TCAAA AWARD WINNING AG NEWSLETTER

VOL 2 ISSUE 8 • AUGUST 2023

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 Monthly newsletter beginning January 2023. 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: TSCRA, Texas Drought Monitor, 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) 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 https://frio.agrilife.org.

Sincerely,

Brianna Gonzales

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

TEXAS A&M AGRILIFE EXTENSION 12

Inside this issue:

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

Beef Cattle Short Course to address cattle business opportunities and challenges

69th annual Beef Cattle Short Course set for Aug. 7-9 in Bryan-College Station

Looking back at 40 years of advances in the beef industry and toward the next 40 years of opportunities and challenges will be the highlight of the general session during the 69th annual Texas A&M Beef Cattle Short Course in Bryan-College Station set for Aug. 7-9.

The largest event of its kind, with more than 1,900 cattle producers expected to attend, the short course will address challenges and opportunities faced by the industry today and into the future. The event is hosted by the Texas A&M AgriLife Extension Service and the Texas A&M College of Agriculture and Life Sciences Department of Animal Science.

Both in-person and online attendance is offered. The cost is $260 for in-person attendance and $160 for online if registered by Aug. 2. The price will increase to $300 after that date.

Registration

To register, go to https://tx.ag/BCSC23Reg or call 979-845-6931 for more information. A detailed agenda of topics and speakers is now available.

Maintaining Herd Performance During Drought

by Ron Gill, Ph.D., Professor and Extension Livestock Specialist, Texas A&M University

Drought always presents unique and difficult management situations. Most managers are caught somewhat by surprise by the size, scope and severity of drought. Getting off to a late start in managing through any drought would completely alter the normal approach to forage and nutritional management. Blanket statements about proper management strategies are completely inappropriate. Recommendations in this discussion will be based on the most common situations observed during drought.

The hardest thing to do is maintain herd performance when forage is limited in quality and quantity. Compounding that problem is the cost of supplemental feed and hay. Feeding through drought usually is not an economically viable option. For hay feeding to make economic sense cattle prices would have to be high. In most situations, the most economical option is to reduce herd size so supplemental forage will not have to be purchased or fed. Forage may still be available for grazing if destocking was carried out early enough. With early destocking, normal herd management practices will be sufficient. All forage will come from growing or standing forage. When the only option seems to be buying hay, then sell cows. Even though cow values are normally low during drought the best long-term economic scenario appears to be to liquidate at least a portion of the cow herd.

Environmental/Stress Management

Managing through a drought requires implementing practices that help reduce stress. This includes nutritional and environmental factors which lead to increased energy requirements of cows and calves. Some things appear to be just common sense. Fencing off watering areas that become boggy will reduce energy required to maintain production. This only works when there are other sources of water available. Hauling water is an expense that cannot be supported for long. There is also the risk of having weaker cows bog down and die before they are discovered.

When water supplies are depleted it is time to liquidate. Minimize exposure to increased health risks by reducing access to stagnant watering areas. Allow cattle access to shade, normally a problem only on operations with a high percentage of "improved" pastures.

Manage cows to maintain a body condition score (BCS) of 4 or above on mature cows and 5 on two and three year old cows. Accomplish this by culling early and allowing cows to maintain condition on standing forage. Thin cows are more susceptible to pathogens and parasites. To take advantage of natural immunity and ability to withstand pathogens and parasites, cows must be in good physical condition. By taking advantage of natures little perks, health management practices can be kept to a minimum. The last thing a ranch needs is to battle a health problem in the middle of a drought.

Health Management

Continue to protect cows and calves against clostridial diseases such as blackleg. As cattle graze on shorter and shorter forage the chance of picking up soil born pathogens increase. Blackleg, leptospirosis and anthrax are just a few of the diseases that occur with greater frequency during drought. Check with veterinarians in the local area to get a history on diseases of concern. Chances of leptospirosis becoming a problem also increase as watering areas dry up. Cattle and wildlife are forced into more concentrated areas and the chance of spread between species increases.

Protect against the reproductive diseases, campylobacter fetus (vibrio), brucellosis, haemophilus somnus, trichomoniasis, IBR and BVD to name a few. Nutritional stress will affect reproductive performance. Failure to prevent diseases will only compound the problem. Once again, get with the local veterinarian with the broadest background in local problems. Even if the ranch has been through drought cycles before you may not have seen or heard about all the possible problems.

Parasites, both internal and external, need to be monitored and controlled as needed. When grass is short, due to drought, internal parasites may not be a

problem. Parasites require moisture to reproduce and move up leaf tissue before they can be consumed. Many producers will deworm cows when they become thin just in case the cause is internal parasites. With the cost of deworming products today it would be best to have fecal exams performed on a random sample of cows before deciding to deworm the whole herd. Most often cows are thin due to poor quality and quantity of forage. When rainfall is received and pastures are short, start being concerned about parasites.

Carefully, monitor the herd and watch for signs of heel flies. Under very dry conditions the heel fly and resulting grubs may not be a problem. When heel fly activity is observed wait five weeks after the last observed activity to treat for the parasite. Treating earlier will not kill all developing grubs and treating later will only allow increased stress and weight loss on the cattle. Horn and face flies have been shown to decrease cow condition due to loss of 50 to 100 pounds and decrease weaning weights up to 50 pounds. Both of these flies need to be controlled. Do not compound nutritional stress with a manageable environmental stress. Flies can be controlled for $2 to $4 per cow. The potential decrease in weaning weight will more than pay for any fly control measures. Economic threshold level for horn flies is 300 flies per animal, above which cattle begin cutting into grazing time by fighting flies. This results in reduced milk production and a loss in body condition.

Nutritional Management Strategies

The key to successful forage management during drought is to cull and destock early enough and go deep enough to provide adequate forage for the remaining cow herd. To economically maintain cows they must be able to maintain body condition on standing forage without supplemental energy.

When destocking is initiated early fewer cows will have to be culled over the course of a drought. Culling strategies need to be in place well in advance of any drought. Initiate destocking at the slightest hint of dry weather during the growing season. A detailed account of destocking strategies are available in *Destocking Strategies During Drought* and will not be covered in depth here. Keep cows that are least susceptible to nutritional stress caused by poor forage conditions. This will be the mid-aged cows between 4 and 10 years of age. At lower body condition scores (BCS 3 and 4) cows of this age will average 35 and 20% higher conception rates than first and second calf cows, respectively, as shown in table 1.

Although older cows have a higher overall conception rate they also have the least potential for longevity in the herd. Another concern about keeping older cows is decreased milking ability. Decreased milking ability and lighter calves at weaning are reasons older cows have higher conception rates at any given BCS. If condition can be maintained on second-calf cows they can also be kept in the herd. Go ahead and sell replacement heifers and any other cow that will not wean a calf in this production year. If a place can be found to hold these cattle economically there may be justification for retaining ownership. Cull first-calf heifers next. There are two primary reasons. These two groups of cattle are normally the most expensive to develop and maintain and have the lowest production potential. When feed is expensive and cattle are cheap, cost can be reduced dramatically by moving these cattle.

Always manage the forage base to allow adequate consumption and efficient use of marginal precipitation. Cows need to consume forage at the rate of 2 to 3% of their body weight to have a chance of maintaining

Table 1. Body Condition Score at Palpation by Age Group (Parity)

Parity	BCS 3	BCS 4	BCS 5	BCS 6	BCS 7	All
1	40 %	50%	70%	82%	83%	63%
2	43%	79%	89%	100%	100%	77%
3-10	71%	86%	92%	97%	95%	91%
>10	100%	92%	97%	100%	100%	97%
All	54%	76%	89%	94%	94%	84%

Maintaining Herd Performance During Drought (continued)

acceptable production and reproductive performance. When grass is not growing the only way to ensure adequate forage is to reduce demand through destocking. This will be a constant battle until the drought breaks, requiring constant monitoring and periodic adjusting to prevent decline in range condition and cow performance. Minerals will need to be provided to cattle during periods of drought. Most areas of Texas are deficient in phosphorus and some trace minerals. When it becomes necessary to cut cost, usually one of the first areas to receive the axe is the mineral program. Do not stop supplementing phosphorus! Phosphorus has a major impact on reproductive performance. If the urge to limit mineral costs overwhelms a rancher, trace minerals can be cut without devastating results on reproductive performance. This is certainly not a recommendation to cut trace mineral supplementation. A more economical source may be available. Do not substitute quality for price. If a supplement of equal quality can be found for less money, it might be alright to try.

If, or when, cows become protein or energy deficient supplementation will be required to maintain acceptable production. Manage nutrition to prevent mid-aged cows from dropping below BCS 4 during the production cycle. The last caution on nutritional management will center on selling cows to purchase forage for the remaining cows. This practice will leave a ranch broke and without cows in an extended drought.

Marketing

One common complaint heard at the coffee shop and sale barn concerns the rancher's inability to significantly influence market price for weaned calves. Although absolute value per pound is determined by demand, a producer has complete control over relative value of calves. Every calf produced should sell in the upper 50% of that days market. It is not feasible to always top the market. Cattle that top a market on any given sale day can change with one order being placed. The high price cattle may change from week to week, month to month and certainly year to year. Calves and yearlings that sell in the top half of a market have not changed for the past 20 years. Moderate to large framed, average muscled, crossbred calves with three-eights or less Brahman influence, no more than one-half Exotic and from one to three-quarter British influence have always been in demand. Producers can get caught on the fringes of these specifications from time to time as the market requirements change.

When a good return is desired, do not produce what the buyer does not want. Know the local market and produce for it. The calves described above can be produced anywhere in the state of Texas. There really is no excuse for producing cattle that are not in demand, other than personal bias. Cows not conforming to the formula stated above may be needed for environmental adaptability and production efficiency. If so, use complementary sires to produce the desired kind of calves. There is a need for purebred cattle that certainly do not fit the description of the ideal calf. These cattle are necessary to produce bulls and females for the commercial producer.

Cost Control

Most ranches do not intentionally waste money on production expenses. The same cannot be said about personal expenses. When times are tight, communication between family members and ranch employees needs to open up. Unfortunately, communication normally breaks down and closes up. Ranchers do not want the family or employees to know and/or worry about the financial stability of the ranch. Most underestimate both the family and employees resolve to survive during tough times. Everyone should know what the situation is and input on ways to cut cost should be sincerely requested. Ideas should be carefully evaluated before implementing or discarding. Common strategies normally start by cutting back on expenses necessary to maintain production. The last place they are usually cut are on items that provide no income. These include personal expenses, family vacations, vehicles, equipment and any other purchases that do not generate a positive production response. If trimming is need it may be accomplished by cutting waste in some management practices. When severe cuts are required start around the house and garage, then move to the equipment shed and horse trap. Thousands of dollars can be saved by cutting personal and living expenses and hundreds by cutting production cost.

Learn more: https://agrilifetoday.tamu.edu/

June Heat Stress Hurts Texas Agriculture

A June heat wave caused agricultural conditions to decline around much of the state after steady improvements over the previous month, according to Texas A&M AgriLife Extension Service experts.

May rains dramatically improved soil moisture conditions in many drought-stricken areas of Texas, but triple-digit temperatures and little to no rain in June were trending many areas back toward drought. Various crops around the state were showing stress from high temperatures and lack of soil moisture, and livestock gains likely experienced heat-related declines.

Heat wave takes toll on Texas crops

The heat wave was especially harsh in the southern half of the state, where some areas experienced record temperatures. All plants and vegetation experience heat stress during extreme daytime and nighttime temperatures like Texas experienced over recent weeks. Heat and inadequate soil moisture can stress plants, damage their cell membranes and disrupt metabolic efficiency during processes like photosynthesis and respiration, said Lee Tarpley, Ph.D., AgriLife Research plant physiologist, Beaumont.

But the combination of high daytime and nighttime temperatures can also economically damage commodity crops, especially during sensitive growth periods like pollination and flowering.

Tarpley said the heat wave was rough on late-planted rice along the Coastal Bend. Yield potentials were high following good spring rains, but the heat arrived at a sensitive development stage for some fields – pollination. High temperatures can also negatively impact the viability of pollen, which can influence how the ultimate crop sets and fills out.

Similar setbacks are occurring in cotton fields that were setting bolls during the heat wave. Stressed cotton plants were aborting bolls in an attempt to hang on as heat indexes near 120 degrees put plants in survival mode, said Josh McGinty, AgriLife Extension agronomist, Corpus Christi.

Cotton crops were having difficulty withstanding the heat over the previous three weeks without adequate moisture, he said. Boll losses were especially bad in dryland fields where soil moisture levels have continued to decline. But even irrigation has not been enough as nighttime lows rarely dropped below 80 degrees.

McGinty said high nighttime temperatures were not allowing cotton plants to shed the heat, which was causing plants to increase respiration. Increased respiration takes resources away from developing bolls.

“Small bolls are the first that the plant will sacrifice when energy reserves are depleted, but if the trend continues, larger bolls will be shed,” he said. “That shedding is evident with small bolls littering the ground in cotton fields.”

Not all the news about the arid conditions was bad. Larry Stein, Ph.D., AgriLife Extension horticulturist, Uvalde, said cantaloupe and watermelon fields in the Winter Garden and Central Texas were producing high-quality, super-sweet fruit. Irrigated vines were thriving, and brix counts were rising under the dry, hot conditions. Brix is the measurement of sugar in fruit.

But overall, Stein said conditions are declining, even for irrigated crops. Heat is not the problem though, it’s the lack of moisture.

“Vegetation is starting to burn up,” he said. “If you can maintain sufficient moisture for plants then they can cool with transpiration from the leaves, but the problem I see with the heat is stress and the other problems like spider mites and aphids, and everything takes its toll.”

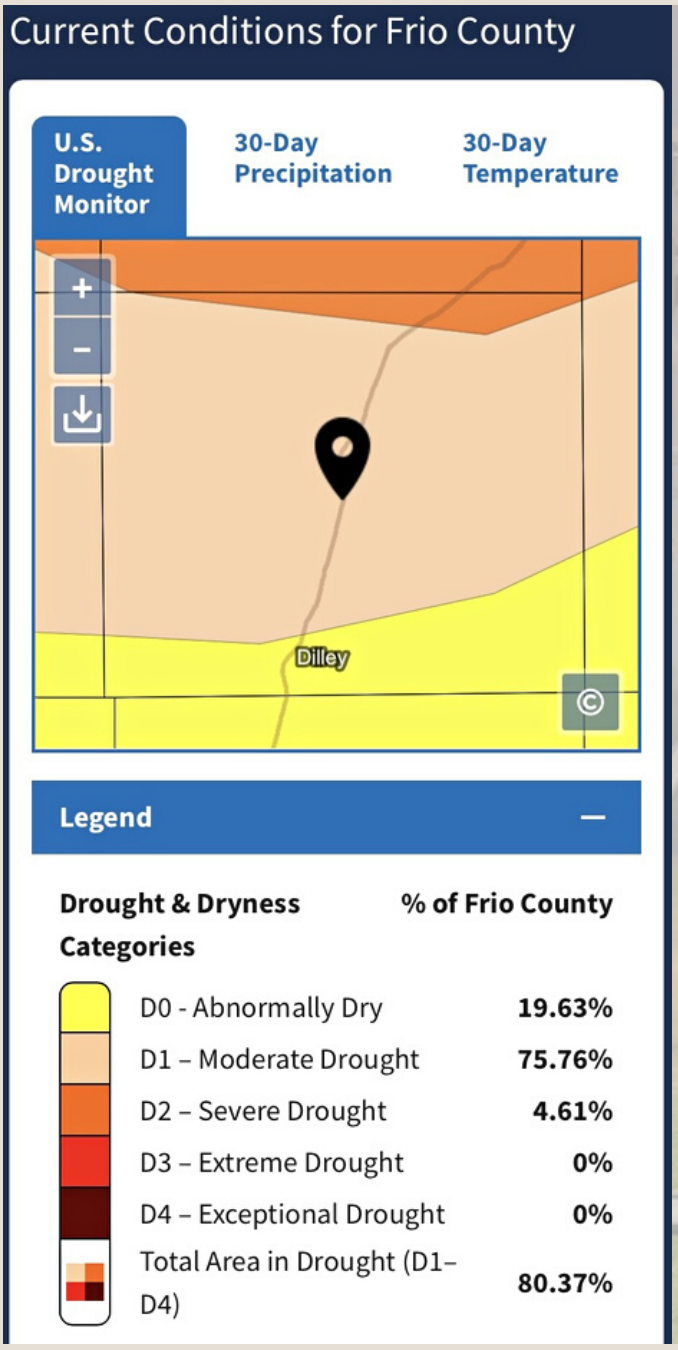
FARM & RANCH - agrilifetoday.tamu.edu

Heat impacting livestock production

The heat wave took a toll on more than just crops. Jason Cleere, Ph.D., AgriLife Extension beef cattle specialist, Bryan-College Station, said cattle performance in high temperatures typically declines. Higher nighttime temperatures make it a challenge to get their core body temperature down. Their grazing may also reduce as they try to avoid activity in the sun.

Cleere said Texas heat shows the importance of choosing cattle adapted to more tropical conditions like breeds with Brahman influence. Forage production for hay, silage and grazing was very good over the last month, Cleere said. Producers were having problems with delays due to rain and excess moisture prior to the heat wave, but the arid conditions were sapping soil moisture levels quickly.

Cleere said it is critical that cattle have adequate shade and fresh water during hot conditions. A cow can drink 20-40 gallons of water per day, depending on the moisture in the grass they are consuming. Cattle should have enough shade to spread out and cool down. “A small shade structure where they can all barely fit under might be worse than no shade if they’re piled up,” he said.



Weekly Crop Report - South Region

Topsoil and subsoil conditions continued to deteriorate due to the wind, heat and no precipitation. Cotton was suffering from extreme heat and lack of moisture. Most cotton fields were about 70% open bolls, and some later planted fields were displaying 35% open bolls. Grain sorghum harvest was almost done, and corn harvest was about 60% done. Some late-planted grain sorghum fields were yet to be harvested, and some were expected to be plowed under because they did not make a crop. The sesame crop was starting to mature. Cotton was about two weeks away from the start of harvest, and some producers were still irrigating and hoping for higher yields. Citrus and sugarcane crops were being irrigated. Hay producers were baling and irrigating meadows for future cuttings. Cattle not feeding calves were in good condition, but the cows with calves looked thinner. Cattle prices remained high. Supplemental feeding of livestock continued. Pastures were rapidly deteriorating. Considering the circumstances, livestock and wildlife still looked good. Range cubes, protein/mineral/molasses and hay were being fed to livestock. One sale reported increased volumes of all classes of beef cattle and strong demand. Cattle prices were high at two local markets. Feed prices continued to be high at local feed stores. Wildlife were being provided supplemental feed and water.

FARM & RANCH - agrilifetoday.tamu.edu

-PEANUT POINTERS-

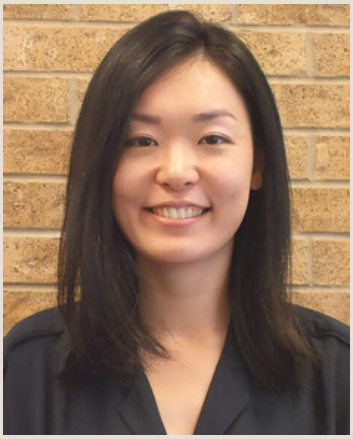
Scout Weekly to Adjust Plans Depending on Moisture Level

"We have received good precipitation through May, which has reduced drought intensity in the Southwest. However, the West Texas region remains under drought conditions. This region has received only an inch and a half of rain since the beginning of 2023.

While temperatures have been milder than they were in 2022, more rainfall is needed to maintain good soil moisture for the optimum development of peanuts. Depending on the amount of precipitation and humidity levels, production plans may need to be adjusted accordingly.

The higher the precipitation and humidity levels, the more pest issues are expected. Although many of our growers are using preventative fungicide programs, weekly scouting is needed to adjust these plans as necessary.

Growers in areas with high precipitation need to carefully monitor weed infestations and treat them accordingly. It is important to scout fields, especially as the crop transitions to flowering and pegging, where yield potential can be greatly affected by the biotic and abiotic stress factors.



EMI KIMURA
Texas A&M AgriLife Extension
State Extension Peanut Specialist

Learn more: https://peanutgrower.com/

2023 Peanut Variety & Peanut Breeding Trials

Photo Credits: Tech Farms

FRIO COUNTY RESULT DEMONSTRATION PROJECTS:

Result demonstrations and applied research projects are effective teaching tools and are used to address the agricultural issues and program needs of the county. Frio County Extension Agent, Brianna Gonzales had the pleasure of working again with Texas A&M AgriLife Research of Stephenville during the month of July as 2023 Peanut Variety Research Plots were put down at Tech Farms and Gary Boyd Farms in Pearsall, Tx. A Peanut Herbicide Trial is also being conducted along with these applied research efforts with Texas A&M AgriLife Research of Corpus Christi. The entire team is extremely excited to disseminate the results during our upcoming 2023 South Texas Peanut Growers Association Annual Peanut Tour set for September 28, 2023.

2023 Multi-County Insect & Turf Grass Management Workshop

PROGRAM HIGHLIGHTS:

The 2023 Multi-County Insect & Turf Grass Management Workshop was held on Thursday, July 27, 2023. This event was hosted by Atascosa, Frio, and Wilson counties. Attendees and producers were educated on topics by Bob Ducote (Envu), Noel Troxclair (CEA- Uvalde), Manuel Chavarria (Extension Turf Grass Specialist), and Young-Ki Jo (Extension Specialist) which included disease management, insect control, nematode & root rot, varieties updates, and weed management followed by a field tour. Special thanks to Capital Farm Credit (meal sponsor), Texas A&M AgriLife Extension, and Envu for making this event a great success!

Frio County Extension Agent Brianna Gonzales wins 2023 TCAAA Award

AWARD HIGHLIGHTS:

Congratulations to Frio County Extension Agent, Brianna Gonzales, as she received the 2023 Texas County Agricultural Agents Association-Communications Award (2nd Place Newsletter) for her monthly Frio County Agriculture & Natural Resources Newsletter. Ms. Gonzales is pictured with TCAAA President Mr. Rogelio Mercado as she received this award at the 2023 TCAAA Conference in Wichita Falls, Tx.

TEXAS A&M AGRILIFE EXTENSION

BEAT THE HEAT CATTLE WORKSHOP

ATASCOSA-FRIO-MEDINA-UVALDE

AUGUST 23, 2023

HONDO COMMUNITY CENTER

1014 18TH ST, HONDO, TX 78861

CHECK-IN 8:00AM—WORKSHOP 8:30AM - 2:30PM

Topics

- ***Sustaining Pregnancies During Drought Conditions***
  - *Dr. Bruce Carpenter, Extension Livestock Specialist*
- ***Nutrition Decisions***
  - *Dr. Karl Harborth, Extension Livestock Specialist*
- ***Prussic Acid and Nitrates in Forages***
  - *Dr. Thomas Hairgrove, Extension Veterinarian*
- ***Increasing Your Stocking Rate Through Brush Control***
  - *Dr. Megan Clayton, Extension Range Specialist*
- ***Market Updates***
  - Seth Crain, Hondo Livestock Auction
- ***FSA Updates***
  - *Klint Koenig, Medina County FSA*

Thank you to our Sponsors

CAPITAL FARM CREDIT

HELENA®

Mumme's

LYSSY & ECKEL FEEDS

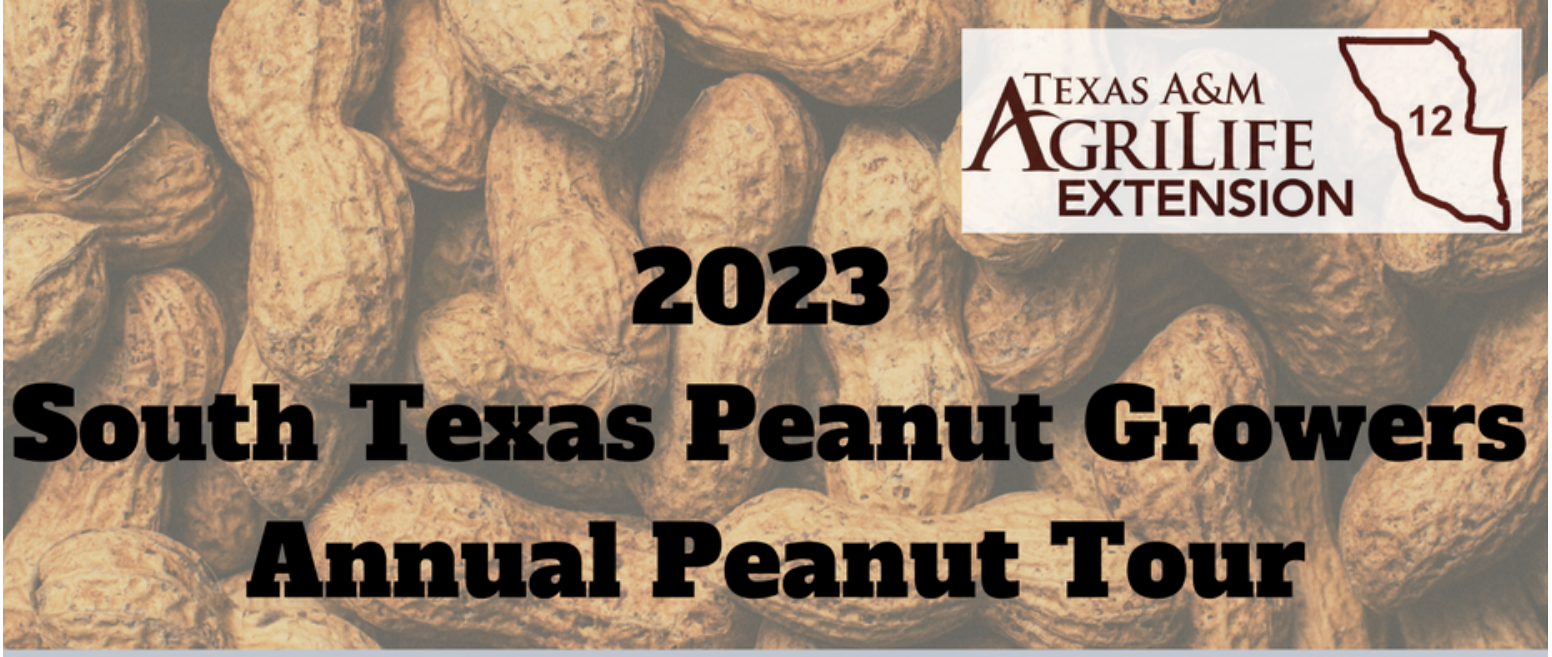
Registration: $15/person (lunch included)

RSVP no later than August 17th by contacting the Medina County AgriLife Extension Office at 830-741-6180

This workshop will be offering

1 General CEU

for Pesticide Applicators



2023
South Texas Peanut Growers Annual Peanut Tour

THURSDAY, September 28, 2023

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

PROGRAM:

- Registration will start at 8:30AM & the program will begin at 9:00AM.
- Topics to be covered include 2023 Texas A&M AgriLife Peanut Breeding Trials & Upcoming Releases, Peanut & General Weed Control/Problem Weeds, and 2023 Peanut Variety Performance.
- 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.
- Lunch will be served at 12:30PM.

*(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 830-505-7474 at least 12 days before all programs for assistance).

***Please RSVP by Sept. 27, 2023 with Brianna Gonzales, Frio County Extension Agent at (830) 505-7474 or Dale Rankin, Atascosa County Extension Agent at (830) 569-0034.**

For more information please contact:

Brianna Gonzales-

Frio County Extension Agent, at

(830) 505-7474

brianna.gonzales@ag.tamu.edu.

Frio County Texas A&M AgriLife Extension