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summer 2020

## **IN THIS ISSUE**

# **Virtual Youth Field Day a Hit**

by Andrea Dunlap

Just as most events have transitioned to virtual programs, this year's Youth Field Day was no exception. In place of our traditional onsite, hands-on program we opted for a joint Zoom/ Facebook LIVE delivery of instruction through educational video productions followed by question and answer sessions with course instructors. Six class sessions were offered in mini youth field days, daily at 2:00 p.m. the week of June 29th.

As always, the goal of our Youth Field Day is to excite students about agriculture and science, reveal future opportunities in those fields, and foster a love of learning which will promote agriculture and good stewardship in this and future generations.

Despite the unusual setting, 121 registered for this virtual event with attendance varying daily - total attendees on Zoom and Facebook LIVE combined: Wired Wildlife, 62; Halter Breaking, 90; Feed n' Stuff, 48; Plants: To eat or not to eat, 51; Milk It! Lactation Station, 63; and Reproduction Deconstruction, 29. All class sessions were recorded and are accessable on our website's virtual classroom in the field day recordings section, on our Facebook page, and on our YouTube site.

Save the Dates, we already have two events scheduled for 2021 and we are hoping to be in person! Our traditional (every 18-months) field day is set for April 1. It will be a milestone for the Center as it will be celebrat-



Filming a segment of the halter breaking demonstration with Matt Warren.

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# UF/IFAS Range Cattle Research & Education Center NEWS

ing it's 80th anniversary in 2021. We hope to start sharing details after the first of the year. The date for the next youth field day has also been set for June 29. Unlike this year, we hope to be in person with hands-on learning in on-site class sessions along with the college/career expo.

Handouts and notes for these classes





Wired Wildlife with Bethany Wight and Tyler Buckley

are available in the Youth Field Day booklet which is available with the links to the recordings on our website.

We are super grateful for everyone who worked hard to make this awesome event a success - all the teachers, video producers, and prize





<u>Plants: To eat or not to eat</u> with Dr. Brent Sellers and Clay Cooper

contributors! Without you this event couldn't have happened. THANK YOU!

<u>Click here</u> for a playlist to watch the class sessions.

Sessions included:





Milk it! Lactation Station with Colleen Larson and Lauren Butler



Halter Breaking with Matt Warren







Feed n' Stuff with Chris Prevatt, Christa Kirby, and Julie Warren







Reproduction Deconstruction with Sonja Crawford, Liz Palmer, and Taylor Davis

# **Faculty News**



Dr. Hance Ellington Grazinglands Wildlife Specialist

Dr. Ellington began work (remotely) on July 1. He looks forward to working with you. He can be reached at

e.ellington@ufl.edu.



Dr. Philipe Moriel Receives Awards

Dr. Moriel was one of two early-career researchers recognized with the UF/ IFAS Richard Jones Outstanding New Faculty Award.

He was also recently awarded the 2020 Christine Taylor Waddill Extension Professional Enhancement Award. UF/IFAS provides a term professorship and program support awarded to Extension faculty who promote outstanding educational programs and demonstrate scholarship in Extension.

Congratulations Dr. Moriel!



Dr. Brent Sellers Receives FFA Honor

Dr. Brent
Sellers was
selected by
the Florida FFA
Association to
receive a Honorary State FFA

Degree. The award recognizes individuals who have greatly contributed to the advancement of agriculture education and who have provided outstanding service to the FFA program.

It was presented during the 4th Session of the virtual Florida FFA Celebration held this summer.

# **Faculty News continued**

#### PUBLICATIONS SELECTED FOR SPECIAL RECOGNITION

by Robert A. Gilbert, Dean for Research and Director, Florida Agricultural Experiment Station, University of Florida/IFAS

In calendar year 2019 alone, our faculty published 1,565 publications in highly regarded peer-reviewed journals, which is a tremendous reflection of our research faculty productivity and scientific impact.

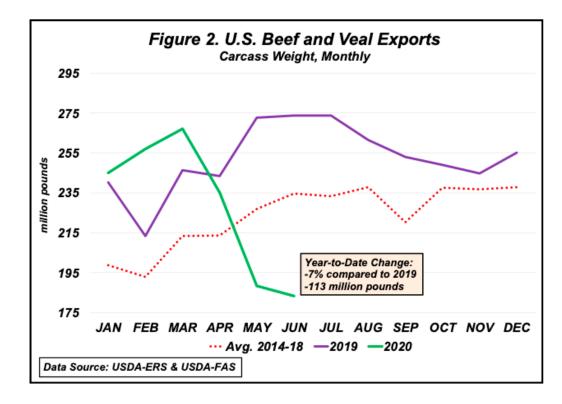
My office requested that each UF/ IFAS unit leader submit one or two recent publications that they believe exemplify research being conducted



within their disciplines and that have had particularly significant impacts. Each of the papers submitted are listed in this brochure, and eight were chosen for special recognition. For more information and to read each impact statement and full publication, visit our website: https://research.ifas.ufl.edu/events/awards-ceremony/2020-award-announcements/#d.en.815948.

# **Economic News** - Chris Prevatt

Domestic and global beef demand have been excellent the last several years. This was especially important given the huge supplies that were produced from the early expansion years. Today, we are presented with a different challenge as we still have huge supplies of cattle and beef in the U.S. supply chain for production in 2020 and 2021. However,



our consumers (domestically and globally) have reduced discretionary spending habits compared to previous years due to the impacts from the pandemic. Figure 2. provides a comparison of U.S. Beef and Veal Exports from 2020, 2019, and the 5-year average of 2014 – 2018.

As you can see, U.S. Beef Exports have declined significantly since the pandemic started in March. When analyzing the data, there are year-over year declines in beef export volumes to Japan (-20.7%), South Korea (-39%), Hong Kong (-11.2%), Taiwan (-37.2%), Mexico (-61%), and Canada (-0.2%) for June 2020 compared to June 2019. It will be extremely important for export volumes to improve over the next several months as U.S. Beef Production increases in the third and fourth quarters of 2020.

## **Student News**

#### Where are they now -Ruth Marisol Orellana

In 2011 Ruth completed a student internship with Dr. Joao Vendramini. She recently provided this update.



Due to my passion for animal agriculture, I am a fervent professional and researcher in dairy cattle and management. Working toward my undergraduate degree, I had the opportunity to participate in an internship program at the University of Florida Range Cattle and Research Center in Ona, Florida. Although this internship was not related to dairy cattle, from this experience I learned that I wanted to focus my career on animal research. Then I decided to pursue a research-based masters program. In 2014, my dream came true and I started my masters program in dairy cattle nutrition in the School of Animal Science at Louisiana State University. My research work at Louisiana State University focused on dairy calf rumen development and physiology. Along with my duties as a graduate student, I helped to support undergraduate research.

Currently, I am working toward my doctoral degree in the Department of Animal and Dairy Science at the University of Georgia. My research interest is to study the impacts of

nutritional management on performance and health of dairy cattle under heat stress. My purpose as a scientist is to find nutritional and management strategies to reduce the negative impact of heat stress on metabolism, tissue development and immune function of dairy cows and calves, thereby improving their performance, health, and overall welfare. During the first two years of my program, I completed two projects related to dietary supplements of lactating or transition dairy cows during the summer. In the first project, I examined the effect of different dietary Zn sources on mammary cell death, proliferation, and heat tolerance during summer. In my second project, I investigated the effect of feeding a glucose precursor on performance, systemic metabolism, liver glucose and fatty acid metabolism, and metabolic health of transition dairy cows during summer. In addition, I performed a third project studying the effect of feeding different levels of milk replacer on stress responses, growth and health of dairy calves raised during summer. These studies not only have implications in understanding the impact of nutrition and heat stress on physiology, metabolism, and health of dairy cattle, but also provide dairy producers feasible nutritional solutions to enhance cattle performance during summer.

I am finalizing my Ph.D. program, and during the last two years I have conducted an experiment to examine the effects of milk replacer feeding rate and frequency on calf performance, systemic metabolism, health, peripheral tissue insulin responses using a glucose tolerance test and insulin challenge, feed digestibility and abomasum emptying rate during summer and winter. From this experiment, I intend to improve the understanding of the impacts of stress, such as heat stress, and nutritional management on dairy calf physiology and metabolism. We have limited knowledge in these areas which impedes the

development of proper strategies to improve calf growth and health during summer.

I believe that a good research program needs to be closely accompanied by an excellent extension program in order to disseminate good management practices and new technologies to producers. To achieve this goal, during the last three years, I have actively participated in several extension projects, such as workshops and field days, published several extension articles and delivered many extension presentations based on my research. These experiences help me better understand the importance of animal research and reinforce my goal to become an animal scientist.

Upon the completion of my Ph.D. program I have been offered the opportunity to work for Provimi-Cargill as Technical Specialist in Dairy Calf and Heifer. I am thrilled to begin this new phase in my career and join such a great team at Provimi. I am confident that with my experience, knowledge and work ethics I will continue to support the dairy industry.



# Congrats Liz Palmer!

Liz was one of 4 graduate students in the UF Department of Animal Sciences to

receive a scholarship from the Florida Feed Association.

In July, at the American Society of Animal Science Annual Meeting, Liz tied for 3rd place in the Graduate Student Poster Competition - PhD division. Her title, "Effects of stairstep vs. constant supplementation amount on growth, reproduction, and intravaginal temperature in Bos indicus-influenced beef heifers."

Liz is advised by Dr. Philipe Moriel.

## **Student News continued**



Congrats Dr. Neha Rana!

Dr. Rana, a 2012 UF PhD graduate and former student of Dr. Brent Sellers, has

accepted the role of Bayer Regional Technology Development Lead for the Northern Plains.

Prior to joining Bayer, Neha completed her post-doctoral research at University of Nebraska-Lincoln focusing on integrated weed resistance and management and biologically effective dose curves for chemical and non-chemical weed control.

# New Videos

# **Ona Highlights Webinars**

Save the date and join us for an upcoming Ona Highlight webinar. These informative presentations are held each month. They begin at 11:00 a.m. and last about 45 minutes. See our online calendar for upcoming webinars, here.

#### Recent webinars:

"Dividing Tasks & Multiplying Success: Regional collaborative effort delivering high-quality education & research' with Lauren Butler and 'How is UF/IFAS Extension helping you during the COVID-19 pandemic?' with Lindsey Wiggins

- SFBFP Guests, 5/12/2020 Run time: 29.08 minutes

'RCREC Faculty Q & A'
- RCREC Faculty, 6/9/2020
Run time: 55.25 minutes

'Applying Hexazinone with Fertilizer for Smutgrass Control'

- Dr. Brent Sellers, 7/14/2020 Run time: 36.34 minutes

### **CONNECT WITH US**

### **Articles published in the Florida Cattleman & Livestock Journal:**

View these on our website at: <a href="http://rcrec-ona.ifas.ufl.edu/publications/">http://rcrec-ona.ifas.ufl.edu/publications/</a>

## **Ona Reports**

June 2020 - 'UF/IFAS Range Cattle Research and Education Center Research Update' with all faculty contributing

July 2020 - 'Hexazinone and Fertilizer for Smutgrass Management' by Brent Sellers

August 2020 - 'U.S. Beef Cattle Market and Economic Outlook' by Chris Prevatt

#### Florida Cattle Market Price Watch

This helpful resource is provided monthly by Chris Prevatt, State Specialized Agent II, Beef Cattle and Forage Economics. View a complete listing of past reports on our website, <u>click here</u>.

'Ona Highlight featuring guest speakers from the Florida Cattlemen's Association Guest presenters Gene Lollis, President and Jim Handley, Executive Vice President provide an activity report on state and federal legislation and other issues.'

- FCA Guests, 8/11/2020 Run time: 53.50 minutes

All our past webinar recordings are available on YouTube or on our website's <u>Virtual Classroom</u>.

#### **Herd Health Seminar**

recorded on 8/11/20

<u>'Pre-conditioning calves to minimize stress and maximize health'</u>-Dr. Philipe Moriel

'Anaplasmosis' - Dr. Joao Bittar



Weaning day - calves waiting to be loaded. Photo by Julie Warren.

#### Listen or download the latest Joe What? Podcasts:



May 2020 - Gene McAvoy, vegetable agent emeritus and the associate director for stakeholder relations

at the UF/IFAS Southwest Florida Research and Education Center in Immokalee. They discuss the impacts of COVID-19 on vegetable production in South Florida. (Run time: 15.55 min.)



June 2020 - Ben Butler, a dairy farmer from Okeechobee. They discuss the current

efforts of the South Florida Water Management District and the agriculture community to improve water quality in South Florida. (Run time: 27.53 min.)



July 2020 – Dr. Luis Prada e Silva, researcher at the University of Queensland in

Australia. They discuss cow-calf production systems in Australia and new findings in selection of cows for greater protein use efficiency. (Run time: 21.14 min.)

These monthly podcasts can be found on:

**Podbean** 

YouTube

**UF/IFAS Range Cattle REC Website** 

Check out our latest blogs featuring **Graduate Student and Visiting Scholar Highlights** by Bethany Wight, UF/IFAS Range Cattle REC, Rangeland Wildlife and Conservation, Biological Scientist: <a href="http://blogs.ifas.ufl.edu/rcrec/">http://blogs.ifas.ufl.edu/rcrec/</a>

Jaime Garzon

Shanna Stingu

Liz Rose

Clay Cooper









Kelly Koriakin

Leandro Vieira



Dipti Rai

Marta Kohmann

**Upcoming Events** 

View our online calendar for more info on these events and the links to register:

http://rcrec-ona.ifas.ufl.edu/calendar-of-events/

#### Ona Highlight with guest presenter Dr. Mario Binelli

– Sept. 8, 11:00 - 11:45 AM
Dr. Binelli is an Assistant Professor with the
UF Department of Animal Sciences. He will be
presenting, "Reproductive Management Strategies for Beef Cattle in Florida."

#### **UF/IFAS CFLAG Equine Institute**

- Sept. 17, 9:00 AM - 3:00 PM An online event, registration fee \$10.

### Winter Supplementation 'Virtual' Seminar

– Sept. 24, 6:00 PM A free online event.

# Livestock Genetics & Genomics - Regional Webinar Series

- These 9 unique webinars will begin Sept. 30 through Dec. 2, at 1:00 PM Hosted by the American Society of Animal Science Southern Section Extension Committee. Learn more: click here.

#### Ona Long-Term Agroecosystem Research (LTAR) Highlight with guest presenter Dr. Rosvel Bracho-Garrillo

Oct. 13, 11:00 - 11:45 AM
 Dr. Bracho-Garrillo, a Research Assistant
 Scientist at the UF School of Forest Resources &
 Conservation, will present, "Carbon and water
 dynamics in Florida Rangelands as affected by fire frequency and chopping."



Dr. Brent Sellers assists with loading on weaning day. Photo by Julie Warren.

## **Publications**

#### Refereed

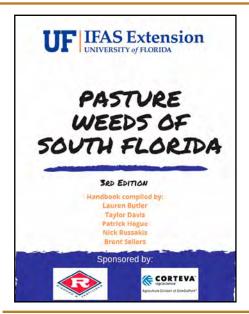
da silva, H.M.S., Vendramini, J. M. B., Leite de Oliveira, F. C., Soares Filho, C. V., Kaneko, M., Silveira, M. L., Sanchez, J. M. D., and Yarborough, J. K. (2020) Harvest frequency effects on herbage characteristics of 'Mavuno' brachiariagrass. Crop Science, 60, 1113-1122.

Fernandez, J.V., Odero, D.C., MacDonald, G.E., Ferrell, J.A., Sellers, B.A., & Wilson, P.C. (2020) Field dissipation of S-metolachlor in organic and mineral soils used for sugarcane production in Florida. Weed Technology, 34, 362-370.

Jaramillo, D.M., Dubeux Jr., J. C. B., Vendramini, J. M. B., Ruiz-Moreno, M., Garcia, L., Santos, E. R. S., Queiroz, L. M. D., Abreu, D., Miranda, L., Siqueira, M. (2020) Establishment techniques affect productivity, nutritive value, and atmospheric N fixation of two sunn hemp cultivars. Grass and Forage Science, 75, 153-158.

Sperry, B.P., Dias, J.L.C.S., Prince, C.M., Ferrell, J.A., & Sellers, B.A. (2020) Relative activity comparison of aminocyclopyrachlor to pyridine carboxylic acid herbicides. Weed Technology, 34, 402-407.

Wallau, M. O., Vendramini, J. M. B., Sollenberger, L. E., van Santen, E., Aguiar, A. D., and Cunha, O. F. R. (2020) In situ dry matter and crude protein disappearance dynamics in stockpiled limpograss. Crop Science, 60, 2159-2166.



#### **New Release**

Interested in learning more about your pasture weeds? This interactive handbook was designed to help producers in south Florida identify weeds specific to this area. A limited number of printed copies are available, free to producers. For more information contact - Taylor Davis: 863-402-7148 or tpohl@ufl.edu or Lauren Butler: 863-763-6469 or l.butler@ufl.edu
You can also access this resource on-

line on our website.

On the publications page at <a href="https://">https://</a>

rcrec-ona.ifas.ufl.edu/publications/, click 'Forage/Pasture Publications' then look in the weed control section.

#### **Our Faculty -**

<u>Dr. Brent Sellers</u>, <u>sellersb@ufl.edu</u> - Pasture and Rangeland Weed Management

Dr. Maria Silveira, mlas@ufl.edu - Soil and Water Science

Dr. Joao Vendramini, jv@ufl.edu - Forage Management

<u>Dr. Philipe Moriel</u>, <u>pmoriel@ufl.edu</u> - Beef Cattle Nutrition & Management

Chris Prevatt, prevacq@ufl.edu - Beef Cattle and Forage Economics

<u>Dr. Hance Ellington</u>, <u>e.ellington@ufl.edu</u> - Grazinglands Wildlife Specialist

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#### ABOUT THIS NEWSLETTER

This newsletter is a publication of the UF/IFAS Range Cattle Research and Education Center (RCREC) located in South Central Florida in the heart of Florida's cattle country. Our goal is to keep you up to date on RCREC happenings, publications, research, faculty & student news, upcoming events and bring you beneficial information you can use in your beef cattle or forage operation.

#### **CONTACT INFORMATION**

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