



Central Florida Ag Masters

A Monthly Newsletter for Stockmen, Hay Producers, and Equine Enthusiasts in Central Florida

NEWS YOU CAN USE: Ecosystem Services— What Florida Ranches Offer Beyond the Burger

By Caitlin Bainum, UF/IFAS Marion County Extension

Many people think of Florida and see our coastal communities, Mickey Mouse, sprawling urban development, and an almost “care-free or vacation” lifestyle to accompany it. While urbanization and economic development are vital to any economy, there is much beyond the beaches. Interior Florida, with rural roots is what our state was founded on and the key to sustainability long-term. Bridging the gap between the urban and rural populations and their lifestyles will be imperative for Florida moving into a future of 22 million people, with no evidence of population decline.

Shedding light on this idea of interior Florida providing more than one stop light towns is key to maintaining the livelihood of our agriculture industries. These industries are the backbone of our lives, used each day by all citizens, yet wildly underrated and misrepresented on many platforms. It is time we all do our part in recognizing the efforts of Florida’s agriculturalists and the benefits of their industries.

While the importance of agriculture is certainly food and fiber production, there are many other aspects of life that are dependent on agriculture and the land it occupies such as; the byproducts generated from livestock production, our ability to maintain wildlife populations, air and water quality, carbon sequestration, and cultural services such as hunting, fishing, or bird watching- the list goes on. If you woke up this morning to brush your teeth, apply make-up, feed your dog a bone on the way out, require insulin, or perhaps even put some antifreeze in your car before starting your day you relied on byproducts from cattle produced on our Florida ranches.

Ecosystem services is a concept not discussed enough and can really help to bridge the urban-rural gap as discussed earlier because this concept is the common ground for both interests. Without a thriving ecosystem we all suffer. Without clean water, pure air, nutrient cycling, food production, and other outputs/conditions all social welfare would suffer. Ecosystem services benefit all populations either directly or indirectly, and sometimes putting a dollar value on these services is difficult because quite frankly the benefits to society are priceless. Ecosystem services has been and will continue to be a research priority for many institutions and as we continue to build our understanding of the value of ecosystem services the sharing of that information will be important, economics is a universal language.

Let’s look at beef cattle production for a second. Beyond the obvious output of Florida ranches which is animal protein and byproducts, there are several other services going on behind the scenes. Many Florida ranches are partnering with Water Management Districts to provide on-farm water storage and treatment, which is a cost-effective strategy to reduce flooding and pollutant loading in water bodies downstream. Wildlife depend on these ranches to carry out their annual migrations and to dwell in their native habitats. Additionally, Florida ranch lands provide open spaces for nutrient cycling, carbon storage, and crop pollination to occur. Think for a moment how we would provide these services without interior Florida. At what cost economically and environmentally?

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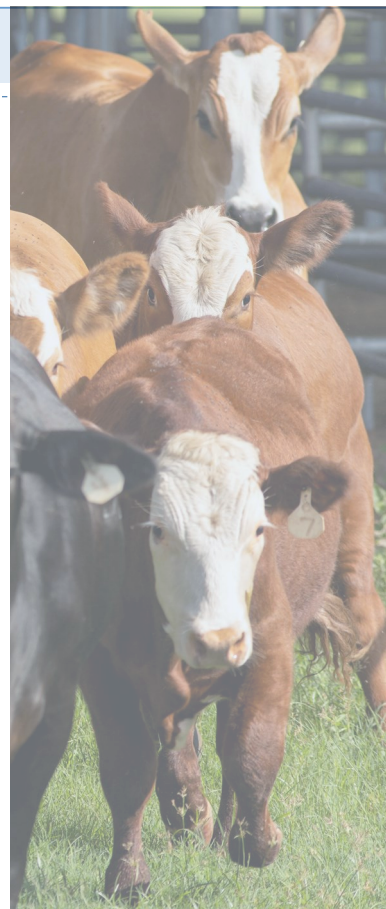


Photo by Tyler Jones, UF/IFAS

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DID YOU KNOW?

- Florida is home to five of the ten largest cow/calf operations in the U.S.
- Florida ranches support native plant systems and wildlife that rely on these green spaces for survival.
- Of all land mammals, horses have the largest eyes. They have an almost perfect field of vision with a small blind spot directly behind and in front of them.

PERSPECTIVES ON PASTURE

Mislevy Bermudagrass

By Kalan Taylor, UF/IFAS Volusia County Extension

Livestock producers often think of themselves as “grass farmers” because they spend a large amount of time and resources growing and managing forages. Livestock producers know that the health and abundance of a quality forage can directly affect the health and productivity of their livestock. Producers in the southern half of Florida have many unique challenges when it comes to growing healthy pastures. These challenges include: extreme heat, humidity, very dry winters, very wet summers, poorly drained soils, and an abundance of pests and plant diseases. Adding to these challenges is the fact that a number of forages that perform well in other parts of the southeast United States don’t always perform as well in the southern half of Florida. So is there a solution?

In 2000 Dr. Paul Mislevy, a professor at the University of Florida, came across an off-type of bermudagrass plant present in a Tifton 85 bermudagrass field. He collected the plant, multiplied it in a greenhouse, and later planted to a field where Mislevy became established in 2001. With nearly 20 years of trials, analysis, and research Mislevy was then released to livestock producers, particularly those in the southern half of Florida.



Dr. Mislevy (left) consults with producers in the field. UF/IFAS File Photo.

So what makes Mislevy different than past cultivars such as Tifton 44, Tifton 85, Jiggs, or Coastal? Well during these 20 years, the University of Florida conducted a broad network of research throughout the state. This included the 12 UF/IFAS RECs and six different research and demonstration sites. During this span, Mislevy, along with the other common bermudagrass cultivars, went through a series of trials. These trials tested everything from herbage accumulation, nutritive values, grazing frequencies, and disease tolerance. Upon completion of these trials this is what the University of Florida has to say about Mislevy.

Mislevy is the University’s 107th grass cultivar and is a natural bermudagrass hybrid. Mislevy is propagated by mature tops and sprigs. In subtropical regions, this cultivar has superior herbage accumulation (HA) in the early spring months. This early herbage accumulation is of great importance to producers because early spring and fall are periods of limited forage. Having an early spring forage option can offer livestock producers the option to decrease the need of supplemental feed. Nutritive value was similar among Mislevy and other bermudagrass cultivars.

In addition, Mislevy had greater herbage accumulation at longer regrowth intervals. This is an important characteristic that can give flexibility to producers to delay forage harvest during Florida’s unpredictable

“The farmer is the only man in our economy who buys everything at retail, sells everything at wholesale, and pays the freight both ways” —JFK

BEEF CATTLE CORNER

Delicious, Nutritious, Fresh From Florida Beef

By Meg Brew, UF/IFAS Lake County Extension

The word “cowboy” often evokes images of the old west...but in truth cattle in America could be more accurately associated with the “old east”. Ponce de Leon, of fountain of youth fame, first introduced cattle to the new world via Florida in 1521. These first Florida cattle were small statured with sharp horns and a knack for eking out a living in an inhospitable environment. Despite the heat, biting insects, swampy terrain, and lack of nutritious forage, the scrappy Spanish cattle not only survived but thrived, paving the way for economic development and growth in Florida.

Nearly 500 years after the first cattle set hoof in Florida, the beef industry continues to play an important role in the economy and culture of our state. Modern Florida is considered a “cow-calf” state with the majority of ranchers caring for brood cows on pasture and raising calves to sell at the market. Weaned calves are typically sent west to grow and mature on rich pasture for several months prior to being moved to the feed yard where they are finished on a grain-based diet. Florida is home to an estimated one million cows, bulls, and heifers that produce approximately 800,000 calves per year. The total value of cattle in Florida is estimated in excess of one billion dollars and the Florida beef industry has an economic impact of 900 million annually. Many Central Florida residents would be surprised to know that the largest cow-calf operation in the U.S. is located a short drive from the hustle and bustle of the theme parks, and that five of the ten largest cow calf ranches in the U.S. are located in Florida.

When it comes to purchasing and consuming beef, consumers have more choices now than ever. There are 60 unique retail cuts of beef available, each with its own best use, taste profile, and degree of tenderness. In the mood to grill? There’s a cut for that! Do you want to “set it and forget it” in the crockpot? There’s a cut for that as well!



Photo Credit: Tyler Jones, UF/IFAS

Consumers also have options as to how their beef was raised and fed. You may have seen beef labeled as “grass finished” in the butchers case and wondered what that means and how it differs from conventional beef. The fact is, all beef cattle live the majority of their lives on pasture. Grass finished beef remain on pasture until processing, while conventional beef cattle are fed grain during the last several months of their life. Grass finished beef tends to be leaner with a slightly different taste profile compared to conventional beef. Regardless of the cut of beef, or how the cattle were fed, consumers should feel confident that their beef is safe, wholesome, and nutritious. Each 3 oz serving of lean beef provides approximately 25g of protein, nearly half of the daily recommendation. Beef is also an excellent source of zinc, iron, selenium, and B vitamins such as riboflavin, B12, and Niacin.

Beef cattle in Florida do more than stimulate our economy and nourish our citizens; they also serve to protect green spaces from further development. Cattle ranchers are considered one of the original stewards of the environment, with ranches often being cared for by multiple generations of Floridians. Over 4.5 million acres in Florida are currently used to graze cattle. These green spaces not only help to filter water and recharge our precious aquifer, they also serve as a habitat for numerous species of birds, reptiles, insects, and mammals. As Florida continues to grow and develop, these habitats will become even more critical to the survival of native wildlife and may play a role in protecting vulnerable species from extinction.

Next time you are out and about in your community I encourage you to notice and appreciate the pastoral beauty of our local ranches, just one of the many ways that agriculture helps to make, and keep, Central Florida a wonderful place to call home!

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SMALL RUMINATIONS

Get Your Stuff Together: Electronic Record Keeping Made Simple

By Francisco Rivera, UF/IFAS Hillsborough County Extension

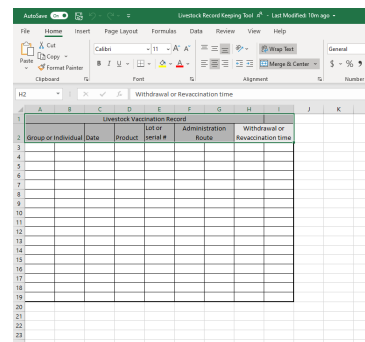
I often get calls from small farmers who need help starting their farming operations. Understanding basic concepts about animal production is, of course, very important to the success of any small livestock operation. Equally important, but often overlooked, is maintaining accurate records of the many processes and transactions that may occur on your farm.

Some of these processes and transactions might include purchasing and selling animals and equipment, handling animals for healthcare purposes, maintaining accurate breeding records, and keeping records related to application of nutrients on your property. The University of Florida has created an Excel spreadsheet to help farmers keep these records organized and up to date.

The Livestock Record Keeping Tool can be found on the CFLAG website by looking under [Livestock Publications](#)

Within this tool you can find maintain your herd inventory, keep up with your vaccine schedule, track your grazing management, note who has and has not calved, and manage your lease agreements in one place. While the spreadsheet was designed with cattle in mind, it can be easily adapted to fit the needs of the small ruminant producer with just a couple of simple modifications.

If you have any questions about using this tool, contact your county agricultural livestock agent. You may also submit your questions to our Central Florida Livestock Agent group (CFLAG) Facebook page.



News You Can Use: Continued from front page

On the nearly 5 million acres of managed ranch land in Florida a \$442.2 million gross revenue is generated, the value of assets associated with these ranches is nearly \$20.5 billion, and the proposed value of ecosystem services of these lands being roughly \$85 per acre or \$22.8 million in total. That \$85 per acre are services that are related to provisioning, regulation of climate and disease, nutrient cycling, or cultural services. The factsheet with this information can be further explored here.

The next time you are enjoying a juicy, perfect hamburger recount the many personal luxuries and necessities as well as the societal benefits from that same animal providing the burger. How impressive are Florida ranchers to provide so much for society at often marginal economic return and little thanks? Be sure to thank a farmer, and continue to spread the positive, science-based truth about Florida agriculture.



Sandhill cranes share habitat space with grazing cattle
Photo Credit: Tyler Jones, UF/IFAS

EQUINE EXPERTISE

Equine Herpesvirus

By Brittany Justesen, UF/IFAS Osceola County Extension

Equine herpesvirus has been highlighted in recent news articles after two horses tested positive for the virus in Marion County. Equine herpesvirus outbreaks can be sporadic in the equine population so it is good to be familiar with the virus to make sure your horse is protected.

What is Equine Herpesvirus?

Equine Herpesvirus (EHV) also known as rhinopneumonitis, is a contagious equine virus that occurs throughout the world. Equine herpesvirus is common in the horse population and almost all horses two years and younger have been exposed. The virus can then establish as a latent infection in the horse's body before becoming reactivated during times of stress.

Nine strains of EHV have been identified. The two strains that are most serious out of the family of viruses are EHV-1 and EHV-4. Equine herpesvirus-1 (EHV-1): causes neurologic disease, respiratory disease, neonatal death, and abortions in mares. The neurological form of EHV-1 is also referred to as Equine Herpesvirus Myeloencephalopathy (EHM). EHM is a reportable disease in Florida. All confirmed cases of EHM must be reported to the State Veterinarian's Office. Equine herpesvirus - 4 (EHV-4): causes respiratory disease and occasionally can cause abortion or neurologic disease.

Symptoms

The incubation period ranges from 2-10 days post exposure before symptoms usually appear. Respiratory disease symptoms include fever, nasal discharge, enlarged lymph nodes, swollen legs, cough, and depression. Symptoms for equine herpesvirus myeloencephalopathy (EHM) is fever, difficulty urinating, tail weakness, hind limb weakness, incoordination, inability to stand, and facial paralysis.

Transmission

Both EHV-1 and EHV-4 is spread primarily by direct and indirect contact.

Direct transmission: saliva, nasal discharge, and air (droplet from coughing and snorting).

Indirect transmission: community water buckets, feed buckets, blankets, tack, grooming equipment, trailers, clothing, shoes, and hands.

If you suspect your horse has become infected contact your veterinarian so the horse can be tested and treated with proper supportive care. The virus can be spread for 7-10 days post infection and positive horses should be isolated from other horses at your barn, horse shows, trail rides, and traveling for 28 days.

Protection

Biosecurity and prevention are key to keeping your horse and barn healthy. Work with your veterinarian to develop a vaccine program that is specific for maintaining a healthy horse. Vaccines will help prevent respiratory disease and abortion, but are not labeled for preventing against the neurological form. Biosecurity is important to help prevent the viral spread of the disease between horses. For prevention, bring your own water bucket to shows with you and try not to let your horse touch noses with strange horses. Always tie your horse away from others and wash your hands to help prevent spreading the virus. Disinfect equipment, trailer, and clothes after shows or traveling. Isolate new horses on your farm for at least 3-4 weeks before being introduced into your horse population.

Incorporating biosecurity measures will help protect your horse and can prevent transmission of the virus in the future.

Additional Resources:

<https://www.fda.gov/Consumer-Resources/Animals/Animal-Diseases/Florida-s-Reportable-Equine-Disease-Map>

<https://largeanimal.vethospitals.ufl.edu/frequently-asked-questions-regarding-equine-herpesvirus/#outbreak>

<https://aaep.org/horsehealth/faq-equine-herpesvirus-ehv>



Photo by B. Justesen, UF/IFAS

“In riding a horse we borrow freedom” - Helen Thompson



Nothing says springtime like a lamb!
Photo Credit: Tyler Jones, UF/IFAS

UPCOMING CFLAG PROGRAMS

Save the Date: CFLAG Small Ruminant Production Conference

June 15th, 16th, and 17th 2:00-4:00pm (Online)

Registration details to follow. Topics to include hay sourcing, cool season forages, parasite management, kidding/lambing, and selection for reproduction.

ABOUT CFLAG

We are a professional organization of UF/IFAS Extension Agents who provide research based education on livestock and forage production to farmers and ranchers in Central Florida. Our goal is to help our clients make informed decisions which will improve both the environmental and economic sustainability of their operations by keeping them abreast of the latest agricultural research, providing access to the resources of the Land Grant University System, and by conducting community based classes and consultations.

To learn more about our programs, or to connect to your Extension Agent, please visit us online at

<https://extadmin.ifas.ufl.edu/cflag/>

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WEED OF THE MONTH

Oldfield Toadflax (*Nuttallanthus canadensis*)

By JK Yarborough, UF/IFAS Orange and Seminole County Extension

In Central Florida around mid-March you may see small stalks of a purple-blue bloom emerging from many pastures. This purple-blue blooming plant has several names and gets confused with several similar species. The one we most commonly see in Central Florida is *Nuttallanthus canadensis* or Oldfield Toadflax, Blue Toadflax, Canadian Toadflax, Toad-flax. This plant was previously known as *Linaria canadensis*. It is native to eastern North America from Ontario east to Nova Scotia and south to Texas and Florida. It is an annual or biennial growing to 10-32 inches tall, with slender, erect flowering stems. The flowers are purple to off-white, 0.4 to 0.6 inches long, appearing from mid-spring to late summer. It typically grows in bare areas and grasslands. Although it is fairly short lived and not seen as a major pasture weed, Oldfield Toadflax can be a nutrient competitor for early growing forage varieties. GrazonNext HL, Metsulfuron, and Banvel all provide excellent coverage of Blue Toadflax.

There are some toadflax varieties that are thought to be toxic to livestock, but this variety is not known to have any toxic traits. In fact, if this plant is blooming your livestock are likely grazing on any early emerging perennial forages you may have.

Some conservation areas and gardeners will plant Oldfield Toadflax as a pollinator plant variety.



Photo Credit: Jared Gorrell