virtual Entomology Summer Camp***



This curriculum was developed by all agents to serve the youth of Central Florida virtually during the covid-19 pandemic. We usually host this day camp annually with field trips and other engagement opportunities,

however that was not possible in 2020. We adapted the curriculum using the platform Canvas to be able to teach the high schoolers about bugs and careers in entomology.



## Newsletter or Series of Articles

### **1<sup>st</sup> Carrie Stevenson Escambia County "Weekly What is it?" blog**



The Covid-19 shutdown starting in March 2020 canceled all our upcoming events and necessitated a creative way to keep teaching and communicating with volunteers, regular clientele, and new Extension users. Inspired by years of questions about plants, animals, and odd invertebrates, I created the Weekly "What is it?" blog. I culled out the most interesting and frequently-asked-about topics and photos, then started writing and researching. Each blog post focuses on a single curiosity related to the natural world (or its preservation) and often includes personal anecdotes and experiences, relating the topic at hand to everyday life. Articles are posted weekly and distributed via email and social media. While isolated from one another but with more time to explore the outdoors, clientele feedback has indicated that the blog provided both a distraction from the larger issues of the world and a source of wonder, learning, and excitement in their own backyards.

### **2<sup>nd</sup> Anne Yasalonis Your Polk Yard, A Gardening and Landscaping Newsletter for Central Florida**



It can be difficult for homeowners to know what to do in their landscapes at the appropriate time of the year. Your Polk Yard is a monthly newsletter for homeowners in central Florida that addresses timely gardening and landscaping issues. The newsletter focuses on the principles of Florida-Friendly Landscaping and best management practices. The goal of the newsletter is to assist and educate homeowners, while at the same time, protect and preserve natural resources through the proper timing of fertilizer applications, appropriate watering techniques, and responsible pest management.

### **3<sup>rd</sup> Abbey Tyrna Healthy Ponds**

A series containing three large postcards was created to inform community stakeholders invested in stormwater pond management about the components and benefits of healthy ponds. The series includes front and back postcards entitled: Healthy Ponds Include, Healthy Pond Banks & Buffer Zones, and Healthy Ponds and You!

## Televised Conference/Webinar

### **1<sup>st</sup> Brittany Scharf, Jennifer Granneman, Razieh Farzad, Bryce Phillippi, Savanna Barry *Recreational Scalping Webinars***



The recreational bay scallop fishery represents an important contributor to the suite of marine-related activities on the Gulf Coast of Florida. This popularity has led to increased numbers of scallopers and trips, which has likely further increased the economic benefit to the respective coastal corridor where recreational scalloping occurs. In response, Florida Sea Grant agents partnered with county governments, biologists, fishing guides, and law enforcement to provide resources users with

scalloping best management practices. Because of the national pandemic, seminars were converted to a webinar platform. In total, 134 stakeholders from 21 of Florida's 67 counties and two other states attended the webinars. During the webinars, participants indicated a 97.4% increase in knowledge. Participants of post-season follow-up indicated that behavior changes based on recommendations made during webinar were implemented during 168+ scalloping trips. The partnership of Extension, research, and fisheries management helps ensure the sustainability of the resource.

### **2<sup>nd</sup> Tina McIntyre, Morgan Pinkerton *Central Florida Cooperative Invasive Species Management Area 2020 Virtual Grass/Sedge Workshop***

This effort made sure that Central Florida Cooperative Invasive Species Management Area (CISMA) did not miss the 2020 Grass/Sedge Workshop by using Zoom webinar resources to go virtual. This is usually a field day training for land management invasive species management professionals in the Central FL area, however with Covid-19, a field day and in-Peron workshop was not possible. I led this effort with other members of the CF CISMA Steering Committee to be sure professionals still had access to the Continuing Educational Units (CEUs), the University experts and networking that they needed.



**3<sup>rd</sup> Libby Carnahan, Armando Ubeda, Renee Collini, Tracie Sempier, Stephen Deal, Marian Hanisko, Nikki Pace *Resilient Gulf Webinar Series***

The Gulf of Mexico Climate and Resilience Community of Practice was set to have its 11<sup>th</sup> annual conference back in Florida! And then March 13<sup>th</sup> a global pandemic was declared. The group is led by Sea Grant Agents in all 5 Gulf States, as well as partners at NOAA. The team decided to pivot tack and switch from an in-person June conference to a virtual webinar series. The successful Resilient Gulf Series contained 7 installments that can be found here <http://masgc.org/climate-resilience-community-of-practice/workshops-webinars>. For the most part, seminars were promoted through Sea Grant newsletters and social media accounts. This year, we added LinkedIn events for additional marketing. The webinars are developed for a targeted audience of extension agents, environmental managers, city and county planners and floodplain managers, emergency managers, and sustainability directors. Continuing education credits were offered for planners and floodplain managers.

**TV/Video**

**1<sup>st</sup> Savanna Barry, Joshua Patterson, Shelly Krueger, Scott Jackson, Laura Reynolds, Shelly Johnson, Marty Main *Video Series for FMNP Marine Habitat Restoration Course***



A series of videos were created as a companion to the new Marine Habitat Restoration course in the Florida Master Naturalist Program. The videos transport course participants to underwater environments that are hard to reach and provide insights from professionals who are leaders in their field. A team of six faculty worked to collect footage, interview professionals, edit content, and fact-check information. These efforts resulted in four videos, each between 10 and 26 minutes long. Two train-the-trainer courses that included the videos yielded between 45 – 51% knowledge gain about marine restoration topics. The video series, listed publicly since launch in Feb 2020, has been viewed by many more people than the course participants, including members of advisory panels and participants in volunteer training events. These videos can inspire members of the public to take the course and increase interest in restoration, including volunteerism for marine habitat restoration projects.

**2<sup>nd</sup> Armando Ubeda, Libby Carnahan, Holly Abeels, Savanna Barry, Michael Sipos, Elizabeth Shephard, Rick O'Connor, Carrie Stevenson, Chris Verlinde, Dorothy Lee, Angela Collins, Vincent Encomio, Rhett Register, Ben Murphy, Gigi Novack, Demi Aycart, Mike Allen, Rebecca Nelson *Florida Seafood At Your Fingertips Cooking Series***

The Florida Seafood at Your Fingertips Cooking series was created to help consumers overcome the barriers to cooking seafood at home during the COVID-19 pandemic. With many people at home and many restaurants closed, consumers might be less likely to and more uncomfortable about cooking seafood at home during this time. To help consumers overcome these barriers, a pilot series of seafood-centric Facebook LIVE cooking demonstration videos were created. Each demonstration provided step-by-step guidance on how to cook the recipe. Blogs, recipes, and promotional content were also created for each episode. Viewers learned about smart seafood choices, sustainable fisheries, and the health benefits of eating a diet rich in seafood. In 2020, 28 Facebook LIVE events were presented by 15 different Agents and Specialist. Videos can be watched anytime at Florida Sea Grant's Facebook page (<https://www.facebook.com/watch/202331533137243/639733286892228>) and website (<https://www.flseagrant.org/seafood/seafoodatyourfingertips/>) dedicated to the program.

**3<sup>rd</sup> Katherine Clements, Kassidy House, Kevin O'Horan, Patrick Williams, Randall Penn, Abbey Tyrna, Armando Ubeda, Carol Wyatt-Evens, Marguerite Beckford, Maria Portelos-Rometo, Mindy Hanak, Sarah Davis, Sophia Moundous, Wilma Holley, Jennifer Dehart, Julianna Costanzo, Adelaide Mahler, Alexa Kurowski, Tony Clements *LIFE (Learning in Florida's Environment) Science Shorts***

LIFE Science Shorts are videos developed for 3rd-5th grade students in response to Covid-19 cancellation of in-person field experiences. These eighteen environmental education videos present a variety of science, natural resource, and ecology topics specific to Florida's ecosystems. 10-20 minute videos feature a guest expert providing educational content and a hands-on activity. Topics were determined based on teacher-identified student needs to support standardized testing success, while modeling scientific careers. The corresponding teacher handbook provides a summary of each video, its associated activity and Florida State standards, and links to pre- and post-test assessments. Videos averaged 100 views per week in the remainder of the 2019-2020 school year. Student assessments indicated comparable knowledge gain to in-person modules. LIFE videos have been shared with all Sarasota County Schools elementary science teachers, are available to the public, and are featured on the Florida State Parks Foundation website.

## Podcast/Radio

### **1<sup>st</sup> Tina McIntyre *Florida-Friendly Landscaping Principles on Better Lawns & Gardens***



I was invited to be a reoccurring guest speaker on the renowned radio Better Lawns & Gardens that airs weekly and is hosted by Extension Agent Emeritus, Tom MacCubbin. The show is syndicated on over 24 radio stations throughout Florida and Georgia, is available for podcast and download, and is available on iHeartRadio! The show reaches over 8500 listeners and covers many gardening and environmental topics. This one radio file explore the Best Management Practices, or how actions people take in their landscape effects our local waterways and surrounding

environment. The series I participated in 2020 covers a variety of Florida-Friendly Landscaping topics, such as enhancing your soil, selecting plants properly for USDA and NOAA Cold Hardiness Zones, Florida-Friendly plant species, watering properly to protect the aquifer, composting to reduce waste and other topics that encourage listeners to adopt practices that will protect our water quality and quantity.

## Web Site/Apps/Ed. Technology

### **1<sup>st</sup> Savanna Barry, Berlynnna Heres *Florida Horseshoe Crab Watch Virtual Training***



This online volunteer training

was created to address statewide training needs related to the Florida Horseshoe Crab Watch citizen science program. The interactive program is delivered through Canvas and includes comprehension tests that ensure volunteers are gaining skills and knowledge needed to carry out scientific procedures. The state wildlife agency (end-user of the volunteer-collected data) co-produced the training to ensure it met their standards. Since launch in May 2020, almost 200 people from 27 different counties in Florida have taken the virtual training. This resource provided Extension agents and other program coordinators the ability to quickly and safely onboard new volunteers in the absence of in-person training options.

**2<sup>nd</sup> Holly Abeels, Marnie Ward, Brandi Yancy, Paula Davis, Sarah Davis, Alicia Betancourt, Ronnie Cowan, Ashley Smyth *Touring Florida: Wildlife, Water and Climate Change***

The Touring Florida virtual educational youth camp program began as a month-long summer 2020 camp. Transitioning what would normally have been an in-person youth camp to virtual allowed for team members from across the state to collaborate and offer this innovative program over an extended period of time. In addition, because the materials are online, the program later transitioned into an asynchronous virtual environmental science project. The main goal of the program was to teach school-aged youth science, technology, engineering, arts and math skills while they explored Florida flora and fauna and analyzed the impacts on Florida's environment. To accomplish this, youth had the opportunity to investigate four main topics with many subsections on the google site created. The four topics were wildlife, both coastal and freshwater ecosystems, and climate change. Youth explored opportunities to become civically engaged in service learning and investigated potential career opportunities related to each topic.

**3<sup>rd</sup> Lara Milligan, James Stevenson, Julia Myers, Sheree Schuer *Discover Wild Florida***



Team is located at an Environmental Education Center situated within an 8,700 acre preserve. Regular guided hikes were offered by volunteers and staff prior to the Center's closure due to COVID-19. In the absence of guided-hikes, staff developed an audio tour to provide similar content received on in-person guided hikes. Staff collaborated to develop the plan for the tour including the number of stops, stop locations, topics, and content. scripts were developed and proofed prior to being recorded as an audio file. Finalized scripts, audio files, GPS coordinates, and images were uploaded to PocketSights for each tour stop. The "Discover Wild Florida" tour includes an introduction and six stops highlighting significant ecological features found along the Education Center trail at the Preserve. Since being uploaded in March 2020, tour stops have a total of 417 plays. Since then, staff conducted a needs assessment showing high demand for additional audio tours.