EPAF

Extension Professional Associations of Florida

2017 Professional Improvement & Administrative Conference Fort Myers, Florida

August 28th – August 31st, 2017

Presentation of Extension Programs Thirty-first Annual Proceedings











EPSILON SIGMA PHI- Alpha Delta Chapter FLORIDA ASSOCIATION OF COUNTY AGRICULTURAL AGENTS FLORIDA ASSOCIATION OF EXTENSION 4-H AGENTS FLORIDA EXTENSION ASSOCIATION OF FAMILY AND CONSUMER SCIENCES FLORIDA ASSOCIATION OF NATURAL RESOURCE EXTENSION PROFESSIONALS

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UF IFAS Extension UNIVERSITY of FLORIDA

Extension Professional Associations of Florida Set Your Place at Florida's Table: Food, Water, Youth and Families

Sanibel Harbour Marriott Resort and Spa Fort Myers, Florida

31st PRESENTATION OF ABSTRACTS

Oral Abstract presentation session:

Tuesday August 29, 2017 9:15 am – 5:30 pm

EPAF Abstract Committee

- Melanie Thomas UF/IFAS Extension Duval County
- Wendy Wilber UF/IFAS Center for Landscape Conservation and Ecology
- Joe Sewards UF/IFAS Extension Volusia County

Food and Finance Hosted by FLORIDA EXTENSION ASSOCIATION OF FAMILY AND CONSUMER SCIENCES - FEAFCS

Agriculture and Horticulture Hosted by FLORIDA ASSOCIATION OF COUNTY AGRICULTURE AGENTS - FACAA

James DeValerioIsland

Youth Programming Hosted by FLORIDA ASSOCIATION OF EXTENSION 4-H AGENTS - FAE4-HA Crystal McCazzio......Caloosa B

Extension Ecdaership hosted by Li Sicon Sicon Arthin LSi	Extension Leadership H	osted by EPSILON SIGMA PHI - ESP
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Adrian HunsbergerGardenia A/B

Natural Resources and Outreach Hosted by FLORIDA ASSOCIATION OF NATURAL RESOURCES EXTENSION PROFESSIONALS - FANREP Nicole Pinson......Camellia A/B

The EPAF Board offers special thanks to:

- The chairs and members of ESP, FACAA, FAE4-HA, FEAFCS and FANREP abstract committees who have the honorable task of reviewing and selecting the abstracts for this meeting.
- All Extension Faculty who submitted abstracts
- UF/IFAS Administration for their continued support of this EPAF Conference

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FLOOR PLANS



2017 EPAF Abstract Schedule

Tuesday 8/29	Agriculture and Horticulture	Natural Resources and Outreach	Youth Programming	Food & Finance	Extension Leadership
Room	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
9:15-9:30	Implementing best management practices (BMPs) in corn production to protect water quality P.Troy* and J. Love UF/IFAS Extension Suwannee Valley Agricultural Extension Center	Expanding the Horseshoe Crab Citizen Science Program to your County S. Barry*, UF/IFAS Extension Nature Coast Biological Station and Florida Sea Grant L. Kolluri*, UF/IFAS Extension Nassau County	Integrating Social Media as an Educational Tool in 4-H Programming A. Granger*, UF/IFAS Extension Jackson County, S. Warden, UF/IFAS Extension Jackson County 4-H Volunteer	Building a Healthier School Sports Environment with Nutrition Education and Expanded Concession Options A. Mullins*, UF/IFAS Extension Leon County L. Osgood*, UF/IFAS Extension Gadsden County	Statewide Public Health Education Collaboration: Zika Challenge J. McConnell*, UF/IFAS Extension Bay County; K. Gioeli, R. Connelly, S. Strickland, J. Davis, B. Hall-Scharf, S. Dunning, D. Demorest, M. Hunter, W. Lester, E. Skvarch, S. Scalera, J. Walter
9:35-9:50	Potential Value of Smut Grass for Beef Cattle A.Stam* Livestock Extension Agent, Seminole Tribe of Florida, L. Wiggins* Regional Livestock Extension Agent II, B.Sellars Extension Weed Specialist, A. Johns Seminole Tribe of Florida, J. Dias Graduate Research Assistant	Real-time Data from Real-Life Anglers: Using Cooperative Research to Assess Survival of Reef Fishes after Recreational Catch and Release A.B. Collins; Multi- county Agent, UF/IFAS Extension Manatee, Hillsborough, and Sarasota Counties	Buggin' Out with 4-H S. Spann*, UF/IFAS Extension Baker County; A. Lamborn*, UF/IFAS Extension Baker County	Colorful & Flavorful Eating: Gardening Goodness for Smart Nutrition A. Mullins* and M. Jameson*, UF/IFAS Extension Leon County	The Extension Education Model in Haiti: Teaching the Next Generation of Agri- Business Leaders L. Harrison, UF/IFAS Extension Wakulla County
9:55-10:10	Digging into the Potential of Sweet Potato Systems in the Tri-County Area Agricultural Area of Northeast Florida B.C. Wells*, UF/IFAS Extension St. Johns County; G. Liu, UF/IFAS Horticultural Sciences Department; D. Dinkins, UF/IFAS Extension Multi-County; G.K. England, UF/IFAS Hastings Agricultural Extension Center; M. Warren, UF/IFAS Extension Flagler and Putnam County	Expanding the Dark Skies Initiative Along Sea Turtle Nesting Beaches in the Florida Panhandle E. Lovestrand*, UF/IFAS Extension Franklin County S. Jackson*, UF/IFAS Extension Bay County R. Bodrey*, UF/IFAS Extension Gulf County	4th H for Health Challenge A. Stewart, UF/IFAS Extension Marion County	A Healthy Table Cooking School Arick, M., UF/IFAS Extension Jackson County	From the Farm to the Table: A Columbia County First Grade Agriculture Awareness Program C. Higgins*, D. Demorest*, M. Bauer*, C. Musgrove*, A. Tomlinson*, J. Chasteen, and C. Jaeger, UF/IFAS Extension Columbia County

Tuesday 8/29	Agriculture and Horticulture	Natural Resources and Outreach	Youth Programming	Food & Finance	Extension Leadership
Room	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
10:15-10:30	Northwest Florida Resource Gardening Guide a Valuable Tool for Newcomers Williams, L.L., UF/IFAS Extension Okaloosa County	Going Coastal Spring Break Camp: Teamwork Divides the Task and Multiplies Success L. Carnahan, UF/IFAS Extension Pinellas County	4-H Officer Training Retreat Draper, A., UF/IFAS Extension Broward County	Cultivating Creativity in Nutrition through Culinary Programs L. Wiggins* and A. Tharpe, UF/IFAS Extension Taylor County	Backyard Chickens Workshops: South Central District Extension Team Program M.E. Henry*, UF/IFAS Extension Polk County; Francisco P Rivera Melendez*, UF/IFAS Extension Hillsborough County; R. Kluson*, UF/IFAS Extension Sarasota County; F. Beckford*, UF/IFAS Extension Lee County; V. Bielema, UF/IFAS Extension Collier County
10:35-10:50	Bite Back – A Mosquito Reduction Education Program M. Tancig, UF/IFAS Extension Leon County	Regional Florida Artificial Reef Workshops - Planning for People and Pisces A.B. Collins*, UF/IFAS Extenion Manatee, Hillsborough, and Sarasoto Counties, H. Abeels, J. Hazell, L.S. Jackson, L. Tiu, and C. Verlinde	Using a Traditional Horse Show Format to Deliver Educational Opportunities to 4-H Members S, Conner*, UF/IFAS Extension Clay County	Educating Food Entrepreneurs S. Ellis*, UF/IFAS Extension Citrus County	Serving Our Stakeholders D. Leonard*, UF/IFAS Extension Walton County, M. Derrick*, UF/IFAS Extension Santa Rosa County, E. Bolles, UF/IFAS Extension Escambia County
10:55-11:10	School Gardens Field Food Safety: Teaching Risk Management Skills N. Demorest, UF/IFAS Extension Columbia County	Derelict Crab Traps and Ghost Fishing in Taylor County V. Blanco, UF/IFAS Extension Taylor County	Growing Awareness with Farm Safety Day J. Brooks* UF/IFAS Extension Walton County, H. Kent* Northwest District Regional Specialized Agent	Master Gardeners Grow Healthy EFNEP Families A. Hinkle* and E. Bolles, UF/IFAS Extension Escambia County	Lessons Learned from Economic Impact Studies of Urban Farmers' Markets R. Madhosingh-Hector*, UF/IFAS Extension Pinellas County
11:15-11:30	Playing with Fire – Teaching Grilling Techniques through Experiential Learning M.D. Mauldin*, J.P. Dillard*, UF/IFAS Extension Washington County, B.J. Estevez , UF/IFAS Extension Escambia County	Recent Citrus Greening (HLB) Discovery in the Florida Panhandle E. Lovestrand*, UF/IFAS Extension Franklin County L. Harrison*, UF/IFAS Extension Wakulla County R. Bodrey*, UF/IFAS Extension Gulf County	Utilizing Youth Adult Partnerships to Engage Teen Volunteers H. Kent, Regional Specialized 4-H Agent, NW; J. Lilly, Jefferson County*; Y. Goode, Gadsden County; M. Boston, Leon County; M. Boston, Leon County; M. Brinkley, Liberty County; W. Cherry, Calhoun County; M. Taylor, Gulf County; A. Granger, Jackson County; P. Davis, Bay County; J. Dillard, Washington County; N. Crawson, Holmes County; J. Brooks, Walton County*; P. Caskey, Santa Rosa County*; Grace Carter, State 4-H Leadership/Citizenship Coordinator	Exploring Local Cuisine From The Roots Up: A Food Systems Extension Program In Lake County, FL. M.Mann*, B. Moffis, J.Popenoe, L.Singleton, M.Wilchcombe*, UF/IFAS Extension Lake County	Reconnecting Urban Audiences with 4-H A. Bowers, UF/IFAS Extension Pinellas County

Tuesday 8/29	Agriculture and	Natural Resources and	Youth Programming	Food & Finance	Extension Leadership
Room	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
11:35-11:50	Northwest District Regionalized Pesticide Training Series Model K. Waters*UF/IFAS Extension Holmes County, E. Carter UF/IFAS Extension Jackson County, M. Mauldin UF/IFAS Extension Washington County, M. Orwat UF/IFAS Extension Washington County, Judy Biss UF/IFAS Extension Calhoun County, Shepard Eubanks UF/IFAS Extension Gadsden County, Mark Tancig UF/IFAS Extension Leon County, Les Harrison UF/IFAS Extension Wakulla County, and Jed Dillard UF/IFAS Extension Jefferson County	Developing a Statewide Survey to Measure Beekeeping Program Impacts M.E. Henry*, UF/IFAS Extension Polk County; J. Sullivan*, UF/IFAS Extension Osceola County; M. Bammer, UF/IFAS Extension Honeybee Lab; J. Ellis, UF/IFAS Extension Entomology Department; J. Diaz, UF/IFAS Department of Agricultural Education and Communication	What happens after the 4-H Embryology Program? Why not Rent-a-Chick? T.Darress* UF/IFAS Extension Martin County and A. Lazzari* UF/IFAS Extension Brevard County	Panhandle Produce Pointers: A Multi- County, Interdisciplinary Effort to Promote Healthful Eating G. Hinton*, UF/IFAS Extension Santa Rosa County; P. Allen*, UF/IFAS Extension Okaloosa County; J. Breslawski*, UF/IFAS Extension Okaloosa County; J. Corbus*, UF/IFAS Extension Washington County; D. Lee*, UF/IFAS Extension Escambia County; M. Moore*, UF/IFAS Extension Bay County	National Invasive Species Awareness Week campaign in the Northwest Extension District Bearden, J.G., UF/IFAS Extension Okaloosa County; Jackson, L.S., UF/IFAS Extension Bay County; O'Connor, L.R., UF/IFAS Extension Escambia County
12:00-2:00 Friends of Extension and Retirees Luncheon					
2:15-2:30	Preparing Youth for Green Industry Employment M. Glenn*and M. Atkinson*, UF/IFAS Extension Manatee County	Training Public School Science Teachers to Teach Water Y. Zhuang, UF/IFAS Extension Marion County	Mindful Living M. L. Brinkley, UF/IFAS Extension Liberty County	Gardening and Cooking with Food Systems E.P. Fletcher* and W. Lynch*, UF/IFAS Extension Putnam County	Are You Aware of The Update Edition of the Florida Grades and Standards for Nursery Plants? H. Mayer *, UF/IFAS Extension Miami-Dade County and M. Orfanedes*, UF/IFAS Extension Broward County
2:35-2:50	Invasive Weed Education Program for Cogongrass D.B. Holmes* and M.T. Bailey*, UF/IFAS Extension Marion County	Multi-faceted Approach to Invasive Species Awareness and Management J. McConnell* and L.S. Jackson*, UF/IFAS Extension Bay County	Achieving Belonging and Inclusion in Diverse 4-H Audiences A. Granger*, UF/IFAS Extension Jackson County; B. V. Bennett*, UF/IFAS Extension Madison County, N. Baltzell*, UF/IFAS State Camping Program Coordinator	Energy Efficiency in a Backpack! M. Thomas*, UF/IFAS Extension Duval County	Multi-State Competency Assessment of New County Extension Directors M. Benge*, UF/IFAS Department of Agricultural Education & Communication, C. Sanders*, UF/IFAS Extension Alachua County R. Sapp, UGA Extension

Tuesday	Agriculture and	Natural Resources and	Youth Programming	Food & Finance	Extension Leadership
8/29	Horticulture	Outreach			a 1 1 1/2
Room	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
2:55-3:10	Forage Workers Tour and In-Service Training J.M.B. Vendramini*, UF/IFAS Range Cattle Research and Education Center; C.L. Kirby*, UF/IFAS Extension Manatee County; M.L.A. Silveira, UF/IFAS Range Cattle Research and Education Center; P. Moriel, UF/IFAS Range Cattle Research and Education Center; B.C. Stice, UF/IFAS Extension Polk County; L.F. Wiggins, UF/IFAS Extension Hendry County; B. Sellers, UF/IFAS Range Cattle Research and Education Center; L.D. Butler, UF/IFAS Extension Okeechobee County; C.C. Larson, UF/IFAS Extension Okeechobee County; C.G. Prevatt, UF/IFAS Range Cattle Research and Education Center; D.W. Thompson, UF/IFAS Extension Desoto County; A.M. Stam, UF/IFAS Extension Seminole Tribe; J. Bosquez-Mendez, UF/IFAS Extension Hardee County	Right Plant, Right Place by Habitat J.V. Morse, UF/IFAS Extension Pinellas County	Gifford Youth Achievement Center Garden Club After School Program D.C. Cole*, L.N. Munroe and C. Kelly-Begazo, UF/IFAS Extension Indian River County	Shopping Matters A. Hinkle* and D.C. Lee, UF/IFAS Extension Escambia County	Developing a Pathway Logic Model to Explicitly Link Program Activities and Outcomes B. Burbaugh, UF/IFAS Extension Clay County
3:15-3:30	Backyard Poultry Basics N. Simmons*, UF/IFAS Extension Escambia County, D. Lee, UF/IFAS Extension Escambia County, A. Schortinghouse, UF/IFAS Extension Escambia County, G. Butcher, University of Florida College of Veterinary Medicine	Recognizing Volunteers through Their Peers D. DeBusk*, UF/IFAS Extension Alachua County	Revitalizing 4-H in an Afterschool Environment R. Madhosingh-Hector*, A. Bowers*, and T. Ackerman, UF/IFAS Extension Pinellas County	Financial Mentoring During Life Changes: the Road to Financial Health Partnership L.A. Hamilton, UF/IFAS Extension Volusia County	Sharing Successes and Impacts with Stakeholders Zamojski, K.*, Jameson, M.*, Mullins, A., Tancig, M., Prevatt, S., Hylton, T., Copeland, H., Boston, M., UF/IFAS Extension Leon County

Tuesday	Agriculture and	Natural Resources and	Youth Programming	Food & Finance	Extension Leadership
800m	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
3:35-3:50	Gulf Coast Small Farms: Maximizing Production & Marketing Practices Thaxton, B.R.*, UF/IFAS Extension Santa Rosa; Unruh, J.B., UF/IFAS Extension WFREC; Johnson, L.*, UF/IFAS Extension Escambia; Walmer, C., Farm to School/Family Nutrition Program; Lollar, M., UF/IFAS Extension Jackson; Bearden, J., UF/IFAS Extension Valton; Orwat, M., UF/IFAS Extension Walton; Orwat, M., UF/IFAS Extension Washington; and McConnell, J., UF/IFAS Extension Bay	Garden Goodies: Sassy Cows 4-H Group Learn About Fodder (Garden Goodies Program) L. Barber*, UF/IFAS Extension Hillsborough County, B. Broaddus*, UF/IFAS Extension Hillsborough County, N. Pinson, UF/IFAS Extension Hillsborough County, S. Haddock, UF/IFAS Extension Hillsborough County, J. Lepore, UF/IFAS Extension Hillsborough County, A. Whidden, UF/IFAS Extension Hillsborough County	Nassau County COOP- eration Kelsey Irvine, UF/IFAS Extension Nassau County	Show Me the Money: Introducing Youth to Financial Literacy at Four Extended Day Programs L. Spence*, K. Condurso*, UF/IFAS Extension Marion County, C. Tafelski	Teaching Agents Technology Tools to Address Emerging Issues Zamojski, K.*, Jameson, M.*, McConnell, J., Bearden, J., Mullins, A., Tancig, M., Osgood, L., Mayo, D., Harrison, G., Davis, P., Jackson, L.S., Vergot, P., Northwest District
3:55-4:10	Mycotoxins in South Florida Pastures A. Stam*, Seminole Tribe of Florida, L. Wiggins* Multi-County Agent, P.N. Gott Biomin America, Inc., A. Johns Seminole Tribe of Florida, B. Bell Biomin America, Inc., B.G. Miller Biomin America, Inc.	Creating Connection through School and Community Gardens S. Webb*, UF/IFAS Extension and Bok Tower Gardens Partnership; E. Elsberry*, UF/IFAS Extension and Bok Tower Gardens Partnership	Poké Maps & Apps: Using Technology as a Teaching Tool A. Stewart, UF/IFAS Extension Marion County	LifeSmarts Consumer Choices Contest V. Spero-Swingle*, UF/IFAS Extension South District, B. Alfonso*, UF/IFAS Extension Seminole County, J. Corbus*, UF/IFAS Extension Washington/Holmes County	Manatee County Food Deserts Harvest Away Hickey, L., UF/IFAS Extension Manatee County
4:10-4:30					
4:35-4:50	Introducing Hydroponics: Just Set it and Forget it H.F. Wooten, UF/IFAS Extension Seminole County	Sprout Out: Growing a School and Community Garden Association E. Elsberry*, UF/IFAS Extension and Bok Tower Gardens Partnership; S. Webb*, UF/IFAS Extension and Bok Tower Gardens Partnership	Science and Technology Institute for Youth Professionals Draper, A.*, UF/IFAS Extension Broward County; Guay, N.*, UF/IFAS Extension Palm Beach County	Eco-Nomic Living Expo: An Interdisciplinary Financial Wellness Program J. Breslawski*, UF/IFAS Extension Okaloosa and Walton Counties	Deliberative Forums – An Opportunity to Discuss Complex Sustainability Issues R. Madhosingh-Hector*, L. Milligan*, UF/IFAS Extension Pinellas County, and M.J. Kipp- Searcy*, UF/Program for Resource Efficient Communities
4:55-5:10	An Assessment of Fungicide Programs and Disease Response in Two Peanut Cultivars E.T. Carter*, UF/IFAS Extension Jackson County; B.L. Tillman, UF/IFAS North Florida Research and Education Center; M.W. Gomillion, North Florida Research and Education Center; R.L. Barocco, UF/IFAS Plant Pathology Department; N.S. Dufault, UF/IFAS Plant Pathology Department	Building a Hobby-Scale Aquaponics Demonstration System L. Tiu*, UF/IFAS Extension Walton & Okaloosa Counties; E. Anderson, UF/IFAS Extension Walton County; and D. Leonard, UF/IFAS Extension Walton County	Achieving Mastery in 4- H Animal Science Programs A. Granger*, UF/IFAS Extension Jackson County; C. McCazzio*, UF/IFAS Extension Putnam County, S. Michael, UF/IFAS Regional Specialized 4-H Youth Agent II	Using Virtual Communication Tools to Enhance and Expand Financial Education Programming C. Musgrove*, UF/IFAS Extension Columbia County, H. Copeland*, UF/IFAS Extension Leon County, H. Janney*, UF/IFAS Extension Hamilton County	Integrating Graduate Students into County Extension Programing Efforts K. Waters*, UF/IFAS Holmes County Extension, N. DiLorenzo, North Florida Research and Education Center, and G.C. Lamb, Texas A&M University

Tuesday 8/29	Agriculture and Horticulture	Natural Resources and Outreach	Youth Programming	Food & Finance	Extension Leadership
Room	Island	Camellia A/B	Caloosa B	Caloosa A	Gardenia A/B
5:15-5:30	Cold Tolerant Citrus Production for N. Florida and the Southern Coastal Plain C. Olson*, UF/IFAS Extension Taylor County; D. Fenneman*, UF/IFAS Extension Madison County; P. Andersen, NFREC; L. Davis, SVEC; K. Athearn, SVEC; M. Lollar, UF/IFAS Extension Jackson County; J. Price, Lowndes Co (UGA)	Hillsborough, Pasco and Pinellas Counties Community Water Wise Award Program L. Barber*, UF/IFAS Extension Hillsborough County, W. Elmore*, UF/IFAS Extension Pasco County, J. Moll, UF/IFAS Extension Pasco County, B. Niemann, UF/IFAS Extension Pinellas County	Teaching Life Skills with Peanut Butter and Jelly B. Estevez*, UF/IFAS Extension Escambia County; S. Spann*, UF/IFAS Extension Baker County; H. Janney, UF/IFAS Extension Hamilton County; B.V. Bennett, UF/IFAS Extension Madison County; K. Allen, UF/IFAS Extension Suwannee County; D. Fenneman, UF/IFAS Extension Madison County; K. MCCallister UF/IFAS Extension Union County	Osceola County Fair Food Booth Food Safety Training Shows Continued Success G. Murza* and J. Sprain, UF/IFAS Extension Osceola County	Developing a County- centered Training Program Based on Food Entrepreneurship Core Curriculum N. Parks*, UF/IFAS Extension Duval County S. Ahn*, Food Science and Human Nutrition S. Deary*, UF/IFAS Extension Bradford County

Food and Finance Caloosa A Gabriela Murza, FEAFCS Abstract Chair Tuesday, August 29, 2017 9:15 am - 5:30 pm

Time Tuesday	Speakers	Abstract	
9:10-9:15 am	Gabriela Murza	Introductions & Protocol	
9:15-9:30 am	A. Mullins, L. Osgood	Building a Healthier School Sports	
		Environment with Nutrition	
		Education and Expanded	
		Concession Options	
9:35-9:50 am	A. Mullins, M. Jameson	Colorful & Flavorful Eating:	
		Gardening Goodness for Smart	
		Nutrition	
9:55-10:10 am	M. Arick	A Healthy Table Cooking School	
10:15-10:30 am	L. Wiggins	Cultivating Creativity in Nutrition	
		through Culinary Programs	
10:35-10:50 am	S. Ellis	Educating Food Entrepreneurs	
10:55-11:10 am	A. Hinkle	Master Gardeners Grow Healthy	
		EFNEP Families	
11:15-11:30 am	M. Mann, M. Wilchcombe	Exploring Local Cuisine From The	
		Roots Up: A Food Systems	
		Extension Program In Lake County,	
		FL.	
11:35-11:50 am	G. Hinton, P. Allen, J.	Panhandle Produce Pointers: A	
	Breslawski, J. Corbus, D. Lee,	Multi-County, Interdisciplinary	
	M. Moore	Effort to Promote Healthful Eating	
Friends of Extension and Retirees Luncheon 12:00 – 2:00 pm			
2:15-2:30 pm	E. "P." Fletcher, W. Lynch	Gardening and Cooking with Food	
		Systems	
2:35-2:50 pm	M. Thomas	Energy Efficiency in a Backpack!	
2:55-3:10 pm	A. Hinkle	Shopping Matters	
3:15-3:30 pm	L.A. Hamilton	Financial Mentoring During Life	
		Changes: the Road to Financial	
		Health Partnership	
3:35-3:50 pm	L. Spence, K. Condurso	Show Me the Money: Introducing	
		Youth to Financial Literacy at Four	
		Extended Day Programs	
3:55-4:10 pm	V. Spero-Swingle, B. Alfonso, J.	LifeSmarts Consumer Choices	
	Corbus		
4:10-4:30	Break		

4:35-4:50 pm	J. Breslawski	Eco-Nomic Living Expo: An Interdisciplinary Financial Wellness Program
4:55-5:10 pm	C. Musgrove, H. Copeland, H. Janney	Using Virtual Communication Tools to Enhance and Expand Financial Education Programming
5:15-5:30 pm	G. Murza	Osceola County Fair Food Booth Food Safety Training Shows Continued Success

*On-site room changes of presentation locations may occur. Look for posted announcements of any changes.

Building a Healthier School Sports Environment with Nutrition Education and Expanded Concession Options

A. Mullins*, Leon County Extension; L. Osgood*, Gadsden County Extension

Objectives: Encourage a healthier school environment supported through sport-specific nutrition education for high school soccer athletes, and healthier concession stand options for students and families. Methods: Programming included a coach/parent meeting, team/parent pre-season presentation, and multiple team meetings. Content included meal and snack planning strategies, food demo, making healthier choices when eating out, not skipping meals, and food/ hydration recommendations for before, during, and after exercise. Concession stand improvements offered access to food items during home games that were lower in fat, sugar, sodium, and calories than traditional concession items. Healthy messaging was displayed on posters at several areas surrounding the concession stand during home soccer matches. Pre and post program data was collected. Results: 87% of athletes reported making at least one positive change in their eating habits; 68% reported skipping regular meals less often; 84% reported seeing a positive improvement in their sports performance; 84% believe that their physical energy level has improved during the season. 84% of parents reported that they or a family member purchased at least one "healthier" item during the season; 68% reported that at least one person in their household has made healthier choices because of the program. Conclusions: Student athletes are traditionally lacking nutritional guidance that could benefit their sports and academic performances. Positive behavior changes resulted from a multi-faceted approach that includes direct education, professional and collegiate sports role model testimony, buy-in and support from coaches, parents, administrators, and the community, peer support, and availability of healthier concession stand options.

Colorful & Flavorful Eating: Gardening Goodness for Smart Nutrition

A. Mullins*, Family & Consumer Sciences, Leon County Extension; M. Jameson*, Sustainable Agriculture and Community Food Systems, Leon County Extension

Many chronic diseases are often preventable and directly related to food choices and lifestyle factors. The goal of the Colorful & Flavorful Eating: Gardening Goodness program was to educate participants on the connection between chronic disease prevention/management and diet composition, particularly with reference to variety and quantity of fruit/vegetable/herb consumption. Objectives: Participants' were able to acquire the awareness, knowledge, and skills necessary to improve dietary behaviors such as increasing volume and variety of produce, replacing excess sodium in foods with herbs and salt-free seasonings, preparing healthy foods, and growing produce in a container garden. Methods: This program was developed in recognition of National Nutrition Month® and delivered during a one-time presentation using numerous teaching methods, including slide presentation, table top display, educational handouts, comprehensive educational booklet with recipes, food demonstration with tasting (fresh salsa), and container gardening demonstration. Programming reached 351 adults, at 12 different community venues. Results: Participants completed a post-program evaluation. Eighty-eight percent reported that they plan to increase variety and the amount of fruits and vegetables in their diet; 73% plan to not use additional salt on their food; 83% plan to use herbs and seasonings in place of salt on their food; and 63% plan to grow some of their own fruits, vegetables, or herbs. Conclusions: Programming that includes practical and hands-on education with healthy food and gardening demonstrations can influence intent towards making positive behavior changes and have a positive impact on nutrition-related chronic disease prevention.

A Healthy Table Cooking School

Arick, M., Jackson County

The current adult obesity rate is 33% and the current obesity rate for preschoolers is 11.9% in Jackson County. In the last 25 years, research has shown that daily caloric intake increases from 18% to 32% when food is consumed away from home. There is a need for adult and child food/nutrition education to demonstrate that low cost, nutrient dense meals and snacks are accessible options and can improve health outcomes. The millennial trend of quick family meals and locally sourced foods lends to the format of this program. Objectives: Provide relevant, valuable information and demonstrate high quality, affordable meals can be prepared at home in 30 minutes, while highlighting local food sources and nutritionally dense foods. Methods: Partnerships with county high school culinary arts programs incorporating student participation in event planning, recipe/cookbook development, event meal planning, preparation and serving, and finally, a select number of students providing live cooking demonstrations. Additionally, local farms were the first choice of food products when possible to promote local accessibility. Results: Two annual cooking schools have occurred reaching 246 participants. The one-year follow up survey of first year participants indicated 61% had tried a recipe from the cookbook, 39% had prepared more meals at home, and 28% had incorporated healthier substitutes/foods. Conclusions: This multifaceted healthy cooking school provides a fun, entertaining and educational environment for the participants as well as an enhanced educational experience for the culinary arts students providing the program.

Cultivating Creativity in Nutrition through Culinary Programs

L. Wiggins*, Taylor County; A. Tharpe, Taylor County

Culinary nutrition is the practicality needed to make a difference in our nation's health. With rates of obesity rising and some of the top causes of American deaths being related to poor diet, the nation needs nutrition intervention that stretches across many of the barriers that prevent healthy eating practices. However, making nutrition principles easily accessible is useless without also making them applicable. Therefore, hands-on culinary nutrition outreach programs focused on producing sustainable healthy eating behavior through culinary confidence and nutrition alertness are a successful approach to begin the restoration of our nation's health. Objectives: Provide a hands-on approach to teach youth how to prepare and cook healthy foods and the importance of eating a healthy diet through Culinary and Nutrition day camps and after-school classes. Methods: Youth receive lessons on food preparation, nutrition, and food safety. Youth have lab sessions where they utilize the skills they learn to make healthy foods. Results: 100% of the Culinary class participants demonstrated an increase in nutrition knowledge and food preparation skills. 66% of participants reported they were willing to try new foods since they were preparing them; 70% reported an increase in fruit consumption and a 45% increase in vegetable consumption. Ten day camps and ten after-school classes have occurred reaching 502 participants. Conclusions: Applying nutrition principles to food preparation transforms learning into a delicious, nutritious experience by allowing people to actually see, feel, and taste what nutrition is all about and helps teach healthy habits that youth can build a solid foundation on.

Educating Food Entrepreneurs

S. Ellis*, Citrus County Extension

Economic conditions have led to increased problems with unemployment and underemployment. Counties hit hard by the recession are having difficulties recovering. Assisting food entrepreneurs is one way to help communities recover. Objectives: Interest in starting a cottage food business has increased among those looking to start a food business with minimum investment. Cottage food operations improve the local economy and increase access to foods in the community. However, there is much confusion over what can be made and how it can be marketed and sold. Cottage food businesses will increase their knowledge and ability to make safe allowed products, marketing, and sales while meeting state requirements. Methods: The Extension agent partnered with the Horticulture agent and IFAS Communications to provide a full day of educational programming on topics that included: understanding the regulatory requirements, kitchen safety for cottage food operations, marketing, and grow your own ingredients. Results: Due to overwhelming demand we held 2 workshops with 53 participants attending. Forty-seven (89%) increased their knowledge and understanding of cottage food regulatory requirements. Forty-five (84%) increased their knowledge and ability to operate a cottage food industry. Forty-two (80%) increased their knowledge and ability on kitchen safety for cottage food operations. Conclusions: There is a growing demand for educational programs that assist community members with supplementing or increasing income. This workshop assisted community members start a food based business, make safe products, while meeting regulatory requirements.

Master Gardeners Grow Healthy EFNEP Families

A. Hinkle*, E. Bolles, UF/IFAS Extension Escambia County

UF/IFAS Extension Escambia County has addressed the increased interest in home fruit and vegetable gardening with community programs and demonstration gardens. Because the edible gardening program does not consistently produce enough for local food banks, an alternative outlet was needed to deliver the harvest to the community. Objectives: Educate volunteers and local community members about fruit and vegetable gardening and deliver harvests to in-need communities. Methods: The Horticulture and EFNEP programs fully embraced the cooperative spirit between program areas to extend the reach of the edible gardening program to those in need. Horticulture faculty and Master Gardeners coordinated with EFNEP (Expanded Food and Nutrition Education Program) staff who routinely teach nutrition to limited-resource families. EFNEP educators were supplied edibles through the year to use and distribute in a variety of community programs. EFNEP has been very creative in utilizing the edibles in programming at community centers, faith-based agencies, schools, etc. EFNEP faculty describe the nutrients of the produce, prepare dishes for participants to introduce new tastes and healthy meal choices, and let the participants "shop" for what they want after the nutrition lesson. Results: Edible gardens have benefitted community members who enjoy gardening and has reached over 200 EFNEP participants. Conclusions: This cooperative effort has allowed EFNEP to introduce a variety of healthy, fresh foods to audiences that may not otherwise have access. The Escambia County Master Gardeners more fully recognize Extension's reach in the community and are more invested in the edible gardening program.

Exploring Local Cuisine From The Roots Up: A Food Systems Extension Program In Lake County, FL. M.Mann*, B. Moffis, J.Popenoe, L.Singleton, M.Wilchcombe*, Lake County

Situation: A food system is a term used to refer to the processes and infrastructure involved in feeding a community. Systems can include growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food products. Consumers play an important role in food systems, but are often ignorant about issues related to production, processing, marketing, food safety, and even healthy food consumption. Objectives: 1. Participants will gain knowledge about local food systems in Lake County. 2. Participants will understand their role within a food system. 3. Participants will adopt practices which will positivity effect their health and wealth. Methods: The program is a ten-part series running from January to December of 2017. Each session will feature a different locally produced food item. The agriculture agent will discuss production and marketing. An emphasis is placed on dispelling myths related to production and providing a clarification of marketing terms. The Family and Consumer Sciences agent will discuss food safety and healthful nutritional practices. Commodities to be explored include eggs, vegetables, citrus, blueberries, and beef. Results: As of the writing of this abstract, three sessions have been completed. Classes have been well attended and survey data reflects knowledge gains related to production, marketing, consumption, and disposal of food. Data collection is ongoing with more robust and quantifiable results expected by the close of the year. Conclusion: Agents involved hope to package the program for adaptation and use by other counties in Florida. Programs like Roots Up can help to bridge the gap between production agriculture and consumers.

Panhandle Produce Pointers: A Multi-County, Interdisciplinary Effort to Promote Healthful Eating

G. Hinton*, Santa Rosa; P. Allen*, Okaloosa; J. Breslawski*, Okaloosa; J. Corbus*, Washington; D. Lee*, Escambia; M. Moore*, Bay

Objectives: 1) 50% of 60 survey respondents will indicate increased knowledge of nutrition, preparation and preservation of local crops. 2) Farmers will respond to increased demand for local produce by expanding sales to new markets.

Methods: Agriculture, Horticulture and Family & Consumer Science (FCS) faculty from 7 counties secured a grant through Florida Department of Agriculture/Consumer Services. The interdisciplinary team promoted the production, promotion, purchase and use of locally grown produce by farmers, consumers, restaurants, and outlets. FCS faculty developed 12 downloadable fact sheets and signs highlighting the availability, use, nutritional value and proper storage of local produce. Fact sheets are distributed at nutrition classes and events. Signs are displayed at farmers' markets, extension offices and small farms. In 2016 the team held a series of events for chefs and buyers to provide nutrition education, aid in networking and encourage them to purchase food from local producers. The team utilized social media to promote a project website – http://www.PanhandleProducePointers.com. Results: 1) Since August 2016, 619 web hits have been recorded on the project web site with 63 survey responses. 85% (54/63) of respondents indicated increased knowledge of nutrition, preparation and preservation of local crops due to Panhandle Produce Pointers. 80% (51/63) plan to use the information learned. 2) Thirty-two producers have taken steps to sell crops at new markets.

Conclusions: Collaboration across disciplines and counties creates a productive synergy, offering the tools to develop multimedia materials to educate about nutrition and local produce and to enhance marketing of locally grown crops.

Gardening and Cooking with Food Systems

E. "P." Fletcher*, W. Lynch*, UF/IFAS Putnam County Extension

Food Systems is a program area where all agents can find a common core. It seemed an obvious application would be to show clients how to grow food at home, and learn how to safely process and consume it. While the agents were already applying these subjects in separate workshops, we found that combining our efforts lead to a more interactive program. Objectives: (1) Clientele would learn how to apply edible landscaping at home, and (2) clientele would learn about health benefits of fresh produce and how to cook and/or preserve it. Methods: Presentations in the form of PowerPoint, handson activities and field tours were given at the county extension office and Hastings (HAEC). Five programs with 82 participants included topics of citrus, herbs, blueberries and olives. The agents discussed how to select appropriate varieties for their region, cultural care and IPM of the food crops. We then provided food safety methods, nutritional benefits and healthy recipes. Results: Based on evaluations (n=37*), 76% had a knowledge gain of variety selection, 45% tested their soil pH and/or nutrients, and 85% planted more edibles in their landscape. 90% of clients were able to successfully process the food and/or replicate the recipes in the workshop. Conclusions: This strategy was successful for recruiting clients that would normally not participate in one program area or another, and many came back for more workshops. The plethora of activities justified as increase in program fees, which assisted with revenue enhancement. Food Systems is a convenient approach for interdisciplinary programing.

*Survey results are continuing to come in so our "n" value will likely increase by EPAF.

Energy Efficiency in a Backpack!

M. Thomas*, UF/IFAS Extension Duval County

As America's need for energy and water grows, so does the need for energy efficiency and water conservation. By adopting energy and water efficient behaviors, one can reduce consumption of these valuable resources and save money. Objectives: The program provides participants with simple and economical ways to evaluate their home energy and water usage. Participants in the program: 1) Learn how the home operates with regard to energy and water, 2) Better understand how systems in the home are designed to function, 3) Learn how proper maintenance can influence efficiency, 4) Learn how to read their utility bill. Methods: The training involved one hour workshops which consisted of lecture, demonstrations, and experiential activities. The local electric company provided the Agent with a Home Energy and Water Evaluation kit for teaching and demonstration purposes. The backpack kit consisted of materials needed to perform a home energy and water audit. Results: In 2016, 291 individuals attended workshops. Ninety-two percent (267) learned at least two new ways to conserve energy. Two hundred nine participants completed the follow up evaluation. Eighty-eight (42%) indicated they have made changes and have seen decreases in their utility bills. Conclusions: Statistics show that for every one degree setting below 78, clients spend up to 8% more in cooling cost. Several participants indicated a reduction in their electric bills due to proper thermostat settings they learned in the class, indicating financial savings, energy savings and conservation.

Shopping Matters

A. Hinkle*, D.C. Lee, UF/IFAS Extension Escambia County

UF/IFAS Extension Escambia County has addressed the problem of limited-resource families struggling to prepare healthy meals for their families through education in the Expanded Food and Nutrition Education Program (EFNEP). To supplement the EFNEP program in making positive behavior changes both easier and more impactful, a grant to educate the EFNEP participants in the area of shopping for healthy foods was obtained from the Share Our Strength organization. Objectives: Increase the skills of limited-resource caregivers of young children to buy healthy foods on a limited budget. Methods: The EFNEP agent, FCS agent, and EFNEP program assistants met with the families' primary food shoppers at local grocery stores. Tours were given in the stores to cover a variety of topics including eating healthy from all five food groups, learning to read food labels to make healthy choices, the importance of whole grains, buying fruits and vegetables in season, and comparing unit prices to choose the best buy for their money. At tour completion, participants were given The \$10 Challenge: buy a fruit, a vegetable, a whole grain, a lean protein, and a low- or no-fat dairy product for \$10 or less. Results: Participants practiced new food resource management skills to help them improve their eating habits. All 157 participants successfully completed the \$10 Challenge. Conclusions: The grocery shopping tour was an experience that allowed participants to practice new skills and encouraged them to make healthy and economical choices when selecting healthy foods for their families.

Financial Mentoring During Life Changes: the Road to Financial Health Partnership

L.A. Hamilton, Volusia County

Objectives: People experiencing critical changes in life circumstances (job loss, college graduation, retirement, divorce, death) often need intensive financial education and individual mentoring to learn new strategies to manage finances and set SMART goals for the future. Methods: UF/IFAS Extension Volusia County and United Way of Volusia-Flagler collaborated to provide 55 participants with six weekly financial classes and/or webinars and individual mentoring for six months. Financial education topics included Credit Report Review and Repair, Maximizing Income, Debt Management Strategies, and Using Credit Wisely. Participants worked at least once per month with volunteer mentors to set and progress toward SMART financial goals. Goals included increasing credit score, reducing debt, increasing savings and investments, managing college loans, and purchasing a home. County of Volusia provided one-time funding for the program including a small participant stipend. Results: 85% (47) of participants completed the program. 85% (47) of participants reported reduced debt totaling \$38,700. 51% (28) of participants increased savings totaling \$22,000. 60% (33) of participants continued working with mentors after six months. Conclusions: The Roads to Financial Success Partnership initiated as a one-time opportunity that quickly grew into a successful program. Beyond the outcomes and impacts to the participants, Volusia County achieved a working collaborative of trained mentors for ongoing financial education. City of Deltona has incorporated the model into its first time homebuyer program and UF/IFAS Extension Volusia County is establishing a Florida Master Money Mentor program to meet the need for one-on-one financial mentoring.

Show Me the Money: Introducing Youth to Financial Literacy at Four Extended Day Programs

L. Spence*, Marion County; K. Condurso*, Marion County; C. Tafelski

SITUATION: A recent Dartmouth study found twelve to fourteen year olds generate an average annual income of \$2200. For fifteen to seventeen year olds, the average increases to \$4000. Research shows resource management education is needed to achieve financial success. OBJECTIVES: Participants will: 1.) be able to differentiate between needs and wants; 2.) discern between a goal and a wish; 3.) explore the psychology behind the way (youthful) consumers use their money. METHODS: In the extended day educational program setting, this four-part series was taught to ninety-three participants, ranging from second to eighth grade. Three schools (two elementary, one middle school) in Marion County hosted a total of sixteen learning sessions. Topics included 1.) needs and wants, 2.) SMART Goal planning, and 3.) money personalities. Using a combination of lecture, activities, and role play, students enthusiastically engaged in the materials. CONCLUSION: At program completion, a retro-posttest was administered to measure knowledge gain. 62% (n=42) of program participants were able to differentiate between a need and a want. (Misspent money can be identified when the consumer understands the difference between needs and wants.) 70% (n=42) of program participants were able to discern between a goal and a wish. 50% (n=63) of program participants learned the components of a SMART goal plan. Consumers are better able to attain their financial goal through planning. Introducing youth to financial literacy before they have significant dollars to manage, serves to increase their probability for financial success early in the lifespan.

LifeSmarts Consumer Choices Contest

V. Spero-Swingle*, UF IFAS Extension South District; B. Alfonso*, UF IFAS Extension Seminole County; J. Corbus*, UF IFAS Extension Washington/Holmes County

Objectives: Decision making skills are not inherently learned and oftentimes must be taught to youth for them to be successful in making wise choices. Research has found that teaching the necessary skills can decrease risky behavior and instill better habits (Baron and Brown, 1991). Using real-life scenarios that youth will encounter help to make the issues at hand more relatable and allow youth to grasp the concepts for everyday living better. Methods: LifeSmarts, is a national consumer sciences choices program that teaches youth how to make a decision through a series of competitions. It prepares students to enter the real world as smart adult consumers. Participants, 6-12 grades, focus on five key topic areas: consumer rights and responsibilities, the environment, health and safety, personal finance, and technology. Results: Seminole County has had a LifeSmarts team since 2008 with over 50 youth participating. Four teams have made it to the National competition with multiple teams placing and one team winning. Conclusions: Decision making skills are one of the target life skills 4-H teaches. Youth are better able to succeed later in life once they have been able to learn about their choices, weigh their options, and make the best decision for themselves.

Eco-Nomic Living Expo: An Interdisciplinary Financial Wellness Program

J. Breslawski* UF/IFAS Extension Okaloosa and Walton Counties

Okaloosa County has a poverty level of 13.2% among individuals. The 2015 average earnings in Okaloosa County was \$66,566, almost \$12,000 below the average U.S. earnings. Earnings are an indicator overall financial wellness. Financial wellness can be affected by efficient management of their home, health, personal financial decisions, and environment. Objectives: To improve financial wellness in Okaloosa County with a collaborative approach. Attendees will participate in at least one of the following: 1) pledge a personal savings goal to meet in one year, 2) create a savings video, 3) build a rain barrel for home installation, 4)attend a seminar on: home, health, personal finance, or environmental wellness. Methods: As a part of the America Saves Week campaign the Okaloosa Saves organization identified 50 local businesses to promote financial wellness. Guest speakers were hosted from the County Extension, UF Gainesville Campus, and County Water and Sewer. Eight seminars were offered throughout the day. A hands-on rain barrel workshop and 4-H activity booth were also available, as well as a savings video creation opportunity. Results: Approximately 500 individuals were in attendance. Five participants created rain barrels, 58 people pledged a savings goal, 52 people created a savings video, and 71 attended seminars. Conclusions: Higher success rates in achieving goals is associated with writing them down or publically announcing. After taking the savings pledge over two times as many people saved regularly.

Using Virtual Communication Tools to Enhance and Expand Financial Education Programming

C. Musgrove*, UF/IFAS Extension Columbia County; H. Copeland*, UF/IFAS Extension Leon County; H. Janney*, UF/IFAS Extension Hamilton County

Objectives: Family and Consumer Sciences Extension Agents must exercise discretion when dealing with confidential client information. In rural counties, agents face additional challenges to recruit volunteers for traditional Extension programs. The Volunteer Income Tax Assistance (VITA) program is a partnership with the IRS to provide free financial education and income tax filing to low-income households. Agents added Skype to the program to increase participation while upholding client-agent relationships for financial education. Methods: Agents applied innovative methods to develop the Virtual VITA Program. The structure included a hub site where IRS-certified volunteers were located to prepare tax returns for multiple intake sites located across 13 counties in North Florida and South Georgia. Communication between clients at intake sites and volunteers at the hub site was conducted using virtual technologies such as Skype, Dropbox, Wi-Fi hotspots, and scanning/PDF mobile applications. Results: In 2016, 231 tax returns were prepared through the hub site. Participating taxpayers saved an estimated \$268 per return, for total savings of \$82,008 in North Florida and South Georgia. These methods also enabled agents to provide financial education tailored to the needs of low-income taxpayers. These strategies resulted in maintaining trusting client-agent relationships and investing in local communities. Conclusions: Implementing a virtual element to traditional VITA programs enables agents to increase program participation. Utilizing emerging communication tools and alternative approaches to reach audiences has the potential to expand Extensions' reach throughout the state in other volunteer-driven programs.

Osceola County Fair Food Booth Food Safety Training Shows Continued Success

G. Murza* & J. Sprain. UF/IFAS Extension Osceola County

Objectives: In preparation for the 4-H program's annual fundraiser at the Osceola County Fair, leaders and members were required to attend annual food booth food safety training taught by the FCS Agent in order to learn how to properly prepare, handle, and serve food to fairgoers. Over time, training materials were developed to allow club leaders the freedom to provide the training to their members at their own pace, while still requiring that all clubs complete the training. Methods: Club leaders have access to and use a PowerPoint presentation addressing various food safety principles as it relates to food booth, materials for activities to help reinforce concepts, and food booth training videos on the Osceola County 4-H YouTube channel. Results: Since its inception in 2014, the number of members trained has remained high. That year, 23 of 27 clubs reached 326 members; in 2015, 20 of the 33 participating clubs were trained reaching 262 members. In 2016, 26 of 29 clubs were trained, reaching 471 members. Lastly, in 2017, 25 of 30 participating clubs were trained, reaching 354 members. Additionally, 32 club Representatives are currently trained in proper food handling or hold ServSafe® or SafeStaff[®]. Conclusions: Club leaders have continually used the materials to provide food safety training to their members. In turn, members who work the food booths are more prepared to provide safe food to customers, thus ensuring a successful fundraiser for years to come. Finally, this training program can be replicated in other counties wishing to start a similar fundraiser.

Agriculture and Horticulture Island James DeValerio, FACAA Abstract Chair Tuesday, August 29, 2017 9:15 am - 5:30 pm

Time Tuesday	Speakers	Abstract
9:10-9:15 am	J. DeValerio	Introductions & Protocol
9:15-9:30 am	P. Troy	Implementing Best Management
		Practices (BMPs) In Corn
		Production to Protect Water
		Quality
9:35-9:50 am	A. Stam, L. Wiggins	Potential Value of Smut Grass for
		Beef Cattle
9:55-10:10 am	B.C. Wells	Digging into the Potential of Sweet
		Potato Systems in the Tri-County
		Area Agricultural Area of Northeast
		Florida
10:15-10:30 am	L.L. Williams	Northwest Florida Resource
		Gardening Guide a Valuable Tool
		for Newcomers
10:35-10:50 am	M. Tancig	Bite Back – A Mosquito Reduction
		Education Program
10:55-11:10 am	N. Demorest	School Gardens Field Food Safety:
		Teaching Risk Management Skills
11:15-11:30 am	M.D. Mauldin, J.P. Dillard	Playing with Fire – Teaching Grilling
		Techniques through Experiential
		Learning
11:35-11:50 am	K. Waters	Northwest District Regionalized
		Pesticide Training Series Model
Friends	of Extension and Retirees Lunche	on 12:00 – 2:00 pm
2:15-2:30 pm	M. Glenn, M. Atkinson	Preparing Youth for Green Industry
		Employment
2:35-2:50 pm	D.B. Holmes, M.T. Bailey	Invasive Weed Education Program
		for Cogongrass
2:55-3:10 pm	J.M.B. Vendramini, C.L. Kirby	Forage Workers Tour and In-Service
		Training
3:15-3:30 pm	N. Simmons	Backyard Poultry Basics
3:35-3:50 pm	B.R. Thaxton, L. Johnson	Gulf Coast Small Farms:
		Maximizing Production &
		Marketing Practices
3:55-4:10 pm	A. Stam, L. Wiggins	Mycotoxins in South Florida
		Pastures

4:10-4:30	Break	
4:35-4:50 pm	H.F. Wooten	Introducing Hydroponics: Just Set it
		and Forget it
4:55-5:10 pm	E.T. Carter	An Assessment of Fungicide
		Programs and Disease Response in
		Two Peanut Cultivars
5:15-5:30 pm	C. Olson, D. Fenneman	Cold Tolerant Citrus Production for
		N. Florida and the Southern Coastal
		Plain

Implementing Best Management Practices (BMPs) In Corn Production to Protect Water Quality

P.Troy^{*} and J. Love, Suwannee Valley Agricultural Extension Center

Driven by the 2016 adoption of the Basin Management Action Plan (BMAP) for the Suwannee River Basin, strong emphasis is being placed on irrigation and nutrient management in the area. Farmers are required by the Florida Department of Consumer Services (FDACS) to enroll in Best Management Practices (BMPs) to conseve water and reduce nitrate leaching (DEP 2016). Objectives: We sought to demonstrate eight commonly recommended BMPs through four on-farm trials and measure their efficacy for wider farmer implementation. Methods: Planting advanced corn hybrid varieties in three counties, we incorporated different BMP tools at each farm including covercropping, soil sampling, poultry litter applications, crop nutrient budgeting, soil moisture sensor installation, ear leaf tissue sampling, side-dressed fertilizers, and pivot nozzel upgrade/calibration (via Mobile Irrigation Lab) and recorded yields at harvest for comparison. Results: Three farms averaged 213 bushes/ac with applied nitrogen inputs of 252 lbs/ac. This represents a return to Nitrogen Use Efficiency of 84%, compared to typical returns of 60-70%. Conclusion: Despite common impressions, high NUE and yields are possible with BMPs with the added benefit of reduced risk to nitrate leaching. Accounting for only the water and fertilizer savings, inputs were reduced by approximately \$67/acre. With encouraging initial results, UF/IFAS will expand these demonstration to more farms, to document both yield and nutrient savings (from leaching and expense). Quantifying economic and environmental services should encourage early adoption of BMPs in corn and provide for greater financial return.

Potential Value of Smut Grass for Beef Cattle

A.Stam^{*} Livestock Extension Agent, Seminole Tribe of Florida, L. Wiggins^{*} Regional Livestock Extension Agent II, B.Sellars Extension Weed Specialist, A. Johns Seminole Tribe of Florida, J. Dias, Graduate Research Assistant

Smutgrass is touted as one of the most difficult to control weeds in Florida pastures. Fortunately, this grass has forage value for beef cattle. This field trial will collect data on quality and quantity of smutgrass. OBJECTIVES: *Determine quantity/growth potential and quality of smutgrass under three different management practices. *Determine/prescribe management practices to ranchers where smutgrass has become the dominant forage. METHODS: Define three test plots: 1) Received 50 pounds of nitrogen, zero pounds of phosphorous, and 15 pounds of potassium per acre (dry formula); 2) Control (no fertilizer or herbicide); 3) Received 50 pounds of liquid Nitrogen/acre and broadleaf herbicide. Place four exclusion cages (four replications) in each test plot for a total of twelve cages. The forage collection schedule was at 14, 21, 28, and 42 days after fertilizer/herbicide application, which gave each cage four samples and the total study area forty-eight samples during the trial. Each sample consisted of a height and weight measurement then it was analyzed at Dairy One Laboratory for Crude Protein (CP) and Total Digestible Nutrients (TDN). RESULTS: (Weights are averaged pounds per month) Plot 1- 6175lbs with an average of 14% CP and 57% TDN, plot 2-6678lbs, averaging 12% CP and 55% TDN, plot 3-7047lbs, averaging 12.5% CP and 55% TDN. CONCLUSION: Smutgrass will yield large quantities of extremely high quality forage, under proper management practices, such as stocking density, fertilization, and timely rotational grazing. More research is necessary to determine stocking rates and rotational schedules for smutgrass pastures.

Digging into the Potential of Sweet Potato Systems in the Tri-County Area Agricultural Area of Northeast Florida

B.C. Wells*, UF/IFAS Extension St. Johns County; G. Liu, UF/IFAS Horticultural Sciences Department; D. Dinkins, UF/IFAS Extension Multi-County; G.K. England, UF/IFAS Hastings Agricultural Extension Center; M. Warren, UF/IFAS Extension Flagler and Putnam County

Situation: Declining production acreage and operating on low profit margins have potato (Solanum tuberosum L.) growers in the Tri-County Agricultural Area (TCAA) (St. Johns, Putnam, Flagler) looking for alternatives such as sweet potato (*lpomoea batatas* L. Lam.) to diversify their farming systems and enhance sustainability. Information about production in the area is lacking, and growers are relying on UF/IFAS Extension to help get the information needed. Objective: The objective of this study was to evaluate yield, identify the optimal nitrogen (N) rate, and compare row spacings on selected sweet potato cultivars. Methods: Field trials were conducted at the Hastings Agricultural Extension Center in summer 2016. 'Boniato,' 'Burgundy,' 'Covington,' and 'Palmetto' were planted using two row spacings (40" and 80") and four N rates (lbs/A) (0, 60, 90, 120). Results: Yields were significantly different for the four tested cultivars. 'Boniato' was the greatest yielding followed by 'Burgundy,' 'Palmetto,' and 'Covington.' The 90N rate resulted in the greatest yields for all cultivars. Due to insufficient slips, only the 40" row spacing was evaluated. Conclusions: Although 'Boniato' and 'Burgundy' had greater yields, 'Palmetto' may demand a better price with a promising market potential for Florida because of its high content of purple anthocyanin, an antioxidant that not only makes this sweet potato a superfood, but gives it an alluring color. Because 90N resulted in the best yield and nitrogen use efficiency across cultivars, this rate may be considered an appropriate nitrogen application rate for sweet potato production in the TCAA.

Northwest Florida Resource Gardening Guide a Valuable Tool for Newcomers

Williams, L.L., UF/IFAS Extension Okaloosa County

There was a need for a reliable local publication to direct the public to local horticulture resources. Such a resource did not exist. So the agent developed it. Objectives: The objective of the Resource Guide initially was to develop a list of local horticulture resources for trained Master Gardeners, Extension Agents and Office Staff to serve as a quick office reference in answering questions from the public in a fast growing county. Methods: The agent began by collecting the resource information and presented the idea to Master Gardener volunteers as a project. Because of the popularity of the guide, we began using it as a publication provided to the public. The Resource Guide is now provided to our Welcome Centers, military bases and libraries and is used at many of our educational events. It is also available online at https://www.ocmga.org/resources.html. Results: The guide has evolved to include local farmer's markets, U-pick farms and community gardens, UF Extension websites, mobile apps and contact information for other nearby County Extension Offices, helpful County resources and local State and Federal Agency Offices. Over 1,000 Resource Guides have been provided to the public and there have been more than 10,000 views online. Conclusion: The guide has become a valuable internal resource for our office as well as a resource for newcomers and longtime residents. It has served as a marketing tool in directing people back to our office as a reliable local resource.

Bite Back – A Mosquito Reduction Education Program

M. Tancig, Leon County

Objectives: The objectives of this program are to educate citizens about the history of mosquito and man, biology of mosquitoes, preferred habitats of day biting mosquito species, methods of source control, and best practices to prevent being bitten. Methods: The methods used in implementing this program include lecture and discussion with a multi-media presentation and visual displays. In 2016, the program was offered at the local extension office, community centers, and local garden centers to the general public. Results: Approximately 90 (n=87) participants attended the program and 34% (n=30) completed a post-workshop evaluation. Eighty percent (24) of the participants reported that they gained knowledge in steps to protect themselves from mosquitoes, and 87% (26) reported that they learned ways to reduce the mosquito population. Sixty percent (18) of the participants reported they would empty standing water to reduce the potential for mosquitoes, while 37% (11) reported they were already doing this. Fifty-three percent (16) of participants reported that they would use a larvicide to control mosquitoes, while only 17% (5) reported already using such products. Conclusions: Proactively educating citizens on mosquito biology and practices to reduce the mosquito population impacts the community by reducing the risk of mosquito-borne diseases. Educational programming conducted by UF/IFAS Leon County Extension was shown to increase knowledge of mosquito-reduction methods.

School Gardens Field Food Safety: Teaching Risk Management Skills

N. Demorest, Columbia County

Objective: School gardens used as teaching tools to engage students in meaningful learning activities. To minimize the risk of illness, students and adults working in school gardens should know about pathogens that can contaminate produce in the field. This program was designed to teach students about microorganisms that cause foodborne illnesses, to identify conditions in the field that may increase the risk of contamination, and to develop and follow procedures that will reduce those risks. Methods: Students in grades six through twelve have participated in this program during the last four years. Each of the three 60-minute sessions in this unit consists of activities that introduce concepts through handson learning activities. Some activities include visiting the garden site where existing risk factors are assessed, growing yeast colonies and observing them under microscopes, and developing in-field procedures that students follow to reduce risk. Results: The average knowledge gain of participants was 86%, as indicated by pre and post-tests. 100% of the students indicated they would use this knowledge later in life. In 2015, the county schools' director of food services first permitted students to harvest produce for the cafeteria after successfully answering safety questions. In 2016, the number of trained students has risen to over 200 in the district. Conclusion: Students are more knowledgeable about food borne illnesses and are empowered to take responsibility in reducing health risks. Risk management has improved the safety of school garden produce and has provided students with real-life opportunities to learn and practice new life skills.

Playing with Fire – Teaching Grilling Techniques through Experiential Learning

M.D. Mauldin*- Washington County, J.P. Dillard*- Washington County, B.J. Estevez- Escambia County

The agriculture and 4-H agents collaborated to develop a day camp for local 4-H members, focusing on meat selection and safe and effective grilling techniques. Objectives: 1) Help local 4-H members gain practical life skills relating to retail cut selection and safe and effective grilling techniques. 2) Take advantage of a fortunate scenario – free access to a large number of grills and a substantial supply of meat – by maximizing the amount of experiential learning utilized in the camp. 3) Promote and prepare 4-H members for the 4-H Tailgate Contest. 4) Have fun. Grilling is both a cooking method and a recreational activity and should be enjoyed. Methods: All facets of the three-day camp were taught using the experiential learning model. Campers were provided fundamental information, asked to make predictions/hypotheses relating to various aspects of the grilling process. Then they were encouraged to test their hypotheses, observations were made and discussed and conclusions drawn. Results: All 17 individuals that participated indicated that they learned at least one new skill through attending the camp. Six of the youth that attended the camp, who had not grilled prior to the camp, applied what they learned during the camp and participated in the NW District 4-H Tailgate Contest. Two of the six qualified to move on to the State 4-H Tailgate Contest. Conclusions: The camp was a success and accomplished all of the stated goals. The success, in large part, can be attributed to the extensive use of experiential learning throughout the camp.

Northwest District Regionalized Pesticide Training Series Model

K. Waters*UF/IFAS Holmes County Extension, E. Carter UF/IFAS Jackson County Extension, M. Mauldin UF/IFAS Washington County Extension, Judy Biss UF/IFAS Calhoun County Extension, Shepard Eubanks UF/IFAS Gadsden County Extension, Mark Tancig UF/IFAS Leon County Extension, Les Harrison UF/IFAS Wakulla County Extension, and Jed Dillard UF/IFAS Jefferson County Extension

Providing opportunities for pesticide applicator trainings, across multiple license categories, requires a great deal of preparation and time for agents. In an effort to maximize the impact of these trainings the Northwest District (NWD) Agricultural Program Implementation Team (PIT) developed a model for pesticide applicator trainings. Objectives: The objectives of the Pesticide Training Series were to meet the needs of pesticide licenses holders in the NWD to obtain new licensees and/or gain continuing education units (CEUs), while creating an educational model that would maximize the impact of agents' time and efforts in a team teaching environment. Methods: Two regionalized clusters of counties were formed, with 8 of the 16 counties within the NWD participating. Each location hosts a week long training, where each day covers a different licenses, and multiple agents teach over the 4 hour course. Exams are offered every day at the conclusion of the training, along with correlating CEU's. Results: Over a two year period, this training series has been hosted in three locations with a total of 243 participants obtained 458 CEUs. Also, 106 exams were taken at a pass rate of 86%. While other trainings are held individually by counties, this series have offered effective and efficient programming for participating counties. Conclusion: This model has served as an effective means to meet the needs for multiple category pesticide applicator training, while providing a structure that allows agents to more efficiently meet the needs of a diverse client base.

Preparing Youth for Green Industry Employment

M. Glenn*and M. Atkinson*, UF/IFAS Manatee County Extension

Objective: The green industry demands employees with experience and/or knowledge. Two Manatee County agents and the Manatee County School Board partnered to offer Greenscaping and Growing It Green to make young, inexperienced workers more valuable to the industry and help them overcome this lack of basic knowledge. Methods: This program teaches participants how to apply best management practices to nursery production and landscape maintenance. Three audiences: FFA students, career prep high school students attending technical schools, and at-risk youth, are targeted (ages 16-18). Educational outreach methods include hands on demonstrations, discussions, educational games, and presentations. Results: A pre and post-test and a six month follow up survey were conducted. 91% (19/21) showed knowledge gained in basic horticultural theories. 82% (17/21) of the attendees acknowledged that they changed their perception of agriculture employment and would consider it as a possible career choice. In the follow up survey, 86% (18/21) of the attendees stated that they had changed maintenance practices to align with the best management practices taught during the workshop (examples were to utilize Integrated Pest Management and to fertilize and irrigate at the correct rate and time as needed). Conclusion: This workshop serves as an important step to prepare youth with an understanding of the industry and teach them best management practices. This will make attendees more valuable employees and productive members in the agricultural green industry workforce, as well as an asset to the community at large. This is an ideal program to conduct throughout the state.

Invasive Weed Education Program for Cogongrass

D.B. Holmes*, M.T. Bailey*, Marion County

Cogongrass, an invasive species, was introduced to Florida as a forage crop in the 1930's, but has proven to have minimal nutritional value. Marion County has severe infestations and is among the top 7 counties in Florida with more than 100 infestations reported to state authorities in 2010. Cogongrass retains dry, combustible vegetation that presents a fire hazard, particularly during dry spring seasons. Because it is difficult to control, infestations may reduce property values. Control of this invasive is beyond the scope of most landowners, who instead employ a professional firm for desired results. Extension and the County Forester needed a list of trained contractors to recommend. Objectives: 1) Develop a list of contractors who can control cogongrass; 2) Present a training to prepare contractors to effectively control cogongrass; 3) Educate the public about this invasive. Methods: 1) A newspaper column was prepared for the Ocala Star Banner and Gainesville Sun Newspapers with circulation 80,000. 2) A workshop was held to train 20 Commercial Pesticide Applicators to control congongrass. 3) A brochure describing cogongrass and control was developed. Results: 22 commercial applicators attended the workshop, 11 manage over 1,000 acres. Attendees learned control methods including burning, disking and spraying herbicide. From this attendance a list of applicators for reference to landowners was developed. Conclusions: Reduction of cogongrass requires public awareness as well as contractor training to understand the long-term management strategies for control.

Forage Workers Tour and In-Service Training

J.M.B. Vendramini^{*}, UF/IFAS Range Cattle Research and Education Center; C.L. Kirby^{*}, Manatee County Extension; M.L.A. Silveira, UF/IFAS Range Cattle Research and Education Center; P. Moriel, UF/IFAS Range Cattle Research and Education Center; B.C. Stice, Polk County Extension; L.F. Wiggins, Hendry County Extension; B. Sellers, UF/IFAS Range Cattle Research and Education Center; L.D. Butler, Okeechobee County Extension; C.C. Larson, Okeechobee County Extension; C.G. Prevatt, UF/IFAS Range Cattle Research and Education Center; D.W. Thompson, Desoto County Extension; A.M. Stam, Seminole Tribe Extension; J. Bosquez-Mendez, Hardee County Extension

Objectives: The Forage Workers Tour and In-Service Training is an educational program with the objective to promote interaction among the University of Florida extension, research, and teaching programs in forage and livestock management. Methods: The program was divided in four sections. The first section is the in-service training for county extension agents, which had classroom and "hands-on" components. The second section had the presentations of faculty members conducting research, extension, and/or teaching in areas related to forage and livestock management. The third section was a roundtable to promote critical thinking and discuss the current needs of forage and livestock management programs in the State of Florida. The fourth section was a tour in a private property to illustrate common management practices adopted by livestock producers in the region. Results: A total of 18 county extension agents participated in the in-service training and 53 faculty members in the forage workers tour. Sixty two extension publications were distributed and 12 power point presentations were generated for the program. There was 47% increase in knowledge in the in-service training. Based on the potential contact hours of the county extension agents, it is expected that the knowledge gained will impact more than 4000 producers in the State of Florida. Conclusions: The increase in knowledge of the county faculty and potential benefits of the collaboration between the different programs was a valuable indicator that the forage workers tour and in-service training was effective and accomplished the proposed objectives.

Backyard Poultry Basics

N. Simmons*, D. Lee, A. Schortinghouse, UF/IFAS Extension Escambia County; G. Butcher, University of Florida College of Veterinary Medicine

Situation: An increased interest in local foods has driven more individuals from suburban and inner-city neighborhoods to have a particular interest in raising backyard poultry. Escambia County recently passed a revised ordinance to accommodate the increased demand for citizens with one acre or less to raise their own flocks. There has been an increase in agent calls with questions related to properly owning and raising poultry. Objectives: The objectives of this program were to: 1) Increase knowledge of backyard poultry production for citizens in Escambia County, 2) Promote dialogue among owners to share ideas and experiences, 3) To teach hands on management for the beginning and novice poultry owner. Methods: Three separate 1.5 hour sessions were designed and delivered with multiple faculty to instruct participants on information related to backyard poultry. Participants were given a pre-program survey to gauge prior experience and knowledge. Participants had the option of attending one or multiple sessions depending on their needs and interests. A post-program evaluation was administered to evaluate teaching methods, knowledge gain, and program effectiveness. Results: An average of 17 participants attended three sessions over three consecutive weeks. Participants gained knowledge on topics including purchasing, housing, nutrition, disease management, selling product and egg production. Evaluation results showed 95% of participants found the information relevant to needs, organized and up-to-date. Conclusion: The backyard poultry basics program provided an educational opportunity for beginning and novice poultry owners to be better informed about their interests. Future sessions will be adapted to facilitate more information.

Gulf Coast Small Farms: Maximizing Production & Marketing Practices

Thaxton, B.R.*, UF/IFAS Extension Santa Rosa; Unruh, J.B., UF/IFAS Extension WFREC; Johnson, L.*, UF/IFAS Extension Escambia; Walmer, C., Farm to School/family Nutrition Program; Lollar, M., UF/IFAS Extension Jackson; Bearden, J., UF/IFAS Extension Okaloosa; Anderson, E., UF/IFAS Extension Walton; Orwat, M., UF/IFAS Extension Washington; and McConnell, J., UF/IFAS Extension Bay

Consumer demand for locally grown food is rapidly increasing. Despite high interest in locally produced food, small farmers are faced with challenges limiting their ability to meet increased demand. Challenges include farmers' access to new markets and maximizing production through various cropping systems. The Gulf Coast Small Farms team is comprised of state and county faculty from UF/IFAS working together to provide hands-on training programs for small farms. Objectives: The team will expand marketing opportunities for local specialty crop farmers and will identify management practices that increase productivity in protected agriculture production systems. Methods: The team offered four field days and one workshop to showcase the trials and marketing materials developed from the project. Marketing materials include six checklist style publications to guide producers entering various markets and regional planting and harvesting calendars housed on the Gulf Coast Small Farms Team website. Results: Thirty-two participants of project activities have taken steps to sell at new markets. Eighty percent (154/192) of participants indicated improving knowledge of cropping systems and protected agriculture. Ten participants made the investment and established protected agriculture structures on their farms, leading to opportunities for an expanded season and increased revenues. Conclusions: The marketing toolkit provided a streamlined and standardized approach for producers seeking to enter new markets. The established yields and quality of fresh produce grown in protected agriculture systems have helped growers utilizing these systems to maximize their production.

Mycotoxins in South Florida Pastures

A. Stam* Agent, Seminole Tribe of Florida, L. Wiggins* Multi-County Agent, P.N. Gott Biomin America, Inc., A. Johns Seminole Tribe of Florida, B. Bell Biomin America, Inc., B.G. Miller Biomin America, Inc.

Mycotoxins are secondary metabolites produced by many types of fungi. They are known to affect many cereal grains, but there is limited research on mycotoxins in standing forage. Sampling has lead us to focus on zearalenone (ZEN), a product of Fusarium fungi. Zearalenone is known to bind estrogen receptors, leading to reproductive issues in cattle; including, abortions, irregular heat cycles, and reduced conception rates. Other mycotoxins were detected in our research, but with reduced frequency and in lesser concentrations. Objective: Identify mycotoxin contamination in standing forages. Methods: Sampling began in 2015. Grass samples were handpicked according to species and placed into freezer bags. Initial samples were sent to Dairy One Labs in Ithaca, NY for mycotoxin detection. Bahia, star, limpo, bermuda, and smut grasses were initially sampled. Common bermuda tested positive for ZEN while other species did not. Intensive common bermuda grass sampling began March of 2016 in six South Florida Counties. One hundred and fifty-seven individual samples have been analyzed for mycotoxins by Activation Laboratories in Ancaster, Ontario, Canada. Results: Sixty-one percent of samples have tested positive for ZEN, with additional samples testing positive for type A, and type B trichothecenes, and fumonisins. Conclusions: Continued sampling/research is needed to establish geographical and seasonal occurrence of mycotoxins in forages. Economic impact for Florida ranchers could be extremely significant, as calf loss is a top priority of Florida cattlemen. We will continue to test and document mycotoxins throughout Florida, while looking to establish relationships allowing for testing across all Gulf-region states.

Introducing Hydroponics: Just Set it and Forget it

H.F. Wooten, UF/IFAS Extension Seminole County

Objectives: Hydroponics allows us to grow more produce around urban environments with less strain on natural resources. The objective is for 90% of class participants to increase knowledge about hydroponic growing techniques, and at least 5% to intend to start commercial hydroponic operations. Methods: Several introductory style "Set it and Forget it Hydroponics" workshops and demonstrations were initiated in Sanford, FL to teach clients hydroponic growing techniques at a low cost with a high rate of success. Results: 131 people participated in "Set it and Forget it Hydroponics" programming since the program's inception in February 2017. Workshop and demonstration participants completing post- event evaluations (n= 82) showed that 100% of participants increased knowledge of hydroponic growing and 94% intend to grow their own hydroponic lettuce. Participants also demonstrated technical skills to grow hydroponically. Participants were over 91% confident in their ability to: Measure and adjust pH, make a nutrient solution, build a "Set it and Forget it" hydroponic bucket, and grow their own hydroponic lettuce. Conclusions: The short- term goal is to teach clientele basic hydroponic techniques that they can use successfully to grow their own food. The long- term goal is to engage a percentage of participants who are interested in employing advanced hydroponic techniques suitable for efficient commercial food production to be determined by 3 month and longer term follow up surveys. Post- workshop surveys indicate the goal is attainable.

An Assessment of Fungicide Programs and Disease Response in Two Peanut Cultivars

E.T. Carter^{*}, UF/IFAS Jackson County Extension; B.L. Tillman, UF/IFAS North Florida Research and Education Center; M.W. Gomillion, North Florida Research and Education Center; R.L. Barocco, UF/IFAS Plant Pathology Department; N.S. Dufault, UF/IFAS Plant Pathology Department

Fungicides and cultivar selection are key components of an integrated disease management plan in peanut. However, the effect of interaction between these components on diseases (e.g. stem rot (Sclerotium rolfsii) and leaf spots (Cercospora arachidicola; Cercosporidium personatum) is unclear. Objective: Quantify differences in disease response between two peanut genotypes (TUFRunner[™] '511', Georgia 06G) under seven Peanut Rx based fungicide programs and an untreated control. Methods: Season long: Leaf spot development was documented using the Florida 1-10 scale, while Stem rot incidence was recorded as the number of 1-ft foci/90 ft of row. Results: Leaf spot remained relatively low with a majority (94%) of final scale ratings ranging between 3 to 6. TUFRunner[™] (511' had significantly higher LS AUDPC (p < 0.001) and final scale rating (p = 0.06) than Georgia 06G; however, there was no significant effect of treatment on LS AUDPC or significant differences in final scale rating (120 DAP) among treatments for TUFRunner[™] '511' or Georgia 06G. A near significant interaction effect of fungicide treatment and variety was observed with stem rot incidence (p=0.06). Despite differences in disease presence for the cultivars, there were no differences in yield between varieties (p=0.68). Conclusions: Yield differences among treatments were variable and possibly attributed to timing of the different fungicide treatments and irregular distribution of natural S. rolfsii inoculum in the field. Further evaluation is warranted to better understand these results and the impact that variety, application timing, and natural inoculum have on different spray programs.

Cold Tolerant Citrus Production for N. Florida and the Southern Coastal Plain

C. Olson*, Taylor County; D. Fenneman*, Madison County; P. Andersen, NFREC; L. Davis, SVEC; K. Athearn, SVEC; M. Lollar, Jackson County; J. Price, Lowndes Co (UGA)

Producers are constantly looking for profitable additions to their farming operation. Currently, citrus greening is destroying the citrus industry in South Florida. New cold tolerant varieties of citrus and growing techniques provide an opportunity for growing citrus in North Florida. Objective: Develop an educational program: 1) Provide education on rootstock/scion combinations showing production potential. 2) Demonstrate freeze protection technologies. 3) Inform clientele about the current successful cold tolerant citrus production areas in N. Florida and S. Georgia. Methods: Private farm and UF/IFAS REC field days/meetings were conducted to demonstrate citrus production in N. Florida and S. Georgia. Producers were educated on: scion and rootstock characteristics/performance, fertility practices, grove layout, tree spacing variables, packing and marketing strategies, insect and disease control, and yield data. Results: Approximately 700 producers have attended field days/meetings in Marianna, Perry, Quincy (NFREC), Live Oak (SVEC) Florida, Tifton and Valdosta, Georgia over the previous two years. Last year approximately 65 acres of citrus was planted in N. Florida and it is estimated that an additional 60-75 acres will be planted this year. Gross returns of nearly \$5,000,000 is expected at maturity. Conclusion: Utilizing current technologies and the occurrence of average winter weather, N. Florida appears well suited to several cold tolerant citrus varieties for the fresh fruit market gearing production for the fall to Christmas period with profit potential. Fifteen-year-old Satsuma trees in Marianna as well as mature production in Quincy and Live Oak continue to provide validation that production can be done in this region.

Youth Programming Caloosa B Crystal McCazzio, FAE4-HA Abstract Chair Tuesday, August 29, 2017 9:15 am - 5:30 pm

Time Tuesday	Speakers	Abstract
9:10-9:15 am	C. McCazzio	Introductions & Protocol
9:15-9:30 am	A. Granger	Integrating Social Media as an
		Educational Tool in 4-H
		Programming
9:35-9:50 am	S. Spann, A. Lamborn	Buggin' Out with 4-H
9:55-10:10 am	A. Stewart	4 th H for Health Challenge
10:15-10:30 am	A. Draper	4-H Officer Training Retreat
10:35-10:50 am	S. Conner	Using a Traditional Horse Show
		Format to Deliver Educational
		Opportunities to 4-H Members
10:55-11:10 am	J. Brooks, H. Kent	Growing Awareness with Farm
		Safety Day
11:15-11:30 am	J. Lilly, Y. Goode, J. Brooks, P.	Utilizing Youth Adult Partnerships
	Caskey	to Engage Teen Volunteers
11:35-11:50 am	T.Darress, A. Lazzari	What happens after the 4-H
		Embryology Program? Why not
		Rent-a-Chick?
Friends	of Extension and Retirees Lunche	on 12:00 – 2:00 pm
2:15-2:30 pm	M. L. Brinkley	Mindful Living
2:35-2:50 pm	A. Granger, B. V. Bennett, N.	Achieving Belonging and Inclusion
	Baltzell	in Diverse 4-H Audiences
2:55-3:10 pm	D.C. Cole	Gifford Youth Achievement Center
		Garden Club After School Program
3:15-3:30 pm	R. Madhosingh-Hector, A.	Revitalizing 4-H in an Afterschool
	Bowers	Environment
3:35-3:50 pm	K. Irvine	Nassau County COOP-eration
3:55-4:10 pm	A. Stewart	Poké Maps & Apps: Using
		Technology as a Teaching Tool
4:10-4:30	Break	
4:35-4:50 pm	A. Draper, N. Guay	Science and Technology Institute
		for Youth Professionals
4:55-5:10 pm	A. Granger, C. McCazzio	Achieving Mastery in 4-H Animal
		Science Programs
5:15-5:30 pm	B. Estevez, S. Spann	Teaching Life Skills with Peanut
		Butter and Jelly

On-site room changes of presentation locations may occur. Look for posted announcements of any changes.

Integrating Social Media as an Educational Tool in 4-H Programming

A. Granger*, UF/IFAS Jackson County Extension, S. Warden, Jackson County 4-H Volunteer

OBJECTIVES: Introduce methods of program delivery that reach the youth and adult 4-H audience and fits their time schedule. Integrate methods of program delivery using social media tools such as Facebook, YouTube, and Twitter, creating multiple learning and participation opportunities. Reduce time and expense related to travel and materials, and offer multiple learning opportunities and increase learning outcomes. METHODS: The Jackson 4-H program uses social media as a teaching tool and to communicate information regarding programs. Practice for livestock, meats and poultry judging is delivered using social media. Quizzes and questions are posted which require responses back to the volunteer including videoed oral reasons. RESULTS: Use of social media as a teaching tool has created more opportunities for participation. Volunteer enrollment increased from 10-45 adults and youth enrollment increased from 91 -235. (2013 to present) Participation at State judging events increased by 80% and three teams have competed at the national level. Reduced costs for training materials, travel and time is estimated to be \$2500. Use of digital images of livestock, cuts of meat or eggs for judging, and using recorded responses shared on Facebook, has proven to be very effective. CONCLUSIONS: The 4-H audience is diverse. The cost of educational materials and travel can be prohibitive and we must find ways to accommodate more time schedules. These can become deciding factors for participation. Facilitating programs through methods that accommodate the audience increases long-term participation and learning outcomes and expands the 4-H audience.

Buggin' Out with 4-H

S. Spann*, UF/IFAS Extension Baker County; A. Lamborn*, UF/IFAS Extension Baker County

When it comes to encounters with insects, emotions associated with fear, annoyance or indifference are often experienced. There is also a lack of understanding among youth of the roles insects (and the scientists who study them) play in our everyday lives. The camp addressed this problem by allowing youth to explore the world of entomology by turning their fears into fascination. Objectives: 1) Improve insect identification and collection skills, 2) Increase knowledge of citizen science and insect interactions, 3) Explore entomological careers, and 4) Develop life skills. Methods: Youth focused on citizen science, insect identification, collecting and preserving, and insect interactions through activities, games, demonstrations and team building exercises. Results: Pre- and post-tests showed 100% of students increased their knowledge of the camp's predetermined objectives, with the class average being a 48% increase in knowledge. Additionally, students were asked to identify their favorite insect and provide reasoning both before and after the camp. Four students improved their answer to this question, by changing it from a non-insect to an insect or giving factual support when none was provided previously. Afterwards, a video was created with the help of camp participants highlighting the citizen science projects (https://www.youtube.com/watch?v=1blai-jjjOc&t=90s). Conclusions: Follow-up surveys of 13 respondents revealed that 69% continued their bug collections started during camp, 85% conducted at least one of three take-home citizen science projects provided by the camp (Native Buzz, School of Ants, and Backyard Bark Beetles), and 85% expressed interest in attending another bug camp or joining a bug club.

4th H for Health Challenge

A. Stewart, UF/IFAS Extension Marion County

Objectives: One of the main objectives of Initiative 7 from the UF/ IFAS Extension Road Map seeks to empower families to lead healthy lifestyles. To achieve this goal, Marion County 4-H sought out a program that would be fun and easy to implement into the 4-H club setting and encourage families to naturally make healthier decisions. Methods: In 2016, Marion County 4-H implemented the 4th H for Health Challenge, which is a nationwide 4-H initiative to promote healthy living. The challenge was introduced to club leaders to be implemented into their monthly club meetings. In order to complete the challenge clubs would have to offer fruit or vegetables as a snack at three meetings, serve water as their main beverage at six meetings, and add 15 minutes of physical activity at six meetings. To encourage physical activity, Marion County 4-H offered several county wide activities such as the Kickball Kickoff, Color Me Green 5K, Eat4-Health Athletic Conditioning Course, Tic Tac Toe Relay Races, and Smoothie Bike demonstrations. Results: Four clubs successfully offered all of the components to the challenge. A total of 71 youth submitted their completed tracking sheets and were recognized with a 4th H for Health pin at Achievement Night. Conclusion: Healthy lifestyle choices is a critical life skill that 4-H teaches youth. By proving the 4th H for Health Challenge we are able to set youth on a path towards making healthier decisions, leading healthier lifestyles, and reducing preventable lifestyle related illness and disease.

4-H Officer Training Retreat

Draper, A. Broward County 4-H Youth Development

Objectives: This three day officer retreat for county and club level 4-H officers was designed to prepare youth elected to leadership positions to successfully perform the duties of their office, work cooperatively with other youth, and coordinate club and county level activities such as business meetings, service projects, and fundraisers.

Methods: 41 youth ages 8-18 attended a three day retreat where they participated in educational workshops and teambuilding activities. Each youth participated in an officer-specific workshop led by adult volunteers and teens who had previously performed that officer position successfully. Participants then attended optional workshops including: fundraising, teaching, service learning, and parliamentary procedure.

At the conclusion of the training participants completed a 5-point likert scale questionnaire (1 being strongly disagree and 5 being strongly agree) about their experience.

Results: 95% (19/20) of participants reported they agree or strongly agree with the statement "this training helped me to feel prepared to be an officer in my club/county." 88% (15/17) felt they understood parliamentary procedure as a result of the training, and 85% (17/20) felt the training better prepared them to work cooperatively with their fellow 4-H members. 100% (20/20) of attendees surveyed found the training valuable and plan to attend again.

Conclusions: Developing leadership skills in volunteers is essential to maintain a successful program. As a result of participating in the retreat, youth officers were better prepared to run successful 4-H clubs that promote the 4-H essential elements.

Using a Traditional Horse Show Format to Deliver Educational Opportunities to 4-H Members S. Conner*, UF/IFAS Extension Clay County

Horse shows provide an opportunity for 4-H members to showcase their riding and showmanship skills. However, there has traditionally been more horse shows than educational sessions offered in Clay County. Objectives: The goal of this activity is to provide a multiple educational sessions in a horse show format which typically lasts two days. This approach is novel in that the educational sessions incorporate the use of horses, 4-H members (local and surrounding counties), and their parents. Methods: A program advisory board organizes a keynote session, horseless Olympics for members without horses, and a family style dinner on Friday evening. Saturday consists of 5-7 riding clinics that cover topics related to discipline topics (i.e., dressage, reining, etc.) Results: These multi day educational sessions have provided 4-H members with an opportunity to improve their confidence in the show ring and develop relationships and sportsmanship with fellow members. As evidence, 55% of participants indicated that they feel more confident engaging with judges, clinicians and fellow riders. This multi day format was successful as 85% of participants reported they would participate in a similar activity again. Conclusions: Providing multiday educational sessions allows 4-H members to experience and/or explore different disciplines as well as provide an experience similar to a horse show. This approach also broke down barriers between competitors and will hopefully alleviate some of the tension and hyper competitiveness that can be felt during traditional horse shows.

Growing Awareness with Farm Safety Day

J. Brooks* Walton County 4-H Agent, H. Kent* Northwest District Regional Specialized Agent

Objectives: Increase awareness of safety in multiple environments (i.e. farm, home, vehicle). Fulfill the experiential learning model (Do, Reflect, Apply) through utilizing teen leaders as session educators. Obtain Mastery in project areas of Senior 4-H'ers through teen led educational sessions. Recruit non-4H members to join the county 4-H program. Train and retain volunteers for episodic and long term service. Methods: 4-H Agent and volunteers recruit local organizations to sponsor Farm Safety Day and/or teach sessions. Stations consist of lecture and hands on components relating to safety topics such as: food safety, electricity, boating, tractor, large animal flight/kick zones. Educational sessions accommodate ages 5-18 and groups are separated by 4-H age. Results: Through implementing Farm Safety Day, Walton County 4-H served 74 youth in 2016 and 107 youth in 2017 with 21 returning youth. 96% of youth stated because of Farm Safety Day they knew how to stay safe around electricity, 87% knew flight/kick zones of large animals, 100% learned to put on life jackets properly and boat safety, 92% could identify safe food/hand washing practices, 88% understood dangers of tractors and PTOs. Conclusions: Through implementation of an annual Farm Safety Day, the following contributions have been made to the county program: (1) In 2016 the county program gained 35 episodic volunteers, 17 new 4-H members, 3 teen leaders, and 5 new community partnerships. (2) So far in 2017, the county program gained 21 new episodic volunteers, 7 new 4-H members, 2 teen leaders, and 7 new community partnerships.

Utilizing Youth Adult Partnerships to Engage Teen Volunteers

H. Kent, Regional Specialized 4-H Agent, NW; J. Lilly, Jefferson County*; Y. Goode, Gadsden County*; M. Boston, Leon County; M. Brinkley, Liberty County; W. Cherry, Calhoun County; M. Taylor, Gulf County; A. Granger, Jackson County; P. Davis, Bay County; J. Dillard, Washington County; N. Crawson, Holmes County; J. Brooks, Walton County*; P. Caskey, Santa Rosa County*; Grace Carter, State 4-H Leadership/Citizenship Coordinator

Objectives: Teens who are engaged as volunteers do better in school, feel more positive about themselves, and avoid risky behaviors (Child Trends, 2006). Although nearly 60% of teens (or 15 million) in the US participate in some form of volunteering each year, the number of teen volunteers utilized in Florida 4-H was relatively low- only 18% of volunteers in the panhandle region were teens (2015 ES237 Report). Methods: Realizing the overall positive impact that teen volunteers can have, Extension faculty in the panhandle of Florida implemented a Teen Retreat to cultivate youth adult partnerships to lead to more engagement of teen volunteers. In 2015, twenty-eight teens planned, implemented and evaluated a two day retreat. Results: In just two years, this positive youth development program has increased teen volunteers by 87%, improved teen leadership and engagement at the county, district and state levels, and also increased teen volunteer service to communities throughout the panhandle. In addition, teen volunteers reported an increase in communication skills and contribution measured by Common Measures constructs. Conclusions: Other unexpected benefits of this program include an increase in funding for teen programs, as well as improved diversity of teen volunteers.

What happens after the 4-H Embryology Program? Why not Rent-a-Chick?

T.Darress* Martin County and A. Lazzari* Brevard County

Objective: Enhance the educational experience with youth who have participated in the 4-H Embryology Enrichment Program. Youth will learn under the experiential model, on how to care for the chicks they have observed developing over the 21 days, of the embryology project. Youth will learn the importance and responsibility of animal husbandry while applying their knowledge gained from the embryology curriculum, with no long-term commitment. Methods: Youth and parents sit through a thirty-minute chick education course, explaining "How to properly care for chicks". Youth and parents receive supplies needed to care for the chicks for 1 week. Youth and parents sign a contract to properly care for chicks and make a payment of \$20.00. Results: Youth who participate in the program are those who are interested in animal science activities but do not have appropriate housing/property for long-term commitment. Youth populations who participate are those that are not actively involved in 4-H activities do to demographics. The Rent-a-Chick program increases involvement with diversified audiences meeting our affirmative action requirements. Funds received from the Rent-a-Chick Program are used to purchase or maintain new or existing Embryology Kits. Conclusions: Feedback from participants of the program have concluded, that youth gain experience, share that experience with peers, process the knowledge, generalize the knowledge through responsibility, and apply the knowledge to real life experiences.

Mindful Living

M. L. Brinkley, Liberty County

Objectives: To share tips on how to overcome stress by living a mindful life resulting in more quality time spent with family and job satisfaction. To encourage others to pursue study leave to enhance Florida IFAS Extension programing. Methods: A six month study leave was granted which allowed me to spend uninterrupted time to study and practice mindfulness. In order to be effective in teaching Mindfulness, I felt it was best to understand the concept. I took an online course and began implementing the practice. I also met with individuals from the UF Mindfulness Center on campus to plan, develop and implement a workshop for youth who attended 4-H University. I attended a Mindful Leadership Summit in Washington, DC. which helped me further explore the growing practice of mindful leadership. Results: The workshop presented at 4-H U was well received by the youth and found they have a lot of interest in learning how to declutter and destress their lives through Mindfulness practice. The possibilities for Mindfulness are fitting for Extension professionals' personal growth and to the clientele we serve through Family and Consumer Sciences and 4-H Youth Development Programs. Conclusions: Extension professionals are stressed and have a difficult time balancing work and family are stressed and anxious and could benefit from implementing Mindfulness. It also improves attention span, memory, the ability to focus and relationship satisfaction. Research shows there is increased productivity, happiness, focus, and improved relationships with the practice of simple mindfulness skills.

Achieving Belonging and Inclusion in Diverse 4-H Audiences

A. Granger*, UF/IFAS Jackson County Extension; B. V. Bennett*, UF/IFAS Madison County Extension, N. Baltzell*, UF/IFAS State Camping Program Coordinator

OBJECTIVES: Provide Agents and volunteers with resources and experiential learning activities to facilitate 4-H Clubs and Buddy Camps that promote inclusion and recognition of a diverse audience with special needs, specifically those youth and families affected by Autism and other developmental disabilities. METHODS: The Madison and Jackson County 4-H Programs have facilitated 4-H clubs that serve youth and their families, with special needs. Since the inception of ASK 4-H Madison County Club-Always Support Kids in 2011 and ASK 4-H Jackson County Club-Always Support Kids in 2016, volunteers have adapted and incorporated components of 4-H into programs through club activities and projects, Buddy Camps through the Florida 4-H Camping Program, and day camps to create long-term educational opportunities in an inclusive environment. RESULTS: Youth in Madison and Jackson County 4-H are developing a sense of belonging and inclusion in club and camp settings. Youth have increased their knowledge and competencies in life skills including managing feelings, marketing themselves, social skills, problem solving, teamwork, and learning to learn. CONCLUSIONS: Youth need to know they are cared about and feel a sense of connection to others in a group. 4-H programs encourage development of a sense of Belonging, which is one of the "Essential Elements." An inclusive environment that provides youth with the feeling of physical and emotional safety while actively participating in a group, helps foster positive relationships with other youth and adults, while creating an avenue through which all youth can succeed as contributing members of society.

Gifford Youth Achievement Center Garden Club After School Program

D.C. Cole*, L.N. Munroe and C. Kelly-Begazo, UF/IFAS Extension Indian River County

Children from historically underserved communities often lack the basic knowledge that help them make healthier food choices. Utilizing the lesson-based curriculum, 'Learn, Grow, Eat, Go!' and modules from the Jr. Master Gardener program, youth were encouraged to participate in an after-school garden club at Gifford Youth Achievement Center (GYAC). OBJECTIVES: Improve the health and wellness of youth participants via fresh vegetable experiences, garden science and physical activity. Incorporate life skill learning with a focus on responsibility, listening, interpretation and following directions. METHODS: Youth (4-5 grades), completed hands-on projects in areas of science, healthy living and gardening in a positive and nurturing environment. Experiential learning was the major focus with an additional emphasis on learning and practicing life skills. Data was gathered using pre-post test surveys, personal interviews and information gleamed from project workbooks. RESULTS: Children indicated that, based upon their garden experiences, they now understood how to make better choices about food selection. Data also concluded that they enjoyed the physical activity in the garden, and were aware of its importance on their health. CONCLUSION: The After-School Garden Club program is a way for youth to understand how their food is grown and to take responsibility for their own healthy eating habits. They feel empowered to make better choices about what they put on their plate and wanted to share that knowledge with family and friends. As a bonus, children who participated in the program also saw improvements in their reading and math skills.

Revitalizing 4-H in an Afterschool Environment

R. Madhosingh-Hector*, UF/IFAS Extension Pinellas County, A. Bowers*, UF/IFAS Extension Pinellas County, and T. Ackerman, UF/IFAS Extension Pinellas County

Objectives: Extension staff sought to reinvigorate the relationship between a 4-H afterschool club at a Title 1 middle school and the county Extension office. In order to deepen the youth's understanding of what 4-H stands for and what sustainability is, staff sought to make the club more sustainable in itself. Methods: Staff targeted an afterschool club that had struggled to understand the requirements of 4-H and had low participation numbers in county-wide 4-H programs. Each semester, staff used 4-H curriculum to educate students about sustainability concepts while slowly reducing staff involvement and increasing youth leadership. Results: After completing one project book, 100% (n=8) of surveyed youth indicated that they learned "a lot" about sustainability and the environment and that they were interested in participating in at least one county 4-H event in the coming year (2017). Four students represented this club at the 2017 "Share the Fun" event. The club has completed three project books and youth have been more involved in decision making and leading activities. They have articulated plans for the future of the club that include lessons and activities from 4-H curriculum. Conclusions: Afterschool clubs have a unique set of challenges that can make adopting a traditional 4-H model more difficult than in other settings. However, with targeted guidance and understanding of their needs they can excel and become active ambassadors for 4-H in the community. The presence of a 4-H club can also support school and classroom educational goals.

Nassau County COOP-eration

Kelsey Irvine, Nassau County Extension/4-H Youth Development

OBJECTIVE: Nassau County historically provides the 4-H Embryology project and has the challenge of find homes for many hatchlings. To offset this problem, Nassau County 4-H completed a recycling project that transformed an old aquaponics structure into a chicken coop in order to house the hatchlings after the program. METHODS: An unused aquaponics structure was selected for re-purposing. Materials required for the build such as tin, wire mesh, and plywood were donated from community sources. Every youth involved (ages 5 to 15) used tools and participated in the build and design. Advertisement through local newspapers and at schools during the Embryology project allowed for the community to be aware of the availability of chicks. Chicks were re-homed for a suggested donation of \$5 each. RESULTS: A total of 7 youth participated in the project, with minimal assistance from 5 adult volunteers. At this time over 40 chicks have been adopted by youth, which has generated more than \$160 in revenue. The coop cost only \$33 to construct due to donations and recycling of some materials. Many adopters were first time chicken owners inspired by the project and are now new 4-H members planning to show in the fair. CONCLUSIONS: The Extension Office coop provides an easy solution to the age-old Embryology problem, while providing youth a skill-building and conservation of resources project. The coop is economically feasible for most counties. The housing of post-program chicks also provides supplementary revenue and cyclic advertising for new 4-Hers to start the poultry project.

Poké Maps & Apps: Using Technology as a Teaching Tool

A. Stewart, UF/IFAS Extension Marion County

Objectives: Marion County 4-H wanted to encourage participation in geospatial programs that would spark interests in the field while introducing youth to how geospatial technologies are integrated into their daily lives. This program was designed to promote GPS, GIS, Geocaching, Mapping, and careers in geospatial related fields. Methods: With the latest Pokémon GO craze, our program was able to modify the Maps & Apps activity and use Pokémon GO as a teaching tool for our geospatial program. Our new Poké Maps & Apps program is a one day, one hour program allowing youth to create their own Pokémon GO maps while understanding how the game utilizes GPS and GIS technologies. Results: Seven classes have been taught around Marion County at schools, community centers, libraries, day camp, and at 4-H University with additional programs currently being scheduled. To date, a total of 140 youth have participated in this program. According to pre and post-test evaluations, youth that have participated in the Poké Maps & Apps program increased their knowledge of geospatial programs and terminology by 98% and reported they are now more comfortable putting this knowledge to use. Conclusion: This program seeks to spark youth interest in geospatial related fields such as GPS and GIS as well as to increase their knowledge gain. Although we are currently unable to measure the long-term outcomes, short-term outcomes show youth participants from the Poké Maps & App program have become more interested in geospatial education and careers that utilize such technologies.

Science and Technology Institute for Youth Professionals

Draper, A.* and Guay, N.* 4-H Youth Development

Objectives: To improve educators' ability to use the experiential learning model to teach STEM topics and increase educators' use of hands-on activities and technology in educational programs. Methods: Faculty and staff facilitate hands-on activities in environmental science, engineering and technology, and agricultural sciences using 4-H curriculums to teach STEM topics in an experiential manner. A retrospective pre-/post-evaluation administered to 21 participants over two years measured participants' perceived knowledge and ability to facilitate educational opportunities for youth. Respondents rated their knowledge/abilities on a scale of 1-5 (1 being very low and 5 being very high). Results: Prior to the workshops 76% (13/17) of participants reported moderate or less knowledge related to helping youth increase their science abilities. Upon completion 100%(21/21) reported high to very high knowledge. Prior to the workshops 63% (10/16) of participants reported moderate or less knowledge of using the experiential learning model. Upon completion 95%(20/21) reported high to very high knowledge. Prior to the workshops 75% (12/16) of participants reported moderate or less knowledge of integrating technology into science programming. Upon completion 100%(21/21) reported high to very high knowledge. Prior to the workshops 69%(11/16) of participants reported moderate or less knowledge of integrating life skill development into science programming. Upon completion 100%(21/21) reported high to very high knowledge. Conclusions: Participants increased their knowledge of, and ability to teach STEM topics to youth in classrooms, afterschool programs, and 4-H clubs using the experiential learning model.

Achieving Mastery in 4-H Animal Science Programs

A. Granger*, UF/IFAS Jackson County Extension; C. McCazzio*, UF/IFAS Putnam County Extension, S. Michael, UF/IFAS Regional Specialized 4-H Youth Agent II

OBJECTIVES: Introduce agents and volunteers to resources and experiential learning tools for 4-H animal science that promote and encourage mastery. Provide youth opportunities for exploration of their ideas and interests and develop self-confidence by achieving mastery through animal science. METHODS: Agents and volunteers incorporated components of 4-H animal science programs in club and classroom projects and day camps to create long-term educational opportunities specific to or related to, animal science. Dosages go beyond club and classroom activities in educational programs that provide opportunities for exploration of ideas related to their interests in competitive events such as skillathons, animal exhibition, judging events, public speaking and exhibition of animals. Youth explore careers related to animal science and learn life skills that help them make positive life choices. RESULTS: Youth in Jackson and Putnam County 4-H programs have increased awareness and participation in long-term club projects at all age levels and are developing mastery in the areas of science, technology, engineering and math (STEM) and healthy living. Youth have increased their knowledge of the animal industry and best practices, nutrition, management, and end products. Multiple delivery options allow for mastery in animal science related 4-H projects and activities including: completion of record/project books, public speaking and participation in competitive events. CONCLUSIONS: 4-H programs encourage development of the "Essential Elements" of youth development which include Mastery. Mastery involves the building of knowledge, skills and attitudes and is related to "self-efficacy," which is a belief in one's ability to succeed.

Teaching Life Skills with Peanut Butter and Jelly

B. Estevez*, UF/IFAS Extension Escambia County; S. Spann*, UF/IFAS Extension Baker County; H. Janney, UF/IFAS Extension Hamilton County; B.V. Bennett, UF/IFAS Extension Madison County; K. Allen, UF/IFAS Extension Suwannee County; D. Fenneman, UF/IFAS Extension Madison County; K. McCallister UF/IFAS Extension Union County

Have you thought about how many peanuts it takes to make a jar of peanut butter or how many blueberries to make a jar of jelly? Peanut Butter and Jelly Day Camp (PBJDC) exposed youth to local commodity farms, taught them how to make peanut butter, canning safety, how to grind their own flour and bake their own bread, and allowed them to have a university experience. Objectives: 1) Increase knowledge of where food comes from, 2) Learn about college and career choices, 3) Increase life skills. Methods: Over four days, youth visited multiple farms including a peanut packing house, peanut farm, blueberry patch, and Extension Center; partook in taste tests of peanut butter and jelly; made bread in a UF laboratory and met with CALS Ambassadors; and ate the food they made. The experiential approach was supplemented by expertise from UF/IFAS Extension agents, UF faculty and staff, and volunteers. Results: Forty-three PBJDC participants learned about the production of peanuts, blueberries, and bread from farm to family and experienced the 4-H motto of "Learn by Doing." When asked to self-report what they learned from the experience, youth identified how to make peanut butter, safe canning, and college opportunities as their top take-aways. Conclusions: Fifty-five percent of youth increased knowledge about where their food comes from, communication, decision making, teamwork, problem solving, and healthy lifestyle choices based on student evaluations. 4-H youth learning how food is produced locally raises awareness of the importance of agriculture to future generations.

Natural Resources and Outreach Camellia A/B Nicole Pinson, FANREP Abstract Chair Tuesday, August 29, 2017 9:15 am - 5:30 pm

Time Tuesday	Speakers	Abstract
9:10-9:15 am	N. Pinson	Introductions & Protocol
9:15-9:30 am	S. Barry, L. Kolluri	Expanding the Horseshoe Crab
		Citizen Science Program to your
		County
9:35-9:50 am	A.B. Collins	Real-time Data from Real-Life
		Anglers: Using Cooperative
		Research to Assess Survival of Reef
		Fishes after Recreational Catch and
		Release
9:55-10:10 am	E. Lovestrand, S. Jackson, R.	Expanding the Dark Skies Initiative
	Bodrey	Along Sea Turtle Nesting Beaches in
		the Florida Panhandle
10:15-10:30 am	L. Carnahan	Going Coastal Spring Break Camp:
		Teamwork Divides the Task and
		Multiplies Success
10:35-10:50 am	A.B. Collins	Regional Florida Artificial Reef
		Workshops - Planning for People
		and Pisces
10:55-11:10 am	V. Blanco	Derelict Crab Traps and Ghost
		Fishing in Taylor County
11:15-11:30 am	E. Lovestrand, L. Harrison, R.	Recent Citrus Greening (HLB)
	Bodrey	Discovery in the Florida Panhandle
11:35-11:50 am	M.E. Henry, J. Sullivan	Developing a Statewide Survey to
		Measure Beekeeping Program
		Impacts
Friends of Extension and Retirees Luncheon 12:00 – 2:00 pm		
2:15-2:30 pm	Y. Zhuang	Training Public School Science
		Teachers to Teach Water
2:35-2:50 pm	J. McConnell, L.S. Jackson	Multi-faceted Approach to Invasive
		Species Awareness and
		Management
2:55-3:10 pm	J.V. Morse	Right Plant, Right Place by Habitat
3:15-3:30 pm	D. DeBusk	Recognizing Volunteers through
		Their Peers

3:35-3:50 pm	L. Barber, B. Broaddus	Garden Goodies: Sassy Cows 4-H Group Learn About Fodder (Garden Goodies Program)
3:55-4:10 pm	S. Webb, E. Elsberry	Creating Connection through
		School and Community Gardens
4:10-4:30	Break	
4:35-4:50 pm	E. Elsberry, S. Webb	Sprout Out: Growing a School and
		Community Garden Association
4:55-5:10 pm	L. Tiu	Building a Hobby-Scale Aquaponics
		Demonstration System
5:15-5:30 pm	L. Barber, W. Elmore	Hillsborough, Pasco and Pinellas
		Counties Community Water Wise
		Award Program

On-site room changes of presentation locations may occur. Look for posted announcements of any changes.

Expanding the Horseshoe Crab Citizen Science Program to your County

S. Barry*, UF/IFAS Extension Nature Coast Biological Station and Florida Sea Grant L. Kolluri*, UF/IFAS Extension Nassau County

The population status of Florida horseshoe crabs (HSC) is unknown despite their important ecological role. We initiated pilot citizen science efforts in two areas of Florida to conduct standardized surveys and provide data to fisheries managers. Detailed population data is needed statewide but expansion to new areas requires baseline data on HSC breeding habits. OBJECTIVES: 1) Pilot a citizen science program for detailed HSC sampling in the Nature Coast; 2) collect baseline data on HSC nesting locations and habits in northeast Florida; 3) engage volunteers in citizen science and increase interest in and awareness of HSC conservation. METHODS: Volunteers were recruited and trained to complete either baseline (northeast Florida) or detailed (Nature Coast) horseshoe crab nesting surveys. We followed up with volunteers to assess program success. RESULTS: Both the Nature Coast region and Nassau County experienced success in volunteer recruitment and scientific findings. High levels of participation and continuing interest in the program are evident in both areas (Nature Coast - 82 volunteers; Nassau County – 25 volunteers). In the Nature Coast, HSC surveys revealed movements between nesting sites. In Nassau County, the western half of Fort Clinch State Park beach was discovered as an important nesting area. CONCLUSIONS: There are several requests for expansion of HSC Citizen Science to new areas. The Florida Fish and Wildlife Conservation Commission plans to support a statewide program. Baseline nesting beach surveys are a great way to engage volunteers and obtain baseline data needed to start an HSC Citizen Science program in your county.

Real-time Data from Real-Life Anglers: Using Cooperative Research to Assess Survival of Reef Fishes after Recreational Catch and Release

A.B. Collins; Multi-county Agent for Manatee, Hillsborough, and Sarasota counties

Objectives: Groupers comprise one of the most economically important reef fisheries in the southeastern United States. Management restrictions necessitate recreational discard, and the associated release mortality is an important consideration during stock assessments. This project aimed to reduce uncertainty surrounding discard mortality estimates, which can vary by species, season, gear and depth. Methods: Using a cooperative team of recreational anglers, Gag (n = 96; 44–80 cm) and Goliath grouper (n = 39; 105 – 206 cm) were caught on hook and line and monitored via acoustic telemetry on the west Florida shelf. Capture depths ranged to 40 m and fish were tagged during all seasons. After tagging, individuals were either placed back into the water without barotrauma mitigation, were vented to assist descent, or were returned to the bottom using a descending device. Results: Monitoring periods ranged to 950 days for Goliath (mean = 444 d) and 794 days for Gag (mean = 132 d). Conclusions: Telemetry data from both species indicate strong site fidelity and high survival (>90%) after recreational catch and release on the west Florida shelf (to depths of 40 m). Cooperative partnerships such as these are cost-effective, efficient and provide a realistic assessment of angler behavior and fish mortality after catch and release.

Expanding the Dark Skies Initiative Along Sea Turtle Nesting Beaches in the Florida Panhandle E. Lovestrand*, Franklin County Ext. Director/Sea Grant Agent II RSA; S. Jackson*, Bay County Ext./Sea Grant Agent IV RSA; R. Bodrey*, Gulf County Ext. Director/Agric./Sea Grant Agent II

Objectives: UF/IFAS Extension received funding to expand dark sky areas along sea turtle nesting beaches in Bay, Gulf and Franklin Counties. The goal of the project is to reduce artificial lighting impacts on Florida Panhandle sea turtle populations by assisting homeowners through educational outreach and providing equipment for retrofitting homes with sea turtle-friendly lighting. Artificial lighting disorients many sea turtles to natural pathways and discourages nesting in prime habitat. Methods: State of the art wildlife-friendly lighting technology that will benefit turtles and not compromise human safety or security will be employed. The turtle-friendly lighting will be made available to property owners residing within a 1000' zone near existing conservation lands or parks. Owners must be willing to sign a pledge to install the equipment. Results: Surveys conducted by the Florida Fish and Wildlife Conservation Commission identified over 400 properties in the tri-county area. Three technicians were hired and trained by the Extension team, one for each county's implementation efforts. The technicians contact clientele within the conservation boundary and assist in sea turtle-friendly lighting retrofits. Conclusions: Sixty eight property owners have agreed to participate in the retrofit efforts to-date. When retrofits are completed impacts will be both environmental and economic. Use of sea turtle-friendly lighting has been shown to improve hatchling survival. The LED lighting being used is energy efficient - low wattage, so property owners will experience a reduction in energy usage and long-term maintenance costs.

Going Coastal Spring Break Camp: Teamwork Divides the Task and Multiplies Success

L. Carnahan, UF/IFAS Extension Pinellas County

Empowering youth to dream big and reach their full potential can be accomplished in a supportive learning environment in partnership with knowledgeable caring adults. OBJECTIVES: The Sea Grant Agent facilitated a marine science spring break camp that educated the county's youth to understand linkages between their behavior and its impact on the environment and society. The Agent used a trainthe-trainer model to teach ten (10) Ohio State University college student volunteers to design, teach, and oversee a 3-day marine science camp for the youth. METHODS: The Agent conducted a 2-day training for the college students that included site orientation, youth protection training, lesson plan development, agenda design, and marine science topical instruction. RESULTS: College volunteers developed a camp agenda that included daily reflections, team-building, marine science lessons, outdoor activities, and arts and crafts. Twenty-three students (ages 7-11) attended the 3-Day Going Coastal Spring Break Camp. Based on a 13-question pre/post assessment, 95% (20 of 21) of elementary students demonstrated knowledge gain, with an average of 24% increase. All students pledged to do something to help Tampa Bay with 74% reporting they would work to decrease litter. CONCLUSIONS: By employing the train-the-trainer model to teach a 4-H camp, the Agent increased the knowledge and life skills of 10 college students, educated 23 elementary school students, and earned revenue for future UF/IFAS Extension marine programs.

Regional Florida Artificial Reef Workshops - Planning for People and Pisces

A.B. Collins*, Multi-county Agent for Manatee, Hillsborough, and Sarasota counties; H. Abeels, J. Hazell, L.S. Jackson, L. Tiu, and C. Verlinde

Objectives: Artificial reefs contribute significantly to local economies, providing recreational opportunities for anglers and divers, and generating at least \$3.1 billion of economic activity in Florida. Artificial reefs are also used as mitigation tools in areas that have suffered environmental perturbations or habitat degradation. Florida Sea Grant and UF/IFAS Extension aim to ensure artificial reef deployment and monitoring are informed by the best available science. Methods: Regional artificial reef workshops were designed to bring together managers, coordinators, scientists, contractors and local stakeholders involved in all aspects of artificial reef research and deployment. One-day workshops were held across the state as a cooperative effort between Florida Sea Grant and UF/IFAS Extension and the Florida Fish and Wildlife Conservation Commission. These regional workshops provided an open forum to highlight local efforts while also providing information regarding new science and overall policy at the state and federal levels. Results: Three regional artificial reef workshops were held across Florida over the course of one year (March 2016 – February 2017). Approximately 150 stakeholders attended statewide and workshop evaluations indicated that almost all participants learned new information that was directly applicable to their job. Conclusions: Regional workshops are an efficient method for communication and provide a conduit for information exchange at a local level that informs best practices for future artificial reef development, deployment and scientific monitoring within the state of Florida. This is critical for continued evolution of artificial reef programs that best address the needs of stakeholders and reef species.

Derelict Crab Traps and Ghost Fishing in Taylor County

V. Blanco, UF/IFAS Taylor County Extension

Objective: To develop educational tools on hazards of derelict crab traps. First it's needed to estimate the number and distribution of derelict crab traps in Taylor County coastal waters to generate awareness about the impact of ghost fishing in marine recreational and commercial fishing resources. Methods: Informal interviews with crab fishermen at Taylor County Boat ramps, and evaluation of FWC published info about issued permits in the County leading to clean-up activities in partnership with FDEP and the Nature Coast Biological Station, so press release and educational notes can be developed and spread. Results: FWC information showed that only 23 permits were issued for Taylor County crab fishermen in 2016 but the number of traps is no disclosed. During interviews with crab fishermen they expressed that the crab industry in Taylor County owns more than 10,000 traps and that at least 10% of traps are lost every year. They also expressed all coastal State waters are fishing zones. No official data was found for recreational crab trapping. It was estimated that at least 1,000 crab traps are derelict per year in Taylor County coastal waters. In 2017 two derelict crab traps cleanups had been performed near Steinhatchee coast and 186 derelict traps were taken out of the water containing commercial and noncommercial species. Conclusion: The exact number of derelict crab traps in Taylor County coastal waters is still unknown, especially considering lack of information of recreational lost traps. Educational efforts must be taken to increase awareness of this threat to marine resources.

Recent Citrus Greening (HLB) Discovery in the Florida Panhandle

E. Lovestrand*, Franklin County Ext. Director/Sea Grant Agent II RSA; L. Harrison*, Wakulla County Ext. Director/Agric. and Nat. Resources; R. Bodrey*, Gulf County Ext. Director/Agric./Sea Grant Agent II

Objectives: Document the occurrence and range of HLB and its vector, the Asian citrus psyllid, in the Florida Panhandle. Methods: A field visit took place in Carrabelle, Florida during December 2016 with a client who was concerned about a noticeable decline in his dooryard citrus trees. When multiple clues were observed in the fruit, leaves and overall appearance, samples were collected and taken to the NFREC Plant Disease Diagnostic Clinic in Quincy. Following a positive test for HLB, samples were sent to the Division of Plant Industry lab in Gainesville where HLB was confirmed. Results: After identifying HLB in Carrabelle, inspections of other citrus in Franklin County resulted in confirmation of the disease in Apalachicola. NFREC faculty then provided sampling equipment that led to a collection and positive ID of the specific insect vector associated with the disease, the Asian citrus psyllid. Faculty at the NFREC then hosted a session with Extension faculty to establish a multi-county sampling project throughout North Florida, to assess the scope of the psyllids presence and identify other possible HLB sites. Since that time psyllids have been collected at multiple sites in Franklin County. Conclusions: Direct contact with clientele in the field is key to identifying and assessing the occurrence and extent of disease and pest problems. Teamwork between the Research faculty at the REC and Extension faculty in the field provided a broader, more effective approach to serve clientele than either group could accomplish on their own.

Developing a Statewide Survey to Measure Beekeeping Program Impacts

M.E. Henry*, UF/IFAS Extension Polk County; J. Sullivan*, UF/IFAS Extension Osceola County; M. Bammer, UF/IFAS Extension Honeybee Lab, Gainesville; J. Ellis, UF/IFAS Extension Entomology Department, Gainesville; J. Diaz, UF/IFAS Department of Agricultural Education and Communication, Lake Wales

Measuring Extension program impact is an increasing focus, yet few instruments have been developed to consistently measure indicators across counties. Agents and Specialists collaborated to develop a preliminary statewide beekeeping program follow up survey and a pilot was distributed to participants of a one day beekeeping program. OBJECTIVES: Develop instrument to measure the post program outcome of beekeeping programs. METHODS: Existing program metrics, national indicators and FDACS Apiary Inspection BMPs were compiled for comparison to greater behavior change objectives. A Qualtrics survey was emailed to 72 participants who had registered online for five years of one day programs conducted from 2012-2016. RESULTS: Of 13 responses, (18% response) 77% had followed up to learn more since the program. 81% had shared what they learned with others. 45% reported starting a hive as a result of the program, however only 9% registered with FDACS. Of fifteen BMPs, monthly inspection, evaluation of nectar sources and locating hives away from public access were the most highly adopted. Questions based on national metrics regarding colony loss garnered little information. CONCLUSIONS: Measuring impact requires development of metrics in line with the complexities of adopting any new enterprise, behavior or technology. Most participants followed up and shared what they learned but fewer were prepared to commit to larger steps in the process. Limited practice adoption may be expected from introductory programs, however metrics developed may provide a benchmark when repeated in a suite of instruments designed to measure longer term outcomes of more intensive programs or series.

Training Public School Science Teachers to Teach Water

Y. Zhuang, UF/IFAS Extension, Marion County

Most K-12 science teachers have expressed a need for water education that introduces students to STEM components in an interactive way. Objective: This program seeks to provide the teachers with information about water education curricula and to prepare them to use these activities in their classroom. Methods: The UF/IFAS Extension, Marion County partners with the Marion County Public School Board and develops an annual training for science teachers. This training was conducted for 4th to 6th grade science teachers in 2015 and 2016. The two-day workshop featured in-class presentations, hands-on demonstrations, and field trips. All the teaching materials incorporate STEM concepts relevant to water and meet the Florida Sunshine State Standards for 4th to 6th grades. Results: A total of 38 science teachers participated in 2015 and 2016. Based on the post program survey, all unanimously indicated that they improved their knowledge of the water education curricula and would use the activities into their classroom, reaching more than 1,700 students in the 2016 school year. Three teachers who attended training in 2015 also attended the training in 2016. They reported having demonstrated activities such as water cycle, aquifer and water properties to approximately 300 students in the 2015 school year. Teachers remarked this program was "a fun way to teach STEM with minimum preparation and cost". Conclusions: This program demonstrates the multiplier effects of train-thetrainer approach. Training the science teachers allows the program to reach more K-12 students in a more time effective way.

Multi-faceted Approach to Invasive Species Awareness and Management

J. McConnell*, UF/IFAS Extension Bay County Horticulture; L.S. Jackson*, UF/IFAS Extension Bay County Sea Grant RSA

Objective: Increase awareness among Bay County residents and visitors regarding invasive species including their impact on local ecosystems and fiscal burden to Floridians. Provide tools needed to recognize, report, and remove invasive species from natural areas. Methods: Several methods were used to promote awareness including classroom sessions, office and field consultations, newsletter articles, field-trips, and Ecofina Water School. The authors also developed multi-media presentations using Microsoft PowerPoint for a 6-week educational enrichment class covering invasive species including terrestrial and aquatic species for plants and animals delivered to enrolled audience. Results: Fifteen participants in the 6-week class were evaluated using pre/post-tests and exhibited a knowledge gain of 26.1% and increased use of the IveGot1 app to report invasive species to EddMaps. Twelve Ecofina Water School participants reported a 23.1% increase in awareness as measured in postevaluation survey. Our efforts have had some measure of success as we strive to become the point of contact for the community interested in controlling invasive species. The agents have partnered with USDA using biological control of air potato vine and with FWC on herbicide control of the aquatic weed Giant Salvinia. Conclusion: Agents will continue to provide educational opportunities through classes, print and social media, and consultations to increase awareness and offer prevention and management options for invasive species. Future plans include additional sessions of the 6-week course and developing programs for municipal workers to help identify emerging problem areas.

Right Plant, Right Place by Habitat

J.V. Morse, Pinellas

For future landscapes to be sustainable they will need to thrive within their environmental constraints while restoring habitat and ecosystem services. Objectives: A new alternative program concept was initiated to increase knowledge regarding invasive species, endangered and declining native plant and animal species, water quality and quantity issues, and ecosystem services; change the concept of traditional landscapes; and guide sustainable decision-making processes. Methods: Attendees were given pre/post exams, a lecture, and a hands-on exercise to increase their skill and knowledge of proper plant selection and placement by habitat type. Results: This program has been taught 4 times to a total of 72 people (mostly professional landscapers that manage 100s of landscapes each) with an average knowledge gain greater than 90%. Conclusions: Understanding the types of native habitats and their respective site conditions provides the basis for choosing plant species that thrive in them. This knowledge helps people realize and appreciate the importance of native plants, where they grow and why, and how they can enhance our natural environment through the ecosystem services they provide. Increased knowledge empowers attendees to engage in proper plant selection and best practices critical for preserving water quality and quantity, reducing invasive species introduction and establishment, and protecting endangered and declining native plant and animal species. Florida's Future landscapes must fit the environmental parameters of their sites, and thereby provide a sustainable system that promotes health, well-being, and ecosystem services.

Recognizing Volunteers through Their Peers

D. DeBusk*, UF/IFAS Extension Alachua County

In order to retain volunteers, recognition is crucial. They are more likely to feel connected to the program and continue their participation if they feel appreciated. In an informal survey, the volunteers did not want yearly certificates, so other possibilities were explored. Objectives: The purpose of this recognition strategy was to give volunteers an opportunity to recognize each other, increase the visibility of volunteer recognition, and market the Master Gardener program. Methods: The agent introduced these special awards and criteria at the 2016 Recognition Dinner: Distinguished Service, Helping Hand, Golden Apple, Green Thumb, and Unsung Gardener Awards. The agent developed a nomination form and the volunteers were encouraged to submit nominations. Results: This resulted in 22 nominations. For the 2017 recognition lunch, the agent selected and wrote speeches based on the submission responses and had the volunteers guess the awardee at the end, creating anticipation. The awardee was presented with a plaque with their photo that was hung in the lobby. A special recognition newsletter was written that included the speeches and photos from the luncheon. In a follow-up survey, 98% [n=61] wanted to continue the luncheon and wrote comments such as "best ever event" and "like the new plaques." Conclusions: The new awards were a big hit with the volunteers. Now the volunteers can see who won those special awards all year round which recognizes them continuously and motivates others. This transparent recognition also helps market the program to residents visiting the office.

Garden Goodies: Sassy Cows 4-H Group Learn About Fodder (Garden Goodies Program)

L. Barber*, UF/IFAS Extension Hillsborough County; B. Broaddus*, UF/IFAS Extension Hillsborough County; N. Pinson, UF/IFAS Extension Hillsborough County; S. Haddock, UF/IFAS Extension Hillsborough County; J. Lepore, UF/IFAS Extension Hillsborough County; A. Whidden, UF/IFAS Extension Hillsborough County

Objectives: Twelve Pepin Academy students with identified learning disabilities or learning related disabilities were taught horticulture and life skills so they could take part in learning and social opportunities like fairs and expos. Methods: As members of the 4-H Sassy Cows, these Pepin Academy students participated in an 11-week program that taught the importance of agriculture, horticulture, small farms and community and home gardens. Program methods utilized the experiential learning model and targeted life skills by demonstrations followed by active student participation in reading a seed packet, implementing Florida-Friendly Landscaping[™] principles, composting, describing plant nutrition, harvesting, food nutrition and cooking what they harvested. Results: Overall, 21% have an increased level of comfort sharing their thoughts and feelings with others. Nineteen percent reported they now perform science activities that are not for school and 19% reported they can explain why things happen in an experiment. One parent stated, "The skills learned in Sassy Cows and Garden Goodies will serve ...our son...the rest of his life." One guardian remarked that her grandson engaged in less self-harm while participating as a member of the 4-H Sassy Cows Group. Conclusions: This collaboration of program areas provided horticulture lessons and life skills as educational opportunities the Sassy Cows 4-H'ers can transfer to school, home and for other life situations. Garden Goodies can easily be replicated and utilized on a state or country-wide basis for engaging special needs youth in Extension educational endeavors.

Creating Connection through School and Community Gardens

S. Webb*, UF/IFAS Extension and Bok Tower Gardens Partnership; E. Elsberry*, UF/IFAS Extension and Bok Tower Gardens Partnership

Objectives: Established school and community gardens offer venues for experiential learning opportunities between new and experienced gardeners. A garden walk and talk event was organized to facilitate "cross-pollination" among school and community gardens in Polk County. The objective of the event was to increase knowledge of garden design and layout, resources, and facilitate networking opportunities. Methods: A one day garden tour of five school and community garden sites was conducted in April 2017. Garden leaders at each site discussed their garden history and development, and successes and challenges with garden management and technical skills. Results: Twenty-six gardeners participated in the event, representing 15 school and community gardens. Pre/posttest survey results indicate that participants increased their knowledge across multiple domains. A retrospective pre/post question about knowledge of different garden designs and layout prior to and after the event showed an increase in knowledge (on a five-point scale) from an average score of 2.5 prior to the event and 4.2 after. Similarly, respondents demonstrated an increase in knowledge of new ideas to implement in the garden from an average score of 2.8 prior to the event and 4.7 after the event. Conclusions: Garden tours allow participants to gain a deeper understanding of the day-to-day realities of maintaining school and community gardens and creates a collaborative learning environment among a group of peers. Garden tours are highly adaptable and transferable for use in Extension programs in other counties and states.

Sprout Out: Growing a School and Community Garden Association

E. Elsberry*, UF/IFAS Extension and Bok Tower Gardens Partnership; S. Webb*, UF/IFAS Extension and Bok Tower Gardens Partnership

Objectives: The Polk County School and Community Garden Association is a network of community groups, teachers and volunteers that was developed to create a sustainable infrastructure for school and community gardens in Polk County, Florida. The goal of the garden association is to empower garden members with the knowledge, training, and resources to start and sustain school and community gardens. Specific objectives include (1) increase knowledge of school and community garden best practices, such as having a garden team, garden management, and Florida gardening principles and (2) facilitate behavior change to adopt these best practices. Methods: Garden association education was delivered through eight educational events between September to April, including Sprout Out! an orientation workshop, Jumpstart Day! a resource giveaway event, content specific workshops, such as Compost, Vermicompost, and Curriculum Connections. Results: Forty gardens are part of the garden association, representing 200 individuals. Results of annual qualitative and quantitative evaluation data collected in May 2017 will be presented. Conclusions: Garden associations are an innovative approach to overcoming common obstacles to school and community garden sustainability. Garden associations and networks serve as a model for program delivery methodology that can be adapted to Extension programs in other counties.

Building a Hobby-Scale Aquaponics Demonstration System

L. Tiu*, UF/IFAS Walton & Okaloosa Counties; E. Anderson, UF/IFAS Walton County; and D. Leonard, UF/IFAS Walton County

One of the University of Florida Extension's high-priority initiatives is "increasing the sustainability, profitability, and competitiveness of agricultural and horticultural enterprises." One food production method currently being investigated is aquaponics, where fish and plants are cultured symbiotically in a recirculating water system. OBJECTIVES: While limited programming has been offered in the past, the objective for this project was to develop a hobby-scale demonstration system. This system will be used as part of the first regional effort to develop an ongoing aquaponics program. METHODS: A small hobbyscale aquaponics system was constructed at the Walton County Extension Office with funding from a Sea Grant mini-grant. The system was designed so that it could be replicated with materials purchased locally or on-line. The system was constructed, stocked with catfish, and seeded with lettuce. Construction and production are being documented as the system matures. RESULTS: Multiple obstacles were overcome during the design and construction process. All experiences were documented to share with interested clientele to educate on the potential difficulties that may be encountered during the installation of such a system. The system has been featured in a Hobby-Gardening workshop and is available to view during office hours. CONCLUSIONS: There is a lot of interest in aquaponics culture methods and training. However, finding research based information can be difficult. Being able to observe a demonstration system and learn about the challenges and pitfalls during construction and production will prevent similar mistakes from being made by clients, saving time and money.

Hillsborough, Pasco and Pinellas Counties Community Water Wise Award Program

L. Barber*, UF/IFAS Extension Hillsborough County; W. Elmore*, UF/IFAS Extension Pasco County; J. Moll, UF/IFAS Extension Pasco County; B. Niemann, UF/IFAS Extension Pinellas County

Objectives: The purpose of the annual Community Water Wise Awards is to recognize individuals and businesses committed to conserving our water resources and protecting the environment by using Florida-Friendly Landscaping[™] (FFL) principles. Methods: The nine FFL principles, integral to the landscape evaluation process for this award program, are promoted locally/regionally utilizing several media sources. Homeowners, businesses, non-profit organizations, community associations and other entities can view photos/videos of past winners and complete an entry form at http://tampabaywaterwise.org. Submissions are followed by on-site landscape evaluations. This process provides landscape advice to entrants. Landscapes are scored in categories of businesses, homeowners, etc. and the highest scoring landscape in each is the winner. Results: Winning entries receive a handmade mosaic stepping stone or a plaque for businesses. Winners are acknowledged by city councils/county commissioners which increases the visibility of the award, further promotes water wise programs and the FFL principles to the public and city/county administration. Hundreds of thousands of residents attend these meetings, view televised presentations, read website and newspaper articles about the award winners. Conclusions: There has been a 125% increase in award applications in these counties. Combining a county proclamation to recognize April as Water Conservation Month with recognition of local winners has proven highly successful in promoting the program which has been replicated in other Florida counties and is ripe for statewide utilization/national application. Tremendous potential exists for an impact study on behavioral change to demonstrate impact on water conservation through county policies incentivizing water conservation associated with awards.

Extension Leadership Gardenia A/B Adrian Hunsberger, ESP Abstract Chair Tuesday, August 29, 2017 9:15 am – 5:30 pm

Time Tuesday	Speakers	Abstract
9:10-9:15 am	A. Hunsberger	Introductions & Protocol
9:15-9:30 am	J. McConnell*	Statewide Public Health Education
		Collaboration: Zika Challenge
9:35-9:50 am	L. Harrison	The Extension Education Model in
		Haiti: Teaching the Next Generation
		of Agri-Business Leaders
9:55-10:10 am	C. Higgins, D. Demorest, M.	From the Farm to the Table: A
	Bauer, C. Musgrove, A.	Columbia County First Grade
	Tomlinson	Agriculture Awareness Program
10:15-10:30 am	M.E. Henry, F.P. Rivera	Backyard Chickens Workshops:
	Melendez, R. Kluson, F.	South Central District Extension
	Beckford	Team Program
10:35-10:50 am	D. Leonard, M. Derrick	Serving Our Stakeholders
10:55-11:10 am	R. Madhosingh-Hector	Lessons Learned from Economic
		Impact Studies of Urban Farmers'
		Markets
11:15-11:30 am	A. Bowers	Reconnecting Urban Audiences
		with 4-H
11:35-11:50 am	J.G. Bearden, L.S. Jackson, L.R.	National Invasive Species
	O'Connor	Awareness Week campaign in the
		Northwest Extension District
Friends of Extension and	Retirees Luncheon 12:00 – 2:00	pm
2:15-2:30 pm	H. Mayer, M. Orfanedes	Are You Aware of The Update
		Edition of the Florida Grades and
		Standards for Nursery Plants?
2:35-2:50 pm	M. Benge, C. Sanders	Multi-State Competency
		Assessment of New County
		Extension Directors
2:55-3:10 pm	B. Burbaugh	Developing a Pathway Logic Model
		to Explicitly Link Program Activities
		and Outcomes
3:15-3:30 pm	K. Zamojski, M. Jameson	Sharing Successes and Impacts with
		Stakeholders
3:35-3:50 pm	K. Zamojski, M. Jameson	Teaching Agents Technology Tools
		to Address Emerging Issues

3:55-4:10 pm	L. Hickey	Manatee County Food Deserts
		Harvest Away
4:10-4:30	Break	
4:35-4:50 pm	R. Madhosingh-Hector, L.	Deliberative Forums – An
	Milligan, M.J. Kipp-Searcy	Opportunity to Discuss Complex
		Sustainability Issues
4:55-5:10 pm	K. Waters	Integrating Graduate Students into
		County Extension Programing
		Efforts
5:15-5:30 pm	N. Parks, S. Ahn, S. Deary	Developing a County-centered
		Training Program Based on Food
		Entrepreneurship Core Curriculum

On-site room changes of presentation locations may occur. Look for posted announcements of any changes.

Statewide Public Health Education Collaboration: Zika Challenge

J. McConnell*, UF/IFAS Extension Bay County Horticulture; K. Gioeli, UF/IFAS Extension St. Lucie County Natural Resources; R. Connelly, UF/IFAS Professor, Extension Specialist Department of Entomology and Nematology; S. Strickland, UF/IFAS Extension Osceola County Extension Director Agriculture; J. Davis, UF/IFAS Extension Sumter County Interim Extension Director Horticulture; B. Hall-Scharf, UF/IFAS Extension Hernando County Sea Grant; S. Dunning, UF/IFAS Extension Okaloosa County Commercial Horticulture; D. Demorest, UF/IFAS Extension Columbia County Environmental Horticulture; M. Hunter, UF/IFAS Extension Marion County Residential Horticulture; W. Lester, UF/IFAS Extension Hernando County Horticulture; E. Skvarch, UF/IFAS Extension St. Lucie County Extension Director Commercial Horticulture; S. Scalera, UF/IFAS Extension Brevard County Residential Horticulture; J. Walter, UF/IFAS Extension Brevard County Agriculture

The threat of Zika virus becoming an issue of public health concern through mosquito-borne local transmission in Florida became a reality in 2016. Objective: Extension agents were challenged to: 1) engage in public outreach and education through multiple outlets, and 2) obtain the Public Health Pesticide License with Florida Department of Agriculture and Consumer Services. Methods: Agents taught classes, participated in forums, wrote newspaper articles, newsletter articles, blogs, and created and shared videos online to provide educational resources to reduce mosquito breeding habitat and decrease exposure through appropriate use of repellents and protective clothing. Dr. Connelly created a shared site using Canvas as a consolidated resource center for agents to access materials to be used in counties. Periodic telephone conferences were led by Dr. Connelly to update agents on the ever changing status of mosquito populations and disease spread in the state. Results: Agents reached 2,271 class attendees, produced 20 published works, 4 mass media events, and 6 social media creations including 5 video productions. Twelve agents obtained he Public Health Pesticide License. Evaluations were distributed to 478 and completed by 237 (50% response rate). Respondents indicated behavior change in repellent use (73%) and reduction of breeding sites by dumping standing water (89%).Conclusions: By participating in the Zika Challenge, agents were able to provide current educational resources to their local clientele. As this situation evolves, agents can use these resources and continue to update and create new methods to reach the public about this topic.

The Extension Education Model in Haiti: Teaching the Next Generation of Agri-Business Leaders

L. Harrison, Wakulla County

Objectives: The changing marketing structure in Haiti for small agribusinesses is to move away from the sale of generic products in the "marche" or local markets to higher value customers which may demand some form of value-added processing. The goal was to have students at the Universite Caraibe in Portau-Prince, Haiti, write a business plan for their vegetable and poultry production projects, and then present it to the class for critique and evaluation. Successful plans were then move to consideration for micro-loans which would be used to initiate the enterprises. Methods: The students were taught in class the basics of business plan development over a two week period. Students were instructed on how to develop and present a feasibility analysis, a realistic production and labor needs calculation, a promotion and marketing strategy, financial assessment and planning techniques with useful ratios for the purposes of evaluating the business' performance and how to prepare for securing necessary financing, and establishing a business identity with a distinct brand to create awareness of potential customers. Results: They worked in four groups of six individuals. Each group produced a business plan which was presented on the ninth day of class and initial assessments were made by the instructors and college faculty. The revised plans were presented on the tenth day of class for final evaluation with two groups recommended for funding. Conclusions: The students adapted quickly to conventional business plans which may be used to firmly establish Haitian entrepreneurial agribusinesses creating jobs and economic stability.

From the Farm to the Table: A Columbia County First Grade Agriculture Awareness Program C. Higgins*, UF/IFAS Extension Columbia County; D. Demorest*, UF/IFAS Extension Columbia County; M. Bauer* UF/IFAS Extension Columbia County; C. Musgrove* UF/IFAS Extension Columbia County; A. Tomlinson*, UF/IFAS Extension Columbia County, J. Chasteen UF/IFAS Extension Columbia County, C. Jaeger UF/IFAS Extension Columbia County

Objectives: Agriculture plays an important role in driving our economy and feeding our citizens. At the conclusion of this program, 80% of teachers will "strongly agree" the students recognize that farmers, ranchers, and dairymen produce plants and animals for food, as measured by post program evaluation. 80% of teachers will indicate that this program is of great benefit to students. Methods: From the Farm to the Table is held during the fair. First grade students rotate through 6 stations; each station deals with a specific agriculture commodity in Columbia County. Students rotate through the stations and receive correct food production information in an age appropriate way. Teachers receive take home classroom packets with additional handouts for students to complete in class. Teen 4-H and FFA members are used as instructors and "tour guides" for the program. Results: Thirty two classrooms (348 1st grade students) and 53 adults participated in the 2016 From the Farm to the Table program. Survey results indicate that 85% of teachers strongly agreed that students could recognize key food production concepts that were presented at the program. In addition, 90% of teachers indicated that this program was well presented and worth their one field trip per year. During the program, adults asked multiple questions and received correct information to clarify misconceptions. Conclusion: This is the 25th year of the program. Educating youth to understand where their food actually comes from assists with a positive attitude on the importance of agriculture as adults and allows those adults to make wiser decisions as consumers and voters.

Backyard Chickens Workshops: South Central District Extension Team Program

M.E. Henry*, UF/IFAS Extension Polk County; Francisco P Rivera Melendez*, UF/IFAS Extension Hillsborough County; R. Kluson*, UF/IFAS Extension Sarasota County; F. Beckford*, UF/IFAS Extension Lee County; V. Bielema, UF/IFAS Extension Collier County

Municipalities and counties across Florida are approving ordinances that allow residential backyard chicken keeping in response to public demand for greater food self-reliance and local food systems. The need for public education in appropriate best practices was identified for the safety and success of these public initiatives. OBJECTIVES: Improve public's ability to learn and apply research based information; develop regional Extension collaboration to provide workshops to the public. METHODS: The Backyard Chickens program is composed of three hours of presentations on local ordinances, housing, nutrition, health and bio-security, food safety and egg production. For this program in 2016-17, our South Central district Small Farms Agents cooperatively edited presentations and conducted four workshops in Sarasota, Collier, Polk, and Pinellas Counties. Each Agent hosted a program and/or taught at least one section of the material. Local vendors provided door prizes and displays to correspond to the program material. RESULTS: For four workshops and 110 participants, 98% of participants (n=61) said the program met or exceeded their expectations. More than 90% of participants (n=63) gained knowledge in the seven featured subjects and at least 82% of attendees (n=63) intended to adopt practices based on what they learned. CONCLUSIONS: Quality and collaborative programing made a successful Extension program in backyard chicken keeping at the regional level that provided workshops to meet the education needs of individual counties. District faculty gained experience working together regionally and further developed partnerships to provide science-based information to the public for one aspect of local food systems.

Serving Our Stakeholders

D. Leonard*, UF/IFAS Extension Walton County; M. Derrick*, UF/IFAS Extension Santa Rosa County; E. Bolles, UF/IFAS Extension Escambia County

Objectives: UF/IFAS Extension Master Gardener volunteers assist Extension in Walton County by reaching over 5,000 clients annually and, thus, it is imperative that Master Gardeners be trained in customer service techniques. Since these skills were not addressed in the initial training course for Master Gardeners, an advanced training series was devised to teach those necessary skills to increase the guality and guantity of their participation in plant clinic and speakers' bureau. Methods: The series consisted of 3 two-hour trainings. Intended outcomes were for 75% of participants to gain knowledge on finding available resources, proper presentation delivery, office administrative skills, customer service techniques, and handling difficult clients. 50% of attendees were expected to use these skills in interactions with clientele. Agent partnered with two other agents in speakers' bureau training. Results: 29 Master Gardeners attended the events and 13 completed an end of program evaluation. Evaluations indicated 85% gained knowledge on online and print resources, 77% gained knowledge on proper presentation delivery, 77% gained knowledge on office administrative procedures, 85% gained knowledge in customer service techniques, and 92% gained knowledge on handling difficult clientele. A follow-up survey conducted two months later found that 100% of participants used the knowledge gained in clientele interactions. The number of volunteers involved in plant clinic and speakers' bureau increased by 40%, from 15 to 25 individuals. Conclusions: Advanced training in customer service is a valuable investment of time in order to increase the quality and quantity of service to clientele.

Lessons Learned from Economic Impact Studies of Urban Farmers' Markets

R. Madhosingh-Hector*, UF/IFAS Extension Pinellas County

Objectives: After completing a study of a large, urban farmers market, the agent sought to provide points of comparison and better understanding of the economic impacts of smaller markets. Methods: Using the Sticky Economic Evaluation Device as the format for all studies, the agent partnered with a market management company overseeing several markets in the region. Attendance counts and survey collection were conducted on several dates at two distinct markets within the county and analyzed to determine the economic impact of each market. Results: Though the markets had similar daily attendance counts, the number of surveys that staff and volunteers were able to collect only yielded statistical validity at one market. In 2017, 54% (n=316) of the shoppers at this market reported spending money at nearby businesses, which was similar to the 2015-2016 study of the larger market where 50% of shoppers did so (n=864). Interesting variances between the markets include differences in the ratio of money spent at the market and at surrounding businesses. Conclusions: The logistical challenge of studying smaller markets is larger than anticipated, but varies widely depending on the layout and culture of the markets themselves. Practices that seemed to be of marginal importance at a large market can be much more impactful at smaller markets. Regardless of these differences, the value of farmers' markets cannot be overlooked in the local economy.

Reconnecting Urban Audiences with 4-H

A. Bowers, UF/IFAS Extension Pinellas County

Objectives: In a very urban county like Pinellas, 4-H programming is often overlooked by parents as a youth development opportunity. In an effort to grow the 4-H program, the agent sought to re-introduce 4-H to old and new audiences and highlight the experiential learning opportunities that it can provide in urban communities. Methods: The 4-H agent used multiple avenues to connect new audiences with 4-H in Pinellas County. These new programs and events included a low-cost food science summer camp, a 4-H year Open House Event, a National Youth Science Day and a Cloverbud SPIN club. These opportunities helped to target 4-H members and recruit adult volunteers. Results: Over 250 children and adults interested in 4-H signed-in at the Open House event in August, which resulted in one new club and many new youth and few volunteers. The Cloverbud SPIN club introduced 20 new children and their families to 4-H in the county. Nine (9) youth attended the Food Science Day camp in 2016, with 88% of participants indicating "I like science" on an evaluation. Conclusions: Urban counties have to utilize different strategies to connect 4-H with new audiences. Short-term programs, camps, and events can be used to make 4-H enticing and interesting to first generation and non-traditional 4-H'ers. It can also generate new revenue opportunities for 4-H.

National Invasive Species Awareness Week campaign in the Northwest Extension District

Bearden, J.G., Okaloosa County; Jackson, L.S., Bay County; O'Connor, L.R., Escambia County

Objectives: The objective was to coordinate a public awareness effort on invasive species in Northwest Florida during National Invasive Species Awareness Week (NISAW). Methods: The interdisciplinary team made up of agriculture and natural resources agents recruited writers for 2 blog posts for each day of the NISAW. Each blog post featured an invasive species. These posts were shared using the Subscription Management System and social media. Results: For 2016, emails were sent to 936 subscribers daily for 5 days. The agents also shared the blog posts via social media daily. The total views for these 11 posts were 1970. For 2017, emails were sent to 3496 subscribers daily for 5 days. The agents also shared the blog posts via social media daily. The total views for these blog posts for 2017 was 2049. Conclusions: This project's objective is to increase public awareness of invasive species in our area and give management and control strategies for each. A side benefit from this campaign is increasing followers of our blog and our social media accounts. Our blog can be found at http://nwdistrict.ifas.ufl.edu/nat/. These blog posts stay active once they are published and are also accessed by clientele at other times throughout the year.

Are You Aware of The Update Edition of the Florida Grades and Standards for Nursery Plants?

H. Mayer *, Miami-Dade County Extension; M. Orfanedes*, UF/IFAS Broward County Extension

Objectives: Educate and train the landscape industry with the last edition of the FL Grades and Standards for Nursery Plants. Methods: County Agents from Broward and Miami-Dade team with the Landscape Inspector Association of Florida (LIAF) Broward and Miami-Dade Chapter in order to train the landscape industry with the 2015 edition of the FL Grades and Standards. The workshops last on average 2-3 hours. Half of the time is inside the classroom for a formal presentation and the other half are in the field for a plant grading demonstration. The grading demonstration involves the use of trees, palms and groundcovers. Results: The agent conducted six workshops related to the subject matter. On average the workshops were attended by 40 people. Participants had a seminar satisfaction rating score of 4.2 (1=very dissatisfied and 5=very satisfies). The knowledge gained rate was 3.8 (1=nothing and 5=lot of things) and the practice change rate was 3.1 (1=no change and 5=lots of changes). 152 people completed the survey. 39 people (19%) responded to the follow up survey that was emailed to 205 participants. 93% (36/39) know how to correct circling or girdling root before planting the tree and 95% (37/39) know how to differentiate the tree matrixes. Conclusions: Due to the success of the programs, we will continue the programmatic effort during 2017

Multi-State Competency Assessment of New County Extension Directors

M. Benge*, UF/IFAS Department of Agricultural Education & Communication; C. Sanders*, UF/IFAS Extension Alachua County; R. Sapp, UGA Extension

County Extension Directors (CEDs) play a crucial role in both managing the county Extension office and providing leadership for the county Extension program. However, current research on CED competencies and professional development is limited for many state Extension systems. OBJECTIVE: To determine which competencies are most important for new CEDs to develop in their first three years. METHODS: The target population (N = 86) consisted of new CEDs who have been in his/her CED position for less than four years. The theoretical framework used for the study was the CED Leadership Competencies Model (Sanders, 2014), which is comprised of forty competencies CEDS need to be successful. The survey consisted of seven total questions, yielding a response rate of 48% (n = 41). RESULTS: The five competencies reported most important to know in the first six months were Budget Management (93%, n = 38), Office Management (80%, n = 33), Communication (80%, n = 33), Conflict Resolution (68%, n = 28), and Professionalism (66%, n = 27). The five competencies reported least important to know in the first six months were Promoting Growth in the Organization (2%, n = 1), Visioning (5%, n = 2), Innovation (10%, n = 4), Creative Thinking (12%, n = 5), and Empowerment (15%, n = 1) = 6). CONCLUSIONS: The majority of 'most important' competencies to develop early on were human skills rather than conceptual skills, and new CEDs with less Extension experience should have more focused development on conceptual skills.

Developing a Pathway Logic Model to Explicitly Link Program Activities and Outcomes

B. Burbaugh, UF/IFAS Extension Clay County

Traditional logic models rely on columnar representations that link whole sets of activities to outcomes. As such, Extension programs are often be viewed as "black boxes" that receive inputs (i.e., learning activities) and produce outputs (i.e., outcomes) (Stufflebeam & Shinkfield, 2007). Objective: The goal of this activity was to look inside the "black box" by developing a pathway logic model to make the connections between learning activities and outcomes more explicit and precise. Methods: An evaluation focus group and a pathway logic model development session were conducted. This process allowed participants to identify programmatic outcomes at the conclusion of their two-year experience, and connect these outcomes to specific learning activities of the program. Results: Learning activities as well as short, medium and long-term outcomes were linked together by participants to form a pathway logic model. The model was transferred to an electronic format using the Netway[™] software program developed by the Cornell Office for Research on Evaluation. By identifying the relationships between programmatic activities and change (i.e., outcomes), the model provided a snapshot of how the Extension program worked. Conclusion: This approach is novel in that it allowed participants to reflect on their learning, collaboratively identify salient outcomes, and articulate the connection between these outcomes and sources of learning. Using program participants to identify the connections between pedagogy, practice, and outcomes can inform the evidence base and the development of evaluation plans for Extension programs.

Sharing Successes and Impacts with Stakeholders

Zamojski, K.*, Jameson, M.*, Mullins, A., Tancig, M., Prevatt, S., Hylton, T., Copeland, H., Boston, M., Leon County

Objectives: Leon County faculty developed strategies to increase county partner and stakeholder knowledge about the impacts of Extension in the Leon County community. These impacts and success stories were then used to advance Extension visibility. Methods: Leon County faculty designed a quarterly newsletter to share programming highlights, impacts, and success stories. Each newsletter was designed to be easy to read and included articles and photographs from each program area. Articles were written to be interesting, impactful, and linked to key county government issues and initiatives. Newsletters are distributed electronically to nearly 200 city, county, and state elected and governmental officials, school district leaders, and businesses. Newsletters are shared with the public through social media, the Leon County website, and paper distribution to clientele. Hard copies are also distributed to Leon County commissioners and administrators. Results: The Leon County Extension office has a multifaceted approach to share information, impacts, and success stories with key stakeholders. This newsletter provides a consistent avenue for faculty to exhibit how Extension programming addresses critical county needs and issues, aligns with key county initiatives, and demonstrates how the community benefits as a result of funding Extension programs. Conclusions: Sharing success stories and impacts with stakeholders demonstrates the return on investment, showcases the potential for new partnerships and educational opportunities, and increases the Extension office visibility in the community.

Teaching Agents Technology Tools to Address Emerging Issues

Zamojski, K.*, Jameson, M.*, McConnell, J., Bearden, J., Mullins, A., Tancig, M., Osgood, L., Mayo, D., Harrison, G., Davis, P., Jackson, L.S., Vergot, P., Northwest District

Objectives: Agents learned the use of technology tools in order to increase Extension professionals' effectiveness in addressing emerging issues, to foster creativity and innovation in developing solutions, and to cultivate methods to advance Extension visibility. Methods: Eight in-service training sessions offered over a ten-month period covered topics such as creating videos for social media, working in the cloud, gizmos and gadgets, Facebook and YouTube Live, Subscription Management System, and blogging. Each day-long technology session provided a hands-on component for Extension professionals to apply the knowledge they learned in the training session. Results: 100% of agents participating in inservice training sessions demonstrated applied knowledge through use of the appropriate skills in the hands-on component of the technology training. Follow-up surveys indicated that agents increased use of Skype for Business, cloud technologies like Drop Box and OneDrive, and tools like Google and Facebook analytics to measure outreach. Others noted the intent to use the technology tools or that additional practice was needed. Conclusions: Hands-on training is an effective method to increase Extension professionals' knowledge, skills, and use of technology. Agents noted the lack of time as a significant barrier in implementing technology. This training provided not only information, but dedicated time for agents to practice using the technology applications. This dedicated time to apply knowledge is likely to increase the use of technology tools to address emerging issues.

Manatee County Food Deserts Harvest Away

Hickey, L., UF/IFAS Extension Manatee County

Objectives: To increase minority participation at workshops, to place 600 mobile gardens into four food deserts within a two-year period, and to teach vegetable gardening to the residents. Methods: This Extension Agent extracted data from the Health Department's survey for the need of community gardens in food deserts. Data indicated residents preferred backyard gardening over community gardening. They expressed the desire to have short, local, inexpensive classes on vegetable gardening. A hands-on workshop, Plant-a-Pail[™], was created by modifying an existing container gardening workshop. Results: Minority demographics increased 97% based on attendee's ethnicity attending the workshops. The Plant-a-Pail[™] design makes the containers portable and easy for residents to take home after the workshops. In the last 18 months, 441 residents attended, 503 buckets went home (we refill returned buckets of residents repeating the workshop), and seven food deserts were impacted. The residents were shown how to effectively grow seasonal vegetables on a low budget in communities that do not have local access to fresh vegetables. To date, they harvested over 6,000 vegetables varying from tomatoes, collards, eggplants, peppers, okra, herbs, to greens. Conclusion: If extension agents have low minority attendance at their extension office workshops, they can consider going mobile with their classes into minority communities and extend their outreach. In turn, agents can increase Extension's presence in underserved communities who are unaware of Extension and their programs.

Deliberative Forums – An Opportunity to Discuss Complex Sustainability Issues

R. Madhosingh-Hector*, UF/IFAS Extension Pinellas County; L. Milligan*, UF/IFAS Extension Pinellas County; M.J. Kipp-Searcy*, UF/Program for Resource Efficient Communities

Objectives: Extension agents experimented with a deliberative forum tool, called a "placemat", in order to determine its usefulness as an educational instrument to examine national and local issues and draw in non-traditional audiences. Deliberative forums may be held for a variety of reasons, one of which is to provide an opportunity to reflect on a particular national issue and discuss opportunities for action (Rourke, 2014). Staff in Pinellas and Alachua counties sought to improve local understanding of water use and conservation. Methods: Using the National Issues Forum guides, agents in Pinellas County piloted a facilitated discussion with known extension clientele before incorporating the placemat with film screening events. In both counties, agents localized the guides prior to program implementation. Placemats outlined possible actions and associated tradeoffs on the issue based on different values. Results: Participants at the film events indicated that the program provided new knowledge and information about water issues (93%, n =40), and 84% (n=38) agreed the placemat was a useful tool to examine water issues. The use of water as the "national" issue of importance attracted new audiences to Extension (21%, n=39). Conclusions: The use of deliberative forums provides a valuable method to engage audiences that may be previously unfamiliar with Extension in important community discussions.

Integrating Graduate Students into County Extension Programing Efforts

K. Waters*, UF/IFAS Holmes County Extension; N. DiLorenzo, North Florida Research and Education Center; G.C. Lamb, Texas A&M University

Recruitment is one of the top internal challenges faced by Cooperative Extension Systems. Additionally, recruiting high quality personnel, with long-term commitment is critical for the sustained relevance of Extension programming and public perception. Research indicates that academic and work experience is the number one factor that influences professionals to choose a career in Extension, however, most professionals entering the Extension field have little program development experience. Objective: To increase quality and retention of extension professionals entering the field through exposure and integration of graduate students (GS) extension programing at the county level, during their degree programs, while adding programmatic support to county extension faculty. Methods: Through building a strong relationship with state specialists, county agents can work with GS to help enhance the overall quality of programming that they offer to their clientele. The Florida Bull Test and Florida Heifer Development Program are two extension programs that have involved GS in every aspect of the program, allowing them to develop skills necessary for development and management of successful Extension programming, translating into an overall increase in Extension scholarship. Results: As a result 87% of the students who have worked directly with the programs are/or plan to work in the field of Extension, with additional survey data currently being collected. Conclusion: The NFREC-Marianna has two programs that integrated graduate students directly into Extension programming working with county agents, the Florida Heifer Development Program and the Florida that can be used as models in the UF Extension system.

Developing a County-centered Training Program Based on Food Entrepreneurship Core Curriculum

N. Parks*, Duval County Extension; S. Ahn*, Food Science and Human Nutrition; S. Deary*, Bradford County Extension

Introduction: Cottage food law and inreasing local food hubs provide great opportunities for small-sized food processors. Most beginning food entrepreneurs, however, have limited knowledge in food safety and business plannning. Therefore, it is important to develop an education curriculum customized for this specific group. Objectives: The goal of this study is to develop a county-centered program by using a core curriculum developed for cottage food operator training. Methods: Duval/Bradford County Extension Office designed a series of half-day training program based on the core curriculum for a oneday cottage food training. Topics addressed in the core curriculum were divided into 2 groups based on the training goals and a new hands-on component was added as a series of 3 classes. Results: The main topics of the core curriculum, including product development, business planning, food safety, and regulation, were divided into two separate half-day classes. Another class of hands-on processing demonstrations was added as the Duval County Extension Office has a kitchen facility and an agent has strong culinary background. By designing the program as a series of multiple classes, this new program was able to address more topics, which were not included in the core curriculum, with more flexibility. Conclusions: Many counties found it demanding to offer one full-day workshop due to difficulty in finding available time for both speakers and target participants. This study provides a good example of modifying the current 1-day workshop curriculum into different formats based on the needs and/or expertise of each county and its agents.

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- Objectives of the education effort/program
- Methods used
- Results

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