HIGHLIGHTS FROM THE FIRST UF/IFAS PANHANDLE BEE COLLEGE

Judy Biss, Residential Hort/Nat Resources CED II, Calhoun County

On March 23 and 24 of this year, 160 beekeepers from Florida, Georgia, Alabama and as far away as Iowa gathered in Calhoun County at the Blountstown High School for the 25th Annual UF/IFAS Bee College. Participants learned from local, state, national and international experts about the latest research and management tools for beekeeping. This year marked the first Bee College held in the Florida Panhandle.

Due to sustained local interest and strong inter-agency partnerships, the UF/IFAS Honey Bee Research and Extension Lab (HBREL) decided to conduct one of their three annual Bee College events in the Panhandle beginning this year. “Beekeepers in the Panhandle have for years been asking for a Bee College in north Florida,” said Mary Bammer, Extension Coordinator for the UF/IFAS Honey Bee Research and Extension Lab. “Starting in 2018, we are answering that call.”

The Bee College is a two-day event with classes for every skill level. Participants were provided information on beekeeping skills, honeybee behavior, bee health, pest and disease management, selling hive products, native bees and pollination. Classes included hands-on beekeeping demonstrations in the bee yard, where students gathered around hives to learn about beekeeping best management practices. Additionally, Bee College hosts a honey judging show where participants were encouraged to enter their honey, hive products, art and more.

Honeybees and pollinators are an integral part of producing the food we eat, and learning about how to best manage them is an equally important and ongoing process. To that end, the UF/IFAS Bee College team extends much appreciation to program sponsors and local support, without whom this program could not have occurred. We are grateful for the Calhoun County School Board, Superintendent Ralph Yoder and Principal Debbie Williams for allowing us use of the Blountstown High School (BHS) campus during spring break; BHS
At each Bee College, there is a series of classes set aside for Junior Beekeepers.

Panhandle Bee College, continued

staff Steve Jackson, David Simpson and Samantha Taylor for being on call and always available to help before, during and after the event; and BHS Ag Teacher Charles Williams and the FFA students for organizing a delicious lunch and helping speakers in each of the classrooms.

The Panhandle Bee College will alternate each year with the South Florida Bee College, so Bee College will be back in the panhandle in 2020. In the meantime, the UF/IFAS Extension Beekeeping in the Panhandle team will continue to provide local educational beekeeping programs, such as the annual workshop and trade show in Chipley, as we have for the past seven years.

UF/IFAS AGRICULTURE AGENTS HOST PROFESSIONAL DEVELOPMENT CONFERENCE IN LIVE OAK

Nick Simmons, Agriculture CED II, Escambia County  |  Libbie Johnson, Agriculture/Agron/Aquaculture EA II, Escambia County
Dan Fenneman, Agriculture/Nat Resources EA II, Madison County

The Florida Association of County Agricultural Agents (FACAA) hosted a combined mid-year meeting and professional improvement conference at beautiful Camp Weed and Cerveny Conference Center in Live Oak on April 3-4. More than 60 FACAA members, including agents, specialists and administrators, participated in business meetings, committee workshops and other activities during the event. Associate Dean for Extension Dr. Saqib Mukhtar provided an administrative update of UF/IFAS Extension. Eight professional development seminars highlighted collaborative programs between county faculty and regional or state specialists, with topics including small plot peanut fungicide efficacy trials, improved scouting methods using UAV’s, developing a weekly series focusing on weed management, improving rancher management decisions by creating agent and specialist synergy, Escambia County Beef Cattle & Forage Field Day, research/Extension partnerships to benefit farmers, protecting agriculture for future generations through conservation easements, and applying Extension education and research to improve and expand rice production in Florida. The FACAA mid-year meeting also included 17 professional excellence posters highlighting programs by county faculty, state specialists and program implementation teams. In addition, professional development tours where hosted throughout Suwannee County to showcase horticulture, animal production and vegetable research. Stops on the tours included:

Horticulture Successes in Suwannee County - The tour group visited a small farm that produces blueberries, blackberries and meat goats. The farm uses IPM strategies and innovative marketing to create a fun agriculture experience when customers visit the U-pick operation. A second stop was to Heritage Park and Gardens, showcasing a successful UF/IFAS Extension partnership with a nonprofit organization for community development.

NFREC-Suwannee Valley Tour - A trolley tour was conducted to showcase the North Florida Research and Extension Center’s use of a whole farm approach to IPM. Advanced irrigation and fertilization technologies in use for various field trials were also discussed, and participants toured the grove/orchard and hydroponic areas.

Suwannee County Dairy Farm - The group visited Shenandoah Dairy to tour their facility and look at forage production, heifer development and animal welfare. This commercial dairy farm currently milks approximately 3,200 cows per day. Agents visited with owner Ed Henderson to discuss current market issues, welfare management and product promotion.
Starting off the new year of 2018, I hosted a beef cattle reproduction workshop in Highlands County with the help of Jonael Bosques-Mendez (EA I, Hardee County), Francisco Rivera Melendez (EA I, Hillsborough County) and Matt Warren, Environmental Manager for FDACS.

The overall objective of this educational workshop was to teach the importance of cattle reproduction, the structure and function of the biological tract, how to improve calving season through management, and how artificial insemination can add potential benefits to an operation. Topics discussed in the workshop included anatomy and physiology, the advantages of establishing a calving season, artificial insemination and estrus synchronization, and wet lab dissection of a female reproductive tract. The overall demographics of the members at the workshop consisted of 32% youth, 64% producers, and 4% local citizens.

Data from pre/post-tests disclosed a 19% increase in knowledge gained evaluating 23 participants; 91% stated they will consider implementing some of the technologies and management tools discussed in the workshop within the reproductive management of their operations and to improve their bottom line.

After the workshop, I contacted the attendees and asked that they complete a Qualtrics survey to help better the UF/IFAS Extension program in their county. Based on their responses, they thoroughly enjoyed the information provided and look forward to attending many other UF/IFAS educational programs.

At their annual Board meeting in April, the Florida Suncoast Chapter of the Golf Course Superintendents’ Association of America (GCSAA) donated two soil testing instruments to the Environmental Horticulture Extension programs in Manatee and Sarasota counties.

The equipment donation, worth over $3,000, was well timed, as the existing equipment needed replacement parts that were no longer supported by the manufacturer. Chapter President Dan Haubein and Vice President Nick Kearns said that they were pleased to support UF/IFAS Extension in promoting environmental horticulture best management practices in southwest Florida.

Many Extension offices offer county residents soil testing services to better guide the implementation of Florida-friendly landscaping principles, including right-plant-right-place and appropriate fertilizer practices.
UF/IFAS CARROT RESEARCH AND EXTENSION TEAM DEVELOPS RELEVANT PROGRAMS
Robert Hochmuth, Vegetable Crops RSA IV, NFREC-Suwannee Valley

Since 2016, a team of UF/IFAS county and state Extension faculty has been working to develop a new research and education program to support the needs of an emerging carrot industry in north Florida and south Georgia. This team was developed with the initial leadership of extension agents Robert Hochmuth, Dan Fenneman, and Keith Wynn; De Broughton has recently joined the team. The agents have reached out to specialists from at least three UF/IFAS departments to initiate research projects at the North Florida Research and Education Center-Suwannee Valley. Research projects include conventional and organic nutrient management being led by Robert Hochmuth, Danielle Treadwell, and Charles Barrett; Alternaria leaf blight management being led by Mathews Paret and Nick Dufault; using drones and associated technology to predict early onset of diseases in carrots being led by Mathews Paret; and nematode management being led by Zane Grabau. The data being collected by this team is also being assimilated by Kevin Athearn to develop crop budget information on carrots.

These research projects will result in updating existing BMP recommendations for carrot production in the deep sandy soils of north Florida, as growers in the Suwannee Valley expand production. The carrot industry currently has about 4,000 acres in Florida, with a few hundred acres of that total being produced in certified organic systems. There has been no BMP research on organic carrot systems in Florida, so this research on organic production is in its infancy.

The industry has moved to or expanded in north Florida because we have the mild winter climate preferred by carrots, an ample supply of high quality water and large tracts of deep sandy land available for production. In addition, moving production from the West Coast to the East Coast brings the product much closer to the huge consumer market in the eastern United States; consequently, growers from California recently established operations in the Suwannee Valley region for producing vegetables, especially root and tuber crops, carrots in particular.

Current UF/IFAS fertilizer recommendations for carrots are based on research completed in the 1990s in Alachua County, as well as research on carrots in similar soils in other areas outside Florida. Current production practices, including organic production, cultivar selection, plant populations, bed and row configurations, irrigation management and fertigation technologies are somewhat different from those used in past research trials. To address the needs of the emerging industry, a UF Carrot Research and Extension team was initiated in 2016. This team has secured grant funding from FDACS Office of Ag Water Policy, USDA-NIFA, local carrot farms and several allied industry representatives. This team has conducted nine experiments in the past two years and held two very successful carrot BMP field days. Nutrient management trials are focused on nitrogen use efficiency and have demonstrated to growers how following the 4-Rs (Right Rate, Right Source, Right Placement, and Right Timing) can help them adopt nitrogen best management practices (BMPs). Adoption of these BMPs has already resulted in growers making initial reductions in nitrogen rates, setting the stage for further adoption in the future. The proper placement of nitrogen on the bed top only results in a reduction of 20-25% due to more precise application of the fertilizer where the plant can utilize all of what is applied. Initial research with controlled-release nitrogen fertilizers may lead to further efficiencies. The research and Extension activities of this UF/IFAS team has brought the growers, allied industry and agencies together to find solutions to the top production challenges facing this emerging industry.
BETTING ON UF/IFAS TO SHINE AT ANREP 2018
Laura Tiu, Sea Grant Marine EA II, Okaloosa & Walton Counties

The 11th Biennial Association of Natural Resource Professionals (ANREP) Conference was held April 29 - May 3 at the Golden Nugget Hotel and Casino in Biloxi, Mississippi. With a theme of “Blues, Bayous, & Beyond,” the conference focused on innovative Extension educational programs focusing on sustainability and stewardship.

This year the odds were in favor of the University of Florida, which has the association’s largest state chapter, FANREP. Alicia Betancourt, Monroe County Extension Director and former FANREP President, is the current Southern Region Representative to ANREP and serves on the executive committee. Carrie Stevenson, a coastal sustainability agent from Escambia County, served on the conference planning and implementation committee. Nine agents from UF/IFAS competed and earned scholarships to attend the conference.

UF/IFAS played to win during the concurrent sessions, with 17 oral presentations, 2 ignite (short oral) presentations and 6 poster presentations. The talks covered a multitude of environmental themes, including climate change, economic development, invasive species, stewardship, water quality, youth programming and much more.

It’s a safe bet that the highlight for many attendees were the mobile workshops at the Audubon Center on the Pascagoula River, the Deer Island Coastal Preserve, DeSoto National Forest, Sandhill Crane National Wildlife Refuge and Gulf Islands National Seashore. Mississippi’s natural resources, including its expansive forest complex, Gulf coastline and fertile soils, are the envy of many. Everyone enjoyed the southern cooking, especially the closing social with a crawfish and shrimp jambalaya dinner at Biloxi’s Maritime & Seafood Industry Museum.

Given that this national conference only occurs every two years, agents will have plenty of time to stack the deck as they prepare for the 2020 meeting in Bend, Oregon.

HITTING THE SWEET SPOT AT THE PALM BEACH SWEET CORN FIESTA
Libbie Johnson, Ag/Agron/Aquaculture EA II, Escambia County | Frank Dowdle, Ag Production EA II, Palm Beach County

On April 29, the 18th Annual Sweet Corn Fiesta took place in the Yesteryear Village at the South Florida Fairgrounds in West Palm Beach. Although Florida is a major producer of vegetables, many consumers have no idea where their food comes from. The Sweet Corn Fiesta was launched almost two decades ago to promote Florida sweet corn and to educate Palm Beach County citizens and other visitors that the freshest sweet corn is grown in western Palm Beach County.

As part of his responsibility for serving on the Citizen Awareness of Food Systems and the Environment Priority Work Group for Initiative One, Frank Dowdle worked with initiative leaders to create an interactive, educational and eye-catching UF/IFAS Extension booth to help showcase sweet corn to more than 4,000 people who attended the event. Frank, along with several other local Palm Beach County agents (Christian Miller, Ron Rice, Matt VanWeelden and Art Kirstein) and Libbie Johnson from Escambia County, developed and managed the booth at the Sweet Corn Fiesta to help increase agriculture awareness concerning the value and importance of sweet corn to the region.

In order to guage the effectiveness of the display and interaction, Frank worked with Dr. Joy Rumble to design a Qualtrics survey to obtain feedback data from booth visitors. The survey was installed on iPads, which were actually quite popular across
Dr. Saqib Mukhtar funded the cost of 250 UF/IFAS Extension-branded “sweet corn stress relievers” to serve as prizes for survey participants. Let’s be honest—people want free swag, and this was an ideal and rather inexpensive way to get people to fill out an electronic survey. A total of 143 completed surveys were submitted. The questions reflected specific measurements outlined for impact development within our Citizen Awareness of Food Systems and the Environment Priority Team.

- 87% of participants agreed or strongly agreed that they had a better appreciation for Florida agriculture after viewing the display.
- 83% were more aware of the value of Florida agriculture.
- 83% increased their knowledge about Florida agriculture.
- 84% were more aware of how sweet corn is grown.
- 83% were more aware of the nutritional benefits of sweet corn.
- 77% recognized that Palm Beach County is the top producer of fresh market sweet corn in the US.
- The survey respondents’ total for monthly, every other week, and weekly Florida-grown food purchases before visiting the booth was 74.9%. After visiting the booth their responses for the three time ranges was 85.3%. This is an indication that 10% will increase their purchases of Florida-grown food.
- 99% of the participants were Floridians.

This is the second time that the Citizen Awareness team has performed on-site Qualtrics surveys during public events. We hope to continue similar survey efforts at future commodity events (in response to agent requests) in order to support data impacts for our statewide initiative plan.
UF/IFAS Extension hosted a successful food systems tour of Flagler County for many interested legislators on March 15. Dr. Wendy Mussoline, agricultural Extension agent for Putnam and Flagler counties, organized the event and partnered with Flagler Farm Bureau, Flagler Cattlemen’s Association and many local farmers to showcase their contribution to Flagler food systems. All of the Flagler County commissioners were in attendance, as well as other important decision makers including State Representative Paul Renner; Drew Meiner, district representative for US Congressman Ron DeSantis; and Community Services Director for Flagler County Joe Mayer. The purpose of the tour was to help leaders take an in-depth look at agriculture and its vital contribution to the economy and nutritional vitality in Flagler County and to the world. The focus of the tour was to identify how our local growers are creating sustainable food systems and enabling environments that promote healthier dietary practices. Here are some of the highlights of the tour:

**Seay Farms**

Matt Seay has diversified his farming operation to maintain economic viability in changing markets that are demanding healthier foods. He has transitioned approximately 50% of his farmland (1,000 acres) from chip potatoes into more nutritious crops, including cauliflower, broccoli, beets, collards, mustards, turnips, kale and cilantro. He faced several challenges in the transition, including erratic weather patterns, cultivar selection and optimization of fertility schemes since each crop has different nutritional requirements. But Matt and his wife (who recently transitioned into a full-time position at the farm) are committed to making a positive economic impact on the Flagler County food system.

**Hollar & Greene**

The fourth generation, family-owned Greene’s Farm showcased their cabbage and helped to educate participants on their transition to organic cabbage production. There are currently 937 planted acres of cabbage; varieties include Rio Grande red cabbage, a Savoy cabbage ‘Clarissa’, and three traditional green cabbages—Bravo, Bronco and Capture. This year they have expanded their organic farming operation to 134 acres to meet the demands of their market. Their red cabbage offers an additional nutritional benefit due to the presence of anthocyanins, which are laden with antioxidants and possess anti-inflammatory and anti-carcinogenic activity, cardiovascular disease reduction and obesity control.

**WP Rawl & Sons**

We all put on our hair nets (and beard nets if necessary) and walked through the foot wash station to meet food safety requirements while visiting the 34,000-square foot, temperature-controlled packing house at WP Rawl & Sons. The smell of cilantro permeated the building, as that was the harvested crop for the morning. Their primary crops include collard greens, kale, turnip greens, mustard greens, herbs and beets. This year they dedicated 183 acres to organic production to support the increasing demand of their customers. Their largest organic buyers are Costco and Whole Foods, while their largest conventional customers are Publix and Wal-Mart. Their goal is to provide immediate chilling of the produce as it comes out of the field to maximize the preservation of the nutrients contained in those leafy green vegetables.

**Clegg Sod and Hay Farm**

David and Wanda Clegg shared the story of how they transitioned from a 100% sod farm into a more diversified sod and forage operation. Since 2009, the Cleggs have converted 165 acres of St. Augustine grass used for residential development into bermudagrass used for hay production. Thanks to the initial help of UF/IFAS faculty, they now produce high quality livestock feed from both Tifton 85 and Jiggs Bermudagrasses. An additional 40 acres were converted into limpograss for both grazing and hay production. They now supply three local feed stores (Pierson Feed, A&S Hardware and Crescent City Feed) with an annual supply of high-quality hay for customers. Neighboring farmers often take notice of the fresh cut hay and are welcome to buy it directly from the farm office.

**Brian Anderson Ranch**

Brian Anderson graciously provided our final stop and luncheon location, staged with 70 heifers and their calves lined up at the edge of the pasture feasting on nutritious, ensiled Jiggs bermudagrass. Brian’s daughter, Alexis, is an active member of FFA, and she shared that the key to a healthy breeding program is providing proper nutrition to pregnant cows so they can provide the appropriate nutrients to their calves. Brian grows his own forage and converts it into haylage by baling and wrapping it in plastic. This promotes fermentation of the material and stores the nutrient quality for longer periods of time. Thus, he can feed his cattle through the winter months when forages are scarce. Brian’s average breeding rate with his predominantly Brangus herd is around 90%, and he attributes this success to high-quality, nutritious
feed. Brian has served a term as the state director for the Flagler County Cattlemen’s Association and has been instrumental in promoting best management practices (BMPs) within the beef cattle industry in Flagler County. The luncheon was held on Brian Ranch and sponsored by Flagler Farm Bureau and Flagler Cattlemen’s Association. All the growers that we visited graciously provided freshly harvested vegetables in advance and the lunch was prepared and catered by Penny Buckles with Country Wedding and Event Planning, Inc.

**Final Words**

UF/IFAS 4-H Agent Amy Hedstrom spoke to the group about the many agricultural opportunities that our youth have through diverse 4-H programs. Gary England, regional specialized Extension agent at the Hastings Agricultural Extension Center, wrapped up the tour by discussing the various ongoing, relevant farm trials at the Hasting farm. He discussed the different trials that involve cultivar selection, varying fertility schemes, and advanced crop production methods for several different alternative crops including broccoli, cauliflower, sweet potatoes, brussels sprouts and even artichokes (to name just a few from this season). He emphasized the beneficial and necessary partnerships with Tri-County legislators to help support the ongoing research at the Hastings farm.

**NEW HIRES**

Justina Dacey, Nat Res/Ag EA II, Nassau County  
Karen Henry, 4-H EA II, Seminole County  
Brianna Swartzfager, 4-H EA I, Marion County  
Zakkiyyah Osuigwe, FCS EA II, Miami-Dade County

**NEW POSITIONS**

Marcus Boston, 4-H EA IV to 4-H CED IV, Leon County  
Kristie Popa, 4-H DeSoto County to 4-H EA II, Charlotte County  
Donald Rainey, Water Resources RSA III, District IV  
Alicia Lamborn, Env Hort EA II to Env Hort CED II, Baker County

**DEPARTURES**

Anne Elise Creamer, 4-H EA I, Clay County  
Deanna Thompson, Livestock EA I, DeSoto County

**RETIREMENTS**

Debra Clements, 4-H EA III, Okeechobee County