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# **IN THIS ISSUE**

# A snapshot of wildlife diversity at the Range Cattle REC

by Dr. Hance Ellington, UF/IFAS Range Cattle REC, Grazinglands Wildlife Specialist



Dr. Hance Ellington

Trail cameras are a common tool for collecting information about wildlife distribution and diversity. Trail cameras can help us determine where and when wildlife use an area. They can allow us to explore questions about wildlife activity patterns and relationships between different wildlife species. Since July 2021, the Rangeland Wildlife Ecology lab has been maintaining 96 trail cameras at the Range Cattle REC (we call this project the RCREC wildlife diversity project) and you might have seen a few of our best images in the monthly RCREC "caught on camera" newsletter. These cameras and the data they are collecting are also helping us look at how wildlife respond to different prescribed fire management, how wildlife respond to cattle on the landscape, and how native wildlife

respond to invasive wild pigs (Fig 1). We have also been using our trail camera data to contribute to a national project looking at wildlife diversity across the United States. This project, called SNAPSHOT USA, has been collecting a national database of wildlife imagery from trail cameras since 2019. During set times of the year collaborators from all 50 states collect wildlife images from trail cameras deployed in a standard way. With this national database, researchers can examine a wide variety of questions, for example, how wildlife diversity changes as urbanization increases or how wild turkey activity patterns change in response to weather at the national scale. This year, SNAPSHOT USA was conducted from September 1st – October 31st, 2021. There were over 100 individual projects from all 50 states that contributed wildlife images to the program. SNAPSHOT USA 2021 collected over 134,000 wildlife image bursts (consecutive images within 60 seconds of each other) at 106 study areas. The RCREC wildlife diversity project contributed 7,493 wildlife images bursts from 57 cameras, the most of any single contributor this year and the first contributor representing Florida's rangelands.

During the two-month SNAPSHOT USA period, we detected 40 wildlife species at the Range Cattle REC, including 13 mammal species, 25

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# UF/IFAS Range Cattle Research & Education Center **NEWS**

bird species, and 2 reptile species. It is important to note that this is just a quick glance at the wildlife diversity that occurs at the Range Cattle REC - many more species also occur here but were not detected on our cameras. For example, I have personally observed over 85 bird species at the Range Cattle REC since January 2021. Small animals, including most rodents, songbirds, reptiles, and amphibians are not easily detected by trail cameras, unlike medium and large animals that are readily detected by cameras.

As expected, white-tailed deer were the most commonly detected species by our cameras (nearly 4,000 times). Deer were detected at all 57 cameras and were detected three times more frequently than any other wildlife

species. Invasive wild pigs were the next most common species detected on our cameras, with more than 1000 image bursts and at more than 90% of the cameras (Fig 2).

The carnivore that we detected most often on our trail cameras was the raccoon – we detected raccoon at 70% of our cameras. Interestingly, we rarely detected raccoons at our cameras that were located in rangelands dominated by saw palmetto. We detected bobcats slightly more frequently than coyotes (70% of our cameras vs. 63% of our cameras; Fig 3).

We detected river otters at two of our cameras and we detected a striped skunk only once during September and October. Among the game birds, we detected wild turkey at 12 of our cameras and bobwhite quail at 4 of our cameras (Fig 4). Interesting absences from our cameras included gray fox, black bear, and Florida panther, although the latter two are not thought to regularly occur in Hardee County, Florida. Our work continues to contribute to a national understanding of wildlife diversity but has also left us well-situated to examine how native wildlife diversity and behavior responses to prescribed fire, grazing, and invasive wild pigs in Florida's rangelands.

<del>\* \* \*</del>

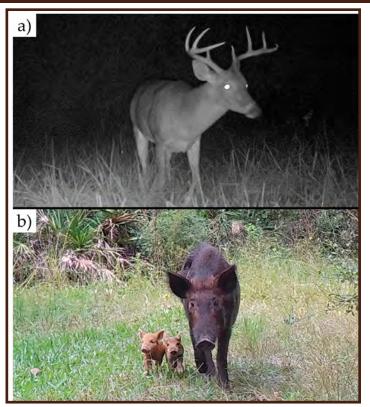
Questions, contact <u>Dr. Ellington</u> at <u>e.ellington@ufl.edu</u> or 863-735-1314 ext. 216.



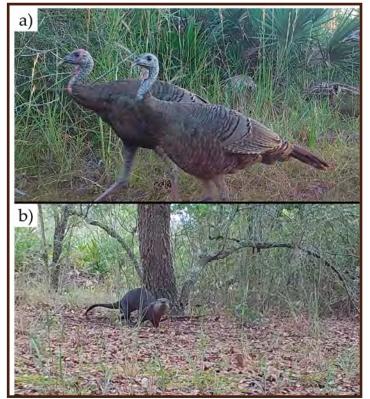
Figure 1.
Rangeland Wildlife
Ecology lab members
deploying and servicing trail cameras
to monitor wildlife
diversity at the Range
Cattle REC

Visit the Rangeland Wildlife Ecology Website:

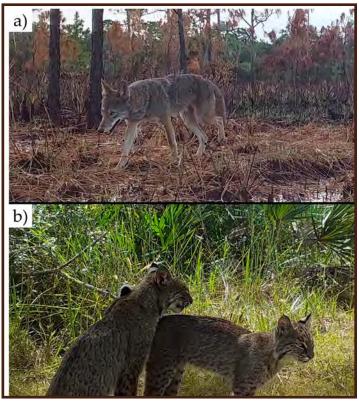
https://www.ufwildlifeontherange.com/



**Figure 2.** White-tailed deer (a) and invasive wild pigs (b) are two of the most commonly detected species on our trail cameras at the Range Cattle REC.



**Figure 4.** Wild turkey (a) and river otter (b) are also present at the Range Cattle REC but are detected less frequently and are likely more restricted to certain land cover types than the other more commonly detected species.



**Figure 3.** Coyotes (a) and bobcats (b) are both common at the Range Cattle REC and were detected at many of our cameras.

# **Climatological Report 2021**

#### **Research Report RC-2022-1**

View this and previous reports 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> <a href="publications/climatological-reports/">publications/climatological-reports/</a>

This annual research report presents a summary of weather conditions observed during 2021 at the Range Cattle Research and Education Center (RCREC), located in Ona at 81° 56.406′W and 27° 23.733′N in south central Florida approximately 45 miles (72 km) east of the Gulf of Mexico and 100 miles (160 km) west of the Atlantic Ocean. Observations have been collected at the Center since June 1942.

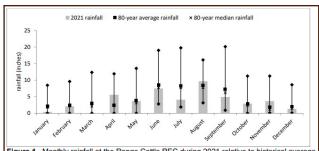


Figure 1. Monthly rainfall at the Range Cattle REC during 2021 relative to historical average median, minimum, and maximum monthly rainfall. Current rainfall is indicated by the gray bars, historical average and median rainfall are indicated by squares (●) and "X's" (x), respectively. Historical high and low rainfall are indicated by diamonds (◆).

# **Student News**



**Leandro Otavio Vieira Filho** was awarded the William C. and Bertha M. Cornett Fellowship CALS award in April. He is pictured here with CALS Dean, Dr. Elaine Turner.

In June he received the 2022 World Congress of Soil Science Fellowship Award from the Soil Science Society of America and the U.S. Committee for Soil Science (USNC/SS). A travel award, it will help him with the costs associated with attending the World Congress of Soil Science in Glasgow, Scotland, UK. This was a competitive travel award based on academic performance and research impact.

<u>Leandro</u> began his Soil and Water Science PhD in the summer of 2019. He is advised by Dr. Maria Silveira.



Caetano Sales, a MS student in Dr.

Sellers' program, placed second in the student competition at the 44th Annual Meeting of the Florida Weed Science Society held at the Gulf Coast Research and Education Center. His presentation was entitled 'Florpyrauxifen-benzyl & aminopyralid efficacy in Florida pastures' and focused on control of tropical soda apple and dogfennel as well as tolerance of limpograss, stargrass, and bermudagrass to the newest herbicide premix (DuraCor) for pasture weed management.

Caetano is also the agriculture and natural resources extension agent in Citrus County. On April 28 he was featured in an article written by Margo Wilson for the Citrus County Chronicle. Read the full article online, <u>click</u>

# **Faculty News**

#### **Congratulations Dr. Philipe Moriel**

View all ASAS National Awards: <a href="https://www.asas.org/about/nation-al-awards">https://www.asas.org/about/nation-al-awards</a>



Dr. Philipe Moriel



#### FOR IMMEDIATE RELEASE:

May 16, 2022

Contact: Dr. Meghan Wulster-Radcliffe, meghanwr@asas.org

# Dr. Philipe Moriel Receives the Early Career Achievement Award from the American Society of Animal Science

CHAMPAIGN, IL – Dr. Philipe Moriel is the recipient of the American Society of Animal Science Early Career Achievement Award, presented during the 2022 ASAS-CSAS Annual Meeting and Trade Show.

Dr. Philipe Moriel is as an Associate Professor at the Range Cattle Research & Education Center from University of Florida (UF). Dr. Moriel's research and extension programs explore fetal and metabolic programming to develop nutritional strategies to optimize cow-calf production efficiency of Bos indicus-influenced cattle in subtropical/tropical environments. His research program has published 87 peer-reviewed articles, and secured over \$7 million as PI and Co-PI from federal agencies, industries, and commodity groups. Dr. Moriel is dedicated to his professional societies, playing extensive roles on committees and chairing activities at national and southern meetings of ASAS. Dr. Moriel also serves as Associate Editor for Translational Animal Science journal. His research/extension programs were recently recognized by multiple awards at the university, regional and national levels in 2018, 2019, 2020, and 2021.

The ASAS Early Career Achievement Award recognizes an individual who has shown outstanding achievement as a young scholar and is working toward the mission of ASAS: "The American Society of Animal Science fosters the discovery, sharing, and application of scientific knowledge concerning the responsible use of animals to enhance human life and well-being." This award is sponsored by the ASAS Foundation.

## **CONNECT WITH US**

# Articles 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>

#### **Ona Reports**

Mar. 2022 - 'Impact of Grazing Methods on Forage and Cattle Production' by Dr. Joao Vendramini

Apr. 2022 - '<u>The Impacts of Wild Pigs on Cattle, Pasture, and the Environment</u>' by Dr. Hance Ellington

May. 2022 - '<u>Dealing with High Fertilizer</u> Prices' by Dr. Maria Silveira



### Florida Cattle Market Price Watch

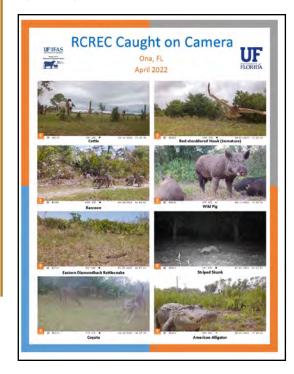
This helpful resource is provided monthly by Chris Prevatt, State Specialized Agent II, Beef Cattle and Forage Economics. View a complete listing of past reports on our website, click here.



## 'Caught on Camera'

A monthly feature with images collected from RCREC game cameras mounted throughout the property. Provided by the Rangeland Wildlife Ecology Program.

View all the issues on our website at: <a href="https://rcrec-ona.ifas.ufl.edu/about/directo-ry/faculty/hance-ellington/">https://rcrec-ona.ifas.ufl.edu/about/directo-ry/faculty/hance-ellington/</a>



## **New Videos**

### **Ona Highlight 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.

Recordings of recent webinars:

'Ecosystem Services of Overseeding Aeschynomene into Bahiagrass Pastures'

with Jaime Garzon, a PhD agronomy student

3/8/2022 - Run time: 33.15 minutes

'Collaboration, Communication, and Education: Enhancing Florida's Livestock Industry Through the SFBFP'

with Allie Williams, a small farms and alternative enterprises extension agent and Sheri Trent, an agriculture/4-H youth development extension agent

4/12/2022 - Run time: 21.17 minutes

'Wild Pigs in Florida: The what, why, and how'

with Dr. Hance Ellington, assistant professor, grazinglands wildlife specialist 5/10/2022 - Run time: 37.01 minutes



If you missed this South Florida Beef Forage Program on March 31, you can now view the recordings on YouTube.

There are 5 videos in this series:

Role of Grazing in Florida's Rangelands

**Managing Pasture Nutrients** 

**Invasive Plant Management** 

Wild Hog Management to Protect Natural Resources

Meeting the Cow's Nutrient Requirements

#### **New Podcasts**

Listen or download the latest **Joe What? Podcast** with <u>Dr. Joao 'Joe' Vendramini</u> -



Mar. 2022 - <u>Breely Barthle of</u> <u>Legacy Verified LLC</u>. They discuss her company, her work with her family's ranch, and the participation of women in beef cattle production in Florida. (Run time: 12.51 min.)



Apr. 2022 - <u>Dr. Monte Rouquette</u> of Texas A&M University. They discuss forage management strategies to cope with current igh fertilizer prices. (Run time: 19.53 min.)

These monthly podcasts can be found on:

<u>Podbean</u> <u>YouTube</u>

You can view all of our our past webinars, program recordings, field day videos, and other recordings on YouTube or on our website's <a href="https://rcrec-ona.ifas.ufl.edu/virtual-classroom/">https://rcrec-ona.ifas.ufl.edu/virtual-classroom/</a>

# **Upcoming Events**

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

#### 13th Annual Youth Field Day

- June 30, 9:00 AM - 1:45 PM UF/IFAS Range Cattle REC, Ona Register on Eventbrite.

#### Ona Highlight with quest presenter David Mason

- July 12, 11:00 - 11:45 AM

<u>"Fire generates seed rain via the magnet effect"</u>
David is a PhD student under the advisement of
Dr. Marcus A. Lashley in the Wildlife Ecology and
Conservation Department at UF.

#### Ona Highlight with Guest Presenter Wes Carlton

- August 9, 11:00 - 11:45 AM

<u>President Wes Carlton</u> of the Florida Cattlemen's Association will discuss the current issues and initiatives of the Florida Cattlemen's Association.

# Ona Beef Cattle and Forage Economics Highlight with Chris Prevatt

 September 13, 11:00 - 11:45 AM
 Chris Prevatt, a state specialized agent II at the UF/IFAS Range Cattle REC, will provide a program update.

# 2022 Winter Supplementation Seminar

- September 22, 6:00 - 8:30 PM A SFBFP event to be held at the Arcadia Stockyard. Space is limited. Register on <u>Eventbrite</u>.

#### **Cattle Management for Women**

- October 20, 9:00 AM - 3:30 PM A SFBFP event to be held at the Center. Space is limited. Register on <u>Eventbrite</u>.



RCREC Administration Building. Photo by Cat Wofford, UF/IFAS Communications.

# **UF News**

#### Share your your throughts with the Presidential Search Committee



On January 4 President Fuchs announced his upcoming transition and the search for the next UF President.

UF's Presidential Search Committee is inviting administration, alumni, faculty, staff, students, and stakeholders to complete a survey to provide input on the search: complete the anonymous survey. You are also welcome to share your thoughts with them by e-mail: presidentsearch@ufl.edu.

#### The Department of Soil, Water, and Ecosystem Sciences (SWES)



What has been known as the UF/IFAS Soil and Water Sciences Department has a new name. Discussions among faculty, students, and staff (beginning in 2019) led to the addition of "ecosystems." The change better reflects the breadth of research, teaching, and extension activities across the department and programs. The Range Cattle REC is home to two SWES faculty members: Dr. Maria Silveira, professor of soil chemistry and nutrient management, and Dr. Golmar Golmohammadi, assistant professor of watershed hydrology and biogeochemistry. SWES faculty members and students are engaged in a wide array of research and educational activities including agroecosystem and ecosystem services management, landscape and watershed ecology and management, coastal ecosystem ecology and restoration, biogeochemistry, management of urban ecosystems, and the restoration and preservation of natural ecosystems. Most of the research, teaching, and extension activities in the department focus on ecosystem scales. Including "ecosystem" in the departmental name also integrates soil and water, which are the foundations of ecosystems.

Visit them: <a href="https://soils.ifas.ufl.edu/">https://soils.ifas.ufl.edu/</a>

### **UF/IFAS Range Cattle REC Faculty -**

<u>Dr. Brent Sellers, 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

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

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

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

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

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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.

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