

36th Annual Northwest Florida Beef Conference



Wednesday, February 10, 2021

Virtual Meeting via Zoom Webinar

2021 Focus: Moving Forward from Disruption

Schedule of Events (AM Central Time)

- 7:30 – **Welcome, Instructions, & Introductions**
Doug Mayo, Beef Conference Chair, Jackson County Extension
- 7:40 – **Cattle Market Outlook for 2021 and Beyond**
Chris Prevatt, UF/IFAS Livestock & Forage Economist
- 8:00 – **Cornerstone Concepts for Cow Herd Sustainability**
The foundation for profitable commercial cow-calf operations.
Glenn Selk, Emeritus Beef Extension Specialist, Oklahoma State University
- 8:40 – **Most Significant Breakthroughs from Beef & Forage Faculty**
Ann Blount, Cheryl Mackowiak, Nicolas DiLorenzo, Jose Dubeux,
Angela Gonella-Diaza, Marcelo Wallau, and Pratap Devkota
UF/IFAS Cattle & Agronomy Specialists
- 9:00 – **Q & A Session All Topics & Speakers**
- 10:00 – **Closing remarks** (depends on the number of questions submitted for discussion)

To join the webinar:

1. Make sure your computer, tablet, or smart phone has a connection to the Internet
2. Make sure your sound is working with the volume set at a comfortable level
3. Log in to the webinar using the link provided below.
 - <https://tinyurl.com/beefconfwebinar>
 - Password: 850
 - If you use the Zoom app to join the meeting manually, the meeting ID is 967 7205 2144 and the passcode is 850
4. Log in 10-15 minutes prior to the start time to ensure your equipment is working and grab another cup of coffee or your favorite beverage.

If you have questions, or need more information, contact:

Doug Mayo or Sharon McRoy
Jackson County Extension Office
850-482-9620
demayo@ufl.edu

Panhandle Ag Extension Beef & Forage Team



UF | IFAS Extension
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Danielle Sprague - Jefferson County

Evie Blount - Gadsden County

Ray Bodrey - Gulf County

Daniel Leonard – Calhoun County

Doug Mayo - Jackson County

Mark Mauldin – Washington County

Kalyn Waters - Holmes County

Mike Goodchild - Walton County

Jennifer Bearden - Okaloosa County

John Atkins - Santa Rosa County

Nick Simmons – Escambia County

Ann Blount – UF/IFAS Forage Breeder

Pratap Devkota – UF/IFAS Weed Specialist

Nicholas DiLorenzo - UF/IFAS Beef
Nutrition Specialist

Angela Gonella-Diaza – UF/IFAS NFREC
Cattle Reproduction Specialist

Jose Dubeux – UF/IFAS NFREC Forage
Management Specialist

Cheryl Mackowiak – UF/IFAS Soil Specialist

Chris Prevatt – UF/IFAS Livestock Economist

Marcelo Wallau – UF/IFAS Forage Specialist

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2021 Virtual Beef Conference Speaker bios:

Chris Prevatt

UF/IFAS Livestock and Forage State Specialized Agent

Prevatt's **extension focus** is working on the economics of livestock and forages, management practices, and marketing strategies for cattle producers. His responsibility is to educate extension faculty and ranchers on the management practices that increase the profitability of livestock and forage producers.



Specific programs include:

- Developing and Maintaining Enterprise Budgets for a Cow-Calf Operation and Forage Budgets
- Generate Decision Aids for producers to analyze profitability on an individual basis
- Provide economic insight on cost-effective management practices
- Develop a Marketing Plan to evaluate Marketing Alternatives and Strategies
- Agri-business Development and Financial Management

Dr. Glenn Selk

Emeritus Extension Animal Scientist, Oklahoma State University

Dr. Glenn Selk was raised on a corn, alfalfa and beef cow/calf farm in Dawson County, Nebraska. He completed his bachelor's degree from the University of Nebraska-Lincoln, and Master's and Doctorate degrees from Oklahoma State University. Upon completion of his Master of Animal Science degree. Dr. Selk began his extension career as the Area Animal Science Agent for Northeast Oklahoma in 1973. He later returned to Stillwater and received a Doctorate degree in reproductive physiology. Dr. Selk then worked as Oklahoma Extension Cattle Reproduction Specialist, conducting extension programs for cow-calf producers in reproduction and cow herd management. He retired from full-time extension duties in 2010.



Although retired, Dr. Selk continues to jointly write a weekly electronic newsletter with Dr. Derrell Peel called the "Cow-calf Corner" He is also seen weekly on the statewide educational television show "Sunup". His segment is also called "Cow-calf Corner" which provides timely management tips for cow herd managers. In addition, each week he can be heard on radio station KFRM, Salina, Kansas on a five minute program called "Livestock Lines."

Dr. Selk, and his wife Mary, live in Stillwater, Oklahoma and have one daughter, Katy Wilson, who lives in Broken Arrow, Oklahoma

Dr. Ann Blount

Forage Breeder, UF/IFAS North Florida Research and Education Center

Blount's **extension program** responsibilities include educational programming and written works on forage selection and management practices for county faculty and producers within the tri-state area of FL, AL and GA. This program supports extension faculty through EDIS publications, in-service training, field days and producer-based meetings addressing local and regional concerns.

Blount's **research and breeding program** is focused on physiological aspects (photoperiod and cold response) of fall-season forage production and complimentary disease, insect and nematode resistances to allow the forages to be productive outside normal growing seasons. The major forage crop effort in the program is breeding improvement in bahiagrass, *Paspalum notatum*, and evaluation of new introductions of perennial peanut, *Arachis glabrata*. Cultivar development and evaluation of other forage species (i.e. limpograss, small grains, ryegrass, clover and bermudagrass) is part of a collaborative effort with state and regional plant breeding programs to adapt new forages to the southern Coastal Plain and Peninsular Florida.



Dr. Cheryl Mackowiak

Forage Fertility & Soil Specialist, UF/IFAS North Florida Research and Education Center

The intent of Mackowiak's **extension program** is to promote good soil stewardship and provide an understanding and appreciation of soil fertility and its interaction with other environmental influences on plant mineral nutrition. Her extension programs represent two areas:

1. Soil nutrient management in forage systems. Within the past six years, fertilizer costs have increased the proportion of a grower's total operational budget from roughly 12% to $\geq 30\%$, particularly for forage hay crops. There is a need to reduce nutrient costs, without jeopardizing production.
2. Promotion of the use of soil sampling reports for efficient fertilization recommendations. Basic application recommendations and considerations have been developed for some waste products and liming products applied to forages. We have demonstrated how incorporating legumes into grass-based pastures can reduce fertilizer inputs, but actually improve the quality of pasture systems.
3. Diagnosing forage mineral nutrition and environmental influences. Many forage species are not managed with the same intensity as "cash crops." The IFAS recommendations for forages are limited in scope, as compared with many of the other commodity crops. Extension calls and visits in response to questionable forage nutrient status are common in forage production. In many cases weed, disease, pest, or N leaching losses are aggravated by poor plant nutrition. This program has focused on forage production and environmental protection, with the need for balanced plant nutrition and awareness of factors that affect nutrient uptake.

The intent of Mackowiak's **research program** is to characterize and enhance the overall quality, especially chemical fertility of agro-economically important soils of the Southern



Coastal Plains. Research projects include the following: developing cool-season forage options, developing low-input groundcovers, integrating cattle into a sod-based crop rotation, and using winter grazing systems to mitigate nitrogen losses from pastures.

Dr. Nicolas DiLorenzo

Beef Cattle Nutrition Specialist, UF/IFAS North Florida Research and Education Center

DiLorenzo's Extension Program is entitled: "*Increasing the efficiency of beef production while minimizing environmental impact.*" The main objectives are to educate producers to increase the adoption rate of best management practices that lead to an increase in the profitability of beef production systems in the State of Florida, while minimizing the impact on the environment. These goals will be achieved by a combination of tools, such as In-service Trainings, development of extension documents, development of decision-aid tools for mobile devices, field days and presentations at producer meetings.



DiLorenzo's research program is based on innovative aspects of ruminant nutrition, concentrating on the mechanisms of ruminal fermentation and nutrient utilization that drive the efficiency of conversion of feed into animal protein. Because of the significant role that forages play in the nutrition of ruminants, particularly in beef cattle, the optimization of supplementation strategies and grazing management is a key portion of his research program. To remain active in such a dynamic field of research, it is essential to maintain a highly collaborative research program. This collaboration involves the interface between aspects of basic and applied science, with the main objective of understanding basic aspects of ruminal fermentation that can be manipulated to enhance beef cattle performance and decrease the environmental impact. His research objectives can be summarized as follows:

1. The development of nutritional strategies that enhance animal performance, while providing an alternative to the use of antimicrobials.
2. The optimization of the use forage resources by strategic supplementation, management practices, or adoption of new forage varieties or species.
3. The development of strategies (additives, management practices, etc.) that decrease the environmental impact of beef production, in particular greenhouse gas emissions.

Dr. Jose Dubeux

Forage Agronomy Specialist, UF/IFAS North Florida Research and Education Center

Dubeux's **extension program** is divided into two program areas: 1) Increasing adoption of forage legumes by livestock producers in Florida; and 2) Strategies to reduce off-farm inputs and increase sustainability of forage production systems in Florida.

Dubeux's major focus of his **research program** is to develop sustainable livestock production systems. These systems must be locally important and at the same time address critical global challenges: climate change, soil quality, and reduction in use of fossil-fuel intensive, off-farm inputs.



Specific research objectives:

- 1) To evaluate warm and cool-season grass-legume mixtures in multiple locations to identify the best grass-legume combinations, quantify the N₂-fixation potential of the legumes, develop strategies for establishment of perennial legumes in warm-season perennial grass pastures, and quantify reseeding potential of cool-season legumes
- 2) To evaluate efficacy and ecosystem services of forage production systems by measuring animal performance, pasture characteristics, nutrient cycling, carbon footprint (CO₂, CH₄, and N₂O), and soil C stock of Florida rangelands, hay fields, and warm- and cool-season pastures
- 3) To evaluate strategies to reduce cattle feeding cost in north Florida by increasing the length of the grazing season through increased use of cool-season forages and stockpiled warm-season forages

Dr. Angela Gonella-Diaza

Beef Cattle Reproduction Specialist, UF/IFAS North Florida Research and Education Center

Gonella's **extension program** focuses on cattle reproduction.

Reproduction is always a major issue in the beef industry. The economic performance of herds is closely related to their reproductive efficiency. However, to analyze and evaluate the effects of reproductive strategies on the economic performance of the herd is not a straightforward task. In the best-case scenario, the economic return from investment in reproductive biotechnologies will come several months after their use. She is aware that reproductive biotechnologies such as AI and embryo transference are not useful for all operations. However, Gonella's goal is to help to establish the best reproductive program, depending upon the needs of each ranch and producer. In some cases, simple strategies such as collecting and analyzing data can help to detect problems and establish strategies to improve herd profitability.



Gonella's **research program** focuses on early cattle pregnancy. The majority of reproductive losses occur during the first 3 weeks of pregnancy. Establishing successful early pregnancy requires that the female reproductive tract is ready and receptive to fertilization, embryo development, and implantation. This maternal receptivity is initiated and maintained by the action of steroid hormones. Gonella's main area of research focuses on understanding the molecular mechanisms that contribute to establishing and maintaining successful early pregnancy in beef cattle. Specifically, she is interested in how alterations of the maternal environment, such as how changes in estradiol and progesterone concentrations affect the oviductal environment, and how the embryo responds to these changes.

Dr. Marcello Wallau

Extension Forage Specialist, UF/IFAS Agronomy Department

Dr. Marcelo Wallau is an assistant professor and Forage Extension Specialist with the Agronomy Department at the University of Florida (70% extension, 30% research). With a background in agronomic engineering, and a master's degree in Agronomy, and PhD in Animal Sciences, his focus is on forage production systems for livestock and wildlife, and on integrated crop-livestock systems. Coming from a farming background in southern Brazil, Dr. Wallau's interests are in the big picture of the production systems. He is searching for solutions for questions from our farmers, with a deep scientific base and global perspective. He has also worked on grassland ecology, modeling and foraging behavior, and on feral hog management and control.



Dr. Pratap Devkota

Crop & Forage Weed Specialist, UF/IFAS West Florida Research and Education Center

Devkota's weed science program focuses on developing integrated weed management programs for farmers and ranchers in Florida. The program emphasizes current and emerging weed management issues for field crops (cotton, peanut, corn, soybean, wheat), forages, and emerging crops (specialty and bioenergy). The overall goal is to develop and extend knowledge on economically feasible and environmentally sound weed management strategies for sustainable crop production in Florida.



The overall goal for Devkota's **extension program** is to promote the adoption of safe, sustainable, and cost-effective weed management programs for sustainable crop production systems in Florida. Devkota focuses on delivering research findings to the end users (county extension agents, growers, applicators, industry partners, and government & non-government organizations). The information is disseminated using various activities, which include face-to-face meetings, weed science trainings, industry meetings, online newsletter/blogs, and social media sites. The findings from his research program are shared through extension publications, field days, workshops and conferences.

Devkota's **research program** focuses on several weed science topics which are pertinent to production agriculture. The research emphasis is on managing herbicide resistant weeds; evaluating performance and optimizing various weed control methods; identifying novel and improved weed management strategies and incorporating them when developing integrated weed management programs. Devkota is also interested in understanding ecology, biology, and morphology of difficult to control/invasive weed species and utilizing this information for developing robust weed control programs. The other research area is evaluating herbicide performance and interaction with other agrochemicals, use of adjuvants/surfactants, and optimizing herbicide spray solutions. His research also focuses on incorporating cultural and mechanical techniques, which are critical components for weed management program. Finally, economics and environmental aspects play vital roles for successful adoption of the weed control strategies; therefore, Devkota is interested in studying economic feasibility and environmental sustainability of weed management programs.

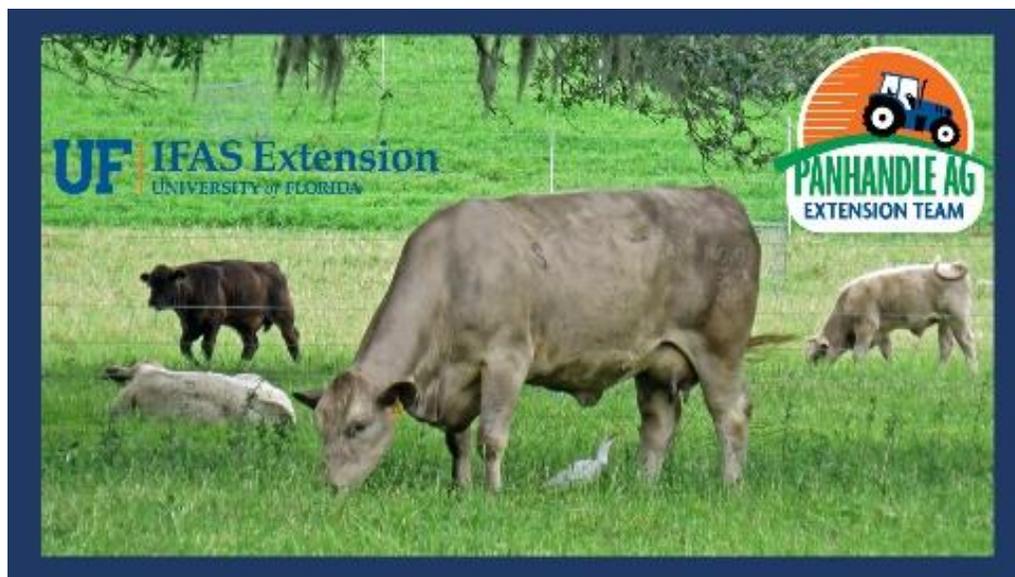
Upcoming Events of Interest



Virtual Forage Legume Webinar Series

30-Minute Sessions - Thursday Evenings - 6:30 PM CT/7:30 ET

April 1, 8, 15, 22, 29, & May 6, 2021



37th Annual Northwest Florida

Beef Cattle Conference & Trade Show

Wednesday, February 9, 2022

Marianna, Florida