

Photo By: Jamie Neal - Neal Farms

TEXAS A&M AGRILIFE EXTENSION - FRIO COUNTY

FRIO COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

Dear Agricultural Producers:

We are pleased to be able to provide you with information contained in this newsletter. The Frio County Agriculture & Natural Resources Newsletter is a Bi-Monthly newsletter beginning August 2022. Best efforts have been made to include Agriculture & Natural Resources information that should be of interest to you and helpful in the management of your agricultural operations. A wide variety of educational publications are available upon request or by accessing the Texas A&M AgriLife Extension website at www.agrilifeextension.tamu.edu. Our office hours are from 8:00 a.m.- 12:00 p.m. and 1:00 p.m.-5:00 p.m., (Monday-Friday). It is recommended that office visits be scheduled in advance or by appointment as there will be times that I'm not in the office.

You are encouraged to read this newsletter and keep informed of all on-going agricultural events and activities. Try to do your best to attend Extension educational programs, workshops, etc., throughout the year as they are sponsored by your local Extension committees for your educational benefit. We would like to acknowledge the Extension Agricultural Specialists and cooperators including: The Cattleman, TSCRA, The Peanut Grower, AgriLife Today, Aggie Horticulture, and the Texas A&M Beef Cattle Browsing, who contributed and provided the educational information for this educational newsletter. For any further questions regarding your agricultural operation, please contact the Frio County Extension Office (830) 334-0099, located at 400 S. Pecan St. Pearsall, Texas, or e-mail brianna.gonzales@ag.tamu.edu. Visit the Frio County AgriLife Extension website at <https://frio.agrilife.org>.



Sincerely,

Brianna G. Gonzales
County Extension Agent- Agriculture & Natural Resources
Frio County



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Helpful Texas A&M AgriLife Extension Service Websites:

- agrilifeextension.tamu.edu
- texaswater.tamu.edu
- aggie-horticulture.tamu.edu
- livestockvetento.tamu.edu
- animalscience.tamu.edu
- texashelp.tamu.edu
- SouthTexasRangelands.tamu.edu

BQA TIP - NOVEMBER

Grass tetany is a condition in cows due to low magnesium levels in the blood which can lead to death

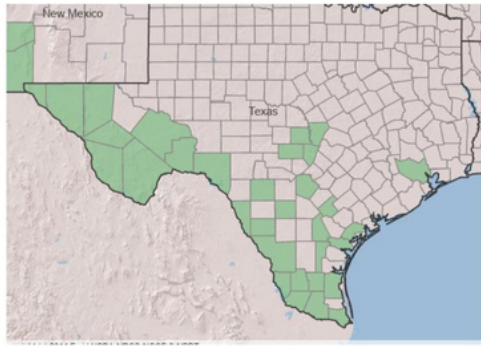


- Grass tetany is a condition in cows due to low magnesium levels in the blood which can lead to death.
- Grass tetany is more likely in lactating cows grazing cool-season annual forages, especially older cows or cows nursing young calves.
- Mineral supplements designed to provide additional magnesium should be considered to help prevent grass tetany in cows grazing cool-season annual forages. Minerals supplements with a target intake of 4 ounces per day should contain at least 5% magnesium.
- Monitor mineral intake as higher levels of magnesium often reduce mineral intake and good intake of the mineral supplement is critical.

***For more information please visit:
<https://texasbeefquality.com/bqa-tips/>
[or animalscience.tamu.edu.](https://animalscience.tamu.edu)***

RANGELAND PLANT IDENTIFICATION

By: Stacey L. Hines, Ph. D., Assistant Professor, Rangeland Habitat Management Specialist



Distribution Map Credit: USDA Plants Database @ plants.usda.gov

Tanglehead Distribution

Tanglehead is found throughout most of South Texas and the far western counties in Texas. It is a native grass that is common throughout its range where soils are often deep loamy fine sands or fine sands.

Its distribution and abundance has increased over the past 30-years. Some areas in South Texas have experienced a 200% increase in tanglehead cover over a 4-year period. The highest increase on this site occurred during the driest months on record from 2011-2013.



The increase in tanglehead abundance has been associated with livestock reduction and reduction or elimination of grazing. The increase has also been associated with abundant rainfall during Tanglehead's peak flowering period between July - September.

Tanglehead

Heteropogon contortus

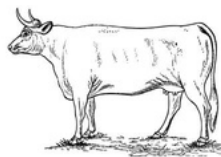


The Tanglehead inflorescence or seed head looks like the twisted hair on the iconic troll dolls that I grew up with.

Plant Identification Tips

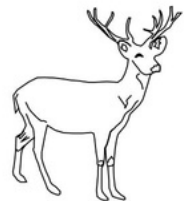
I'll never forget the first time I saw Tanglehead. The inflorescence or seed head looked like a dark, purplish colored twisted tangle. It reminded me of the iconic troll doll's hair. If you do not know what I'm talking about- do an Internet search for troll dolls and you'll see the resemblance. While the color looked purplish to me, others say the inflorescence appears red-brown in color.

It's a perennial, bunch grass that is typically 1-3 feet in height, but may reach up to 5 feet in optimal growing conditions. The leaves are about 1/4 inch wide and can be 4-12 inches long. If you pull the leaf back from the stem and look on the interior of the leaf collar, then you'll see a thin line of short hairs (e.g., the ligule is a line of cilia).



Livestock & Wildlife Value

good, palatable forage for livestock during growing season. provides cover for wildlife



ISSUE WITH TANGLEHEAD

Monoculture Decreases Diversity

Native or non-native grasses that out-compete other species and form monocultures reduce plant diversity on our rangelands. Reduction in plant diversity is associated with reduction in all species diversity, including insects and wildlife species.

Parts of this article were derived from:
Wester et al. 2018. Tanglehead in Southern Texas: A Native Grass with an Invasive Behavior. Rangelands: 37-44. DOI: 10.1016/j.rala.2018.03.002

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RANGE DETECT SERIES:

FORAGE QUALITY PHOTO GUIDE

Evaluating Diet Quality Selected by Grazing Beef Cattle Using Photographic Guidelines

Robert K. Lyons¹, Richard V. Machen² and Jerry W. Stuth³

Both animal productivity and ranch profitability can be affected by the nutritional management of grazing beef cattle. Management of beef cattle nutrition should be based on the quantity and quality of forage, as well as animal considerations such as body condition score, physiological status and production goals.

However, estimating the quality of forage consumed by grazing animals is difficult. First, the quality of forage changes seasonally. Second, in rangeland environments, animals can choose from numerous plant species and select specific plant parts. This selectivity frequently changes the diet composition and makes it difficult to tell exactly what these animals are eating.

For some time, it has been recognized that a relationship exists between forage quality and the physical appearance of feces of grazing cattle.

Grazing cattle primarily eat grasses and forbs (herbaceous broadleaf plants). New plant growth, mostly leaves, contains high levels of easily digestible compounds such as proteins, sugars and lipids. New plant growth has very little fiber in the form of cellulose or cellulose-lignin complexes. Therefore, cattle droppings that result from the consumption of immature, high quality forages tend to fall to the ground in relatively shapeless deposits. As grasses mature, the fibrous content increases and the appearance of the cattle droppings reflects a lower quality diet that is high in fiber.

To interpret the relationship between forage quality and fecal appearance, the following Photo Guide to Forage Quality can be used. The guide features four broad forage quality categories that are indicators of forage quality.

Forage quality categories are divided on a crude protein basis because this approach provides the clearest relationship to visual changes in droppings. Some overlap of digestibility values exists between the middle two crude protein levels. Forage quality estimates were

obtained using near infrared reflectance spectroscopy (NIRS) fecal analysis. While this guide serves as, and is meant to be, a general indicator of forage diet quality, more precise estimates can be obtained through NIRS fecal analysis.

FORAGE QUALITY AND NUTRITIONAL MANAGEMENT

Forage quality must be interpreted in relation to the status of the animals being managed. Be sure to consider the animal physiological status (dry, lactating, growing), body condition score (to determine performance goals), and production goals (maintenance versus gain). Body condition scores are good nutritional management indicators. These scores reflect past forage quality and quantity levels, but they also indicate future management needs.

Forage quality is important, but so is forage availability. There are several indicators that may provide clues to forage availability.

Cattle have strong forage preferences. Even though grass is their preferred food, some grasses are more palatable and cattle will search for these specific grasses. Having “a lot of grass” does not necessarily mean cattle will perform at the desired level if very little of the desired grass is available.

Cattle diets typically consist of more than 80 percent grass and other herbaceous plants. Cattle are not efficient at eating browse (leaves of woody plants) and normal diets usually contain less than 7 percent browse. If cattle spend time eating browse, it is a good indicator that available forage is limited. Performance most likely will suffer once browse in the diet reaches 10 percent.

Cattle have fairly definite grazing patterns. Typically, there are three major daily grazing periods—long periods at dawn and late afternoon and a short one near midnight. Cattle graze to fill a need for quantity. Cattle grazing in the midday summer heat probably do not have enough grass to meet their needs.

¹ Associate Professor and Extension Range Specialist

² Associate Professor and Extension Livestock Specialist

³ Professor - Department of Rangeland Ecology and Management
 The Texas A&M University System.



This dropping indicates a forage crude protein greater than 20 percent and digestibility of 70 percent to 80 percent. The dropping forms around whatever is beneath it, with little shape of its own. Also, notice the dark green color. The high-quality forage is typically associated with cool-season winter forages such as small grains or ryegrass. Nutrient (protein and energy) availability exceeds the cattle's requirements for maintenance, growth or lactation.



This dropping indicates a forage crude protein level between 6 percent and 9 percent. Digestibility is from 58 percent to 63 percent; a slight overlap with the crude protein level of 10 percent to 17 percent. At this forage quality level, a dropping exhibits flat folds. As forage quality increases within this range, the folds become smaller. This dropping indicates that forage quality is adequate to supply maintenance requirements for mature cows. Minimal weight gain in replacement heifers and stocker cattle should be expected.



This dropping indicates a forage crude protein level between 10 percent and about 17 percent and a digestibility of 61 percent to 67 percent. Notice the slight crater-like appearance in the surface of this sample. In the 10 percent to 13 percent crude protein range, small folds may be present in the dropping. Supplementation, or the addition of protein and energy to the diet, is not required for mature cows. Forage, which creates droppings like this, should support 1 pound to 1.5 pounds average daily gain on heifers and steers.



This cattle dropping indicates a forage crude protein level of 5 percent or less and digestibility at or below 56 percent. Notice the distinct rings in the lower right portion of the dropping. These rings tend to be firm. Droppings such as this tend to stack, however, stacking without the distinct hard rings is not characteristic of this forage quality level. This dropping indicates that forage is below the maintenance requirements for all classes of beef cattle. Forage digestibility and intake may increase with protein supplementation.

Note that increased levels of activity can result in loose droppings. Evaluate the consistency of cattle droppings only after a rest period.



WHEAT PRICES UP AMID WAR, EXPANDING DROUGHT

TEXAS CROP AND WEATHER REPORT - NOV. 1, 2022 / ADAM RUSSEL

Wheat prices are high, and weather and market factors could make the crop an attractive option for Texas growers coming out of a severe drought, according to a Texas A&M AgriLife Extension Service expert.

Mark Welch, Ph.D., AgriLife Extension grain economist, Bryan-College Station, said uncertainty about accessibility to wheat around the globe has driven prices skyward, and emerging drought in wheat-producing areas of the U.S. could add to that trend.

Recent rainfall across many parts of the state improved conditions for Texas wheat, Welch said. Some areas had adequate planting moisture following widespread August rains, but other areas remained too dry to support crop establishment or to plant.

Some producers “dusted” crops in, planting seeds into dry soil, and hoped for rain, while others waited for moisture. The recent moisture could boost plantings, seed germination and crop establishment.

Most Texas wheat is planted for dual-purpose – cool-season grazing and grain – or for grain production, Welch said. The value of wheat as a forage, either for grazing, hay or wheatlage, and as a grain crop could make the crop very attractive to producers this season.

Welch said planted wheat acres typically trend upward following cotton abandonment, which was widespread this year due to drought. Wheat is also a relatively flexible crop when input costs like fuel and fertilizer are high.

He said producers can plant the crop into the first part of December, let fields establish and wait until January or early February to invest money in fertilizer.

“Conditions look much better after much of the Texas wheat country got a drink,” he said. “The moisture could boost establishment and set it up for winter, and between that potential and the market conditions, wheat could be an interesting crop for a lot of producers.”

Uncertainty drive wheat prices up

Welch said Texas wheat producers could have an opportunity due to high prices and uncertainty surrounding U.S. and global supplies.

Moisture levels worsened in other U.S. wheat-producing regions as they improved in Texas, Welch said. Large swaths of Kansas, Oklahoma and southeastern Colorado are experiencing extreme to exceptional drought, according to the U.S. Drought Monitor, and most fall planting windows for crop insurance in those areas have passed.

“If those areas do not get moisture, it creates a big question for U.S. winter wheat production, and that could mean better prices for Texas wheat producers,” he said.



WHEAT PRICES UP AMID WAR, EXPANDING DROUGHT - CONT.

Wheat prices are already historically high, Welch said. The October cash price for Texas wheat is \$9 per bushel compared to the same time last year when bushel prices reached \$8. Wheat prices hit \$11 per bushel in June, compared to October 2019 when a bushel of Texas wheat was \$4.

The pandemic impacted wheat prices to a degree, but the Russia-Ukraine conflict has been the primary factor driving wheat prices upward, Welch said. The two countries account for around 30% of global wheat production, and the uncertainty of war has weighed on the market.

Welch said news that Russia may not extend an agreement that allowed Ukraine to export wheat created a price spike in the global market and injected more uncertainty. At the same time, Russia is reporting a record wheat crop.

Other wheat exporting nations like Australia and Canada have also reported strong production numbers, though European production was expected to be down compared to last year. Overall, global wheat production is expected hit an all-time high in 2022.

“It’s not a supply problem; it’s an access problem,” Welch said. “The uncertainty around exports and how grain flows are important. If the Russia-Ukraine war went away, I think wheat prices would fall significantly overnight. But the Russians control the Black Sea, and Ukraine is down on plantings and harvest. They don’t have access to fields or storage facilities, and Russia is looking at a bumper crop. All of it ties to the uncertainty of conflict.”

Texas Crop and Weather Report – Nov. 1, 2022

SOUTH:

Soil moisture ranged from very short to adequate, depending on location. Areas received scattered rain showers. Temperatures were mild with cool mornings. Cotton harvest was mostly complete. Peanut digging continued. Rangeland and pasture conditions were declining. Livestock were in good condition and receiving supplemental feed. Beef prices were down a little. Most hay producers reported one cutting this season. Watermelon and cantaloupe crops were done, and Bermuda grass was entering dormancy. Pecan orchards were harvesting. Citrus harvest continued, and sugarcane harvest should begin soon. Cool-season vegetables were planted, and many fields looked good and were receiving irrigation.

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Gardening Tips For Fall

ADVICE FROM EXTENSION EXPERTS

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AGRI LIFE
EXTENSION

Plant Growth

→ At least six hours of direct sunlight if possible for plants is optimal for their growth. Root crops and fruit crops require a lot of carbohydrates so they can take the most direct sun. Leafy greens can tolerate a little less sunlight as needed.

→ Preparing good quality soil is another step in producing healthy, growing plants. Organic matter compost helps gardens to thrive. Sandy soil holds water and nutrients better with compost and clay soil drains better with it.

→ Planting the right species at the right time is critical for success. The Texas Fall season can be short so planting things that harvest quickly is key. To select crops that are adaptable to your area, your local county extension office can help.

Learn more: <http://aggie-horticulture.tamu.edu/>

TEXAS A&M
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LAST CHANCE CEU's

TUESDAY, NOVEMBER 29, 2022

8:00AM - 12:00PM

Frio County Extension Office
400 S. Pecan St.
Pearsall, Texas 78061

PROGRAM

Laws & Regs - 2.0 Integrated Pest Management - 2.0

(\$10.00 Registration Fee Required)

For More Information Contact:

Brianna Gonzales, Frio County Extension Agent 830-334-0099

The Texas A&M AgriLife Extension Service provides equal access in its programs, activities, education, and employment, without regard to race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.



*Have a Blessed
Thanksgiving*



****For more information please contact:
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(830) 334-0099 or brianna.gonzales@ag.tamu.edu.***

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