



Central Florida Ag Masters

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

NEWS YOU CAN USE:

What's Growing On In Your Hayfields?

By Meg Brew UF/IFAS Lake County Extension

You almost certainly know what you have growing in your hayfields in terms of forage species, but do you really have a good grasp on the nutrient content of what you are producing? Knowing the energy concentration and crude protein content of your forage is important as this information can help you better utilize and market your hay. The nutritive value of hay can be influenced by a number of factors to include the maturity of the crop at time of harvest, whether or not the fields were fertilized, and how the hay was managed post-harvest. While some indicators of poor quality hay, such as weeds and mold, may be obvious, it is impossible to tell how nutritious hay might be just by looking at it. Fortunately our Forage Testing Laboratory at the Range Cattle Research and Education Center in Ona offers hay producers the opportunity to measure the Total Digestible Nutrients, or TDN, and Crude Protein, or CP, of what they grow. TDN is an measurement of energy concentration which is found by summing the digestible fiber, starch, sugars, protein, and fat in forages. CP is estimated by measuring the nitrogen content of forage and multiplying it by a factor of 6.25. The Forage Lab will also provide information on neutral detergent fiber, or NDF, a measurement of plant cell wall components as well as acid detergent fiber, or ADF, a measure of cellulose and lignin. In general as NDF increases voluntary forage intake decreases and as ADF increases overall digestibility is decreased.

When feeding livestock forage-based diets we typically start by maximizing forages and trying to supplement whatever nutrients the forage can't provide. This can be difficult to do when we don't have a good baseline knowledge of what we are providing in the forage. Through testing, producers are better positioned to target their supplementation in an efficient and effective manner. Producers can also share this information with their customers who may appreciate being able to "read the label" of the hay they purchase. Additionally, Ona keeps records of all the samples that they collect year to year so producers can see how they measure up to the average of each forage species produced in Florida.

Proper collection and submission of samples is critical to getting accurate results. Instructions for sample collection (as well as additional information about the testing procedures) can be found [here](#). If you need help collecting a sample do not hesitate to ask your CFLAG agent to lend a hand. The submission form that should be filled out and sent in with your samples can be found [here](#).

To reach the Forage Lab directly please call 863.735.1314 extension 205.



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DID YOU KNOW?

- We often associate cowboy culture with the old west, but cattle were first brought to the new world by way of Florida!
- The American Quarter Horse is thus named for being the fastest horse in the world at the quarter mile sprint!
- It is widely believed that goats are one of the first species of livestock to have been domesticated.



WEED OF THE MONTH

By Brittany Justesen, UF/IFAS Osceola County

Dogfennel (*Eupatorium capillifolium*) is an aggressive native perennial plant found throughout the Southeast and is the most commonly occurring pasture weed in Florida. This weed is usually found in unimproved or overgrazed pastures. Dogfennel will compete with your existing forage and can cause a significant decline of forage yield and overall pasture quality if not removed prior to July.

Identification:

Dogfennels grow in a single non-branching shoot that can reach heights of eight feet tall. The leaves are very thin and contain a toxin called tremitol that can cause dehydration in cattle if ingested. As temperatures in Florida increase, overwintering rosettes will begin to grow and during the warmer months of April-June the seeds will start to germinate. Seed dispersal will begin during the months of November-December.

Dogfennel Lifecycle:

Dormancy	January-March
Bolting	April-June
Flowering	September-October
Fruiting	November
Seed Dispersal	November-December

Control:

Plant height is a deciding factor for determining the correct herbicide control option. Dogfennel is easier to control when the plant is immature and smaller in size. Early spring is the best time to control the weed since it is smaller in height, but during the dry months of spring the plants are usually drought stressed. If the plants are drought stressed and wilting during the day, then herbicide application may not work effectively.

Herbicide options for dogfennel control in pastures:

Active Ingredients	Trade Names	Rate	Cost/A	Comments
2,4-D amine	Many	1.5-2 qt/A	\$7	Apply to dogfennel less than 36 inches tall; apply higher rates as dogfennel approaches 36 inches.
2,4-D amine + dicamba	WeedMaster	1.5-2qt/A	\$8	Apply to dogfennel less than 36 inches tall; apply higher rates as dogfennel approaches 36 inches in height.
Fluroxypyr+triclopyr	PasturegardHL	1-1.5pt/A	\$14-21	Apply 1pt/A when plants are less than 36 inches tall; apply 1.5 pt/A to plants >36 inches. Applications of 1.5 pt/A are very
Aminopyralid + 2,4-D amine	GrazonNext HL	1.5 pt/A	\$8	Apply alone to dogfennel less than 30 inches tall when pastures are also infested with tropical soda apple; when plants are > 30 inches tall, tank mix GrazonNext with 3 pt/A 2,4-D amine, 2 pt/A 2,4-D + dicamba, or 0.5 pt/A Pasturegard HL.

For help identifying pasture weeds or developing a control plan for your operation, please contact your County Extension Agent.

Tables and information provided from the following publication: <https://edis.ifas.ufl.edu/ag233>



BEEF CATTLE CORNER

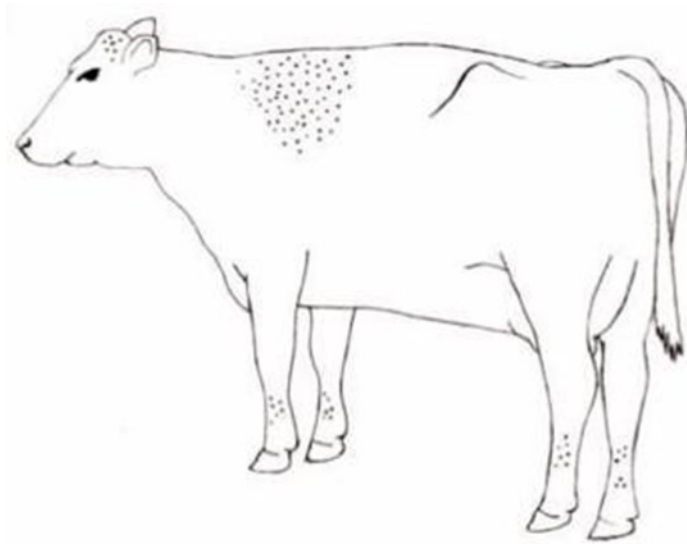
Horn Fly Control on Beef Cattle

By Ed Jennings, UF/IFAS Levy County Extension

Horn flies are one of the most economically damaging external parasites in beef cattle operations in Florida. While present in Florida year round, as spring arrives, horn fly season picks up. Horn flies are dark gray and slightly smaller than houseflies. Both sexes are blood feeders, taking 20 or more blood meals each day. They primarily feed on cattle but will also feed on horses. Irritations from the bites annoy animals and occasionally, the wounds may become infected.

Unlike other solitary biting flies on cattle, horn flies accumulate in groups on the tops of the shoulder and back. During extremely hot weather or hard rains, they temporarily migrate to the undersides of the host animals for protection. They fly up in swarms when disturbed but soon return to an animal. Females leave their host animal only to deposit their eggs on manure within about 10 minutes of the manure hitting the ground. Once manure crusts over due to drying, the females cannot deposit their eggs.

Horn fly maggots can only develop in cattle manure. The life cycle from laid egg to adult fly is completed in 10 to 14 days. Each female can lay up to 500 eggs so very large populations can build up very quickly. It is common for cattle in a herd to have several hundred horn flies feeding on them at once causing the cattle not to thrive due to blood loss and expenditure of calories fighting off the flies and responding to the irritation. Bulls usually carry heavier infestations than cows and calves.



Horn Fly threshold of 100 flies per side. Image courtesy of the University of Kentucky Extension.

Insecticide impregnated ear tags, dust bags, concentrated pour-ons, animal sprays, and oral larvicides available in minerals and feed supplements can all be effective in reducing horn fly problems. Ear tags impregnated with either pyrethroid or organophosphate insecticides are generally the most popular treatment options. Forced use dust bags are also popular. Both of these control methods require minimal handling of the cattle and so reduce labor costs and time spent dealing with the problem. Pour-ons, and sprays, can be effective but they require frequent treatment which may not be practical in larger herds or if time is constrained. The choice of treatments should be made based on what works best with pasture layouts and herd management practices of your operation.

Insecticide resistance has become a problem, particularly when insecticide impregnated ear tags within the same chemical class are continually used. Rotating between pyrethroid and organophosphate type tags, withholding tag application until fly numbers reach a threshold of 100 per side, and removing the tags at the end of their useful life can help to reduce resistance issues. Always follow label instructions when using any pesticide to protect your animals, yourself and the environment.

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EQUINE EXPERTISE

Hurricanes and Horses: Before, Durings, and After the Storm

By Meg Brew UF/IFAS Lake County Extension

With hurricane season right around the corner, now is the time to start thinking about how you will handle “rain with a name” on your farm. These tips will help you think through your options before, during, and after major storms.

Before Hurricane Season

- Stock up a first aid kit and tool kit
- Clean up debris from your pastures and around your farm, make repairs to fences and roofs, and check that your trailer is in good repair and the tires have sufficient tread

In the Immediate Lead-Up to a Storm

- Be sure that your horse has a form of ID with your phone number
- Decide if you will evacuate, or stay in place, at least 3 days prior to the storm making landfall (you don't want to be stuck in a traffic jam pulling a horse trailer)

If you plan to evacuate

- Secure lodging for you and your horse outside the path of the storm
- Map an evacuation route
- Bring extra feed, hay, and water

If you plan to shelter in place

- Identify the safest pasture for turnout (high ground, free of debris, good fences)
- Top off all water troughs and fill extra buckets with water
- Apply secondary visual identification to horses
- Make sure you have at least two weeks' worth of hay and feed stored someplace that will stay dry

During the storm

- Unless your barn is built to hurricane standards, a pasture is the safest place for your horse
- Do not bring your horse inside the house or garage as this can be dangerous for horse and human

After the Storm

- Check on wellbeing of animals
- Check on and repair fencing
- Remove debris
- Check in with neighbors
- Evaluate the execution of your hurricane plan and make changes to future plans as needed

PERSPECTIVES ON PASTURE

Let's Talk Poisonous Plants

By Joe Walter, UF/IFAS Brevard County Extension

We must first understand what the term poisonous plants means; Any plant that causes a negative reaction to the animal when, eaten, touched, or inhaled. The term does not necessarily mean that it will kill the animal. Reaction to the plant may cause an acute (immediate) reaction or a chronic (delayed) reaction. Some plants may be consumed over a long period of time producing an accumulative effect on the animal. Sometimes it is difficult to discover the cause of the problem because the cause plant has been totally consumed, mowed, or merely a stem remaining.

I prefer to refer to these plants as toxic plants instead of poisonous plants. The lifecycle stage of the plant, the part of the plant, and stress of the plant often determines if the toxic plant is truly poisonous and/or the degree of toxicity. Not all toxic/poisonous plants affect all species of animal; however, horses seem to be affected by more plants than other farm animals.

The best protection is to learn to identify toxic/poisonous plants; remember many landscaping plants are toxic but seldom are they listed in poisonous weed lists. Once identified check to see if the plant is toxic, under what conditions, and the amount that needs to be consumed before it is of great concern. Sometimes the animal can be treated successfully by simply removing the source. When pasture becomes limited (overgrazed) animals tend to eat plants that they normally would not. Having adequate well cared for pasture can lessen the probability of toxic plants ruining the enjoyment of your farm animals.

“Agriculture is the most healthful, most useful, and most noble employment of man” - George Washington

CFLAG PROGRAM SPOTLIGHT

Beef Cattle Reproductive Management School with AI

By Joe Walter, UF/IFAS Brevard County Extension

Reproductive efficiency is the single most important factor affecting profitability of the cow-calf producer. A cow can only produce one calf per year but needs to produce a healthy, heavy calf while rebreeding every 12 months. Under the proper conditions heifers should be able to produce her first calf as a two year old and a second calf as a three year old.

There are many factors that affecting her ability to perform to this level of efficiency. First, she must have the genetic ability. Selecting replacement heifers from cows that have demonstrated superior reproductive performance is a good way to start. Proper nutrition beginning with the dam before and during gestation followed by excellent nutrition during the development stage. Once breed the first time it is imperative with proper nutrition for her to continue go grow and produce a calf; maintaining a body condition score of 5-6. Disease prevention, vaccination for common diseases is a must particularly if other cattle are in the area.

The use of a short breeding /calving season makes working calves much easier. Evaluate heifer reproductive tract before breeding season, cull those that are not mature enough to breed. Target weight for heifers is 700-750 pounds. The use of heat synchronization and timed Artificial Insemination can help keeping you calving season short 60-90 days while improving herd performance.

The use of AI does not mean that you don't need a bull, expectation of 50-60% of heifers will breed on timed AI the first service. The use of a clean-up bull should improve conception to 90-95%. This system reduces the number of bulls required; generally the cost of timed AI is much less than the cost of additional bulls.

To learn more about cattle reproductive management join us for a weeklong school Aug. 2-5, 2021. To learn more about the school, or to register, contact your local CFLAG agent.

SMALL RUMINATIONS

Sheep and Goat Hoof Trimming: A Good Foundation to Stand On

By Jonael Bosques, UF/IFAS Hardee County Extension

Florida's sandy soils are no match for the cells that make hooves grow in sheep and goats. This problem is one of the major challenges sheep and goat producers have in the state. Incorrect or lack of hoof care can reduce the ability of that animal to travel and forage. It can improperly put pressure on the animal's joints and result in a reduction in the lifespan of our dams and sires. The problem started millions of years ago when sheep and goats evolved in the rocky hillsides of the Middle East. Knowing a little bit of history and anatomy can hopefully help you understand where to start in your quest to building the perfect foundation for your animals to graze, browse or stand on.

Cattle, sheep, goats, and pigs are cloven-footed animals, meaning that the hoof consists of two digits, instead of one solid entity like that of a horse. The two digits are analogous to the third and fourth fingers of the human hand. The claws are named by their relative location on the foot. There is the outer, or lateral claw, and the inner, or medial claw. In cattle, the lateral claw is slightly larger in the back feet, while the medial claw is the larger claw in the front feet. The space between the two claws is called the interdigital cleft; the area of skin is called the interdigital skin. The different surfaces of the claws are named according to their relative position to the interdigital cleft: the abaxial surface is the outer wall of each claw, and the axial surface is the inner wall.

Each digit in an animal's foot has germinal cells (skin cells) that will make horn. Inadequate horn abrasion will result in uneven wear, causing excessive growth where most commonly the abaxial wall will grow inwards and tilt the angle on where the animal tries to balance its body.

Once the anatomy of the hoof is understood, it is much easier to comprehend how certain lameness's occur, how to prevent them, and how and why one should keep feet in good, working condition. As many veterinarians and livestock producers will note, a well-maintained routine of cleaning and trimming animals' feet will lead to a far lower incidence of discomfort and lameness in the animals.

For trimming your sheep or goats we recommend the following tools: A trimming table or stanchion; trimming shears; and a hoof pick with a brush.

[We have provided a video on the process for hoof trimming in sheep and goats](#) Note from this video that it is better to have adequate help and facilities to avoid stressing of the animals.

Nutrition plays a big role in the growth and conformation of hooves in sheep and goats. Balanced diets provide essential nutrients, such as zinc and biotin, which are important for horn development. Always follow the recommended nutrition requirements for your animals to ensure good health.

Trimming schedules will depend on the environment where your animals are grazing. In Florida sandy soils will not be sufficient to wear the hooves of most animals, and some producers use cinder block piles for goats to climb and reduce hoof issues. Regardless of the use of this technique, hooves need to be checked at least every other month, and minimal trimming will improve hoof conformation and joint health in the herd/flock.

Genetics is half the battle: select for easy keepers. Sheep and goat herds/flock can be selected for hoof health. Cull animals with bad feet, and select males that have balanced bodies and adequate feet.

Finally, protect your animals from excessive moisture. Always have an area where your animals can escape humid soils. Continuously wet feet can create foot rot and increase lameness due to bacterial and fungal infections. Trapped mud in overgrown feet can also cause foot rot, abscesses, and other preventable illnesses. For more information on hoof trimming or care, please contact your local veterinarian or your County Extension Agent. We are here to help!

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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