

2017 FANREP Awards

Leadership, Outstanding Specialist

First Place Program Awards

Early-Career Leadership Award

Shannon Carnevale, Natural Resources and Conservation Agent, UF/IFAS Extension Polk County, P.O. Box 9005, Drawer HS03, Bartow, FL 33831-9005, 863-519-1051; scarnevale@ufl.edu

To the FANREP Awards Committee:

I enthusiastically submit this nomination letter to recognize Shannon Carnevale as an outstanding candidate for FANREP's 2017 Early-Career Leadership Award.

Program Accomplishments:

"Leadership" is both a quality and a skill set that Shannon strongly displayed upon being hired in late 2010 as a natural resources agent. As her county Extension director, I've witnessed first-hand the continued development of that skill set, as Shannon has taken wise risks in her professional life to stretch and expand her abilities.

Shannon provides critically needed water resource and ecosystem education in a county that includes the headwaters of five of the state's 29 major watersheds (Department of Environmental Protection). Further, Polk County maintains 45% of its land area in production agriculture, while growing to an estimated population of just over 666,000 (July 2016, www.census.gov). The conflicts between urban and agricultural water and land use often require an unbiased, science-based, trusted entity to facilitate discussion and provide safe venues for conversations to occur. Shannon's events and workshops are known as innovative, enjoyable places to converse and to learn.

Shannon has been a team member and lead collaborator for Extension Initiative Two since its beginning in 2013. Working in a county that has hosted a biennial Water School event at least since 1996, Shannon upended the status quo format and approach in 2016 with a two-day program that targeted elected officials and municipal administrators. For the first time, 100% of the audience was made up of the target, and more than half of Polk County's 17 municipalities were represented. Having just created the new Polk County Water Cooperative to address water use needs for 30 years and beyond, Polk's leaders in government were ready to learn about practical, resource-efficient ways to address storm water runoff, citizen environmental stewardship, and water availability. In partnership with University of Florida faculty, local cities, and the water management district, these issues were addressed in such a way that cities were able to digest the information (not being too academic) and have real discussions about implications for their own towns. A one-year follow up interview is being conducted (spring 2017) with municipal leaders to determine how the information has been employed in local decision making, and early data indicates some leaders have directly referenced their Water School experience in making choices about water supply or use decisions. Post-event anecdotal feedback includes this statement from an official at the Southwest Florida Water Management District:

“Last night a [City of] Winter Haven commissioner cited Water School as very helpful in making his decision to support the water cooperative. Also said to other commissioners and the audience, ‘if you get a chance, you should participate.’ Winter Haven voted unanimously to support the [new] Polk County Water Cooperative.”

A mayor of another one of the participating cities commented:

“Events like Water School need to happen more. It helps us (elected officials) understand the vernacular and provided justification for the theories our staff present. It’s good to hear about these projects from outside experts and then work with staff to bring them to our community.”

Another of Shannon’s recent innovative programs is the Wildlife Wednesday Webinar series, co-hosted with a fellow natural resources agent in the South Central district. This popular series of 11 webinars (2015 and 2016) had 306 live participants using the Adobe Connect web-based software, and at least another 572 views have occurred for the 2015 webinars (as of fall 2016). Topics included bears, invasive species (such as tegu and pythons), bats, and backyard wildlife habitats, among others. This web-based learning event was recognized as a Silver Award winner for FANREP’s Videoconference publication category in 2016.

A final example of out-the-box programs includes Shannon’s lake ecology kayak tours event, a fun and different way for people to get outside, get exercise, and get educated about the importance of plants and impact of people on Polk County’s more than 550 lake bodies. Fifty-six percent of kayak tour participants indicated an increased knowledge of the impacts of stormwater runoff on local water (2015).

In addition to partnering with Extension, teaching, and research faculty on the Initiative Two priority work group teams, Shannon also worked with numerous other government and non-profit agencies to deliver programming, including:

- Florida Fish and Wildlife’s Invasive Plant Management Section
- Florida Fish and Wildlife’s Bear Management Division
- Polk County’s Natural Resources and Environmental Lands Programs
- City of Winter Haven’s Natural Resources and Water Utilities Divisions
- Lakes Education/Action Drive (Polk County)
- Heartland CISMA (Cooperative Invasive Species Management Area)
- Osceola CISMA
- Lake Region Audubon Society
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Shannon also serves as chairperson of the City of Winter Haven’s Urban Forestry Advisory Board, member of the Board of Directors for a local lakes education non-profit agency, Florida Fish and Wildlife Bear Management stakeholder group member, and chairperson (2013, 2016) and active member of Polk County Extension’s office marketing committee (2011-2017). She further actively pursues cross-programmatic opportunities with office colleagues and has partnered with the Florida-Friendly Landscaping™ educator, family and consumer sciences agent, small farms agent, urban horticulture agent, and 4-H youth development agent.

Use of social media in Extension work has the potential to be haphazard and unfocused. Shannon uses the most relevant and impactful media to not only extend information, but to engage followers in meaningful content that delivers education. To date, Shannon's popular Twitter profile (@polkNR) has 634 followers, and another 106 followers on Instagram (@PolkNR).

In addition to her program accomplishments at home, Shannon regularly submits abstracts for state and national level presentations. In 2016, she presented two abstracts at the Dual Conference of the Association of Natural Resources Extension Professionals and National Association of Community Development Extension Professionals. In 2015, at the National Urban Extension Conference, she presented on the topic, "Strategies for Recruiting Political Audiences to Extension Programming." She also extended her experience in effective utilization of student interns in her co-presentation at the Extension Professional Associations of Florida conference, with "Strengthening Extension and Teaching: Practical Time Saving Approaches to Utilize Community Interns."

Finally, Shannon completed her Master of Science degree in Agricultural Education and Communication in the spring of 2015. Having accomplished this while being an active and collaborative leader, both in Polk County and throughout the Extension system, was a notable accomplishment. For this and the many other accomplishments that have advanced her career and the scholarship of Extension, I hope you will consider this nomination of Shannon Carnevale for the FANREP Early Career Leadership Award. Please don't hesitate to contact me if I can provide any further information.

Outstanding Specialist

Laurie Trenholm, Ph.D., Environmental Horticulture, University of Florida, PO Box 110675, 101A, Mehrhof Hall, Gainesville FL 32611-0675, [\(352\) 273-4524](tel:3522734524), letr@ufl.edu

Nominee's Contributions

Dr. Trenholm is a professor and urban turfgrass specialist. Dr. Trenholm is head of the Florida Urban Turfgrass Program. She specializes in working with Extension Agents and the commercial lawn care industry on problems relating to lawn grass cultural management, stress physiology and best management practices. Dr. Trenholm oversees the statewide BMP educational program. In this role she has focused on research and education dedicated to motivating lawn care and pest control professionals to implement best management practices that protect natural resources, especially water. Dr. Trenholm's Warm Season Turfgrass Growth Pattern Effect on Potential Nitrate Leaching long term study, funded by the FDEP, provided substantial evidence that has resulted in sound fertilization recommendations. That and other research has resulted in reductions in nitrogen application recommendation on some warm season turfgrass species. Dr. Trenholm serves as a faculty specialist team member on Initiative 2: Enhancing and protecting water quality, quantity and supply, Urban water quality since the initiative inception. In this role she provides leadership, communication, organization and guidance of the urban water quality initiative and collaborates with the team with feedback on the statewide action plan. Dr. Trenholm has a 30% research and 70% extension appointment.

Why nominee is deserving

As natural resource professionals we place a high value on water quality, green space and in general a concern for the environment and protection of natural resources. As a result of Dr. Trenholm's contributions, Extension Agents, landscape professionals, architects, governmental agencies and consumers have solid recommendations for selecting, establishing and maintaining landscapes in an environmentally sound manner. She has personally appeared before scores of county commission and city council meetings to communicate research and scientifically based recommendations for healthy turf and the potential negative consequences of improper management. She also educates naysayers on the benefits of the plant, turfgrass: ground level air conditioner, noise absorber, absorber of pollutants, erosion control, ground water filter, ground stabilizer, fire retardation buffer, oxygen generation and last but not least play and sports areas for pets, children and professionals. Dr. Trenholm also coordinates the educational sessions for the Florida Turfgrass Association and engages Extension Agents to participate in educational sessions and attend the conference for free in exchange for assistance with sessions, and works with the Dean's office to provide funding for lodging. Upon request, Dr. Trenholm is readily available to support educational programs or assist with a presentation before a group or regulatory board at the county level bringing clarity to landscape and turfgrass cultural practices and issues.

Extension and Specialist Programs

Dr. Trenholm's extension program focuses on best management practices for lawns and landscapes for conservation and sustainability for Florida's water resources. She works primarily with lawn care and pest management professionals on proper turfgrass management with emphasis on nutrient management and stress tolerance. She works extensively throughout the state with horticulture extension agents on landscape and turfgrass cultural practices and issues. Dr. Trenholm's recent research led the Florida Department of Environmental Protection turfgrass nutrient leaching research project which was conducted in 3 locations statewide over 9 years. The results verified the recommendations of the Green Industries Best Management Practices for the Protection of Florida Waters. She has over 112 research publications.

Individual Program Leadership

Plant-a-Pail™ Program Leader

Lisa Hickey
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Program Description:

Target Audience:

Our program serves seniors, working-aged adults, teens and children in Manatee County who reside in areas identified as food deserts by the Manatee County Department of Health.

Issue Addressed:

The Plant-a-Pail™ (PAP) program was developed specifically to address the needs of Manatee County residents residing in areas identified as “food deserts.” These areas were identified by a Manatee County Department of Health Needs Assessment conducted in late 2014. Food deserts were defined as areas without direct access to fresh foods or easy access to grocery stores. In addition to the identification of these food desert areas, the Health Department surveyed the residents to determine their ideas and concerns. Information developed from this survey provided important direction for the development of the PAP program.

Residents indicated that while they liked the idea of community gardens, they preferred to grow vegetables in their own yards, wanted to choose what they grew and needed short and targeted classes or workshops as a consequence of work and childcare time demands. Therefore, under Ms. Hickey’s leadership, the Manatee County Urban Horticulture team with the Master Gardener volunteers developed a mobile program using container gardening principles to allow these Manatee County residents grow their own produce.

Program Objectives:

1. To further the educational mission of the Extension and the Master Gardener Program in underserved neighborhoods and food desert areas in Manatee County
2. To provide targeted, hands-on container gardening education within respective food desert communities
3. To provide a selection of quality, season appropriate plants to allow residents a choice so they can grow a vegetable of interest to them
4. To provide follow-up support and education ensuring a positive outcome for our community participants
5. To measure the program’s impact on the communities served and evaluate the success and further development of the PAP program
6. To foster positive relationships between Manatee County residents, Extension staff and volunteers in communities who have not traditionally used Extension services

Educational Methods/Materials:

Ms. Hickey with a team of Master Gardener volunteers developed a mobile approach in order to reach our targeted communities. Through the use of a county van, Ms. Hickey and PAP volunteers bring all materials necessary to the community sites. We use neighborhood community centers, housing authority facilities, and church centers for our program.

Through experiential teaching methods, the team demonstrates how to use a simple, easy-to-use mobile container system which can be reused after each planting cycle. The planting container consists of two plastic five-gallon pails fitted together, a water fill tube and a small interior plant pot as a water wick. The program supplies the soil, fertilizer and other items for each pail. In addition, a choice of seedlings or seeds are provided. Depending on the season, we offer tomatoes, collards, lettuce, peppers, sweet potatoes, okra, carrots and Malabar spinach.

The educational sessions opens with Ms. Hickey explaining plant growth and care, how the pail works and basic nutritional benefits of fresh vegetables. Master Gardener volunteers then assist in hands-on guidance as each participant fills and plants a pail. In addition to a planted pail, participants take home a packet of specific instructions for planting success, additional fertilizer and Ms. Hickey's contact information in case assistance is needed or questions arise. Ms. Hickey manages the follow-up in the community which consists of scheduled visits with participants at their homes in order to assess their success and provide personal assistance as needed. As a key component of our program, personal visits to view the planted pails allow us to build relationships and foster future participation in the program. Participants are encouraged to bring back used pails to subsequent events. They can refill their older pail, and if desired, they can obtain a new pail and plant it.

Resources:

The PAP program is a volunteer initiative of the Master Gardener program under the leadership and direction of the coordinator, Lisa Hickey. Master Gardener volunteers (a core group of about fifteen) construct the planting pails, assemble all the materials needed for each pail and grow and care for the seedlings that are distributed during the sessions. In addition, volunteers provide hands-on assistance during each PAP program session working on setup, assisting participants and cleanup.

In November 2015, the Manatee County Extension was awarded an initial grant of \$5,000 through the State College of Florida's - Martin Luther King Jr. Day of Service Grant to fund the PAP program. In November 2016 based on the success of the first year, Extension was awarded a second \$5,000 grant for the 2017.

Partnerships have been developed within Manatee County Extension Family Nutrition Program, as well as, other community organizations: the Faith-Based Alliance Organization, Future Farmers of America, Manatee Housing Authority and the Bradenton Housing Authority. Building other partnerships is an on-going priority for Ms. Hickey.

Evaluation:

The success of Plant-a-Pail™ has been measured mostly through site visits and personal interviews of participants returning for a new session. Our strategy has been to reach out to selected food desert communities and revisit them several times during the year within two months of the date they planted their pails. Our program is active from January through May and then resumes in the fall until the end of

the year. The summer break gives the participants a chance to clean their spring pails in preparation of the fall sessions.

From January 2016 through April 2017, we have visited six food desert communities at least twice (several of them four times), distributing 435 new pails and 600 seedlings (including refills). Greater than 90% (n=392) of the original participants succeeded in growing vegetables in their pails. Now in our second year, Ms. Hickey is working on collecting yield information from our participants so we will be able to quantify our success. Based on inspections by the PAP program and the testimony of our participants, there have been incredible successes in growing and harvesting.

Now in the second year of this project, Ms. Hickey's efforts to foster the program's personal approach are critical in helping us to expand and evaluate the program more effectively. It is very rewarding to see how much our participants have been able to grow.

The intangible results of this program are equally important to the volunteers and the participants. Through our multiple sessions and follow-up visits, we have been able to establish a relationship with our participants. Our return rate - 46% of the initial participants come back for a second or third session. They bring us photos and stories of who they shared their harvest with. This is so rewarding to the Master Gardener volunteers and our leader.

Summary:

Through Ms. Hickey's leadership, PAP combines mobility with container gardening principles to bring a cost-effective approach to helping food desert communities in Manatee County gain access to fresh vegetables at their own homes. A need uncovered by the Manatee County Department of Health assessment has been creatively addressed by Ms. Hickey and her team. Container gardening is not necessarily an inexpensive endeavor but through our efforts, we are providing a free program and product (\$15 value per planted pail) to the food desert residents. In addition, this program has a unique personal follow-up component which not only assists the client in being successful but also demonstrates that PAP is clearly invested in the ultimate goal of the program, production of vegetables for our participant's tables.

Ms. Hickey has been instrumental in leading this program from the developmental stage to the implementation and evaluation stages. She will be planning several new communities for the PAP program. She believes that the Habitat for Humanity will be a great community to introduce the Plant-a-Pail™ Program to in the fall of 2017. She is currently working with the team to complete program evaluations, summer site visits, fall planning sessions, and additional funding sources to augment our grant. The Master Gardener program is committed to Plant-a-Pail™ and wants to support its continued success and relevance to our food desert communities in Manatee County.

As an example of how the unique aspects of this program resonate with people, Ms. Hickey recently shared the program and results at a national Public Issues Leadership conference. After her talk, she was approached by twelve Extension professionals from around the nation who wanted to find out how they can do this program in their locations.

Innovative Program Award

Climate Change and Sea Level Rise Program

Holly Abeels, Florida Sea Grant Extension Agent, 3695 Lake Dr, Cocoa, FL 32926, 321-633-1702 x235, habeels@ufl.edu;

Elizabeth Carnahan, Florida Sea Grant Extension Agent, 1800 Weedon Dr NE, St Petersburg, FL 33702, 727-453-6522, lcarnahan@pinellascounty.org;

Alicia Betancourt, County Extension Director, 1100 Simonton St, Key West, FL 33040, 305-453-8747, Betancourt-Alicia@monroecounty-fl.gov;

Thomas Ruppert, Coastal Planning Specialist, 1365 Memorial Dr, Coral Gables, FL 33146, 352-213-6777, truppert@ufl.edu;

Maia McGuire, Florida Sea Grant Extension Agent, 150 Sawgrass Rd, Bunnell, FL 32110, 386-586-2102, mpmcg@ufl.edu;

Heather Kent, Regional Specialized 4-H Extension Agent, 3925 Hwy 71, Marianna, FL 32446, 850-394-9124, hckent@ufl.edu;

Will Sheftall, Natural Resources Extension Agent, 615 Paul Russell Rd, Tallahassee, FL 32301, 850-606-5202, sheftall@ufl.edu

Program Accomplishments:

The Climate Change and Sea Level Rise program is a statewide, coordinated effort among Sea Grant, Natural Resources, 4-H, and Community Development Extension Agents to bring climate change and sea level rise extension programming to local governments, organizations, and professionals. The team members for this project are involved in efforts to educate extension professionals in Florida on delivering climate change and sea level rise information to their clientele. This is done by providing in-service trainings and resources to agents in all Extension disciplines that are tailored to each program area. Often the hurdle for talking about climate change with clientele is not having the resources or knowing what resources are available. Since climate change and sea level rise affects all areas including health, agriculture, natural resources, horticulture, and youth, it's important for Extension professionals to have the resources they need to discuss aspects of this issue with their clientele.

The publication *Global Warming's Six Americas* looks at the 6 distinct public audiences and their level of concern over and motivation to address climate change. It's important to know where an audience stands in regards to their view on climate when delivering Extension climate programming. Since Extension professionals are also part of the public, it's important to know their perception as well about climate change since this could affect programs they develop for their clientele. A study done by Wojcik et. al. in 2014 of attitudes and perceptions of climate change in Extension in the southeast U.S. shows some insights into where Extension professionals fall into the six Americas. In this study, 2,589 Extension professionals from 8 southeast states answered a 56-item, web-based survey. Extension professionals show the same percentages and groupings as the national survey on where they fall into the six Americas with about 10% alarmed, 25% concerned, 25% cautious, 10% disengaged, 15% doubtful, and 10% dismissive. Here in Florida, Extension professionals were more likely to be alarmed or concerned compared to other states. Also, agriculture agents were more likely to be doubtful and dismissive and natural resources agents were less alarmed and concerned than environmental education agents.

Knowing that Extension agents show the same tendencies as the public for concern over climate change means that educational programming with Extension professionals as the audience needs to use the same messaging, communication strategies, and tools as you would when talking to the public about climate change.

Many Extension professionals may not see the connection between their program and climate issues, but in fact climate change and sea-level rise in Florida are already impacting or will soon impact most IFAS Extension clientele and programming. Stakeholders, county officials, and engaged clients are increasingly aware of the potential for climate impacts and will be looking to Extension for guidance. Every Extension professional should be aware of the projected climate change impacts in their program area. In-service trainings (IST) provide expert science in specific program areas as well as resources that can be used to explore climate impacts based on program area and location. Extension professionals are given up-to-date science, communication best practices, and online tools that could be used and incorporated into their comprehensive programs. The objective of these trainings are to increase Extension faculty knowledge and comfort level with projected climate impacts in existing program efforts and in turn empower faculty to include climate variability and change in the development of their programs. Over the past several years, the team has planned, developed, and delivered several ISTs for Florida Extension professionals. In 2014, a *Helping Youth and Adults Address Climate Change through Experiential Learning* IST was delivered for UF IFAS Extension faculty at the 2014 Extension Professional Associations of Florida (EPAF) annual conference. In 2015, a *Coastal Climate Change and Sea Level Rise* IST was delivered for faculty at a 2-day training in St. Petersburg, FL. In 2016, a *Climate Change Isn't Part of My Program Area, Is It?* IST for faculty was delivered at the 2016 EPAF conference. Extension professionals that are well-versed on the science of climate change and associated sea-level rise are empowered to assist their clientele (local government leaders, industry representatives, concerned citizens) to increase resilience to economic, environmental, and societal climate change impacts.

In 2014, a *Helping Youth and Adults Address Climate Change through Experiential Learning* IST was delivered for University of Florida (UF) IFAS Extension faculty at the 2014 Extension Professional Associations of Florida annual conference. The goals of the training were to raise awareness of climate change and sea level rise concepts; provide simple hands-on activities that demonstrate the concepts; and inspire faculty to implement these activities in youth and adult programming. Faculty were given an overview of climate change and sea level rise; participated in activity stations that incorporated several topics and explored the influence of climate change on these topics; and participated in a discussion about trusted science-based sources. Faculty were given resources and tools that they could take back to their communities and to incorporate climate change programming in their existing programs. A post-event evaluation completed by 20 attendees showed that 65% (n=13) of respondents will incorporate activities into programs and 15% (n=3) of respondents will start the conversation about climate change.

In 2015, a *Coastal Climate Change and Sea Level Rise* IST was delivered for UF IFAS Extension faculty at a 2-day training in St. Petersburg, FL. The goals of the training were to provide a concise, accurate overview of the state of climate change science today with a focus on Florida; provide an overview of both historic changes in seal level and projections for the future; share resources for obtaining climate change information; demonstrate a variety of online tools available to understand and plan for potential

impacts; share techniques and tips for crafting climate change messages for specific audiences, and use case studies from Florida to illustrate applications of messaging and communications strategies; discuss how messaging and communications play a role in both early successes and in on-going climate or sea level rise related work; and identify strategies to incorporate climate change and sea level rise information and communication strategies into Extension faculty current programming. The team developed an agenda that included climate science and sea level rise overviews; a tools café where faculty could learn about a variety of online tools from people who created or have used the tools; how to communicate effectively about climate science with your audience followed by Florida specific case studies using specific messaging and communication strategies; and breakout groups to discuss how to incorporate climate change into your programming. A pre/post test survey completed by 12 attendees showed that 33% (n=4) increased their knowledge of climate change, 41% (n=5) increased their knowledge about sea level rise, and 58% (n=7) planned to increase how much they include about climate change/sea level rise in their work.

Overall, 47 Extension faculty participated in the UF IFAS Extension Climate Change ISTs in 2014 and 2015. On post-workshop evaluations, 81% (n=26) reported climate change knowledge gain as a result of the program. Sixty-three percent (63%) (n=20) pledged to incorporate climate change into their outreach programs. Extension professionals that are well-versed on the science of climate change and associated sea-level rise are empowered to assist their clientele (local government leaders, industry representatives, concerned citizens) to increase resilience to economic, environmental, and societal climate change impacts.

In 2016, a *Climate Change Isn't Part of My Program Area, Is It?* IST for UF IFAS Extension faculty was delivered at the 2016 Extension Professional Associations of Florida annual conference. Faculty explored climate considerations in specific programming such as Family and Consumer Sciences, Horticulture, Agriculture, and 4-H Youth Development. The team developed a list of guest speakers, including members of the team, to deliver short presentations in identified topics areas that would be given during the IST. The topic areas were 4H – Engaging Youth, Horticulture – Planting for Climate Change, Agriculture – Growing for Tomorrow, Family and Consumer Sciences – Public Health and Wellbeing, and Natural Resources – Habitat and Wildlife Impacts. There were also presentations about multi-stakeholder engagement, local government impacts and economics, and a general talk about scientific projections. The goal was to give Extension professionals a chance to gain knowledge in climate change information in their specific program area and the resources they could refer to when discussing climate change with their clientele.

A post event survey was delivered to the 36 Extension faculty who attended the 2016 IST and 16 filled out the post-event evaluation. Results of the evaluation show that as a result of the training: 100% (n=16) agreed or strongly agreed the scientific projections helped them learn about climate change and sea-level rise; 100% (n=15) agreed or strongly agreed their knowledge of ways to engage youth in climate science has increased; 78% (11 out of 14) agreed or strongly agreed they understand types of climate impacts affecting horticultural programs; 92% (12 out of 13) agreed or strongly agreed the training provided an opportunity to consider strategies to overcome climate-specific challenges facing agriculture in Florida; 87% (13 out of 15) agreed or strongly agreed consideration of climate impacts on families will help them develop better messages about climate change in their community; 100% (n=15) agreed or strongly agreed their awareness of climate impacts to Florida's natural resources has increased; 59% (10 out of 17) agreed or strongly agreed the training provided an opportunity to learn

strategies to engage and evaluate stakeholders in climate discussions; and 86% (12 out of 14) agreed or strongly agreed the training provided them with resources and ideas related to insurance, comprehensive community planning, and local government policies and legal issues that will help them support community efforts to address climate change.

The team plans to continue training as well as develop resources for Extension faculty in the future. The team is in the process of developing a Climate 101 packet that will include PowerPoint presentations with basic information as well as program specific information, list of resources, program evaluation tools, objectives and outcomes for end-of-year reporting purposes, example case studies, and activities or tools. This packet will be presented during an UF IFAS Extension IST in April 2017.

Outstanding 4-H/Youth Development Program

Jr Water Ambassador Program

Jp Gellermann, Extension Director/Sea Grant Agent III

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Tanya Darress, 4-H Youth Development Agent I, 2614 SE Dixie Hwy., Stuart, FL 34996, Phone: 772-288-5654, Email: tdarress@ufl.edu

Program Description

The Indian River Lagoon has been damaged by a variety of factors and has lost 90% of its historic oyster beds and thousands of acres of sea grass beds. Oyster populations have been devastated by fresh-water discharges into the Indian River estuary beginning in 2005 and continuing to this day. Oysters are critical to cleaning the water and providing habitat and food for up to 300 estuarine species.

Faculty from the UF IFAS Martin County 4-H and Florida Sea Grant have developed an innovative approach to engaging youth in a new environmental enrichment program. The multi day program focuses on providing youth a greater understanding of the importance of the Indian River Lagoon, human impacts on this ecosystem and hands-on learning experience. The Jr Water Ambassadors class begins with classroom education on the history, biodiversity and recent events surrounding the Indian River Lagoon. The youth are then provided an opportunity to experience the lagoon by taking a two hour "River Tour". The tour is an opportunity for 4-H and Sea Grant faculty to discuss the dynamic issues impacting the health of one of the most diverse ecosystems in the county. The day is concluded with activities focused on developing navigational skills and recognition of local fish species.

The second portion of the program focuses on Oyster Gardening. Beginning with a 45 minute lecture on lagoon basics, importance and life cycle of oysters, and impacts of urban runoff in the marine environment by Sea Grant, 4-H faculty and Florida Oceanographic Society staff. Youth are then asked to assist in the creation of oyster baskets that will house immature oyster fray. The oyster baskets are hung under local docks where the young oysters are protected and become acclimated to the changing environment. One month later youth are asked to 'wash' the oyster baskets to remove predators and excessive algae. Faculty work closely with the youth during this process and collect the flora and fauna that fall out of the baskets. The species which are collected are categorized with the results passed along to the Florida Oceanographic Society to help assess overall lagoon health. One month later, the oyster baskets are again removed and placed in their permanent oyster reef location where they will continue to mature and grow. Youth will begin the process again for the next oyster reef.

This program is funded through a grant from the Martin County Engineering Department. The Florida Oceanographic Society provides oyster spawning expertise, oyster reef location and permitting as well as lectures and insight to lagoon biology and history. Due to the initial success of the program, the Martin County Engineering Department has requested scheduling of multiple additional Jr Water Ambassador programs for the summer of 2017.

To date the Jr Water Ambassador Program has engaged 25 youth. Through survey, 90% of attendees have demonstrated knowledge gain concerning lagoon and oyster biology. 100% of participants have indicated a willingness to adopt a behavior that would benefit the lagoon. 95% of participants have indicated that they would recommend to a friend the oyster gardening program and are now more interested in life sciences than they had been before participating in the program. One year after setting the initial oysters,

a survey of the reef was taken to determine the survival and growth rates of the oysters. The initial results indicate that the oysters were heavily impacted by the historically poor water quality resulting from the heavy fresh -water discharges and green algae issues of 2016.

Educational Materials

Promotional Materials

Partnering with the Girl Scouts to Create a Sustainable Pollinator Garden

L. Barber and N. Pinson, UF/IFAS Extension Hillsborough County, 5339 County Road 579, Seffner, FL 33584, 813-744-5519, labarber@ufl.edu; nicolepinson@ufl.edu

Description: Program Accomplishments: Pollinators are important because an estimated 1/3 of the food we eat comes from animal pollinated plants. Recognizing this issue, three members of Girl Scout Troop #360 worked in partnership with the UF/IFAS Extension Hillsborough County to plant a pollinator demonstration garden while earning their Silver Awards. Silver Awards encourage the cadets to design their own community project and understand how the project impacts their community. Obtaining the award requires completing an approved cause and issue service project of at least 50 volunteer hours. In addition to planting the pollinator garden, the Girl Scouts wrote newspaper articles and press releases, installed microirrigation, created a pollinator display, and provided docent tours. Involving youth in creating pollinator demonstration gardens is a win-win for the Girl Scouts, Extension and local residents who can learn more about sustainable landscapes. **(target audience)**

Pollinators help increase fruit set, quality and size. The U.S. Department of Agriculture in 2014 estimated bee pollinated commodities accounted for \$20 billion in annual U.S. agricultural production **(economic, environmental and social issue)**. Three members of Girl Scout Troop #360 partnered with Extension to plant a pollinator demonstration garden while earning their Silver Awards. Obtaining the award requires completing an approved cause and issue service project of at least 50 volunteer hours **(program innovation)**. Girl Scouts, Master Gardener volunteers and Extension faculty worked together to plant and maintain the garden **(cooperators)**. Youth were responsible for watering, weeding, pruning, and integrated pest management. Additionally, the Scouts assembled backpacks that contain insect and flower sketch plates, field identification cards, magnifying lenses, and books. Children and their parents check out the pollinator-themed backpacks as they visit the garden. Agents focused on developing the youths' leadership and life skills **(role of FANREP members)**. The Girl Scouts wrote newspaper articles and press releases, reviewed a grant proposal, created a community event display, designed educational signage, and completed a radio interview with WTIS 1110 AM **(set of educational methods, materials and events)**. During 2016, more than 1,000 people visited the Extension demonstration gardens **(target audience)**. The Florida Department of Transportation provided a \$1,521.12 project grant. Kidsgardening.org provided \$500.00 in garden tools and books **(funds, supplies, equipment)**. Involving youth in creating pollinator demonstration gardens is a benefit for the Girl Scouts, Extension and local residents who can learn from the examples displayed. Extension offices can work with their local Girl Scouts or other organizations to promote pollinator gardens. These gardens can teach residents and youth how to attract pollinators to their landscapes while reducing negative environmental impacts associated with landscape management practices **(results, replication, implications for future programs and expected outcome)**.

Brief Publication

Have You Got Bats?

Holly Ober, Associate Professor & Extension Specialist, Department of Wildlife Ecology and Conservation, NFREC, 155 Research Rd, Quincy, FL 32351; 850-875-7150; holly.ober@ufl.edu

Description:

We developed an educational document to increase awareness that an endangered species of bat sometimes opts to live in buildings in southern Florida. Although it is legal to 'exclude' bats from buildings in FL (i.e., use humane approaches to prevent roosting bats from re-entering buildings during fall and winter), such exclusion efforts are not allowable with one of the thirteen bat species that resides in Florida. This species, the Florida Bonneted Bat, is a federally endangered species, that occurs nowhere in the world but 14 counties in southern Florida. There is concern that people may inadvertently harm these rare bats because they don't realize they are a unique, protected species.

Target audience:

The audience is anyone who might find bats living in a building within the geographic range of the Florida Bonneted Bat (14 counties in southern Florida, extending from Polk County in the north to Miami-Dade County in the south). Thus, we are targeting builders, roofers, nuisance wildlife control operators, apartment and condominium caretakers, as well as general homeowners.

Issue addressed:

As described above, our intent is to increase awareness of the fact that there is a rare species of bat that could be found roosting in buildings in southern Florida. The species is thought to have the smallest geographic range of all bat species in North America. Because the species is endemic to Florida, UF/IFAS Extension has the opportunity to play a key role in the conservation of the entire species.

We developed a brochure to increase awareness of the fact that if one or more bats are found roosting in a building in certain parts of the state, this could be an endangered species. Therefore, anyone who finds bats roosting in a building in this region should first determine what species of bat they've found before they decide what steps to take next. Few people are aware that one of Florida's bat species is endangered, since the listing occurred quite recently (in 2013).

How the product will be used with, distributed, or marketed to the target audience:

We created three versions of the document: one is a hard copy that contains the same message in both English and Spanish, while the second and third are web-friendly English-only and Spanish-only versions posted on the internet.

The hard copy pamphlet folds open in a rather unique manner. As a "gate-fold" brochure, it opens in such a way that all interior panels written in English can be viewed simultaneously, and all panels written in Spanish can also be viewed simultaneously, while the front and back panels contain information in both languages. We opted to morph the material into a different layout when posting the same information online, because the unusual folding of the brochure might not be intuitive for web viewers if a simple pdf of the pamphlet were posted. The web versions contain all the same information as the hard copy pamphlet, but in a condensed format that could be printed on an 8.5"x11" sheet of paper. These web versions are currently available through websites from University of Florida, Bat Conservation International, and Zoo Miami.

The hard-copy brochures have been disseminated through several non-traditional means. First, copies were distributed to the Southwest Florida and the South Florida regional offices of the Florida Fish and Wildlife Conservation Commission, as well as to the U.S. Fish and Wildlife Service office in Vero Beach. Second, copies have been distributed to environmental educators that teach about bats within the range of the species. Third, two members of the content-design team (from Bat Conservation

International and Zoo Miami) recently met with Mayors and City Planners from the cities of South Miami and Coral Gables (hotspots of activity for the Florida Bonneted Bat), and convinced these officials to incorporate language about protection of the species into their permitting process for construction and tree removal, as well as to include the hard copy pamphlets in the final permit issuance. Officials from two other cities will be targeted in May 2017. We plan to continue distributing the document throughout southern Florida during 2017, with a concerted emphasis in Miami, where the bats are most well-known for roosting under barrel tile roofs.

Lastly, I will soon be engaging the IFAS Extension network in increasing awareness of concerns regarding the treatment of this species when it is roosting in buildings. The two ways this will be accomplished include disseminating the brochure and enhancing understanding of the issues at the 2017 State Master Gardener Conference, as well as incorporating information through the Florida Master Naturalist Program's module on upland mammals.

Expected outcome:

Many people who live or spend time in Florida are not well-informed about our wildlife. In addition, many people have an inherent fear of bats. The intent of this brochure is to provide people with information so that if they come across bats roosting in a building, they are aware that these bats could be an endangered species, understand there are regulations regarding treatment of this species, and have contacts for experts they could reach out to for answers to additional questions.

Evaluation results (or plans):

Information on the impact of the product is not yet available, since the hard copy brochures were just printed a few months ago. That said, nearly 2,000 hard copies have already been distributed, and the pamphlet is posted on websites of three different organizations. We know the number of individuals who have previously contacted the U.S. Fish and Wildlife Service to report having found this species the past few years since it was listed as endangered: we will be keeping track of changes to this number since our education efforts began, and use this as a metric of the success of our efforts.

Role of FANREP member(s) in producing the material:

Production and dissemination of this brochure was truly a team effort. A group of individuals with an interest in this endangered species met at a "Florida Bonneted Bat working group" meeting in March 2015. One of the conservation priorities this group identified during this meeting was outreach efforts to increase awareness that these bats can roost in buildings and should not be 'excluded' the way other bats are. I initiated this project by developing rough drafts of the product in early 2016; then a team of individuals from Florida Fish and Wildlife Conservation Commission, Bat Conservation International, Zoo Miami, and U.S. Fish and Wildlife Service provided feedback on the content and provided photographs; next Cheli from IFAS Communications designed and revised the actual gate-fold brochure several times; then Bat Conservation International and Zoo Miami paid printing costs; and finally, individuals from all five organizations are now working to distribute the product to a diverse audience.

Other information required in the award description or other information the nominator thinks is relevant to judging this material.

I have included photos of the pamphlet in a supplementary pdf file ('Brief Publication-Ober-Holly-supporting-1.pdf'). The web versions, in English and Spanish, are shown in a second supplementary pdf file ('Brief Publication-Ober-Holly-supporting-2.pdf'). In addition, there is a brief (30 second) video in Dropbox that demonstrates how the pamphlet opens in such a way that all material in English can be viewed simultaneously, while all material in Spanish can be viewed simultaneously, in case that's not entirely evident from the photos in the first supplementary file

(https://www.dropbox.com/s/95g4uq265jmr7ov/Brochure_HaveYouGotBats.MOV?dl=0).

Short Publication

Bird-Friendly Boating and Fishing

Savanna Barry, PhD, Regional Specialized Agent II, 552 1st Street, PO Box 878, Cedar Key, FL 32625, 804-305-6014, savanna.barry@ufl.edu

Description:

Birds are an important tourism draw to Florida's Nature Coast and this area of my extension program focuses on improving interactions between visitors and birds. I collaborate closely with the Florida Fish and Wildlife Conservation Commission, Audubon Chapters, and the Lower Suwannee National Wildlife Refuge to produce materials consistent with outreach to their stakeholders. The materials developed in 2016 focused on bird-friendly boating and fishing include a brochure, signage, website, and a web-based video. As part of this effort, I also coordinate a volunteer bird rescue program that includes workshops, signage, and newsletters. As a result of this program, we hope that boaters and anglers will act in a more sustainable fashion toward birds, by adopting behaviors such as not feeding birds or unhooking birds from fishing line instead of cutting them loose with tackle and monofilament attached.

There are several ways bird populations can be negatively affected by boating and angling activities but the most urgent concerns are the direct interaction of birds and fishing tackle and disturbance of roosting birds by boaters. Materials produced for this program are targeted toward recreational boaters and anglers and are displayed/distributed at local marinas, parks, festivals, tourism offices, fishing piers, as well as online. We printed 10,000 copies of the bird-friendly boating brochure for regional distribution. Signs were posted at 6 public locations. The local bird rescue program received 23 calls in 2016 and continues to receive calls in 2017 (38 so far). Bird rescue workshops were well-attended (22 in August 2016 and 30 in January 2017) and the local bird rescue program is highly active. Between August 2016 (inception) and December 2016, volunteers contributed 83.65 hours to the program, worth approximately \$1,847. Without this service, paid employees from local governments, the Florida Fish and Wildlife Conservation Commission, or Lower Suwannee National Wildlife Refuge would be called upon to respond to the injured bird or use staff time to explain that they do not provide this service. Therefore, this program provides tangible benefits to wildlife management agencies by saving staff time and providing an outlet for calls that previously went unanswered due to limited staff resources at these agencies. We are tracking reports of injured birds over time, and this information will be used to evaluate the effectiveness of outreach activities such as signage, brochures, website, web videos and festival booths. Field surveys of anglers on fishing piers indicate the signs are being seen and anglers are acting on the information. In addition, most charter fishing guides have stopped feeding large fish carcasses to pelicans since I coordinated the posting of a separate set of signs (produced by FWC – not submitted here). All of the materials submitted below were written, designed, or produced by me (**FANREP member**) except the online video, which I coordinated but did not produce. I received some graphic design assistance on the birdfriendly boating brochure. Collaborators for brochure and video: Kevin Oxenrider (FWC), Blair Hayman (FWC), Fara Illami (FWC), Vic Doig (USFWS), Mary Opall (Nature World Wildlife Rescue)

Items Submitted:

Pages 3-4: Brochure: Conserve Nature Coast Waterbirds: A guide to being a bird-friendly boater (https://ncbs.ifas.ufl.edu/wpcontent/uploads/2016/08/NC_wtrbds16_SG.pdf)

Page 5: Signage: Waterbirds of the Nature Coast (poster displayed at 3 local festivals)

Page 6: Signage: Cedar Key Bird Rescue signage (posted at 6 public locations)

Page 7-10: Newsletters: Cedar Key Bird Rescue Volunteer Update August 2016 & Cedar Key Bird Rescue Volunteer Update December 2016

Page 11: Website: Sustainable human-bird interactions (<https://ncbs.ifas.ufl.edu/sustainable-humanbird-interactions/>)

Page 12: Video: Free the Bird....But Don't Cut the Line (<https://vimeo.com/194074371/26e20c007e>)

2

Long Publication

One in a Thousand: Those Amazing Sea Turtles

Maia McGuire, UF/IFAS Extension Sea Grant Agent III, Flagler County Extension, 150 Sawgrass Road, Bunnell, FL 32110. Phone 386-437-7464. Email mpmcmg@ufl.edu.

DESCRIPTION: This book was written for a 5th grade target audience and was completed in April, 2016. The authors were unable to find an existing publication that addressed sea turtle biology and ecology (threats faced by sea turtles and ways that people interact with sea turtles, with both positive and negative results) for this grade level. They wished to create a 5th grade curriculum to build on their existing 3rd grade manatee and 4th grade cetacean curricula. In addition to the book, the authors wrote lesson plans to accompany each of the ten chapters. All of these materials (book and lesson plans) are available for download from the website <http://stjohns.ifas.ufl.edu/Sea/seaturtlecurriculum.html>. The sea turtle book and lessons have been marketed to educators through presentations at the 2016 National Marine Educators Association, Florida Science Teachers Association, and EPAF conferences. The book was used as a resource for the 2016 4-H marine ecology contest. Additionally, the Florida Sea Turtle license plate program, which provided grant funding for the book, has the sea turtle curriculum website linked from theirs. Information about the curriculum has also been included in the nominator's newsletter and by email to teachers with whom she works.

The intent is for fifth grade teachers, as well as informal educators, to use the book (and accompanying lessons) to help them address education standards, while teaching their students about the connections between sea turtles, humans and the environment. Youth who understand potential impacts of their impacts on animals that they feel a connection to are more likely to be conservation-minded and to take actions to help protect those animals. Reducing plastic pollution, not littering, picking up trash, filling in holes dug at the beach, and knocking down sandcastles before leaving the beach are all actions suggested in the book. Youth will also learn how people currently work to help protect sea turtles, from volunteering to help with sea turtle nest monitoring, to providing rescue and rehabilitation for sick or injured turtles.

The book was reviewed for scientific content by all four authors (one of whom is a sea turtle veterinarian) as well as by the Sea Turtle Conservancy. A draft of the book was also reviewed by three fifth grade teachers from St. Johns County. Feedback from all of these sources was used to improve the book. The book has been downloaded 1,988 times in the year that it has been available. An evaluation requesting feedback on the book and lessons is linked from the webpage where the materials are located, but so far there have been no evaluations completed. In 2017, this link will be sent to extension faculty who attended the inservice training at EPAF where the book was presented.

Maia McGuire (FANREP member, and lead author), and Ruth Francis-Floyd (UF/IFAS Extension Specialist, second author) are currently in negotiations with the UF/IFAS bookstore to print the book and make bound copies available for sale.

Newsletter

ProHort Happenings

Susan Haddock, Commercial Horticulture/IPM Agent III, UF/IFAS Extension Hillsborough County, 5339 County Road 579, Seffner, FL 33584, (813)744-5519 ext. 54103, szcrmchz@ufl.edu

Target Audience

The primary target audience is commercial horticulture professionals but, the newsletters are designed to be easily understood by urban residents and Master Gardeners.

Issue Addressed

The objective of these newsletters are to educate landscape maintenance professionals on a variety of urban topics while presenting in a consistent month to month format that is interesting and fun. Urban landscape management practices affect many aspects of natural resources from water quality to beneficial organisms. Florida has a wide diversity of water resources and the largest area of water resources in the contiguous 48 states. Many of these water resources are downstream of watersheds where approximately 19 million people live. Additionally, Florida has many beneficial insects that are good predators, parasites and pollinators and occur naturally in landscapes. The purpose of the newsletters is to educate horticultural professionals about how urban landscape inputs (pesticides and fertilizers) aimed at controlling damaging insects or greening up lawns are associated with potentially negatively impacts on natural resources.

How used/marketed

The newsletters are distributed by email campaign monthly to over 550 clients/companies. Four hundred additional newsletters are directly distributed in hard copy to landscape suppliers for their clients. Over 50 newsletters are 'picked up' at the Extension office front desk monthly.

Expected Outcome

The newsletters are expected to raise awareness of horticultural professionals about best landscape management practices and provide them with practical applications and resources that can be utilized to preserve natural resources. The 'Photo Promo' is expected to challenge their ability to solve a problem while providing the motivation to figure it out and be fun. The newsletter also provides a reference for upcoming events.

Evaluation Results

As a result 98% of respondents to an informal survey (n=107) report that knowledge gained from the newsletter have helped them implement best management practices that protect and preserve water quality and beneficial insects and help them manage properties more responsibly. Respondents also greatly enjoy the Photo Promo and many indicated that is the section they go to first for fun.

Role of FANREP member

The newsletter was designed by the submitting Agent and printed on office equipment.

Newsletter Links:

October 2016

<http://hillsborough.ifas.ufl.edu/prohort/documents/1610-ProHort-Happenings.pdf>

November 2016

<http://hillsborough.ifas.ufl.edu/prohort/documents/1611-ProHort-Happenings.pdf>

Series of Articles

Evelyn “Prissy” Fletcher

Target audience:

Putnam County residents who are unaware of the positive aspects of wildlife, natural resources or horticultural applications to their environment.

Issue addressed:

As noticed through clientele contacts in the community, the local residents are unaware of the services provided by wildlife or by our local biological station. They are also unaware that every plant, regardless of ornamental value or natural establishment, has a life span. Nature is meant to be a continuous cycle. These articles educate and encourage the local residents to be aware of these concepts. Specific titles: “The Gopher Tortoise,” “Every Plant Has a Lifespan” and “The Ordway-Swisher Biological Station.”

How the product will be used with, distributed, or marketed to the target audience:

These articles were originally published by our in-house newsletter, *Of Growing Concern*, but were also requested to be published in the local newspaper, *The Palatka Daily News*. The newsletter has over 750 subscribers that receive their copies via email, while the newspaper has several thousands of subscribers online and in print.

Expected outcome (what the audience will do as a result of using this material and learning this information):

It was expected that the articles would encourage clients to be appreciative and aware of nature and how we interact with it. Whether it be through the Ordway-Swisher Biological Station where research is conducted on pristine, untouched Florida land, or how a gopher tortoise can serve as a natural way to deal with weeds as part of their regular diet. It was also aimed to enlighten people that all plants, in the landscape or in the wetlands, will eventually decline and make room for another form of life.

Evaluation results (or plans):

We can evaluate the impact of these articles in a number of ways. Direct contact from the clients who read the articles is a great indicator that the information is being dispersed. The gopher tortoise article was shared with people as far north as Virginia, where we received a very enthusiastic phone call from a man who thanked us for taking the time to encourage people to respect the gopher tortoise. His mother, a Putnam County resident, shared the information with him. As these articles are published by the newspaper, we notice an increase in subscriptions. Since they were published, we gained 45 more subscribers, or 6%. It has also assisted with our needs assessment, and there is a desire of the clients for more wildlife oriented educational topics, which is reflected in the agent’s POW.

Role of FANREP member(s) in producing the material:

Evelyn “Prissy” Fletcher, is a member of FANREP, and was inspired by other members who started weekly webinars on wildlife to educate their community and neighboring counties.

Other information required in the award description or other information the nominator thinks is relevant to judging this material:

While the series of articles may not appear like a consistent flow of a particular topic, they were all addressing environmental awareness and stewardship. They were also meant to enlighten the readers

to not have such high expectations of their plants or wildlife in their environment. The native plum tree died, so what? It wasn't mean to live forever. The gopher tortoise burrowed under your favorite rose bushes – that's unfortunate, but keep in mind, he or she is just trying to live life as he knows how – regardless of property lines or your desire to have ornamentals in his path.

Video/Video Disc

Sustainable FloridiansSM Online Modules

Ramona Madhosingh Hector, Urban Sustainability Agent, 12520 Ulmerton Road, Largo FL 33774, 727-582-2656; ramona.m.hector@ufl.edu

Target audience

Registered participants of the Sustainable FloridiansSM (SF) training program.

Issue addressed

The SF training program addresses sustainability issues through a systems analysis. It offers instructional content on subjects such as climate change, land use, food systems, water, and energy. The holistic approach provides a good foundation for understanding the complexity of sustainability while ensuring that participants can make individual choices that would have immediate impact.

How the product will be used with, distributed, or marketed to the target audience?

In order to make the SF training program more marketable and flexible to interested participants, the agent decided to create online content that would allow participants to benefit from additional material without having to drive to class. Each participant, as part of a group mailing list, receives a weekly email with the video links, the evaluation link, and the recommended readings for the week. Participants are expected to watch the video, complete the readings, and evaluations to receive credit for that module.

Consumerism

<https://www.youtube.com/watch?v=HgX-zj7hnp4&feature=youtu.be>

Food Systems

<https://www.youtube.com/watch?v=aQlurjFQlcY&feature=youtu.be>

Climate Change

<https://www.youtube.com/watch?v=X1lZxT0XGIM&feature=youtu.be>

Expected outcome (what the audience will do as a result of using this material and learning this information).

Participants will learn to distinguish between wants and needs and engage in more sustainable shopping behaviors. Participants will also be more aware of the different components of a food system and how each of them could contribute towards supporting local food systems. The climate change module allowed participants to learn about anthropogenic contributions to climate variability and examine the science behind climate change. Additionally participants would learn about climate change adaptations.

As a result of this information and the sum total of information presented in the SF training program, participants will be empowered to make more informed choices and embark on a sustainability journey that best supports their personal, household and community vision of change.

Evaluation results (or plans)

Each video class was individually assessed through Qualtrics to ensure that participants viewed the video in entirety and that credit towards certificate completion could be provided. The series of videos/online classes was also assessed through a follow-up survey conducted through Qualtrics.

Eleven (11) registered participants attended the series and participated in the individual surveys. All participants reported positive comments about the videos although a few provided comments that they would have preferred classroom instruction. Fifty percent (50%, n=10) of participants indicated that the availability of video/online class sessions was convenient and swayed their decision to participate in the program. The other 50% preferred to have content explored in a classroom setting although there were no complaints about the video quality, its presenter, or the material; in fact, 100% of respondents reported that the material presented was well-done.

Role of FANREP member(s) in producing the material

I coordinated the development and delivery of the online content. Each of these slide sets already existed but I wanted to make it more engaging and create a flexible learning environment. The content that was offered in video/online was content that I determined participants could learn on their own and although they would not benefit from an in-person faculty led discussion, they would still benefit from the material presented in the session.

My program assistant presented the Consumerism module, and I engaged the Statewide Coordinator to present the Climate Change module. The Food Systems module was delivered by the FNP regional agent housed in Pinellas County. Although Consumerism and Food Systems are usually presented by myself and co-faculty, I wanted to expose participants to different faces involved with UF/IFAS Extension. This gives them a better sense of UF/IFAS Extension as an organization.

With the exception of the Climate Change video, the videos were produced in partnership with Pinellas County Communications. I coordinated the scheduling and staff time to create the videos. As always, our county partners produce stellar work and it's also useful to highlight the work Extension does in the local community.

Each video and the series as a whole were assessed through individual Qualtrics surveys and follow-up surveys – these were done by the ANREP member to collect pertinent data related to the use and quality of the videos.

Other information required in the award description or other information the nominator thinks is relevant to judging this material.

Pinellas County is one of handful of counties that offers the SF program in the state and definitely within the Tampa Bay region. Many times, I receive calls from counties within the region about the SF training program, so the development of online modules paves the way towards a fully online, customizable course. It is also important to note that participants were also given at least one full week to complete the material, discussions were held in the following face-to-face session about the online content, and additional reminders were provided to ensure that participants met the certificate requirement.

Television/Video

Florida Bay Scallops

Brittany Scharf, Florida Sea Grant Agent II, UF/IFAS Extension Hernando County, 16110 Aviation Loop Dr., Brooksville, FL 34604, 352.754.4433, bhallscharf@ufl.edu

Florida's Adventure Coast, Hernando County, relies heavily on marine and coastal natural resources for economic viability. Visitors and residents alike are drawn to Hernando County for fishing, boating, and

wildlife viewing. Scalloping is one of the County's largest attractions (local businesses estimated 30% economic impact for 2016 season) and the commercial shrimping provides 70% of the bait shrimp for the state of Florida. People engaged in these activities support local economies when they purchase supplies, charter tours or vessels, and stay in hotels. In order to promote ethical and sustainable management strategies, Agent created one televised conference (estimated 83,000 viewership). Televised conference was adopted by Hernando County Broadcasting and aired throughout the season on local channels.

Link to televised conference: **Scharf, B.J.**, D. Dammer Kimbrough, and R. Foti. 2016. *Florida Bay Scallops*, 31 minutes.

<http://hernandocountyfl.iqm2.com/Citizens/VideoScreen.aspx?MediaID=6843&Frame=None>

Web Sites/Social Media/Applications

Inside Nature Coast Blog

Savanna Barry, PhD, Regional Specialized Agent II, 552 1st Street, PO Box 878, Cedar Key, FL 32625, 804-305-6014, savanna.barry@ufl.edu

My blog is targeted toward Nature Coast residents (Harnardo-Wakulla Counties) and is an important mechanism for communication across this large area. The blog highlights new research, events, programs, and general coastal sustainability topics. When I publish a new post, I share the link on social media accounts with a short blurb to drive readers to the content. This also makes blog posts more "shareable" and allows us to tag important partners and collaborators. The intent of the blog is to increase visibility of important research in the region, make that research feel more accessible, and increase awareness of extension programs. I evaluate the success of the blog using Google Analytics, which indicates that 2016 blog posts received 2,669 views and the average visitor spent 2 minutes and 40 seconds viewing a post. Since most blog posts range between 300 and 500 words, this amount of time spent indicates that most visitors were actually reading all or most of the content in the posts. In total, visitors to my blog pages spent a total of 2 hours and 31 minutes engaging with the content. The blog posts have been published in other media outlets, such as the local online newspaper, and the researchers featured in the posts often share them on their own social media pages. The Inside Nature Coast Blog is an important facet of my programs that aim to increase the visibility of and access to science in the region.

I (**FANREP member**) post, authored or co-authored all blog posts, except one guest post by a colleague in the region.

Link to blog: <https://ncbs.ifas.ufl.edu/about/inside-nature-coast/>

Mixed Materials

Right Plant, Right Place by Habitat

Jane Morse, Extension Agent, 12520 Ulmerton Road, Largo, FL 33774, Ph: 727-582-2562;
jvmorse@ufl.edu

Target audience:

Homeowners and landscape installation and maintenance personnel

Issue addressed:

Loss of habitat, invasive species, endangered plant and animal species, aquifer depletion, water pollution, ecosystem services, types of habitats and their related plant species.

Product will be used:

To educate homeowners and landscape installation and maintenance personnel.

Expected outcomes:

To introduce people to the concept of habitats for selecting their plants, introduce them to the native plants that grow in those habitats, what to consider when selecting plants for a site, introduce them to the topics of invasive species, endangered plants and animals, aquifer depletion, water pollution, ecosystem services and the need to restore habitat plants into our landscapes. The hope is they will begin to understand that traditional landscapes are unsustainable and harmful to our environment, and as such they will begin to embrace our native flora and fauna and provide a place for them in our fragile Florida environment.

Evaluation results:

This new program was taught 3 times to a total of 59 people. Pre/post tests show the average knowledge gain was 90%. Asked if they will use any of the practices they learned 94% said yes.

Role of member in production:

Created by member using standard Microsoft equipment. The plant selection books were excerpted from the floridayards.org plant data base to correspond with the 3 chosen habitats and printed/laminated by the county printshop.