

# **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 Monthly newsletter (Sept. 2023 - August 2024). 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 <a href="https://www.agrilifeextension.tamu.edu.">www.agrilifeextension.tamu.edu.</a>. 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 ongoing 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: TSCRA, US Drought Monitor, Texas Beef Quality, The Peanut Grower, AgriLife Today, Aggie Horticulture, Tx Ag Law, and the Texas A&M Beef Cattle, 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) 505-7474, located at 400 S. Pecan St. Pearsall, Texas, or e-mail brianna.gonzales@ag.tamu.edu. Visit the Frio County AgriLife Extension website at <a href="https://frio.agrilife.org">https://frio.agrilife.org</a>.



Sincerely,

Brianna G. Gonzales

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County Extension Agent- Agriculture & Natural Resources Frio County



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Helpful Texas A&M AgriLife Extension Service Websites:

agrilifetoday.tamu.edu
texaswater.tamu.edu
soiltesting.tamu.edu
aggie-horticulture.tamu.edu
livestockvetento.tamu.edu
animalscience.tamu.edu
texashelp.tamu.edu
SouthTexasRangelands.tamu.edu

# FEBRUARY BQA TIP

By Dr. Jason Banta, Beef Cattle - Texas A&M AgriLife Extension





# **AVERAGE GESTATION LENGTH:**

- Average gestation length for cattle is often reported as 283 days with a common range of about 9 days either side of the average.
- When getting ready for the start of calving season be aware that gestation length varies depending on breed, genetics differences within a breed, calf sex, age of dam, and other factors.
- The average gestation length for Angus is about 279 days compared with 291 for Brahman.
- Gestation length is longer for bull calves.
- Gestation length is often shorter for low birth weight genetics, so be prepared for those heifers to calve early.

\*Beef Quality Assurance monthly tips can be found on the Texas Beef Quality website along with additional resources that include the Texas Beef Quality Assurance Handbook, Group Processing / Treatment Map, & upcoming BQA events.

For more information: <a href="https://texasbeefquality.org">https://texasbeefquality.org</a>

# ANSWERING THE CATTLE NUTRITION PROTEIN

## **QUESTION**

Texas A&M AgriLife Extension - AgriLife Today



New equations will better estimate protein utilization by beef cattle, benefit producers.

Knowing exactly how beef cattle utilize protein is important to answering many nutrition questions producers and industry nutritionists pose to <a href="Texas A&M AgriLife Extension Service">Texas A&M AgriLife Extension Service</a> specialists like <a href="Jason Smith">Jason Smith</a>, Ph.D., Amarillo. Smith, an AgriLife Extension beef cattle nutritionist and associate professor in the <a href="Texas A&M College of Agriculture and Life Sciences">Texas Department of Animal Science</a>, works one-on-one with producers, AgriLife Extension County Agents and other beef industry stakeholders throughout the High Plains of Texas. One of his primary focus areas is to identify opportunities and conduct the applied research necessary to develop solutions to problems producers face. Protein nutrition is one of those areas. He hopes to empower producers with the ability to make decisions that optimize cattle productivity, are economically advantageous and promote environmental stewardship.

#### Protein utilization by cattle

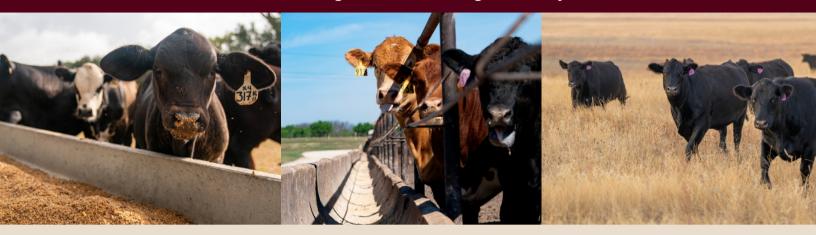
"For years, we have had a good appreciation for the concept that cattle utilize different protein fractions to different degrees due to the rumen environment but have historically been limited in our ability to reliably predict the site and extent of protein digestion," Smith said. "Making strategic, informed decisions and recommendations involving protein nutrition requires us to predict how and where the animal will digest and utilize protein. Recognizing our previous limitations, filling that knowledge gap became a critical step necessary to help producers and nutritionists meet the nutrient requirements of cattle." "Our latest research is making us rethink the values traditionally assigned to some of our major protein ingredients," Smith said. "We need to rethink how we measure or estimate those values. Fortunately, this project allowed our team to develop prediction equations for producers and nutritionists to use that are both highly accurate and precise." The research needed to address this industrywide problem was partly funded by the Texas Cattle Feeders Association and conducted at the joint Texas A&M AgriLife and U.S. Department of Agriculture-Agricultural Research Service research feedyard and metabolism laboratory in Bushland. The team is in the process of publishing the results and has already presented their findings at several major meetings, which have been well received by the industry.

#### Teamwork to answer the protein availability question

Smith said he often receives questions not being answered by others at this time — there's a void in the information — and he strives to help answer these questions. "Protein is one of those areas where we need more information to answer questions that pertain to feeding cattle," he said. "Not all proteins fed to beef cattle are treated the same in the rumen, and how they are utilized by the animal influences far more than just the amino acids they supply to the animal. Before answering many of these questions with more certainty, we knew we needed to better understand the site and extent to which protein is digested. This was a critical first step for our group."

# ANSWERING THE CATTLE NUTRITION PROTEIN QUESTION - CONTINUED

Texas A&M AgriLife Extension - AgriLife Today



Over the past three years, he has collaborated with research colleagues in <a href="Texas A&M AgriLife Research">Texas A&M AgriLife Research</a> and within the Department of Animal Science, as well as with the <a href="U.S. Department of Agriculture-Agriculture Research Service">U.S. Department of Agriculture-Agriculture Research Service</a> at Bushland, to generate science-based answers and bring solutions back to those asking the questions. Other AgriLife Research members of the team from the Department of Animal Science include Vinícius Gouvêa, DVM, Ph.D., assistant professor and ruminant nutritionist, Amarillo; and Tryon Wickersham, Ph.D., professor and animal nutritionist, and Luis Tedeschi, Ph.D., professor and animal nutritionist, both in Bryan-College Station. From the USDA-ARS <a href="Livestock Nutrient Management Research">Livestock</a> Nutrient Management Research unit at Bushland, researchers include Matt Beck, Ph.D., research animal scientist, and Terra Thompson, Ph.D., research soil scientist. This study complements the work of Wickersham in protein nutrition and <a href="nitrogen metabolism">nitrogen metabolism</a>, of Gouvêa in beef cattle nutrition and feeding management, Tedeschi in <a href="nutrition modeling">nutrition modeling</a>, and work by Beck in environmental impact.

#### Research findings

The research team completed a series of experiments over the past three years that allowed them to not only evaluate the individual protein fractions and their availability to cattle for 18 common feedstuffs, but also to predict them using simple nutrient composition provided by routine feed analyses, Smith said. "We've also begun to conduct some testing to better understand the economic and environmental consequences of under and over-feeding protein to cattle," he said. The research will ultimately allow producers and nutritionists to make more strategic supplementation decisions, formulate rations more precisely, and make more informed ingredient purchasing decisions. "Ultimately, we're trying to help producers and nutritionists achieve the optimal balance between productivity, economics and environmental stewardship. This work will help us to do that."

#### More than just answering questions

The research is an example of the effort to answer more than just scenario-dependent questions, but to provide broader solutions to a greater area of concern within the industry. Part of that effort is training graduate students like Jarret Proctor and Nate Long, who both work at Bushland, to become tomorrow's nutritionists and AgriLife Extension personnel. Smith said these students are being trained in a unique way by working in this integrated AgriLife Extension-based applied research field. "We are using translational research to build a foundation of scientific knowledge but also sharpen it with experiential on-the-ground learning by solving real-world problems," he said. "These students are working with producers to develop solutions to the problems that they face. The findings of their work are enhancing their ability to do so." Smith said the team will continue to refine the process and actively work to further improve the understanding of how feedstuffs interact with the animal to meet its nutrient requirements and to develop estimates that can quickly and economically be incorporated into current laboratory tests.

For more information: <a href="https://agrilifetoday.tamu.edu">https://agrilifetoday.tamu.edu</a> - FARM & RANCH

# **TEXAS AGRICULTURE**



By: Tiffany Dowell Lashmet, Assistant Professor & Extension Specialist- Agricultural Law



#### **About the Author & Texas Agriculture Law:**

Tiffany Dowell Lashmet is an Associate Professor and Extension Specialist in Agricultural Law with Texas A&M AgriLife Extension. She focuses her work on legal issues affecting Texas agricultural producers and landowners with a primary focus on water law, oil and gas law, leasing, property rights, right to farm statutes, and landowner liability. A wide variety of educational resources and upcoming presentations can be found on Tiffany's Tx Ag Law Blog at <a href="https://agrilife.org/texasaglaw">https://agrilife.org/texasaglaw</a>. Some of which include:

#### **Handbooks**

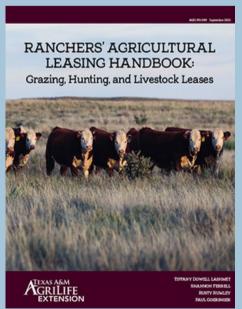
To purchase a hard copy, contact Lacrecia at 806-677-5600 or download a free PDF copy.

- Owning Your Piece of Texas: Key Laws Texas Landowners Need to Know (Updated September 2023)
- <u>Ranchers Agricultural Leasing Handbook</u>: Grazing, Hunting, & Livestock Leases (Updated September 2023) (co-authored with Shannon Ferrell, Rusty Rumley, & Paul Goeringer)
- <u>Where's the Beef?</u>: Legal and Economic Considerations for Direct Beef Sales (Updated September 2023) (co-authored with Justin Benavidez, Garrett Reed, Beth Rumley & Sarah Patterson)
- <u>Second Edition Five Strands</u>: A Landowner's Guide to Fence Law in Texas (June 2022) (co-authored with Jim Bradbury, Kyle Weldon, & Sarah Patterson)
- Eminent Domain in Texas: A Landowner's Guide (March 2020)
- <u>Petroleum Production on Agricultural Lands in Texas</u>: Managing Risks and Opportunities (February 2016) (co-authored with Shannon Ferrell & Rusty Rumley)

#### **Online Courses**

Online courses are available anytime. Once registered, participants can access the course at anytime and watch at their convenience. They may also re-watch any portions desired.

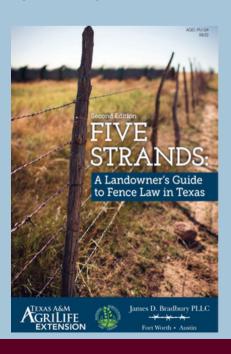
- Owning Your Piece of Texas: Key Laws Texas Landowners Need to Know (Updated September 2023)
- Online Ranchers Leasing Workshop (Updated September 2023)







For more information: <a href="https://agrilife.org/texasaglaw">https://agrilife.org/texasaglaw</a>



# CROP & WEATHER

# Hay supplies remain tight for Texas cattle producers

Hay supplies may be better than last year, but they remain extremely tight as costs for winter feeding continue to mount for Texas ranchers, according to <u>Texas A&M AgriLife Extension Service</u> experts.

Jason Cleere, Ph.D., AgriLife Extension statewide beef cattle specialist and professor in the <u>Texas A&M Department of Animal Science</u>, Bryan-College Station, said hay supplies have improved but stocks are still below pre-drought averages. Back-to-back years have led to deeper culling and difficult decision making for some producers about their herds even as cow/calf prices remain historically strong. Cleere said spotty rains delivered moisture to some parts of the state early and other areas late in the hay season last year. That provided decent early or late-season cuttings for those areas, but forage production was held back by hot, dry conditions overall. "Texas had two rough summers, and producers can absorb a miss one year with reserves from the previous haying season, but two years in a row becomes more challenging," he said. "We really haven't stopped feeding hay since mid-July on our farm, and that is a challenge for producers who aren't producing their own hay, given bale prices."

#### Tight hay supplies driving prices higher

David Anderson, Ph.D., AgriLife Extension economist and professor in the <u>Department of Agricultural Economics</u>, Bryan-College Station, said tight supplies and higher demand is driving prices upward. Anderson said Dec. 1 hay stocks were the third lowest on record behind 2022 and 2012, respectively. Texas hay yields averaged 1.87 tons per acre in 2023 compared to 1.56 tons per acre in 2022, but tonnage was still below historic averages, he said. Producers had yielded 1.95 tons per acre on average since 2012. The national price for round bales is \$102, but Cleere said grass hay bales in Texas have been selling for \$100-\$140, or \$200-\$280 per ton based on quality. Some ranchers are shipping in hay and alfalfa from out of state due to low availability locally, Cleere said. Anderson said Oklahoma hay stocks were up 97% compared to last year, while New Mexico, which produces mostly alfalfa, was up 25% and Kansas was down 12%. "Prices are not as high as a year ago, but they are indicative of the tighter supplies and higher input costs," Anderson said. "There are fewer cows to feed, but the costs to keep herds fed through winter after poor hay and grazing production has translated into tough decisions for some producers."

#### Conditions for grazing, hay season improving

Vanessa Corriher-Olson, Ph.D., AgriLife Extension forage specialist and professor in the <u>Department of Soil and Crop Sciences</u>, Overton, said recent rainfall could alleviate some producer concerns. Storm systems that delivered moisture to much of the state could improve conditions in established cool-season forages, like winter wheat or annual ryegrass. The rain should also improve conditions as warm-season perennial grasses begin breaking dormancy this spring. Cool-season forage conditions for some producers, especially in areas with more moisture like East Texas, were good for grazing, and the rain should help improve production, she said. However, grazing availability is a mixed bag around the state, even in East Texas where many producers may have not seeded ryegrass due to dry conditions in September and October. In other parts of the state like the Panhandle and South Plains, sporadic soil moisture led to decent winter wheat establishment, but little production for some and failure for others. Some dry-sown fields had yet to emerge, and AgriLife Extension experts said the recent moisture may be too late to help grazing. "The producers who planted in mid-October are having success, but I think fewer people planted this year because of drought and doubts about rainfall," Corriher-Olson said. "But now we're in February, and I've gotten calls from people wanting to plant because they are out of hay and don't have anything to graze. The moisture will help what is up, but unfortunately, it's too late to plant."

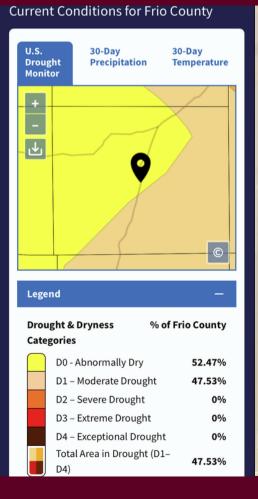
For more information: AgriLife Today - Farm & Ranch

## **CROP & WEATHER**

CONTINUED- The key now, she said, is to focus on what can be done to optimize hay output in 2024. Unfortunately, many forage producers have reduced fertilizer inputs or cut them completely over the previous two seasons because of high prices in 2021 and drought in 2022. The lack of fertility and overgrazing could lead to compounding problems this season, she said. Lack of fertility, especially potassium, has led to unhealthy and thinning stands in Bermuda grass fields while overgrazing will likely result in a "bumper crop" of annual weeds. Producers should start with a soil sample now that there is moisture to make sampling easier, she said. Analysis is the only way to know the state of soil and its ability to support warm-season perennial grass production. Planning also will give producers time to shop around for contract fertilizer options to meet the soil fertility requirements recommended based on the soil analysis, she said. Producers should also shop around for other inputs, including herbicides, based on pests they've dealt with in past seasons. "Low fertility, unhealthy or overgrazed stands will not recover as quickly without reducing competition with weeds and feeding the grass what it needs to grow," she said. "We will need more rain going into and during the growing season, but this moisture should bring some optimism."

#### Outlook remains positive for cattle producers

Cleere said the future looks bright for cattle producers who have been able to hold and maintain good body conditions on quality cows and heifers. But balancing feeding costs with potential gains and realized sale prices for calves will be critical for short- and long-term profitability. He recommends continued assessment of both hay rations, body conditions and potential culls of older or troublesome cows and to consider earlier weaning of calves to reduce pressure on cows. Producers should also consider moving cattle to smaller holding locations for winter feeding to help other grazing pastures recover quicker, he said. "In 2011, grain prices were more economical and that helped stretch hay supplies during that drought, but both are so expensive now that it makes producers walk a fine line," he said. "But we need to stay on top of forage management and pasture recovery because ryegrasses and legumes can really take off and change things dramatically with moisture."



### **Weekly Crop Report - South Region**

Scattered rain fell across the district, with some areas benefitting more than others. Temperatures reached into the high 70s. Some areas experienced high winds and small hail, but the damage was minor. Wheat, oats and winter weeds responded rapidly to the moisture and warm temperatures, but most forages were still in fair to poor condition due to the January freeze. Beef markets continued to receive below-average volumes due to the wet conditions but were expected to increase. Prices remained firm and steady for all classes of beef cattle. Hay supplies were low, and cattle and wildlife producers continued supplemental feeding.

FARM & RANCH - agrilifetoday.tamu.edu



## **2024 FCJLS HIGHLIGHTS**

The 2024 Frio County Junior Livestock Show was held January 24-27, 2024, at the FCJLS Show Barn with the FCJLS Commercial Heifer Show held at Pearsall Livestock Auction. Frio County 4-H and FFA members exhibited their livestock and Country Store projects during the duration of the show. For the second year in a row, FCJLS has provided the great opportunity for the Frio County 4-H Clover Kids (members K-2nd Grade) to showcase a live or stuffed animal during the 2nd Annual Clover Kids Pet Parade. This year's Frio County 4-H Clover Kids Pet Parade had over 30 participants. A new addition to this year's FCJLS was the implementation of the Locally Grown Frio County 4-H Steer Project. The goal of this project is to allow Frio County 4-H members the opportunity to raise, train/work with their project, and exhibit a local grown steer that is provided by a local producer. Thank you to Texas Tailor Farms for their contributions to this project.





## PROGRAM HIGHLIGHTS

The 2024 Winter Garden Row Crop Conference was held on January 29, 2024, in Hondo, Tx at the Hermann Sons Life Hall. This event was hosted by the Texas A&M AgriLife Extension Offices of Atascosa, Dimmit, Frio, Guadalupe, Medina, Uvalde, Wilson, and Zavala counties. Over 60 individuals were in attendance for this educational CEU event. Attendees were educated on topics that included Key Pests of Row Crops, TDA Laws & Regulations Update, Effective Management of Weeds in Row Crops, along with a great Market Panel discussion (local, State, & National) by Bryce White of the Texas Corn Producers, Florentino Lopez of Creando Manana LLC, Jeff Nunley of the South Texas Cotton & Grain Association, Brendon Lowe of Mumme's, and Nelson Reus of Reus Ag Services. An optional Auxin Training was offered and conducted by Dr. Ronnie Schnell, Texas A&M AgriLife Extension Agronomist. We would like to thank our Title Sponsors- Helena, Texas Farm Bureau, Capital Farm Credit, Mumme's, and the Texas Corn Producers Board. Additional sponsors included Sesaco, Reus Ag Services, South Texas Cotton & Grain Association, Second Nature, Farm Service Agency, Creando Manana, TB Insurance, Range Ward, Marek Ag, and Jess Smith & Sons Cotton, INC.









# South Texas Peanut Growers Annual Meeting

TUESDAY, March 5, 2024

Atascosa County Lonnie Gillespie Memorial Annex 25 E. 5th Street Leming, Texas 78050

# **PROGRAM:**

- Registration will start at 2:00PM & the program will begin at 2:30PM.
- Topics to be covered include Peanut Variety Trials, Herbicide Update, Peanut Economic Outlook, Farm Bill Discussion, followed by an Auxin Training. Updates will also be provided by the Texas Peanut Producers Board.
- 3 Continuing Education Units (CEU's) will be given with a \$10.00 (Cash Only) fee towards your Texas Department of Agriculture Private Pesticide Applicator License.
- Dinner will be served at 6:30PM.

\*(Individuals with disabilities, who require an auxiliary aid, service or accommodation in order to participate in any of the mentioned activities, are encouraged to contact the County Extension

Office at 830-569-0034 at least 12 days before all programs for assistance).

\*Please RSVP by March 1, 2024, with Dale Rankin, Atascosa County Extension Agent at (830) 569-0034 or Brianna Gonzales, Frio County Extension Agent at (830) 505-7474.

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.



Hosted by: Atascosa, Dimmit, frio, La Salle, McMullen & Zavala counties

Have you tested your private Water well?

Private water wells should be tested annually. The Multi-County Water Screening Program is sponsored by the Texas A&M AgriLife Extension Service of Atascosa, Dimmit, Frio, McMullen, LaSalle, and Zavala counties. The offices are hosting a water well screening on April 17, 2024 to give area residents the opportunity to have their well water tested. The cost is \$15.00 per sample.

Samples will be collected on Wednesday, April 17, 2024 between 8:00 a.m. and 9:00 a.m. Well owners may pick up a sample bag and instructions from their County Extension Office.

- Atascosa County AgriLife Extension Office, 25 E. 5th Street, Leming, TX 78050 | P: (830) 569-0034
- Dimmit County AgriLife Extension Office, 539 Industrial Blvd., Carrizo Springs, TX 78834 | P: (830) 876-4216
- Frio County AgriLife Extension Office, 400 S. Pecan Street, Pearsall, TX 78061 | P: (830) 505-7474
- McMullen County AgriLife Extension Office, 604 River Street, Tilden, TX 78072 | P: (361) 274-3323
- Zavala County AgriLife Extension Office, 221 N 1st Ave, Crystal City, TX 78839 | P: (830) 374-2883
- La Salle County AgriLife Extension Office, 119 S. Front Street, Cotulla, TX 78014 | P: (830) 483-5165

Results will be available on April 18, 2024, at your County Extension Office. There will be a virtual educational program to discuss water quality presented by Extension Specialist Joel Pigg.

#### Samples will be screened for:

#### Fecal Coliform Bacteria

Presence indicates that feces (bodily waste from humans or animals) may have contaminated the water. Water contaminated with this bacteria is more likely to have pathogens present that can cause diarrhea, cramps, nausea or other symptoms.

#### **Nitrates**

Levels above 10 ppm may cause infants, pregnant or lactating women, the elderly, and the immune-suppressed to be at risk for methemoglobinemia, a condition which inhibits the ability of blood to sufficient carry oxygen to tissues and cells.

#### Salinity

Measured by Total Dissolved Solids (TDS). Water with high TDS levels may leave deposits and have a salty taste. Using water with high TDS for irrigation may damage the soil or plants.

#### Hydrocarbons

Presence indicates that oil contamination has occurred



Brianna G. Gonzales

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brianna.gonzales@ag.tamu.edu

Website: https://frio.agrilife.org/agriculture-natural-resources/



Frio County Texas A&M AgriLife Extension