The Florida Senate COMMITTEE MEETING EXPANDED AGENDA

AGRICULTURE Senator Collins, Chair Senator Boyd, Vice Chair

MEETING DATE: Tuesday, December 12, 2023

TIME: 4:00—6:00 p.m.
PLACE: 301 Senate Building

MEMBERS: Senator Collins, Chair; Senator Boyd, Vice Chair; Senators Baxley, Berman, Rouson, and Simon

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
1	Presentation by the USDA Military Veterans Agricultural Liaison, Command Sergeant Major Monshi Ramdass, U.S. Army (Ret)		Presented
2	Presentation by the Future Farmers of America		Presented
3	Overview of Florida's Beef Industry		Presented
4	Presentation on Technology in Agriculture by UF/IFAS		Presented
	Other Related Meeting Documents		



ETERANS,

Careers in Agriculture for Transitioning Service Members, Veterans, and Military Spouses



Why Veterans?

There are approximately 17 million veterans in the U.S.

- These veterans make up around 8% of non-metropolitan residents, compared to around 6% of U.S. residents overall.
- Over 192,000 to 250,000 service members transition out of DoD annually, and there are over 17 million veterans in America. According to the 2017 Census of Agriculture, 370,619 veterans are farmers. That accounts for 11% of the 3.2 million farmers in America. The 11% of farms operated by veteran producers sold \$41 billion in agricultural products in 2017, of which \$22 billion were crop sales and \$19 billion were sales of livestock and livestock products.
- The U.S. Census Bureau's 2018 Annual Business Survey reports that there are over 1.9 million veteran-owned businesses (including around 484,000 employer firms and 1.5 million nonemployee firms) with an estimated \$1.2 trillion in revenue, approximately 5.2 million employees, and about \$232.6 billion in annual payroll.
 - ✓ Veterans want meaningful work and quality of life that can be achieved through farming, ranching, community leadership or owning a small business
- USDA Needs Veterans so that together, we can:
 - ✓ Feed America and keep our food supply abundant, safe and secure
 - Preserve and strengthen rural communities
 - ✓ Restore and conserve the environment.



WETERANS



Navy Veteran Carlina Williams started a mobile juice business, Communion Juice, which serves locally-sourced, cold-pressed fresh juice and herbal shots. She hopes to eventually franchise her business.



Veterans can learn to fight wildfires through USDA Forest Service apprenticeships.



Air Force Veteran Rupert Richards is USDA's Agricultural Marketing Service Specialty Crops Inspection/Training Branch Chief in Washington, D.C.

Marine Corps Veteran Calvin Riggleman, USMC Veteran, took the products from his family farm and transformed them into a wide range of condiments.





Air Force Veteran Angela Mulder learns about agriculture and farming by volunteering with Vets on the Farm.

WETERANST



Jesse McCarty, US Navy veteran and military spouse, supports 2018 Canada Lynx threatened species preservation research for forest preservation planning.



Erin Kesler, active-duty Marine Corps spouse, at Rappahannock County Public Schools District in Virginia.



w career s

Randall Sutton, army veteran and veteran spouse, now works as a wildlife biologist with the US Forest Service restoring and protecting wildlife habitat.



Candace E. Hall, veteran and retired military spouse, works as a management and program analyst assisting with operations and administrative activities.

Liz Colby, P.E., active-duty spouse, works as a state hydrologic and hydraulic engineering technical lead with USDA's Natural Resource and Conservation Service in California.

We serve those who serve us

- Veterans don't know what veterans don't know!
- Oath of an enlisted service member or officer has no expiration. Veterans want to continue to serve their communities.
- Institute for Veterans and Military Families V-Start: State report:

V.<u>START Dashboards - D'Aniello Institute for Veterans and Military Families (syracuse.edu)</u>

Veteran Entrepreneurship:

<u>Veteran Entrepreneurship Across Urban & Rural Places (2022) - D'Aniello Institute for Veterans and Military Families (syracuse.edu)</u>

- Veterans Crisis Line: Dial 988, then press 1
- Know where your DD 214 certificate of release or discharge from active duty is, and make sure a family member has a copy.





Opportunities in the 3Es

EMPLOYMENT



EDUCATION



ENTREPRENEURSHIP















Employment

USDA's Employment Opportunities for transitioning service members, veterans, and military spouses:

- Match skills / qualifications to careers at USDA
- Review resumes & provide feedback
- Explain the Federal hiring process (USA JOBS, special hiring authorities, category rating)

Your military experience can be directly translatable to jobs at USDA, such as:

- Criminal Justice
- Soil Conservationist Technician
- Contracting and Procurement
- Information Technology
- Food Inspection and Public Health
- Firefighter
- Finance
- Economists



USDA MVAL Monshi Ramdass (right) with TAP Manager Troy Johnson at MacDill Air Force Base in Florida.





Employment

On-the-Job Training:

- Paid Apprenticeships
 - Agricultural Commodity Graders 12-month training program through USDA's Agricultural Marketing Service, starting at grades GS-5/7
 - Food Inspector's Apprenticeship Program USDA Food Safety and Inspection Service offers a two-phased approach to a career in the federal civilian workforce through its 4-week Pre-Apprenticeship Program for transitioning Service members and a 12-month paid Apprenticeship Program designed exclusively for veterans.
 - Wildland Firefighters 3,000-hour on-the-job learning program through USDA's Forest Service, with positions starting at grades GS-3, 4/5, and 5.
 - **Dairy Grazers*** Includes full-time employment, training and mentorship over a 2-year period. *Dairy Grazing Apprenticeship is an independent non-profit organization with a National Apprenticeship under the U.S. Department of Labor-Employment and Training Administration.
- DoD SkillBridge/Career Skills Program Eligible service members can participate in industry training instead of performing military duties during the closing months of their career.





Employment Resources

- Contact USDA's Veterans Employment Program by emailing: veterans@usda.gov
- Department of Labor Apprenticeships:
 Apprenticeship | U.S. Department of Labor (dol.gov)
- Agricultural Commodity Grader Apprenticeship:
 Agricultural Commodity Grader (GS-1980) | Agricultural Marketing Service (usda.gov)
- Wildland Firefighter Apprenticeship:
 Wildland Firefighter Apprenticeship Program | US Forest Service (usda.gov)
- Dairy Grazing Apprenticeship:
 <u>Dairy Grazing Apprenticeship (dga-national.org)</u>
- DoD SkillsBridge:
 DOD SkillBridge Program (osd.mil)
- Army Career Skills Program:
 <u>Career Skills Program (CSP) :: U.S. Army Installation Management Command</u>
- Special Hiring Authorities for Military Spouses:
 Special Hiring Authorities for Military Spouses & Family Members (opm.gov)











Education

Ag experts are in high demand.

• **Higher Education** – A recent Purdue University research study indicates that about 60,000 agriculture-related jobs are available annually, but many can't be filled due to lack of graduates.

Veterans can fill this need by getting a degree in:

- Plant science
- Food science
- Environmental science
- Sustainable biomaterials
- Water resources science and engineering
- Precision agriculture
- Veterinary medicine



U.S. Army Veteran Matt McCue is working on his graduate degree in international agricultural development at the University of California, Davis. (Photo Courtesy: Farmer Veteran Coalition)

- Certificates Many U.S. institutions and organizations offer certificates in sustainable agriculture.
- **Student Farms** Offer practical, hands-on education through courses, internships, special projects, and research projects.

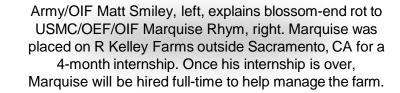




Education

- Farm Training and Apprenticeships Equip veterans with the right tools and skills to gain experience and qualifications needed to participate in USDA programs.
 - **ATTRA**'s Armed to Farm program for military veterans provides trainings including conference presentations, two-day workshops, and week-long training events.
 - Farmer Veteran Coalition provides direct assistance to veterans in their beginning years of farming or ranching.
 - Boots to Business Reboot with Agriculture Focus provides training to veterans interested in beginning farming and ranching.
 - USDA Beginning Ranching and Farming Webinar provides training to veterans interested in beginning farming and ranching.
 - Extension USDA works with universities to provide non-formal education and learning activities directly to ag producers, small business owners, consumers, and families throughout the country.









Education

2501 Grant Program:

The objective of the 2501 Program is to show USDA's commitment to ensuring that underserved and veteran farmers, ranchers and foresters can equitably participate in USDA programs.

Underserved and Veteran Farmers, Ranchers, and Foresters | USDA

Enhancing Agricultural Opportunities for Military Veterans (AgVets):

The program encourages the development of training opportunities specifically designed for military veterans. AgVets projects will offer onsite, hands-on training and classroom education leading to a comprehensive understanding of successful farm and ranch operations and management practices.

Enhancing Agricultural Opportunities for Military Veterans (AgVets) | National Institute of Food and Agriculture (usda.gov)

Beginning Farming and Ranching Development Program Grant (BFRDP):

The Beginning Farmer and Rancher Development Program provides grants to organizations for education, mentoring and technical assistance initiatives for beginning farmers and ranchers.

Beginning Farmer and Rancher Development Program (BFRDP) | National Institute of Food and Agriculture (usda.gov)





Education Resources

- National Institute of Food and Agriculture: https://www.purdue.edu/usda/employment/
- ATTRA Armed to Farm:
 Armed to Farm Sustainable Agriculture Training For Military Veterans
- Farmer Veteran Coalition:
 <u>Farmer Veteran Fellowship Fund FARMER VETERAN COALITION</u>
 (farmvetco.org)
- National Institute of Food and Agriculture Extension:
 Extension | National Institute of Food and Agriculture (usda.gov)





ENTREPRENEURSHIP



<u>Army Veteran Brings Brewing Back to Butte - YouTube</u>

Fridays on the Farm: From Veteran to Beginning Farmer | Farmers.gov

From Army to Agriculture: USDA Supports Military
Veteran's Transition to Farming | Farmers.gov





Entrepreneurship – From Farm to Fork

USDA can help agriculture entrepreneurs get access to capital and land and manage risk.

Loans

- Microloans
- Operating Loans
- Farm Ownership Loans

Land

Transition Incentives Program

Enhancing Land Quality

- Environmental Quality Incentives Program
- Agricultural Easement Program
- Conservation Stewardship Program



Mannah Gbeh, pictured with his son, grew up in Liberia before coming to the U.S. and enlisting in the Navy, where he served three deployments in support of OIF and OEF. Today Mannah owns and operates Bee Valley Farm in Jamul, CA where he produces garlic, honey, olives and almonds.

Crop Insurance

Technical Assistance / Conservation Technical Assistance





Entrepreneurship – From Farm to Fork

Veterans who are part of the community of New and Beginning Farmers are eligible for USDA programs to help start – and continue – careers in farming.



Josh Eilers, a former Army Ranger, now owns a cattle ranch in Texas and specializes in high-quality FullBlood Wagyu.

- Access to ag resources, such as capital, land, business development, marketing, insurance, etc.
- Find information tailored to you by using the New Farmer Discovery Tool.
- Connect with a mentor, attend workshops, and receive online resources through USDA's partnership with SCORE.





Entrepreneurship – Rural Business

Veterans can help strengthen and develop rural communities by starting or expanding a rural business. USDA can help with:

- Loans and Loan Guarantees
- Processing and Marketing of Products
- Energy Efficiency Improvements



USAF Veteran Torrance Hart now runs a successful e-commerce business called Tweak & Twine

Rural is closer than you think!

Eligibility (usda.gov)
See if your area is eligible by visiting our
Eligibility Map





Loans to include Farm Service Loans, Single Family Home Ioans, Rural Business Loans, and Environmental Quality Incentives Program

Farm Service Direct and Guaranteed Loans

FY-2023, \$82.3 Million in Direct Loans and \$36.2 Million in Guaranteed Loans

Rural Development Single Family Home Loans-

FY-2023, \$17.1 Million in Direct Loans and \$156.2 Million in Guaranteed Loans

Rural Development Business Loans

FY-2023, \$24.4 Million in Guaranteed Loans

Environmental Quality Incentives Program (EQIP)

FY-2023, \$28.7 Million funded.



Food Insecurity

Food insecurity is a lack of access to enough food for a healthy lifestyle. In 2018, about 11 percent of US households were food insecure at least some time during the year. Food insecurity tends to be higher in households relying on social assistance, single-parent homes, ethnic minorities and people who are homeless or house insecure. The number of food insecure Veterans is also high among those who served in the US wars in Iraq and Afghanistan. These Veterans are almost twice as likely to be food insecure compared to the general population.

SNAP

To get SNAP benefits, you must apply in the state in which you currently live and you must meet certain requirements, including resource and income limits, which are described on this page. SNAP income and resource limits are updated annually.

https://www.fns.usda.gov/snap/recipient/eligibility https://www.fns.usda.gov/snap/state-directory

SNAP Toll-free I-800-221-5689











Entrepreneurship Resources

- How to Start a Farm: Beginning Farmers and Ranchers: https://newfarmers.usda.gov/veterans
- Loan Tool: USDA Farm Loan Discovery Tool | Farmers.gov
- Farm Answers: <u>Farm Answers</u>
- USDA and SCORE: https://www.score.org/usda
- Rural Development programs: https://www.rd.usda.gov/programs-services/all-programs
- Eligibility Map: <u>Eligibility (usda.gov)</u>
- U.S. Small Business Administration
 - USDA Rural Small Business information to soon be included in Boots to Business course (TAP): www.sba.gov/bootstobusiness
 - Get help with your business plan by visiting your local Veteran Business Outreach Center: www.sba.gov/vboc
- Conservation Reserve Program: crp_transition_incentive_program-fact_sheet.pdf (usda.gov)
- USDA Get Started Guide: <u>Get Started! A Guide to USDA Resources for Historically</u> <u>Underserved Farmers and Ranchers | Natural Resources Conservation Service</u>
- Veterans Florida: <u>Home Veterans Florida</u>
 Agriculture Veterans Florida





THANK YOU!

Questions / Comments

Contact Us:

Veterans@usda.gov

Visit Us:

USDA Service Centers: https://offices.sc.egov.usda.gov/locator/app

Learn More:

www.usda.gov/veterans



THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date	Bill Number (if applicable)			
Topic Military Veterans AG Lian Name Monsti RAM RAMDASS	Amendment Barcode (if applicable)			
Name MONSHI RAM RAMDAS	_			
Job Title MVAL USDA -				
Address 2220 & NEED RD	Phone 772-834-3172			
FORT PIERCE FL 34945 City State Zip	_ Email MONSHÍ. Rom des seus DA.			
Speaking: For Against Information Waive (The Cl	Speaking: In Support Against hair will read this information into the record.)			
Representing				
Appearing at request of Chair: Yes No Lobbyist regi	stered with Legislature: Yes No			
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.				
This form is part of the public record for this meeting.	S-001 (10/14/14)			



FLORIDA FFA ASSOCIATION

The Next Generation of Agriculturalists



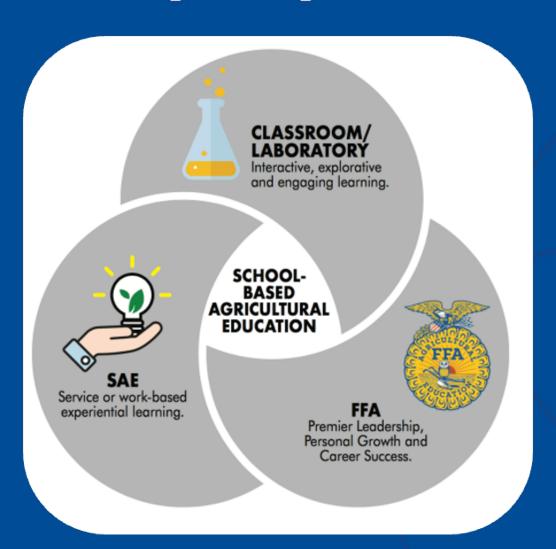
By 2050, agricultural production will need to increase by 70% in order to feed 9 billion people. With less land, water, and resources.

The future of agriculture is much more than farming. It's about the **next generation of agriculturalists** and a **new age of discovery**.



We are addressing a very key issue: the growing need for young, talented people in a variety of fields to consider a career in agriculture.

FFA is the most recognized component of agricultural education, but Supervised Agricultural Experiences and the classroom create a complete experience for our students.



33 farm boys started the organization in 1928, and now over 735,000 members nationally are developing their potential for premier leadership, personal growth and career success through agricultural education and FFA.



FFA is only part of a comprehensive strategy to build a heroic workforce & reconnect people with agricutlure



Students can choose from eight different career pathways, preparing them for the workforce & college.



Supervised Agriculture Experiences allow students to gain real-world experience and apply their skills and knowledge from FFA & the classroom.



Agriculture Education proudly provides students with one of the most complete educational experiences available.

We've got some work to do before 2050, but we're up for the challenge. Our growing pains are a positive sign:

- Record membership
- Record participation





REMARKS

CHUCK CLEMONS

RESENTATIVES

Speaker Pro Tempore Chuck Clemons has requested the continuation of this funding for the 2024-2025 school year by filing Appropriation Request #3547 entitled

FLORIDA HOUS

"Preparing Florida's Workforce through Agriculture Education"



Together, we'll face these issues in an effort to tackle a global challenge.



WILTON SIMPSON







96th Florida FFA State

Convention & Expo

June 10-14, 2024 – Orlando, FL



THE FFA MISSION

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.

THE AGRICULTURAL EDUCATION MISSION

Agricultural education prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resource systems.

The Florida FFA Association is a resource and support organization that does not select, control, supervise or approve local chapter or individual member activities except as expressly provided for in the Florida FFA Constitution and Bylaws.

The Florida FFA Association affirms its belief in the value of all human beings and seeks diversity in its membership, leadership and staff as an equal opportunity employer.

The Florida Senate

	Meeting Date	A	PPEAR Deliver bo	ANCE th copies of th		D	Bill Number or Topic	
_50	Committee		Senate profession	al staff conduc			Amendment Barcode (if applica	able)
Name	Kayelee E						812-5485	
	5600 SW Ste Street				Email _	Kayel	ce.enrismano	Hatta
	Gainesville	State		Zip	<u>) </u>			
	Speaking: For	Against X	Information	OR	Waive Speak	king:	In Support	
		PI	LEASE CHECK	ONE OF TH	le FOLLOWIN	NG:		
8 1 / 74	n appearing without npensation or sponsorship.		l am a registo representing	ered lobbyist, g:			I am not a lobbyist, but received something of value for my apper (travel, meals, lodging, etc.), sponsored by:	

While it is a tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this hearing. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. If you have questions about registering to lobby please see Fla. Stat. §11.045 and Joint Rule 1. 2020-2022 Joint Rules.pdf (flsenate.gov)

This form is part of the public record for this meeting.

S-001 (08/10/2021)

The Florida Senate

	The Horida Seriate	
12/12/23	APPEARANCE RECORD	FFA
Meeting Date	Deliver both copies of this form to	Bill Number or Topic
Senate Ag	Senate professional staff conducting the meeting	<i>k</i>
Committee		Amendment Barcode (if applicable)
Name Jenna Larson	Phone	
Address 5600 SW 34th Street Camesville FL City State	St. Email jehna	larson@flaffa.org
Speaking: For Against	Information OR Waive Speaking:	In Support Against
	PLEASE CHECK ONE OF THE FOLLOWING:	
I am appearing without compensation or sponsorship.	I am a registered lobbyist, representing:	I am not a lobbyist, but received something of value for my appearance

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(travel, meals, lodging, etc.),

sponsored by:



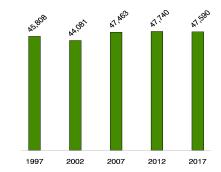
Florida



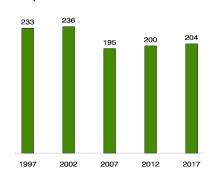
Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	47,590	(Z)
Land in farms (acres)	9,731,731	+2
Average size of farm (acres)	204	+2
Total	(\$)	
Market value of products sold	7,357,343,000	-4
Government payments	59,120,000	+47
Farm-related income	328,906,000	+36
Total farm production expenses	6,507,308,000	(Z)
Net cash farm income	1,238,061,000	-17
Per farm average	(\$)	
Market value of products sold	154,599	-4
Government payments		
(average per farm receiving)	14,795	+46
Farm-related income	31,708	+35
Total farm production expenses	136,737	+1
Net cash farm income	26,015	-17

Number of Farms, 1997-2017



Average Farm Size, 1997-2017 (acres)



Farms by Value of Sale	s		Farms by Size		
	Number	Percent of Total ^a		Number	Percent of Total a
Less than \$2,500	23,558	50	1 to 9 acres	14,072	30
\$2,500 to \$4,999	4,813	10	10 to 49 acres	19,696	41
\$5,000 to \$9,999	4,863	10	50 to 179 acres	7,791	16
\$10,000 to \$24,999	4,842	10	180 to 499 acres	3,204	7
\$25,000 to \$49,999	2,592	5	500 to 999 acres	1,286	3
\$50,000 to \$99,999	2,010	4	1,000 + acres	1,541	3
\$100,000 or more	4,912	10			

CENSUS OF State Profile

Market Value of Agricultural Products Sold

	Sales (\$1,000)	Rank in U.S. ^b	States Producing Item	2 Percent of U.S. agricultu	re sales
Total	7,357,343	23	50	-	
				Share of Sales by Type (%)
Crops	5,704,533	11	50		=0
Grains, oilseeds, dry beans, dry peas	48,165	41	50	Crops Livestock, poultry, and produc	78 ets 22
Tobacco	4,903	10	18	Livestock, poultry, and produc	15 22
Cotton and cottonseed	52,456	16	17		
Vegetables, melons, potatoes, sweet potatoes	1,284,110	2	50		_
Fruits, tree nuts, berries	1,298,656	3	50	Land in Farms by Use (ad	cres)
Nursery, greenhouse, floriculture, sod	2,274,654	2	50		0.005.000
Cultivated Christmas trees, short rotation				Cropland Pastureland	2,825,803 3,621,801
woody crops	1,553	22	50	Woodland	2,514,794
Other crops and hay	740,036	6	50	Other	769,333
Livestock, poultry, and products	1,652,810	32	50		
Poultry and eggs	406,742	24	50	Top Counties: Land in Fa	arms (acres)
Cattle and calves	521,847	28	50		
Milk from cows	478,124	20	50	Osceola	525,055
Hogs and pigs	3,989	35	50	Palm Beach	487,845
Sheep, goats, wool, mohair, milk	6,169	33	50	Polk Hendry	487,128 433,113
Horses, ponies, mules, burros, donkeys	112,778	3	50	Glades	428,689
Aquaculture	72,185	9	50		-,
Other animals and animal products	50,977	9	50		

Total Producers °		Percent of farms that:		Top Crops in Acres d		
Sex Male Female	46,777 32,122	Have internet access	76	Forage (hay/haylage), all Oranges, all Sugarcane for sugar Vegetables harvested, all	422,551 422,421 386,428 245,375	
Age <35 35 – 64 65 and older	5,038 44,941 28,920	Farm organically	(Z)	Peanuts for nuts	186,803	
Race American Indian/Alaska Native Asian	539 1,384	Sell directly to consumers	7	Livestock Inventory (De	c 31, 2017)	
Black or African American Native Hawaiian/Pacific Islander White	2,299 112 73,864	Hire farm labor	26	Broilers and other meat-type chickens Cattle and calves Goats	12,893,097 1,635,742 61,159	
More than one race Other characteristics Hispanic, Latino, Spanish origin	701 7,121	Are family	95	Hogs and pigs Horses and ponies Layers	15,567 90,638 7,536,543	
With military service New and beginning farmers	10,664 24,738	farms	30	Pullets Sheep and lambs Turkeys	2,464,009 24,504 7,081	

See 2017 Census of Agriculture, U.S. Summary and State Data, for complete footnotes, explanations, definitions, commodity descriptions, and methodology.

^a May not add to 100% due to rounding. ^b Among states whose rank can be displayed. ^c Data collected for a maximum of four producers per farm. ^d Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. ^e Position below the line does not indicate rank. (D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

FL exported over \$1 Billion

Florida Cattle Industry 2017 Economic Contributions

worth of cattle, meat, and dairy products to international markets

Direct Contributions

Beef Cattle Farming

Employment: 8,174 Jobs Revenues: \$640 Million

Indirect + Induced

Labor Income

Direct Effects

Beef and dairy cattle industry activities also generate additional economic activity through Florida's economy!

Total Contributions

Industry Output Direct Effects \$16,798 Billion Billion

Indirect + Induced

Revenues: \$1.566 Billion



Livestock, Dairy Product, and Meat Wholesalers

Employment

Dairy Farming Employment: 1,924 Jobs Revenues: \$621 Million

Dairy Product Manufacturing

Employment: 2,293 Jobs Revenues: \$1.504 Billion

Direct Effects 118,191 lobs 51%

Direct Effects Indirect + Induced

Gross State Product

5.4 Million Acres

water storage

wildlife habitat

carbon storage

outdoor recreation

Did You Know?

Florida ranchlands provide many

environmental services including:

mitigation of droughts and floods

representing 15.6% of the state's land area

Top 5 FL Counties

for beef and dairy cow inventory

1 Okeechobee (110,000)

2 Highlands (75,500)

Polk (60,600)

4 Osceola (60,000)

5 Hardee (48,100)



Employment: 34,713 Jobs

Employment: 4,191 Jobs

Allied Services Include: ort activities for animal production Veterinary services Animal feed manufacturing

Allied Services

Employment: 3,193 Jobs



For every \$1 of direct output in the beef and dairy cattle industry...



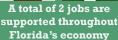
. A total of \$2 of output is

contributed to Florida's economy



For every 1 direct iob in the beef and dairy cattle industry









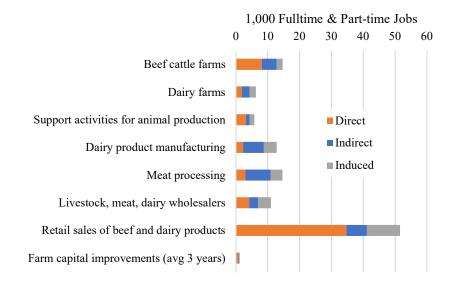


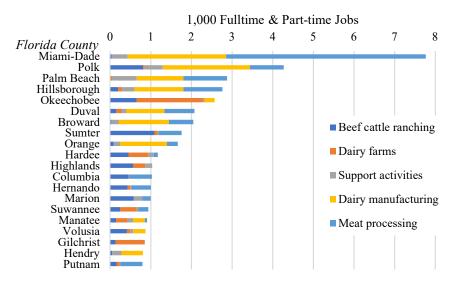




Economic Contributions of Beef and Dairy Cattle and Allied Industries in Florida in 2017 Fact Sheet

- **5.4 million** acres of pasture and range land used for cattle grazing (2012), **15.6%** of state land area
- **1.68 million** inventory of cattle and calves in January 2019
- 18,433 beef cattle operations, 425 dairy operations, 213 processing-manufacturing firms, plus supporting services, feed manufacturers, veterinarians, wholesale and retail distributors of beef and dairy products
- \$502 million value of cattle produced; 300 million gallons of milk produced worth \$537 million
- **\$6.40 billion** retail sales of beef and dairy products, representing 16.9% of food store sales in Florida
- \$1.03 billion international exports of meat and dairy products
- 118,191 fulltime and part-time jobs generated (including indirect and induced regional multiplier effects), represents 1.02% of state workforce supported
- \$16.80 billion industry output or business revenue contribution
- \$7.65 billion value added contribution to Gross State Product
- **\$4.64 billion** labor income contribution to employee wages, salaries, benefits
- \$712 million generated to state-local tax revenues, \$1.16 billion federal tax revenues
- 10%+ of total economic activity attributed to the cattle industry in Lafayette, Okeechobee, Gilchrist, Madison, and Hardee Counties
- \$4.61 billion annual value of non-marketed ecosystem services provided by Florida pastures and rangelands for wildlife habitat, biodiversity, water storage and treatment, carbon capture, outdoor recreation.









Florida isCattle Country

In partnership with



FLORIDA has a long and colorful history of cattle ranching. The state has supported cattle grazing since the arrival of Spanish explorers almost 500 years ago, and many ranching families are into their 6th and 7th generations. Native American culture in Florida is tightly linked to the cattle industry, with the regional Seminole and Miccosukee tribes managing large ranches.

Until the 1930's many Florida cattle were descended from the early Spanish herds. Known as cracker cattle, they are now preserved as a rare breed. Today, the breeds that dominate Florida beef production have both European and Indian heritage.

acres of Florida land are used for pasture and rangeland. That's

> of the state's total land area.

In January 2018. Florida had

cattle and calves, including

beef cows

Feeding the World Florida's cattle produce over

pounds of beef per year, providing

Cattle by-products are used in millions of everyday things such as

cosmetics, crayons, bandages, sheetrock and leather goods.

They also provide important medicines and supplements such as

insulin, heparin and vitamin B12.

Driving the Economy

In CY 2017 the Florida cattle industry and allied industries supported

full-time and part-time jobs.

\$16.8

in output or revenues.

in value added or Gross State Product. \$4.64

in labor income (wages, salaries, benefits, business-owner income).

tax revenues

in federal tax revenues.

Pastures and rangelands also support recreational activities such as

fishing, hunting and wildlife viewing.



Source: Hodges, A.W., Court, C.D., Rahmani, M., and Stair, C.A. 2019. Economic Contributions of Beef and Dairy Cattle and Allied Industries in Florida in 2017. University of Florida/IFAS, Food and Resource Economics Department. https://bit.ly/2C4hHbw ¹1Figures contributed by UF/IFAS sources.

lowa State University. Date Unspecified. Cattle By-Products. https://bit.ly/2NBUylo

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Horida's

Pastures and Rangelands

In partnership with



Preserving Natural Resources

Well-managed cattle ranches work in harmony with the natural environment, providing wildlife habitat, biodiversity, air and water purification, carbon storage, moderation of extreme weather events, soil preservation, and control of agricultural pests. In Florida, the dollar value of such ecosystem services is estimated at \$4.6 billion annually.1



Plants and Wildlife

Cattle ranches provide sensitive and unique ecosystems that support many native and endangered plants, including bromeliads, milkweed, pawpaw, scrub palmetto, bald cypress trees and sabal palms.

The extensive open spaces on ranches are crucial for protected wildlife species with a large home range, such as the Florida panther and black bear. The mosiac of habitats on ranches, including pastures, woodlands and wetlands, provide homes for many notable wildlife species, including the bald eagle, American alligator, gopher tortoise and more.



Water

Some large cattle ranches in Central and South Florida have partnered with Water Management Districts to provide on-site water impoundment as a low-cost option to enhance water quality and reduce flooding.¹



Carbon Footprint

Improved efficiency and animal well-being mean a 16% lower carbon footprint and fewer natural resources used for every pound of beef produced.²

Well-managed beef cattle grazing systems and improved feed production practices can reduce the carbon footprint of beef and contribute to the reversal of global climate change.



Land

Florida cattlemen are dedicated to preserving the land and its resources by entering into conservation easement agreements and assisting public land managers through managed grazing leases.

Conservation easements allow public and private organizations to purchase property rights, such

as development and land-use conversion rights, that are needed to accomplish specific water resource and environmental protection goals.

Wetlands constitute 15-25% of grazed land, and

Florida ranchers have enrolled 185,496 acres in the USDA's voluntary Wetland Reserve Easement program, which purchases the development rights to the wetlands and restores the hydrology of these areas.³





Source: Hodges, A.W., Court, C.D., Rahmani, M., and Stair, C.A. 2019. Economic Contributions of Beef and Dairy Cattle and Allied Industries in Florida in 2017. University of Florida/IFAS, Food and Resource Economics Department. https://bit.ly/2C4hHbw

*Capper, D. 2011. The Environmental Impact of Beef Production in the United States. Journal of Animal Science Vol. 89, Issue 12, pp. 4249-4261. Cary, N.C.: Oxford University Press.

*Figures contributed by UF/IFAS sources.

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Florida Lattle

Best Management Practices

In partnership with



Florida ranchers work with the Florida Department of Agriculture and Consumer Services to implement Best Management Practices (BMPs) that reduce nitrogen and phosphorus loads in water leaving their properties.

As of 2017, nearly

11,000

individual BMP projects had been implemented since the program began in 2005. Over

5 million

acres of Florida agricultural land are enrolled in BMP programs.

Over 80% (1,926,000 acres)
of the agricultural lands within the
Lake Okeechobee watershed are currently enrolled
in the Notice of Intent BMP program, and

325,000

acres have been enrolled in a BMP cost-share program.²

Best Management Practices include:

- Maintaining adequate vegetative cover by adjusting stocking rates and using prescribed grazing systems. Well-established and managed forage stands effectively reduce soil erosion, absorb nutrients, and provide nutrition for livestock.
- Carefully planning watering and feeding sites.
- Carefully planning temporary holding areas.
- Using structural techniques to abate pollution.

The Value of Agricultural Research and Extension

It is estimated that every

\$1 invested

in agricultural research and Extension results in a

return of \$20

from increased productivity.3



Source: Florida Department of Agriculture and Consumer Services. 2017 Annual Report. https://bit.ly/2EPQA63

OkeechobeeCoFCA_FactSheets.v2.indd 3

¹Florida Department of Agriculture and Consumer Services. Water Quality Best Management Practices for Florida Cow/Calf Operations, 2008 Edition. https://bit.ly/2H3X23l

²Soil and Water Engineering Technology, Inc. Estimation of Total Phosphorus & Nitrogen Loads Reductions Associated with FDACS Lake Okeechobee Cost-Share BMP Program. 2016. https://bit.ly/2TzcyC8

³Alston, J.M., Andersen, M.A., James, J.S., and Pardey, P.G. 2010. Persistence Pays: U.S. Agricultural Productivity Growth and the Benefits from Public R&D Spending. New York: Springer.

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Florida Lattle

Driving the Economy

In partnership with



The state of Florida has a long and colorful history of cattle ranching.

Currently, there are

5.4+ million

acres of pasture and rangeland, representing

15.6%

of the state's total land area, used predominantly for beef and dairy cattle production. As of January 2018, Florida had an inventory of

1.63 million cattle and calves,

including **886.00**(

beef cows.

In CY 2017, Florida producers received

\$502 million

from sales of cattle and calves. Most of the revenue came from sale of the year's calf crop, which numbered 790,000. Florida's cattle contribute

231 nillior

pounds of beef annually. Which is the equivalent of

334 million

meals to consumers.

According to a UF/IFAS report, in CY 2017, for all Florida cattle industry groups and activities, statewide economic contributions included

118,191

full-time and part-time jobs,

\$16.8 billion in industry output or revenues,

\$7.65 billion

in value added or Gross State Product, and

\$4.64 billion

in labor income (employee wages, salaries, benefits, business owner income).

In addition, the industries contributed

\$712 million

in state and local government tax revenues and

\$1.16 billion

in federal tax revenues.

- In addition to commodity production and commercial services in the cattle and allied industries, pastures and rangelands in Florida support a variety of recreational activities, including fishing, hunting and wildlife viewing.
- Some large cattle ranches in Central and South Florida have partnered with the Water Management Districts to provide on-site water impoundment as a low-cost option to enhance water quality and reduce flooding.
- Other non-marketed ecosystem services offered by cattle ranches include provision of wildlife habitat, maintenance of biodiversity, air and water purification, carbon storage, moderation of extreme weather events, generation and preservation of soils, and control of agricultural pests.
- Although the ecosystem services mentioned above have not been formally valuated, UF/IFAS economists recently estimated their value to the state as \$4.6 billion annually.

Source: Hodges, A.W., Court, C.D., Rahmani, M. and Stair, C.A. 2019. Economic Contributions of Beef and Dairy Cattle and Allied Industries in Florida in 2017. University of Florida/IFAS, Food and Resource Economics Department. https://bit.ly/2C4hHbw 'Figures contributed by UF/IFAS sources.

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The Florida Senate

Meeting Date

APPEARANCE RECORD

beef industry presentation

SAMALA MOVILLALANA

Deliver both copies of this form to Senate professional staff conducting the meeting

3011	Committee	Amendment Barcode (if applicable)
Name	Whithie Yoder	Phone 850.272.9097
Address	25535 NE GYARY TEW Rd.	Email
	Altha, Fl 32421 City State Zip	
	Speaking: For Against Information OR Wa	ive Speaking:
	PLEASE CHECK ONE OF THE FO	OLLOWING:
	n appearing without I am a registered lobbyist, representing:	I am not a lobbyist, but received something of value for my appearance (travel, meals, lodging, etc.), sponsored by:

While it is a tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this hearing. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. If you have questions about registering to lobby please see Fla. Stat. §11.045 and Joint Rule 1. 2020-2022 Joint Rules pdf (flsenate.gov)

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S-001 (08/10/2021)

The Florida Senate

12/12/23 APPEARANCE RECORD

Tab 3- Beef Industry

Meeting Date Bill Number or Topic Deliver both copies of this form to Agriculture Senate professional staff conducting the meeting Amendment Barcode (if applicable) Committee Pat Durden 8505190896 Name Phone Email patdurden@f-r-m.com Address 800 Shakerag Road Street Kissimmee FI 34744 City State Zip OR Against / Information Waive Speaking: In Support PLEASE CHECK ONE OF THE FOLLOWING: I am not a lobbyist, but received I am appearing without I am a registered lobbyist, something of value for my appearance compensation or sponsorship. representing: (travel, meals, lodging, etc.), sponsored by:

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S-001 (08/10/2021)

Dec 12 2023



Technologies for practical farms of tomorrow

Kati Migliaccio, PhD PE Agricultural and Biological Engineering

Agricultural technology in Florida



- Opportunities to implement technology are changing due to availability of data, advances in technology & wireless connectivity, sensors, affordability
- Role for teaching, research, & extension for success
- Presentation includes example projects that are highly integrated with Florida farmers
- Presentation includes examples of robotic applications in agriculture



Florida Stakeholder Engagement Program (Florida STEP)

Florida STEP is an innovative extension program to engage growers, agriculture industry, agricultural research, and extension in an interactive real-world system to increase productivity, sustainability, and profitability.

Competition

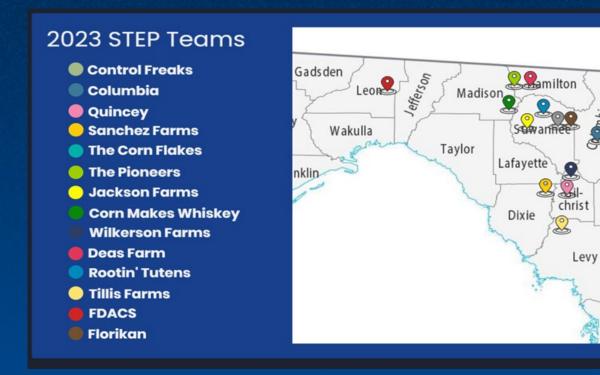
Peer-to-peer interaction





Research: Dr. Sharma 4

Florida Stakeholder Engagement Program (Florida STEP)



Management decisions

- Hybrid Selection
- Seeding Rate
- Irrigation

Baker

Union rad-

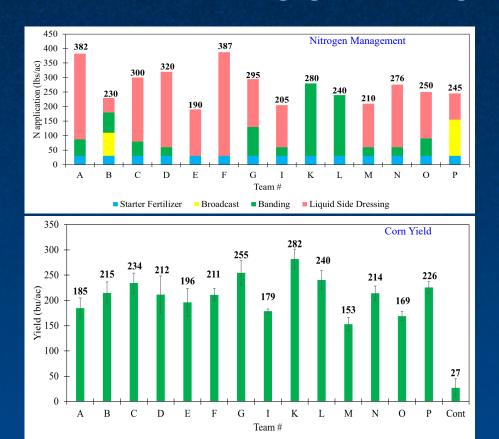
Marior

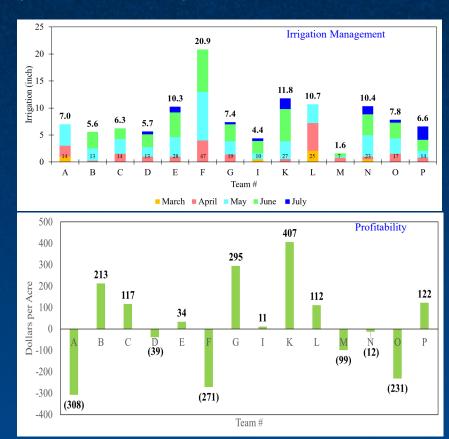
Alachua

Citrus

- Nitrogen
- Insurance Selection
- Grain Marketing

Florida Stakeholder Engagement Program (Florida STEP)





Strawberry and Blueberry Advisory System

Strawberry Advisory System

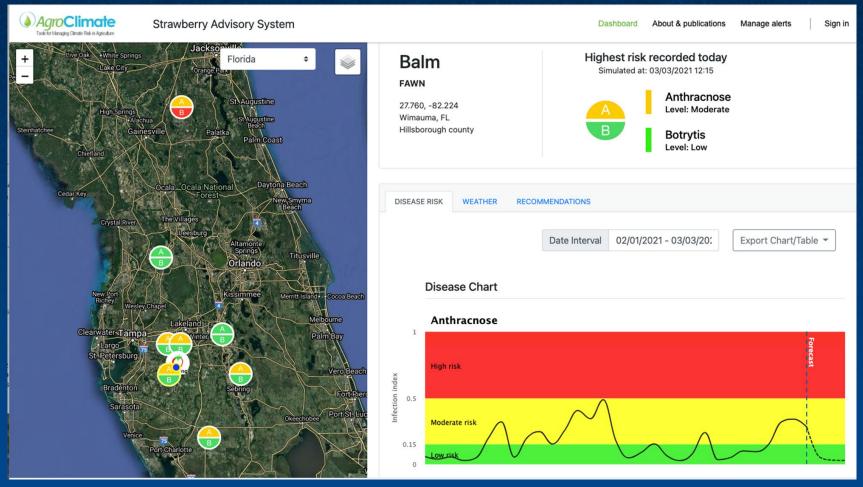
Weather-driven decisions that may need access to information while on the field for immediate action are suitable for mobile- phone apps.



- SAS has been widely adopted by growers.
- It's guided fungicide applications provide comparable disease management with up to 50% reduction in fungicide use compared to current practices.
- SAS has been shown to save Florida strawberry growers \$1.7 million a year.

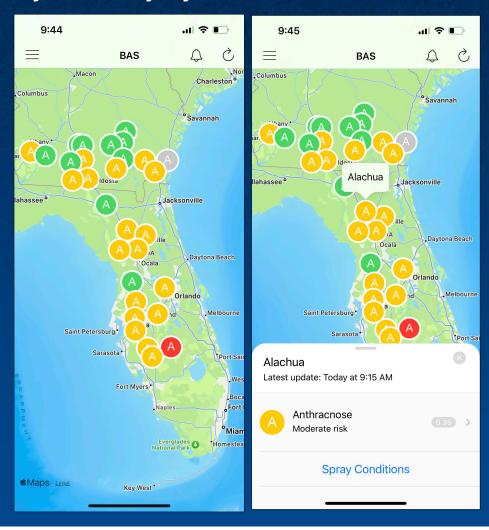
Research: Dr. Fraisse

Strawberry Advisory System



Research: Dr. Fraisse

Blueberry Advisory System



The Blueberry Advisory System (BAS) was recently launched to alert Florida blueberry growers when environmental conditions are favorable for the development of anthracnose fruit rot (AFR).

It serves blueberry growers in Florida and Georgia and will help them reduce costs and improve disease management.

Research: Dr. Fraisse

Two-Spotted Mite Detection

Two-Spotted Mite Detection











- Labor intensive to do by eye and hand
- Artificial Intelligence algorithm with smartphone can provide estimate of presence and density
- System costs around \$300

Irrigation

IrrigMonitor

IrrigMonitor features:

- · Centralized platform showing data collected in the field
- Integrates data from various manufacturers and sources

User Friendly interface for realtime insights:

- · With personalized displays the grower can select the most appropriate features for scheduling
- · Growers with and without irrigation control can use the software



Al-Enabled Technologies

Agroview - farm analytics

- Product created from IFAS Research that is now commercialized
- Uses drone data to create data maps for growers



Research: Dr. Ampatzidis

Agroview - farm analytics



Manual data collection

- 800 trees
- 30% error rate
- 8 hours sample collection
- 4 people
- 2 weeks lab analysis
- Estimated cost: \$10,500 Estimated cost:

UAV-based with

Agroview

- 5,000 trees
- 95-97% accuracy
- 30 min flight
- 1 person
- 5 min analysis
- Estimated cost: \$100

Agroview - nutrient management



grovie lutritio	w n Report		AGR@VIEW		
Farm: Dem Block: Inve	o Account entory, Health &	Data Collection Date: 12/20/2020 Block area: 12.7 acres			
Nitrogen					
Range	Average value	Acres	Suggested actions	Application Rate	
Deficient	0.535%	3.7	Check yield. Check tree health. Review water management. Review N fertilizer rate.	0	
Low	2.358%	1.1	Check yield. Check tree health. Review water management. Review N fertilizer rate.	0	
	2.686%	3.6	No actions	0	
Optimum	2.00076				
High	2.848%	4.3	Check soil organic matter, Review N fertilizer rate.	0	
	2.848%	3775771		Application Rate	
High Phospho	2.848% rus	4.3	Review N fertilizer rate.		
High Phospho Range	2.848% FUS Average value 0.181%	4.3	Review N fertilizer rate. Suggested actions	Application Rate	
High Phospho Range High	2.848% FUS Average value 0.181%	4.3	Review N fertilizer rate. Suggested actions	Application Rate	
Phospho Range High	2.848% rus Average value 0.181%	4.3 Acres 12.7	Review N fertilizer rate. Suggested actions No actions	Application Rate	
High Phospho Range High Potassiu Range	2.848% rus Average value 0.181% m Average value	Acres 12.7 Acres	Review N fertilizer rate. Suggested actions No actions Suggested actions Increase K fertilizer rate.	Application Rate 0 Application Rate	
Phospho Range High Potassiu Range Deficient	2.848% PUS Average value 0.181% M Average value 0.300%	Acres 12.7 Acres 1.2	Review N fertilizer rate. Suggested actions No actions Suggested actions Increase K fortilizer rate. Apply foliar K fertilizer. Increase K fortilizer rate.	Application Rate 0 Application Rate	

Costa L., Kunwar S., Ampatzidis Y., Albrecht U., 2021. Determining leaf nutrient concentrations in citrus trees using UAV imagery and machine learning. Precision Agriculture,

Standard practice

Collection Labor
4 People @ \$20/hr = \$800/day
3 days collection
Total: \$2,400

Lab Fees \$20 lab fee per sample Total: \$18,000

3 Days, Collection 2-4 Weeks, Wait Lab Analysis

Total Cost: \$20,400 Total Time: ~5 weeks

Agroview

Method: UAV Collection, All 67 Acres, 9,000 trees

UAV Flight (@\$4/ac, multispectral) \$275

Analysis (\$14/ac) \$938

1-2 Day, Collection/Upload/DataProcessing1-2 Days, Nutrient Analysis

Total Cost: \$1,213 Total Time: 2-4 days

Research: Dr. Ampatzidis

Robotics

Autonomous Data Collection for Scouting





- Scouting robot provides images for detecting weeds, pests, and diseases
- Using a robot provides more complete coverage and can obtain images that can be used for multiple purposes
- Reduces labor time and costs

Precision Weed Management



- The project will develop, integrate, and apply novel technologies to provide the specialty crop industries with a commercially viable precision sprayer at a lower cost (affordable to medium and small level growers).
- The project will reduce dependence on labor (for scouting), use of herbicides (up to 70-90%), risk of crop damage, environmental pollution and contamination of the edible products.

Research: Dr. Ampatzidis

Thank you

University of Florida
Institute of Food and Agricultural Sciences
Agricultural and Biological Engineering
Kati Migliaccio
klwhite@ufl.edu

The Florida Senate

	DD	EA	D	Λ	AI	CE	D		D	
A	PP	EA	M	A	IV	LE	K		K	L

Tab	4

Bill Number or Topic

Deliver both copies of this form to

Se	nate Anna	lture	Senate profession	al staff condu	icting the meeting	
	Committee					Amendment Barcode (if applicable)
Name	<u> Kati Miè</u>	Maccio			Phone _	305-484-3638
Address					Email _	klwhite@ufl.edu
	Street					
	City	State		Zip		
	Speaking: For	Against	✓ Information	OR	Waive Speal	king:
	n appearing without npensation or sponsorship.		PLEASE CHECK I am a regist representing	ered lobbyist		I am not a lobbyist, but received something of value for my appearance (travel, meals, lodging, etc.), sponsored by:

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S-001 (08/10/2021)

CourtSmart Tag Report

Room: SB 301 Case No.: Type: Caption: Senate Committee on Agriculture Judge:

Started: 12/12/2023 4:00:33 PM

5:34:59 PM

5:35:08 PM

Ends: 12/12/2023 5:35:27 PM Length: 01:34:55

4:00:34 PM Chair Collins calls meeting to order 4:01:19 PM Roll call, quorum is present 4:01:32 PM Pledge of Allegiance 4:02:12 PM Chair Collins makes opening remarks 4:02:47 PM Tab 1, Presentation by the USDA Command Sergeant Major Monshi Ramdass 4:03:04 PM 4:28:37 PM Questions: Senator Simon 4:28:40 PM 4:29:02 PM Sqt. Ramdass Senator Simon 4:30:20 PM 4:31:49 PM Chair Collins 4:32:31 PM Tab 2, Presentation by the Future Farmers of America (FFA) Kaylee Ehrisman, FFA State President 4:33:14 PM 4:34:39 PM Jenna Larson, FFA State Secretary 4:37:14 PM Kaylee Ehrisman 4:39:46 PM Jenna Larson 4:39:52 PM Kaylee Ehrisman 4:42:49 PM Jenna Larson Questions: 4:45:49 PM Senator Rouson 4:46:52 PM 4:48:09 PM Tab 3, Overview of Florida's Beef Industry Whitnie Yoder, Florida Cattlemen's Association 4:48:46 PM Comments: 4:59:33 PM 4:59:40 PM Senator Simon 5:02:11 PM Recording Paused 5:08:27 PM Recording Resumed 5:08:57 PM Pat Durden 5:11:35 PM **Chair Collins** 5:11:57 PM Tab 4, Presentation on Technology in Agriculture by UF/IFAS 5:12:20 PM Dr. Kati Migliaccio 5:28:25 PM Chair Collins 5:28:44 PM Dr. Migliaccio **Chair Collins** 5:29:08 PM Dr. Migliaccio 5:30:01 PM Chair Collins 5:30:13 PM 5:30:34 PM Senator Simon 5:31:02 PM Dr. Migliaccio 5:31:47 PM Senator Simon 5:31:51 PM **Chair Collins** Dr. Migliaccio 5:32:01 PM 5:32:17 PM **Chair Collins** 5:33:41 PM Closing remarks 5:34:40 PM Senator Rouson

Senator Boyd moves to adjourn

Meeting adjourned

THE FLORIDA SENATE

Tallahassee, Florida 32399-1100

COMMITTEES:

Appropriations Committee on Agriculture, Environment, and General Government, *Vice Chair* Agriculture Community Affairs Education Pre-K -12 Finance and Tax Fiscal Policy

SELECT COMMITTEE: Select Committee on Resiliency

SENATOR LORI BERMAN

26th District

December 11, 2023

Dear President Passidomo,

Please excuse my absence from this week's committee meetings. I have a personal obligation and will be unable to attend. Please reach out with any questions.

All the best,

Lori

REPLY TO:

□ 2300 High Ridge Road, Suite 161, Boynton Beach, Florida 33426 (561) 292-6014 FAX: (888) 284-6491 □ 216 Senate Building, 404 South Monroe Street, Tallahassee, Florida 32399-1100 (850) 487-5026

Senate's Website: www.flsenate.gov



THE FLORIDA SENATE

Tallahassee, Florida 32399-1100

COMMITTEES:

Agriculture
Appropriations
Appropriations Committee on Criminal
and Civil Justice
Appropriations Committee on Health
and Human Services
Children, Families, and Elder Affairs
Community Affairs
Military & Veterans Affairs, Space and
Domestic
Security
Rules

SENATOR DENNIS BAXLEY

President Pro Tempore 13th District

December 11, 2023

The Honorable Chairman Jay Collins 304 Senate Office Building 404 South Monroe Street Tallahassee, FL 32399

Dear Chairman Collins,

I am requesting to be excused from the Agriculture Committee Meeting, scheduled on December 12th, in order to attend a meeting elsewhere in the state.

I appreciate your favorable consideration.

Onward & Upward,

Senator Dennis Baxley Senate District 13

Denik Bayley

DKB/dd

cc: Katherine Becker, Staff Director

Evan Denny