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winter 2024

# **IN THIS ISSUE**

# Steers and Bulls: Price Gap, Price Slides, & Value of Additional Pounds

by Hannah Baker, State Specialized Agent II - Beef Cattle and Forage Economics



Hannah Baker

Year after year, cattle producers have a calf crop that is typically almost 50 percent bull calves. Many producers will castrate these bull calves, making them steers, for a multitude of reasons. Two reasons being that steer calves have a higher meat quality and are more docile than bull calves, making them easier to handle and creating a safer work environment. However, the main reason for castrating bull calves, and why it is encouraged, is the higher price received for steer calves compared to bull calves.

According to the 2017 USDA-NAHMS report on Beef Cow-Calf Management Practices in the United States, 62 percent of all operations indicate that they castrate bull calves before sale. The percentage of operations that castrated increased with size of operation. Large operations (200 head or more) had the highest percentage, 90 percent, followed by

medium (50-199) at 80 percent, and small (1-49) at 55 percent. Responses were also divided by region. The percentage of operations that indicated they perform castration on bull calves was the highest in the Central region (86 percent), followed by the West (57 percent) and the East (48 percent).

Florida is the number nine state as of 2024 in beef cow production. With that being said, 85 percent of the state consists of mostly small operations with 1-50 head in a herd. Consisting of mostly small operations and being located in the East region, Florida is included in the two lowest percentages of operations that castrate bulls before sale. Not castrating bull calves on small farms could be the result of several circumstances such as lack of proper facilities and labor. However, the price for steer calves compared to bull calves shows to be historically greater in Florida. Therefore, if possible, producers should consider implementing castration of bull calves as a management strategy to avoid receiving a discounted price.

Prices for 450–495-pound steer calves in Florida over the last six vears (October 2017-December 2023) have averaged at \$173.10/cwt or \$822/head, 5 percent higher than average bull calf prices at \$165.58/



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# UF/IFAS Range Cattle Research & Education Center NEWS

cwt or \$786/head. That results in an average discount of \$7.52/cwt or \$33.84/head. In 2023, prices for steer calves were 6 percent higher on average with average steer prices at \$241.37/cwt or \$1,146/head and bull prices at \$227.87/cwt or \$1,082/head. The average discount in 2023 almost doubled the six-year average at \$13.50/cwt or \$60.75/head. It is evident that steer calves, on average, consistently receive a higher price than bull calves.

However, bull calves may weigh more than steer calves at the time of weaning, essentially bringing a higher price. But after considering the price slide for entering a heavier weight class, what is the actual value of those extra pounds and how many additional pounds would that bull calf need to make up for the discount? The price slide is the amount that prices decrease as weight increases. For example, in 2023, a bull calf that weighs 475 pounds sells for \$227.87/cwt or \$1,082.38. With a \$15/cwt price slide, much like we are seeing in today's market, (\$15 decrease for every 100-pound increase),

a bull calf weighing 50 pounds more at 525 pounds sells for \$1,156.94 (\$227.87-\$7.50) \*5.25). The value of those additional 50 pounds comes out to \$1.49/pound (Table 1). To make up for the \$64.13 discount we saw in 2023, this bull calf would need to weigh 43 pounds more than the 475-pound steer calf. In this scenario, the bull calf is heavy enough to offset the discount. But let's say the bull calf only weighs 500 pounds rather than 525 pounds (Table 2). With the same \$15/cwt price slide, the calf would sell for \$1,120.60. This bull calf sells for \$38 more than the 475-pound bull calf but is still short \$26 to make up for the \$64 discount compared to the 475-pound steer.

See table 1 and 2 below.

In conclusion, castration is encouraged on cow-calf operations in Florida, as well as across the country to take advantage of higher prices. However, if castration is not a feasible option, knowing the discount and being aware of the current price slide is crucial in knowing how many

additional pounds your bulls need to put on to receive the same value as steers. Along with castration, implanting steers is also a beneficial and economical option to gain more pounds without getting the bull discount. With prices expected to stay favorable for at least the next year, use this time to consider and invest in making these efficient and economical changes on your operation.

USDA, NASS. 2017. "Table 16: Beef Cow Herd Size by Inventory and Sales: 2017." USDA, NASS 2017 Census of Agriculture. <u>USDA - National</u> <u>Agricultural Statistics Service - 2017</u> <u>Census of Agriculture - Volume 1,</u> <u>Chapter 1: State Level Data</u>

USDA, NAHMS. 2020. "Beef 2017 Report Part 1: Beef Cow-Calf Management Practices in the United States, 2017." USDA, Animal and Plant Inspection Service. <u>USDA APHIS</u> <u>NAHMS Studies Table</u>

\* \* >

Questions, contact <u>Hannah</u> at h.baker@ufl.edu or 863-374-7051.

Table 1. Price Slides and Value of Additional Weight, 2023 Prices

	\$10/cwt price slide	\$15/cwt price slide	\$20/cwt price slide
*Value of 475 lb bull, initial price of \$227.87/cwt	\$1,082.38	\$1,082.38	\$1,082.38
Value of 525 lb bull	\$1,170.07	\$1,156.94	\$1,143.82
Value of each additional pound	\$1.75	\$1.49	\$1.23
Pounds needed to add \$64.13 of value per head	37	43	52

Table 2. Price Slides and Value of Additional Weight, 2023 Prices

	\$10/cwt price slide	\$15/cwt price slide	\$20/cwt price slide
*Value of 475 lb bull, initial price of \$227.87/cwt	\$1,082.38	\$1,082.38	\$1,082.38
Value of 500 lb bull	\$1,126.85	\$1,120.60	\$1,114.35
Value of each additional pound	\$1.78	\$1.53	\$1.28
Pounds needed to add \$64.13 of value per head	36	42	50

<sup>\*</sup>Price is based on 2023 average in Florida

Adapted from: Burdine, K. "The Steer-Bull Price Differential: A Historical Perspective." Economic and Policy Update (21):8, Department of Agricultural Economics, University of Kentucky, August 31st, 2021.

# **Center News**

# **Internet Upgrade**

In the previous year the Center received the long awaited upgrade to it's internet system which is years in the making. To give you an idea of the magnitute of this change, (in the words of Bill Black with IT Suport, "We have gone from a 25Mbps connection, which is like driving down a narrow alley, to a 1Gbps connection, which is like zooming on a wide highway." This much needed improvement is allowing us to access more information, enjoy better quality, and run more smoothly. We have a few things to workout with the Wi-Fi, but overall conditions are much improved.

# Cattle Management for Women - held Dec. 7

As always, this South Florida Beef Forage Program event saw great attendance. It was a beautiful, cool day and an excellent learning opportunity. Breakout sessions covered cattle management, calf care, legality of selling meat, and resilience in agriculture.



Lauren Butler speaking about selection and management of replacement heifers. UF/IFAS RCREC. Photo by Hannah Baker.

# Florida Cattlemen's Institute and Allied Trade Show - Jan. 24

Held in Okeechobee, State specialized extension agent, Hannah Baker, presented "Maximizing Profits: Optimizing what we have." See a PDF of her presentation along with a video recording on her webpage under 'presentation.'

## **New Study Underway**

Have you heard about 'invisible fence' for cattle? Dr. Joao Vendramini says, "It is a new technology that allows ranchers to control livestock distributions in grazing lands without physical fences." As seen in the image below, cattle wear collars that contain both GPS a radio frequency transceiver that communicate with reception towers. To learn more about this study see this article by Brad Buck of UF/IFAS Communications or see the March Ona Report.



Group of cows wearing collars, UF/IFAS RCREC. Photo by Julie Warren.

# **Group Visits**

Feb. 1 - Dr. Cassio Brauner and PhD student Vinicius Izquierdo hosted a group of producers and technicians from Australia, Brazil, and the USA, as well as representatives from Alltech. They were here for a tour to learn about the work the UF/IFAS Range Cattle REC animal science program is doing, as led by Dr. Philipe Moriel.



Group photo, UF/IFAS RCREC. Photo by Andrea Dunlap.

Feb. 2 - A group from Intellibond and Tecnobeef visited the research center. Pictured here are Dr. Joao Vendramini and David Araujo, a former UF graduate student at the RCREC and now a researcher with Intellibond in the Netherlands.



# In the Community





Regional Science and Engineering Fair, Avon Park. Judges: Dr. Tenzy Mncube, Namrata Ghimire, and Andrea Dunlap. Photo by fellow iudge.



Hardee Co. Fair, Wauchula. Citrus Sales Marketing Competition. Judges: Tammy Watts, Tennille Haney, and Andrea Dunlap. Photo by Lane Warren

# **Center News Continued**

## **Weather News-**

Thus far we have experienced no freezing temperatures this winter, but rainfall for January was above normal. January 2024 was one of the wettest we have had since recording daily rainfall totals in 1942. The 80-year average rainfall is 2.13", and the maximum rainfall ever recorded during the month of January was 8.45" in 1958. We have had other instances when rainfall was above normal in January with 3.73" in 2019 and 6.17" in 2016. The least amount of rainfall received was in 1950 with 0.03". This table shows the January rainfall totals, extreme lows, and the average low and high temperatures for each January from 2000 through 2024. Weather data is collected daily from FAWN.

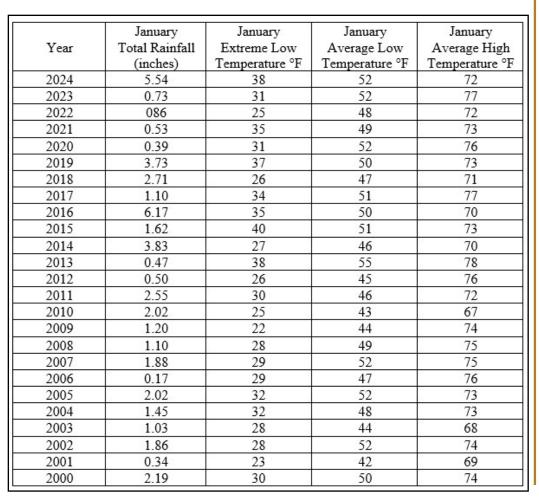
UF/IFAS RCREC annual Climatological Reports can be viewed on our website.

# **Staff News**

Annual Awards and Recognitions Ceremony - held Dec. 19, 2023 at the UF/IFAS RCREC, Ona.



UF/IFAS RCREC 2023 Superior Accomplishment Awardee Ryan Nevling with Dr. Brent Sellers.





Dr. Brent Sellers with those receiving recognition for their years of service: Kim Parks, 20 yrs; Julie Warren, 10 yrs; Lauria Gause, 10 yrs; David Womble, 5 yrs; and Tom Fussell, 10 yrs.



Dr. Brent Sellers with Dennis Kalich who received recognition for 30 yrs. service.



Cornhole competitors (above) John and Andrea Dunlap, Hannah Baker, Tiffany Wiggins, Dr. Brent Sellers, Hunter Sellers, Peter Brau, Dr. Hiran da Silva, Nikitha Kovvuri, and Chadwade Anderson, and the winners Cody Wiggins and Rocky Parks.



Dr. Brent Sellers welcomes everyone and kicks off the ceremony.

# **Staff News Continued**

## **Annual Awards Continued**



Bill Black, our UF/ IFAS IT Support staff, was awarded a certificate of appreciation for his above and beyond support

to the Center. Bill always goes above and beyond, but through our post-Hurricane lan challenges, with relocating offices during facility renovations and then through the move back in, he was especially helpful. Bill, pictured above, couldn't attend the ceremony in December.



# **Student News**

# **Rangeland Wildlife Program News**

Dr. Hance Ellington and students, Brier Ryver and Zach Holmes, presented at the Wildlife Society Conference in Louisville, KY in November.



# **Undergraduates Complete Internships**

Undergraduate interns Gabriela Gomez, Miguel Arrasco, and Rebeca Prieto who had been working on our Natural Resources Extension and Outreach to Hispanic Communities project finished their internships in early December and presented at an undergraduate poster session in Gainesville. Each intern translated two wildlife factsheets into Spanish, made short videos about those wild-life species in Spanish, and created some social media posts that we could use in the future to promote the translated factsheets once they are fully published in EDIS (https://edis.ifas.ufl.edu/). Dr. Hance Ellington and Alejandra (a bilingual wildlife extension communicator in Dr. Ellington's lab) attended the poster session.



# **Congratulations Graduate Brier Ryver**

Brier graduated with her MS in Wildlife Ecology and Conservation under the advisement of Dr. Hance Ellington. In the new year Brier will begin work at Crystal River National Wildlife Refuge, in Crystal River, FL as a park ranger - visitor services specialist.

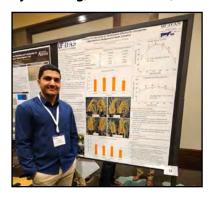
As a MS student, Brier's thesis title was 'Barriers to Wild Pig Management on Private Lands in Florida.' She hopes her research will inform outreach programs to improve the use of best management practices to remove wild pigs.

We wish you all the best Brier!



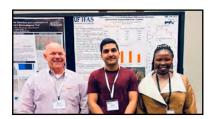
# **Student News Continued**

# Joint Weed Science Society of America- Southern Weed Science Society Meeting, San Antonio, TX

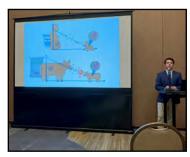


MS student Sudip Regmi received 1st place for his poster "Influence of Adjuvants on Hexazinone Efficacy for Smutgrass (*Sporobolus jacquemonti*i) Control" in Section 2. This work was funded by the Florida Cattle Enhancement Board. He is advised by Dr. Brent Sellers.

Attending the joint Weed Science Society of America-Southern Weed Science Society meeting in San Antonio, Texas were - Dr. Brent Sellers, Sudip Regmi (MS student), and Dr. Temnotfo 'Tenzy' Mncube.



# American Society of Animal Science - Southern Section Annual Meeting, Louisville, KY



Ph.D. student Vinicius Izquierdo presented, "Maternal pre- and post-partum supplementation of Bacillus-based DFM enhanced cow and calf performance." He did an oral presentation and competed in the 3-minute Graduate Student Competition, Ph.D. Section where he received 2nd place.



Vinicius Izquierdo, Dr. Joao Vendramini, and Dr. Cassio Brauner attended the meeting.



Dr. Cassio Brauner also presented at the meeting, "A 12-year summary of effects of body weight at breeding and synchronization protocols on reproductive success of *Bos indicus*-influenced beef heifers grazing warm-season grasses."

# **Upcoming Events**

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

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

35th Annual Florida Ruminant Nutrition Symposium

- Feb. 26-28

Location: Best Western Gateway Grand Hotel, Gainesville. Register online, <u>click here.</u>

Ona Highlight - 'Grasses Gone Bad' with Dr. Brent Sellers and Marc Frank - March 12, 11:00 - 11:45 AM

Ona Highlight - 'Update on Biosolids Research' with Dr. Maria Silveira – April 9, 11:00 - 11:45 AM

Ona Highlight - 'Nutritional Impacts on Beef Cow Reproduction'

with Dr. Philipe Moriel – May 14, 11:00 - 11:45 AM

Ona Highlight - 'Invisible Fence' with Dr. Joao Vendramini – June 11, 11:00 - 11:45 AM

15th Annual Youth Field Day

Details coming in the spring! Questions, contact us at <u>ona@ifas.ufl.edu</u> - June 27, 8:00 AM - 2:00 PM



It has been a wetter than usual winter.

# **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, here.



# Recordings of recent webinars:

Dec. 2023

<u>'Stockpiled Forage for Cow-Calf</u>
<u>Production in Florida</u>' with Dr. Joao
Vendramini

Jan. 2024

'What's new in peppertree and climbing fern control?' with guest speaker, Dr. Stephen Enloe

Feb. 2024

'Bridging Research to Ranch:
Strengthening the Cattle Industry
through the Educational Outreach
of the South Florida Beef Forage
Program' with guest speakers Bridget
Stice and Lauren Butler

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

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



Dec. 2023

'Management of stockpiled limpograss in South Florida' - by Dr. Joao Vendramini

Jan. 2024

'Controlling Invasive Plant Species Rarely Talked About in Grazinglands' - by Dr. Brent Sellers and Dr. Stephen Enloe

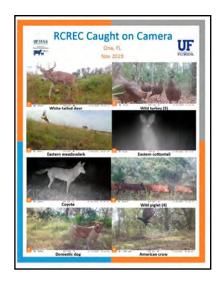
Feb. 2024

'Annual "State of Ona" Address: An UF/IFAS Range Cattle Research and Education Center Update'

- by Dr. Brent Sellers

# **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, the Oct., Nov., and the Dec. edition: click here.



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

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

This is a new monthly feature provided by Hannah Baker, a 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 h.baker@ufl.edu or 863-374-7051. Nov. 2023 - 'Seasonality price trends and feedlot placements'

Dec. 2023 - 'What will the new year bring?'

Jan. 2024 - '2024: A year of stabilizing, expanding, or both?'

# New tools available...

## Calculator:

'Replacement Heifer Cost Estimation Tool'

## Fact sheets:

Estimating the Investment Cost of Raising Replacement Heifers

Steers and Bulls: Price gap, price slides, and the value of additional pounds

#### Presentation & Video:

FCIATS - Okeechobee, 1/24/2024

<u>Bi-Annual Cattle Market Report:</u> January 2024

# **University of Florida News**

https://news.ufl.edu/



#### **Volunteers Needed**

-- Biologists, Master Gardeners, Master Naturalists and interested members of the public with experience in identifying Florida plants and animals:

UF/IFAS Extension will be conducting the 2024 UF

DeLuca Preserve Bioblitz on March 1, 2024. This event will be hosted by a team of UF research and extension experts from across the state and volunteers are needed to assist. For more information and to register go to Eventbrite, <u>click here.</u>

# **UF College of Agricultural and Life Sciences (CALS) News**

- If you have questions about either of these opportunities, contact Dr. Charlotte Emerson, <a href="mailto:cemer@ufl.edu">cemer@ufl.edu</a>.

#### Florida Youth Institute

The Florida Youth Institute is a life-changing experience at the University of Florida for high school students. Participants get the unique opportunity to engage with local leaders and experts on critical global challenges, participate in hands on activities, and explore exciting ways to make a difference in Florida and around the world. Two one-week residential sessions are offered in July.

- Applications are open now: <a href="https://www.cpet.ufl.edu/students/uf-cpet-summer-programs/florida-youth-institute/">https://www.cpet.ufl.edu/students/uf-cpet-summer-programs/florida-youth-institute/</a>
- Applications close March 6 and invitations will be extended March 20
- Final application and World Food Prize Essay are due April 22

# Florida Teacher Institute

In collaboration with the Department of Agricultural Education and Communication, CALS offers a weeklong residential program in July for non-agriculture teachers to learn more about incorporating agriculture and natural resources in their lessons. Throughout the week, teachers will engage in a variety of visits and workshops to learn about the many facets of agriculture and natural resources that contribute to solving global food insecurity. Teachers will also develop their own lesson plans to incorporate the concepts they learn into their classes. At a cost of \$450, 55 continuing education units are available. Applications will open later this spring.

## **UF/IFAS Range Cattle REC 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

<u>Dr. Joao Vendramini</u>, <u>jv@ufl.edu</u> - 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</u>, <u>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**

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