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# Using body condition score to increase pregnancy success of beef cows and growth of their calves in Florida

#### by Dr. Philipe Moriel



Dr. Moriel

Body condition score (BCS) is a visual assessment of the fat cover (energy reserves) at key locations on a cow body, which is also often positively correlated with reproductive success during the breeding season (Kunkle and Sand, 1990). However, in some scenarios, pregnancy success was not affected by BCS at calving in Bos taurus beef females managed and selected for decades to perform in extensive rangeland conditions (Mulliniks et al., 2012) and by changes in cow BCS from calving until the start of the breeding season in Bos indicus beef cows grazing warm-season grasses and submitted to estrus synchronization protocols (Carvalho et al., 2022). Combined these results indicate that the specific consequences of BCS at calving and BCS change from calving until the start of the breeding season on pregnancy success of beef cows need to be evaluated across multiple cattle breeds,

particularly in scenarios of natural breeding when no exogenous hormones and estrus synchronization are implemented. For more details on how to measure BCS, we recommend readers to access the EDIS documents AN347, How to measure body condition score in Florida beef cattle (https://edis.ifas.ufl.edu/publication/ AN347). For more details on how to implement a supplementation strategy before calving to increase cow BCS, please access EDIS document AN387, Precalving nutrition of beef females in Florida (https://edis.ifas. ufl.edu/publication/AN387#).

#### Studies at the UF/IFAS Range Cattle Research and Education Center

From 2016 to 2023, multiple studies at the Range Cattle Research and Education Center (Ona, FL) gathered performance data on 1,180 fall-calving, Brangus crossbred cow-calf pairs. Briefly, in August of each year (2 weeks after weaning), mature, pregnant cows were assigned to bahiagrass (Paspalum notatum) pastures (6 to 14 cows and 12 to 24 acres per pasture; 12 to 20 pastures per study) at approximately 90 days before calving. Cows were divided into two groups. One group received supplementation of protein and energy from August until calving (October/ November), whereas the second group of cows did not receive sup-

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plemental feed. Starting in December and during the breeding season (January to March), all cow-calf pairs were offered stargrass (Cynodon nlemfuensis) hay and 4 lb of sugarcane molasses + urea per cow daily (20% crude protein and 75% total digestible nutrients). Calves were then weaned at 7 to 9 months of age (July of subsequent year). For the statistical analysis, all cows were sorted into two groups: cows calving with a BCS below optimal (BCS < 5; scale 1 to 9) and cows calving with a BCS equal or above optimal (BCS  $\geq$  5). Then, within each group, cows were sorted into those that lost, maintained, or gained BCS from calving until the start of the breeding season (Table 1).

#### **Maternal Reprouctive Success**

In Florida, fall calving beef herds are often provided an adequate quantity of mature perennial grass to graze during Fall, but these forages lack sufficient protein and energy to meet the requirements of pregnant beef cows (Vendramini et al., 2023). These forage conditions explain the fact that most cows in our analysis calved with BCS  $\geq$  5 and BCS declined in approximately 2/3 of the cows from calving until the start of the breeding season and during the breeding season (Table 1). Cows that calved with a BCS  $\geq$  5 had greater BCS during the breeding season and also at the time of weaning compared to cows

that calved with a BCS < 5. Cows that gained BCS from calving until the start of the breeding season had the greatest BCS during the breeding season and at the time of weaning. Cows that lost BCS after calving had the lowest BCS during the breeding season and at weaning (Table 1).

Our assessment also detected that pregnancy percentage, calving percentage, and percentage of cows calving within the first 30 days of the calving season depended on the combined effects of cow BCS at calving and changes in BCS from calving until the start of the breeding season (Table 2). In cows calving with a BCS < 5, pregnancy percentage

Table 1. Body condition score (BCS; scale 1 to 9) of Brangus cows that calved with body condition score below (BCS < 5) or equal or
above (BCS ≥ 5) and cows that lost, maintained, or gained BCS from calving until the start of the breeding season.

	Calving BCS		P	Post-calving BCS change	
Item <sup>1</sup>	BCS < 5	BCS ≥ 5	Lost	Maintained	Gained
Number of cows	208	980	757	271	160
Cow performance					
BCS 2 weeks after weaning (initial BCS)	4.78ª	5.51 <sup>b</sup>	5.05ª	5.12 <sup>b</sup>	5.26 <sup>c</sup>
BCS at calving	4.51ª	5.56 <sup>b</sup>	5.21 <sup>b</sup>	4.94ª	4.96ª
BCS at the start of breeding season	4.51ª	5.51 <sup>b</sup>	4.57ª	4.96 <sup>b</sup>	5.51°
BCS at the end of breeding season	4.27ª	5.15 <sup>b</sup>	4.38ª	4.62 <sup>b</sup>	5.13°
BCS at weaning	4.77ª	5.59 <sup>b</sup>	4.82ª	5.11 <sup>b</sup>	5.60 <sup>c</sup>
Calf performance					
Birth body weight, lb	75ª	79 <sup>b</sup>	79ª	76ª	77ª
Weaning body weight, lb	524ª	542ª	535ª	529ª	533ª

<sup>1</sup>Initial BCS was collected 2 weeks after weaning (August). Cows calved in October/November. Breeding season occurred from January to March (natural breeding; no estrus synchronization and artificial insemination). Calves were weaned in July of subsequent year.

(and calving percentage and calving distribution in the first 30 days of the calving season) were similar between those that maintained or gained BCS from calving until the start of the breeding season but both groups had better pregnancy percentages compared to cows that lost BCS. In fact, we detected a linear increase in probability of pregnancy as BCS change from calving until the start of the breeding season increased in cows calving with a BCS < 5 (Figure 1). However, pregnancy percentage among cows calving with a BCS  $\geq$  5 was not impacted by their BCS change from calving until the start of the breeding season (Table 2), and . the probability of pregnancy was not impacted by cow BCS change from calving until the start of the breeding season when cows calved with a BCS  $\geq$  5 (Figure 2). These results emphasize the importance of nutritional

management **before calving and from calving to breeding** when no exogenous hormones are administered, and cows are exposed to bulls for natural breeding.

#### **Calf Performance**

Cow BCS change from calving to the start of the breeding season did not impact calf growth performance. However, calf body weight at birth

Table 2. Reproductive performance of Brangus cows according to their body condition score (BCS) at calving (BCS < 5 or BCS ≥ 5; scale
1 to 9) and subsequent BCS change from calving until the start of the breeding season (lost, maintained, or gained BCS). <sup>1</sup>

Maternal classification				Calving distribution, % of total		
Body condition score (BCS) at calving	Post-calving BCS change	Pregnant, % of total	Calving, % of total	Calved 1 <sup>st</sup> 30 days	Calved 2 <sup>nd</sup> 30 days	Calved 3 <sup>rd</sup> 30 days
BCS < 5	Lost (n = 93 cows)	74.5ª	70.6ª	35.0ª	51.2 <sup>b</sup>	13.7
	Maintained (n = 55 cows)	84.8 <sup>b</sup>	80.5 <sup>b</sup>	67.2 <sup>b</sup>	25.1ª	7.9
	Gained (n = 60 cows)	83.7 <sup>b</sup>	78.6 <sup>b</sup>	68.4 <sup>b</sup>	26.8ª	4.9
BCS ≥ 5	Lost (n = 664 cows)	88.3 <sup>bc</sup>	85.0 <sup>b</sup>	64.2 <sup>b</sup>	25.4ª	10.2
	Maintained (n = 216 cows)	90.4 <sup>c</sup>	86.9 <sup>b</sup>	68.1 <sup>b</sup>	27.3ª	4.9
	Gained (n = 100 cows)	93.2°	87.5 <sup>b</sup>	57.6 <sup>b</sup>	34.3ª	8.0

<sup>1</sup> All cows were stratified by their BCS at calving and classified as cows calving with BCS < 5 and BCS  $\ge$  5. Then, within each calving BCS group, cows were classified into those that lost, maintained, or gained BCS from calving until the start of the breeding season.

increased by 4 lb and calf body weight at weaning increased by 18 Ib for cows that calved with a BCS  $\geq$  5 compared to cows that calved with BCS < 5, respectively (Table 1). Despite the heavier body weight at birth, no signs of calving difficulty were observed. Hence, the increased calf BW at birth and weaning reported herein and by others (Moriel et al., 2021) are probably the result of greater gain of BCS during precalving period of cows that calved with a BCS  $\geq$  5 compared to cows that calved with a BCS < 5, which in an indicator of improved cow nutritional status during late gestation.

## Cow BCS After Weaning vs. Cow BCS at Calving

To facilitate the nutritional planning and make sure cows are calving at a BCS above optimal (BCS  $\geq$  5), producers should evaluate the BCS of cows on the day of weaning (when all cowcalf pairs are brought up to the cow pens) or at approximately two weeks after weaning. The sooner after weaning the better, because you will have less time to act and implement a feasible supplementation strategy the longer you wait to evaluate the BCS of these cows. Figure 3 shows the correlation between cow BCS two weeks after weaning (90 days before calving) and its subsequent BCS at calving for cows that either

Figure 1. Probability of pregnancy in beef cows according to their body condition score (BCS) change from calving until the start of breeding season and BCS change during the breeding season for cows that calved with a BCS < 5 (n = 208).

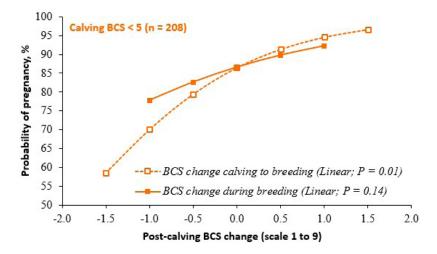
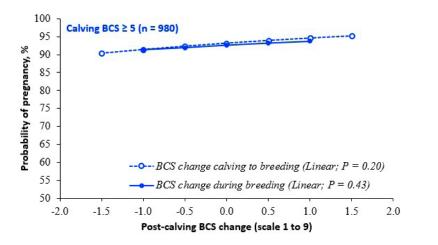


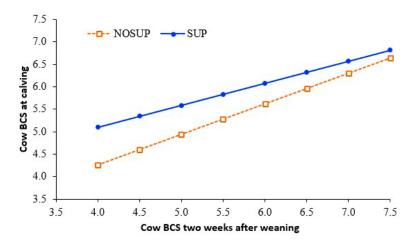
Figure 2. Probability of pregnancy in beef cows according to their body condition score (BCS) change from calving until the start of breeding season and BCS change during the breeding season for cows that calved with a BCS  $\geq$  5 (n = 980 cows).



received (SUP) or did not receive (NOSUP) precalving supplementation of protein and energy (on average 2.5 lb per cow daily of either sugarcane molasses + urea, dried distillers grains, bakery waste, or range cubes). All cows grazed bahiagrass pastures during this period and further details about the options of supplementation strategies are discussed in EDIS AN387 referenced above. Overall, there is a strong correlation between cow BCS after weaning and subsequent BCS at calving. However, the resulting BCS at calving depended on whether or not cows received precalving supplementation. We observed that: NOSUP cows that had a BCS < 5 after weaning either gained a very small amount of BCS or maintained the same BCS, and consequently, these cows calved at a BCS < 5; and NOSUP cows that had a BCS  $\geq$  5 after weaning lost BCS during the precalving period, but still managed to calve at a BCS  $\geq$  5. Thus, producers should expect a BCS loss from weaning until calving in most cows when no precalving supplementation is provided, which may or may not negatively impact cow subsequent reproductive success (as discussed above). In contrast, we also observed that: (1) SUP cows that had a BCS < 5after weaning gained nearly 1 unit in BCS during the precalving period and calved at a BCS of 5.1 to 5.3; (2) SUP cows that had a BCS  $\geq$  5 after weaning either lost a minor amount of BCS or maintained their BCS during precalving period, but all SUP cows calved at a BCS  $\geq$  5. Therefore, as also discussed in EDIS AN387, precalving supplementation of protein and energy is a viable strategy to increase or ensure that cows calve at a BCS  $\geq$  5 (optimizing their reproductive success) and simultaneously increase calf body weight at weaning by approximately 25 lb compared to no precalving supplementation.

#### Conclusion

In terms of cow reproductive performance, these data reinforce that: Figure 3. Correlation between cow body condition score (BCS) two weeks after weaning and subsequent BCS at calving of cows that received (SUP; n = 525 cows) or did not receive (NOSUP; n = 663 cows) precalving supplementation of protein and energy, as discussed in EDIS AN387.



1) cow BCS at calving remains a key factor driving pregnancy success in fall-calving beef cows in Florida; 2) a decline in cow BCS from calving until the start of breeding season reduces pregnancy percentage, calving percentage, and calving distribution during the first 30 days of calving in cows calving with BCS < 5; and 3) despite the lower BCS at calving, thinner cows that maintained or gained BCS from calving until the start of the breeding season achieved similar pregnancy percentage, calving percentage, and early calving distribution compared to cohorts that calved with a BCS  $\geq$  5 and lost BCS after calving. In terms of calf performance, increasing cow BCS at calving improved calf birth weights and weaning weights, whereas changes in cow BCS from calving until the start of the breeding season had no impact on calf performance. Overall, these results further strengthen the importance of precalving nutrition and calving BCS on cow and calf performance combined.

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### **Center News**

#### Inservice Training Held - 5/23

Ten Extension agents took part in this training opportunity organized by Hannah Baker.

Instruction included:

An Update on Phosphorus Fertilization in Limpograss with Dr. Joao Vendarmini

Smutgrass Treatments & Herbicide Selection with Dr. Brent Sellers

Voluntary Programs to Assist with Conservation Stewardship with Dr. Hance Ellington

The Use of AI in Agricultural Water Resource Management with Dr. Golmar Golmohammadi

Pre- and Post-Calving Nutrition for Beef Cows - Impacts of BCS with Dr. Philipe Moriel

Cattle Market Outlook & Program Updates with Hannah Baker

Those attending: Left to Right: Lauren Butler (Okeechobee), Laura Bennett (Pasco), Allie Williams (Hillsborough), Lindsey Crum (Henry, Lee, Collier), Lizzie Whitehead (Bradford), Joe Walter (Brevard), Bridget Stice (Polk), Brittany Justesen (Osceola), Sheri Trent (Seminole Tribe), and Christa Kirby (Manatee).



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Vendramini, J.M.B., M.L. Silveira, and P. Moriel. 2023. Resilience of warm-season (C4) perennial grasses under challenging environmental

#### NRCS Training Held - 5/30

A group from Natural Resources Conservation Service (NRCS) attended a Pasture ID and Management Workshop at the UF/IFAS RCREC to learn about warm-season perennial grass management with Dr. Joao Vendramini and weed control with Dr. Brent Sellers.



#### Visitors from Africa - 6/24

Research fellows from Kenya, Ghana, Burkina Faso, and Mozambique visited Ona to exchange research information on grazing management, forage conservations, soil health, and laboratory techniques to conduct soil-plant-animal interface research. Dr. Joao Vendramini was their host.



#### Warner University Group Visit -6/25

On June 25th, Abby Crawford, Coordinator of Advancement and Ag Programming at Warner University, brought 60 students and 12 camp councelors for a visit. Dr. Joao Vendramini shared about the center, his research, and the importance of being and management conditions. Anim. Frontiers. 13:16-22. <u>https://doi.</u> org/10.1093/af/vfad038

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Questions, contact Dr. Moriel at pmoriel@ufl.edu.

careful what information you accept as truth/the importance of well-done research. Dr. Hance Ellington and Mohamed Khalil Meliane shared about their work with game cameras and invasive wildlife. Dr. Tenzy Mncube spoke to them about 'Lethal dose (LD50) for toxicity.'



#### 15th Annual Youth Field Day - 6/27

This year we had 101 students, parents, and youth leaders, 33 persons with our 19 education expo booths, 55 RCREC faculty, staff, students, Extension staff, and volunteers joining us, for a total of 189 in attendance!

Traditionally held the last Thursday in June, this event is for students ages 8 to 18 and adults. The goal 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.

The field day began with a learning expo where attendees engaged in learning activities with 19 educational booths with topics like ham radio use in disasters, college opportunities, 4-H, land and wildlife conservation, cattle nutrition, bees, the wildlife corridor, and more. After the expo attendees split up into 5 groups

### **Center News**

#### Youth Field Day, continued

to complete 5, 25-minute classes on soil texture, invasive reptiles, weed control using AI, the value of cattle nutrition in fetal development, and meat quality. At the closing assembly attendees gathered inside the grazinglands education building for the announcement of the t-shirt design winners and for the learning expo prize drawings.

You can view each of the class recordings on YouTube or see them on our website along with a links to the field day booklet and the photos on our Facebook page.

Video recordings available -

'How Does a Cow's Diet Affect My Wallet?' (23.15 min.) - with Hannah Baker and Laura Bennett.

'From Sand to Clay: Evaluating Soil Textures' (20.41 min.) - with Don Rainey, Dr. Golmar Golmohammadi, Maxwell Naah, Seyed M. B. Seighalani, and Saba Shaghaghi.

'Artificial Intelligence for Targeted Weed Control' (20.13 min.) - with Dr. Ana Buzanini and Emily Witt with UF/ IFAS GCREC.

'<u>Ultrasound</u> and Carcass Merit of Youth Market Cattle' (21.30 min.) with Sonya Crawford and Amy Perryman.

'Argentine Black and White Tegu: Invader in the Florida Rangelands' (25.47 min.) - with Dr. Hance Ellington, Alex Furst, and Vance Young with Florida Fish and Game Commission.

A big THANK YOU to this year's youth field day sponsors and to everyone who worked the event making it a great success!

#### **Platinum Sponsors:**

A & J Lucky 7 Ranch

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D & S Cattle Co., Inc.

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Roman III Ranch

Sarasota County Farm Bureau

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### **Silver Sponsors:**

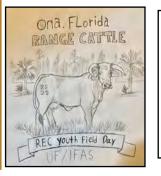
Florida Fence Post Co., Inc.

#### Ultrasound & Meat Quality Class



Thank you to everyone who entered the t-shirt design contest and congratulations to the winners! From left to right, the winners are 1st place, Lydia Davis (Plant City), 2nd place, Abree Perryman (Micanopy), and 3rd place, Kelly Westfall (Gainesville).

OUTH FIELD DA





3 of the 19 Learing Expo Booths





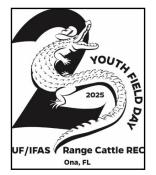


Cattle Class



Weed Control with AI Class









### **Faculty News**

#### Dr. Maria Silveira named SSSA

**Fellow** - by Mike Loizzo, UF/IFAS Soil, Water, and Ecosystem Sciences Communications Specialist

The Soil Science Society of America (SSSA) has named Dr. Maria Silveira a 2024 SSSA Fellow. Silveira is a professor of grassland bio-



geochemistry in the UF/IFAS Department of Soil, Water, and Ecosystem Sciences (SWES). She was selected for her contributions to soil science over the past two decades. Silveira conducts her research and extension activities at the Range Cattle Research and Education Center in Ona, Fla.

"It is a great honor to be named SSSA Fellow," Silveira said. "I am immensely thankful to all my colleagues and students for helping me achieve this important milestone in my career. Dr. Reddy's support and encouragement have been invaluable."

Dr. K. Ramesh Reddy, SWES graduate research professor of biogeochemistry and director of the UF School of Natural Resources and Environment, nominated Silveira. His nomination highlighted Silveira's creativity in research and extension to address critical issues in grassland ecosystems.

#### Continue reading, click here.

# Congratulations Dr. Silveira & Dr. Vendramini!



In 2023, the University of Florida initiated a post-tenure review process that requires the review of faculty performance in the areas of teach-

ing; research, scholarship, or creative work; service; and other assigned responsibilities (including extension) every 5 years. At the end of the review process faculty members are provided a performance rating of "exceeds expectations," "meets expectations," "does not meet expectations," or "unsatisfactory." Drs. Maria Silveira and Jooa Vendramini were included in this first round of post-tenure review and we're happy to announce that their performance over the past 5 years has been rated as "exceeds expectations."

#### **Meetings** Attended

In May, Dr. Maria Silveira and Dr. Rosvel Bracho and their partners from Archbold Biological Station attended the LTAR Annual Science Meeting in Tucson, Arizona. As part of the program,



they visited the Santa Rita Experimental Range, the oldest rangeland research center in the U.S., founded in 1902 with the goal of conducting research on the improvement and management of semiarid grasslands in the southwest U.S.

\* \* \*

In June, Dr. Maria Silveira and her PhD student, Nikitha Kovvuri, attended the W4170 Multi-State Annual Meeting in Seattle, WA. The multistate group W4170 "Beneficial Use of Residuals to Improve Soil Health and Protect Public, and Ecosystem Health" consisted of 50+ scientists from 30 states with extensive history on biosolids research. Dr. Maria Silveira currently serves as the chair of the W4170. Topics of discussion included beneficial reuse of biosolids, PFAS contamination, biosolids regulations and legislation. The group also visited the CitySoil Farm, a 1.5-acre

demonstration site located at the King County Wastewater Treatment facility that is dedicated to showcase sustainable farming practices and beneficial reuse of biosolids.



\* \* \*

The **2024 Amer**ican Society of Animal Science Annual Meeting was held in Calgary, Alberta, Canada, from July 21 to 25. Dr. Joao Vendramini



and Dr. Philipe Moriel attended with their students Vinicius Izquierdo and Chadwade Anderson. Vinicius de Souza Izquierdo received the American Society of Animal Science H. Allen Tucker Graduate Student Travel Scholarship. He is an animal science PhD student under the advisement of Dr. Philipe Moriel.

\* \* \*

#### The American Society of Agricultural and Biological Engineers

(ASABE) Conference was held in Anaheim, California, July 28-31, 2024. Dr. Golmar Golmohammadi attended with her students Seyed Mostafa Biazar Seighalani, Saba Shaghaghi Khajehdehi, and Rohith Nedhunuri Reddy.



### **Student News**

#### **Congratulations Graduates!**

#### Caetano Sales came to

the center in January 2020 for an undergraduate internship, where he spent six months advised by Dr. Brent Sellers working on his lab's research with pasture and rangeland weed management. In August 2020, he started his MS degree in the weed science program at the Agronomy Department advised by Dr. Brent Sellers. Caetano's research



focused on studying the efficacy of the herbicide premix Duracor on weed control and forage species tolerance to the product in Florida grazing lands.

Caetano graduated on August 10th and is looking forward to working in the ag industry in Colorado.

**Sudip Regmi** started his MS degree in weed science in January 2022 at the UF Department of Agronomy under Dr. Devkota's advisory at UF/IFAS West Florida REC. When Dr. Devkota left UF, he transferred to Dr. Seller's lab at the UF/IFAS Range Cattle REC to finish his project. His project focused on the influence of co-applied urea ammonium nitrate and adjuvants on bahiagrass biomass and smutgrass control.

Sudip now looks forward to continuing his education as a PhD student with Dr. Boyd's lab at the UF/IFAS Gulf Coast REC.



We wish you all the best Caetano and Sudip!

#### Ona Graduate Student Organization Officers 2024 – 2025

Dr. Joao Vendramini - Faculty Advisor

Seyed M. B. Seighalani - Treasure

Joao Lazarin - President

Conner Crawford - Vice President

Julian D. A. Bernal - Secretary



### **Upcoming Events**

View our online calendar for more info on events and links to register: <u>http://rcrec-ona.ifas.ufl.edu/calendar-of-events/</u>

Ona Highlight - 'An Overview of the Cattle Market & Planning for the Future' with Hannah Baker - Sept. 10, 11:00 - 11:45 AM

Ona LTAR Webinar Series - 'Challenges and opportunities to increase soil carbon in subtropical grazing lands'

with Dr. Maria Silveira - Sept. 23, 1:00 - 1:45 PM Learn more: https://www.thetimezoneconverter.com/

#### Ona Highlight - 'Probiotic Supplementation for Beef Females'

with Dr. Philipe Moriel – Oct. 8, 11:00 - 11:45 AM

#### **Field Day**

- October 10, 8:00 AM - 3:00 PM Research presentations, field tour, learn about student research, and enjoy a steak lunch. See the flier attached for details. Questions, contact us at 863-735-1001 or <u>ona@ifas.ufl.edu</u>

#### Pasture, Rangeland, Forage PRF Insurance Workshop

- October 24, 8:00 AM - 2:00 PM https://prfinsurance.caes.uga.edu/

Ona Highlight - 'Long-Term Agroecosystem Research (LTAR) Update' with Dr. Maria Silveira – November 12, 11:00 - 11:45 AM



### **CONNECT WITH US**

#### **Ona Highlight Recordings**

Save the date and join us for an upcoming Ona Highlight by Zoom broadcast. 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, <u>here</u>.



#### Recordings of recent webinars:

May 2024 '<u>Nutritional Impacts on Beef Cow</u> <u>Reproduction</u>' - Dr. Philipe Moriel

June 2024 '<u>Invisible Fence</u>' - Dr. Joao Vendramini

July 2024

'Barriers faced by landowners in implementing effective management of wild pigs on private property in Florida' - Dr. Hance Ellington

#### Ona Reports - published in the Florida Cattleman & Livestock Journal:

View these on our website at: <u>https://rcrec-ona.ifas.ufl.edu/</u><u>news-and-publications/</u>

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important to minimize the risk of establishment failure and to goars Warm-season perennial grasses are the foundation for Florida's live Florida, these grasses are represented by bahagons, staegrass, ben	
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Reestablishment or total resolution appears to be the most unproductive partners that have been lost to pest domain, overgroup instances of multiple freezent prespectators during late winter, enc- rative sod, allowing for a clean seedbed for reestablishment to new	ing, prolonged drought, and This practice destroys the
While replanting damaged bahageass pastness with alternat stargeass, bermudageass, or haspeograss is expensive with approxim investment should pay for invelf with greater forage production and	are costs of \$700/acye, the
TEP 1) A CLEAN SEEDBED READY FOR PLANTING	
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June 2024 'Special Research Report' - all faculty

July 2024 'Potassium Fertilization of Pastures and Hayfields' - Dr. Maria Silveira

#### August 2024

'Five basic steps to successful perennial pasture grass establishment from vegetative material in South Florida - by Dr. Joao Vendramini

#### Florida Cattle Market Update - published in the Florida Cattleman & Livestock Journal:

View these on Hannah's webpage: <u>https://rcrec-ona.ifas.ufl.edu/about/</u> <u>directory/staff/hannah-baker/</u>

This is a new monthly feature provided by Hannah Baker, state specialized extension agent II in beef and forage economics. At the link above see 'Florida Cattle Market Update' dropdown menu. Questions? Contact Hannah at <u>h.baker@ufl.edu</u> or 863-374-7051. May 2024 'Hay Stocks and Pasture Conditions'

June 2024 'The Cull Cow Market'

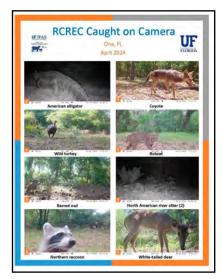
July 2024 'Pasture Conditions, Cattle on Feed, & Prices'

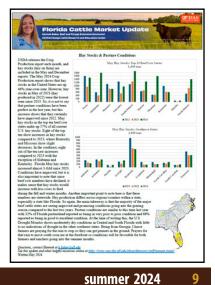
#### **Recent Presentation for viewing:**

Central Florida Livestock Agents Group (CFLAG) Repro School held August 7. 'The Economic Impact of Reproductive Efficiency'

#### **Caught on Camera:**

This feature is assembled by the UF/IFAS RCREC Rangeland Wildlife Ecology Program with images collected from RCREC game cameras mounted throughout the property near Ona, FL. View online this and previous editions: <u>click here.</u>





#### Available resourses from Hannah (continued)

#### **Refereed Publication**

Baker, H. M. & Shear, H. E. (2024) A Commentary on Extension Programming: An Overview of the Costs and Benefits of Patch-Burn Grazing Extension Program Development Through the Use of a Logic Model. Applied Economics Teaching Resources. Vol. 6(2), DOI: 10.22004/ag.econ.343484. View online: Applied Economics TEACHING RESOURCES

#### **EDIS Publication**

Baker, H. (2024) Analyzing the Price Gap between Steers and Bulls in Florida: The Effect of Price Slides on the Value of Additional Pounds - <u>https://edis.ifas.ufl.edu/publication/FE1152</u>

### **University of Florida News**

Recent UF news you may find interesting. Click the title to view the full article or visit <u>https://news.ufl.edu/</u> to learn about all the latest happenings.

<u>University of Florida earns 5-star ranking on Money magazine's 'Best</u> <u>Colleges in America' list for second year in a row</u> - 6/17/24

<u>UF/IFAS honors Turner, begins search for new dean of the College of</u> <u>Agricultural and Life Sciences</u> - 6/20/24

<u>University of Florida President Ben Sasse announces resignation</u> - 7/8/24

Kent Fuchs named interim UF President - 7/23/24

Angle returns to lead IFAS, Glover to serve as interim provost - 8/14/24

Forbes ranks UF No. 4 among the nation's best public universities - 8/28/24

#### UF/IFAS Range Cattle Research and Education Center Faculty -

Dr. Brent Sellers, sellersb@ufl.edu - Pasture and Rangeland Weed Management

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

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

Dr. Philipe Moriel, pmoriel@ufl.edu - Beef Cattle Nutrition & Management

Dr. Hance Ellington, e.ellington@ufl.edu - Grazinglands Wildlife Specialist

<u>Dr. Golmar Golmohammadi, g.golmohammadi@ufl.edu</u> - Hydrology and Water Quality

Hannah Baker, h.baker@ufl.edu - Beef Cattle and Forage Economics

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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**

UF/IFAS Range Cattle Research and Education Center 3401 Experiment Station, Ona, FL 33865 Phone: 863-735-1314 Fax: 863-735-1930 E-Mail: ona@ifas.ufl.edu Website: http://rcrec-ona.ifas.ufl.edu Newsletter Contact: Andrea Dunlap







# Pasture, Rangeland, Forage Collaborative project funded by Southern Extension Risk Management Education Center 2024 (1)

### Join us for an educational workshop this fall to learn more about how to evaluate & mitigate forage risk on your operation!

All workshops will be from 5:30 -8:00 p.m. Dinner and educational materials provided.

Dates	Locations
September 12 <sup>th</sup>	Houston Co. Extension Office 2030 Kings Chapel Rd. Perry, GA 31069
September 26 <sup>th</sup>	NFREC Suwannee Valley (Live Oak) 8202 CR 417 Live Oak, FL 32060
October 1 <sup>st</sup>	Bulloch Co. Extension Office 151 Langston Chapel Rd. Suite 600, Statesboro, GA 30458
October 3 <sup>rd</sup>	Perdido River Farms 5535 Poarch Rd. Atmore, AL 36502
October 24 <sup>th</sup>	Range Cattle Research and Education Center 3401 Experiment Station Ona, FL 33865
October 29 <sup>th</sup>	Gordon Co. Extension Office 1282 SR 53 Spur SW Suite 200 Calhoun, GA 30701
November 7 <sup>th</sup>	A.W. Todd Centre 201 Washington Ave Russellville, AL 35653

Find more information online about the upcoming workshops at prfinsurance.caes.uga.edu









This material is based upon work supported by USDA/ USDA National Institute of Food and Agriculture NIFA under Award Number 2024-70027-42471.





### Workshop Checklist

Who, What, When, Where, Why, & How of **PRF** Insurance

### Learn...

- who qualifies for ...
- why I should use ...
- Mow I can use ...
- where & when to enroll in ...

#### ... PRF Insurance

### Evaluate...

- what is at risk ...
- when it is at risk ....
- Mow to cover the risk ...

...on my operation



# UF/IFAS Range Cattle Research and Education Center



Thursday Oct. 10, 2024

# 8:00 a.m. – 3:00 p.m.

3401 Experiment Station Ona, FL 33865

### Schedule

8:00 a.m.	<b>Check-in</b> Visit sponsor booths, student poster displays, and enjoy light refreshments
9:30 a.m.	<b>Opening Assembly</b> Welcome, IFAS and FCA Updates
10:00 a.m.	Morning Presentations Cattle Market Outlook, Hannah Baker Artificial Intelligence in Agriculture and Water Management, Dr. Golmar Golmohammadi Coyote Ecology in Florida's Rangelands, Dr. Hance Ellington Benefits of Probiotic Supplementation in Cow-Calf Herds, Dr. Philipe Moriel
12:00 p.m.	Steak Lunch / Visit Sponsor Booths
1:00 p.m.	<b>Field Tour</b> What is the Feed Value of Fall Fertilized Forage in South Florida?, Dr. Joao Vendramini Smutgrass Management Techniques: Broadcast and Spot-treatment Applications, Dr. Brent Sellers Pasture Management Strategies to Increase Soil Carbon Sequestration and Greenhouse Gas Mitigation Dr. Maria Silveira

**Registration required:** 

Early (ends 9/13): \$20 · General (ends 10/8): \$30 · Day of event: \$50

### rcrec-2024-fd.eventbrite.com



### For more information: E-mail Ona@ifas.ufl.edu or call (863) 735-1001

The University of Florida is committed to providing universal access to all of our events. For disability accommodations such as sign language interpreters and listening devices, please contact **ona@ifas.ufl.edu** at least 1 week in advance.