

AG & NATURAL RESOURCES

Connecting West Texas Farmers & Ranchers
with Texas A&M AgriLife Extension

2020 - A Year Full of Challenges and Triumphs!

2020 has been an interesting year to say the least and, no matter what your personal or political views are, I think we can all agree on a few things as we start reflecting on a year that the history books may never be able to adequately capture!

If there is a silver lining to COVID-19, it has to be that more than ever before, people realize agriculture is essential! At the beginning of the COVID-19 pandemic I traveled to California. First, if you have never been to California and seen the agriculture operations I suggest you add it to your bucket list, it is that amazing. Second, with states shutting down left and right due to COVID-19 it was amazing to see the agriculture industry at its finest, continuing to work to feed and clothe the world. While many of us in the agriculture industry may not have the most glamorous or high-paying jobs, we have one of the MOST IMPORTANT jobs there is. This pandemic has highlighted that our food doesn't come from the grocery stores it comes from the hard working Americans who grow and raise it. Agriculture is and always will be essential - even when we aren't in the middle of a global pandemic.

It has been a challenging year for everyone but the great thing about being a part of the arguably greatest industry is that we every day - global pandemic or just a normal day of the farm/ranch - have always been able to adapt and overcome. We are resilient and have many years of practice with dealing with problems -- I have no doubt that we will be able to solve the many problems that 2020 have thrown at us.



ON THE LINE WITH AGRILIFE

Join us on the 3rd Tuesday of each month at 8:30 AM for "On The Line with Agrilife"! AgriLife Extension agents and specialists will share a brief presentation that will give an update on relevant information followed by a Q&A session for participants to ask agents/specialists questions. Participants can join virtually online or via teleconference. Get Reminders About Upcoming "On the Line with AgriLife" Programs by Texting @OTLWA to 81010!

Upcoming Topics:

October 20th - Wildlife

November 17th - Beef Cattle

December 15th - Texas Ag Law Year in Review with Tiffany Dowell Lashment - Extension Ag Law Specialist

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For more information about West Texas Farmer and Rancher Programs go to:

<https://valverde.agrilife.org/connecting-west-texas-farmers-and-ranchers-with-extension/>



Diagnostic Guidance: Keep Cattle Hydrated and Healthy

BY: MALLORY PFEIFER

TEXAS VETERINARY MEDICAL DIAGNOSTIC LABORATORY

It's hot and getting hotter. Each summer in Texas, farmers and ranchers are on the gambling side of the weather. Hoping for an appropriate level of rainfall to water cattle and crops. Although most of the state currently is not experiencing drought-like conditions, the Texas A&M Veterinary Medical Diagnostic Laboratory encourages cattle producers to be vigilant during periods of drought or drought-like conditions.

Water Deprivation

The most obvious method of mitigating cattle losses due to water deprivation is to ensure they have access to clean and plentiful water sources. To remain healthy in hot weather, a 1,000-pound heifer may need to drink about 20 gallons daily. The lack of rain also may lead to far less forage growth. In normal years, green forage may provide some of the daily water requirements for a grazing cow. In drought years, forage becomes much drier and the amount of water available from forage will lessen. To avoid water deprivation, ensure water is readily available to your cattle daily. Check the pumps that draw water from wells. Make sure troughs and tanks contain water. Ensure nipple waters in barns are working properly. Avoid holding cattle in pens that lack water sources for long periods of time, and do not work cattle in the heat of the day. Ensure cattle know where to find water. Cattle are creatures of habit. If their preferred tank or trough dries up, animals may ignore other distant watering points in their pasture. When introducing cattle to new pastures, drive the animals to the troughs or tanks. Make sure weaned calves know where to find water. Watch the cattle to ensure they are drinking adequately.

Water/Salt Intoxication

When cattle become excessively dehydrated, sodium levels increase in all tissues, including the brain. If dehydrated cattle find water and drink too much too quickly, the liquid will rush to their brains. As pressure builds in the brains, cattle may develop instability or seizures, or may die from what is known as water/salt intoxication. Salt intoxication does not mean the animal is getting an excessive load of salt, but rather the sodium concentration is increasing in the body because the animal is deprived of adequate water. If cattle become dehydrated, they need to drink water immediately-but only in small amounts. If the trough is empty, put a few inches of water in the bottom. Let all cattle drink at once to create competition for the water. Then repeat several times with 30 minutes between each watering until their thirst is satisfied. Monitor water intake and keep it gradual.

Poor Water Quality

Hot summer days take their toll on ponds and tanks. As water sources dwindle during a drought, water may become concentrated with salt and other inorganic materials. Unpalatable water may cause cattle to avoid troughs or tanks, leading to deprivation and dehydration. Test water for high concentrations of sodium, calcium, nitrates, magnesium, salts and sulfates. If concentrations are high, new sources of fresh water must be provided. Warm stagnant water also may encourage the growth of blue-green algae, some of which are toxic. The algae often concentrate on the downwind side of a pond. Dead rodents, birds or fish along the downwind side of a pond may indicate the presence of blue-green algae that could harm cattle. However, the first indication of blue-green algae could be one or more dead cattle. Even during a drought, toxic weeds may thrive along the edges of a water source. Look along the shorelines of tanks and ponds for toxic weeds, such as small-headed sneezeweed or knotweed and control grazing to avoid toxic weeds.

To learn more about testing options, visit the Texas A&M Veterinary Medical Diagnostic Laboratory or call the College Station laboratory at 888-646-5623 and schedule a consultation with a veterinary diagnostician.



Sheep & Goat Update

This article is an excerpt taken from “Reid’s Ram-blings”, a monthly article written by Dr. Reid Redden, Associate Professor and Extension Specialist for Sheep and Goats. You can read more of his “ram-blings” and subscribe to his monthly newsletter by following this link.

“I’ll call this next part, “Lessons from the Facebook Frontier.” Our page has around 10,000 followers, which in all reality is not that many, but it is enough that we expect each of our posts to be seen by several thousand folks. There is potential for us to put something on Facebook and by the next day it has been seen by the same amount of people that attend an Aggie football game. Wait a week and that might equal all the people who watched the football game. For those of you who wish to use social media platforms to promote agriculture (or any business, really), we have a little advice. Here is what we have learned what to do and not to do –

- 1) DO allow, and encourage, comments on your posts. This creates interaction and promotes sharing and discussion of the information, and all around is beneficial. DO NOT get caught up by negative comments. Inevitably, someone will say something a bit “snarky”, or even worse, and it is very easy to dwell on. We typically brush off comments that are obviously foolish. Best case scenario is when a fellow ag producer defends you with honesty and integrity.
- 2) DO include photos in your posts. Pictures connect with people significantly more than just words. We (humans) believe what our eyes see but are more likely to question or ignore what we read or hear. Pictures are worth more than a thousand words online and often a simple, or no caption, are even required. Bonus points for pictures of animals. Double bonus points for baby animals. If you are working livestock, definitely describe what and why you are doing.
- 3) DO post about the drawbacks and negatives of farm and ranch lives. Seeing the “other side” of the story is usually appreciated by viewers as everybody is faced with positives and negatives within their careers and by you showing (and describing) your adversity it helps to create a sense of relatability. DO NOT Describe your problems and how it is somebody else’s fault. Describing a situation, showing both sides of the story, and letting others draw their own conclusions is infinitely more powerful.
- 4) DO share, comment on, and promote posts by fellow agriculturalists who have similar messages as you. Regularly posting on your page to maintain a steady stream of interest can be exhausting if you are trying to develop new content daily. Often by sharing posts or interactions with others you are able to publish new posts that are equally as impactful without the need to create something new by yourself. DO NOT post or share articles or content from others without vetting their source. The saying “not everything you read on the internet is true” needs to be amended to “almost nothing you read on the internet is true.”
- 5) DO go live and share videos. Social media is crowded with people who have found the success of posting photos. But most people are terrified of being behind a live camera. Viewers recognize this and are more attracted to videos. If a picture is worth a thousand words, live video is worth a million words. Once we stepped into the world of Facebook live, our audience grew tenfold. Do invest in equipment to stabilize the camera and drown out the wind noise. This is far from an exhaustive list of how to be successful through social media promotion, mostly because we have not figured out the perfect formula ourselves. New technology generates excitement amongst its users and provides everybody a voice to share their views and stories. You have a great story; so tell it to the general public or someone else will tell it for you. “If you want something done right; do it yourself!”



Control Weeds in Your Pastures with Rotational Grazing

BY: DAKOTA KEMPKEN - GLASSCOCK COUNTY ASSISTANT EXTENSION AGENT-ANR

Controlling weed growth and spread is a constant battle for producers when managing improved pastures. Overgrazed land can only make this problem worse, as target forage species, such as bermudagrass or ryegrass, are not able to grow properly due to the intense grazing pressure caused by continuous grazing. Overgrazing allows undesirable weed plants to grow and spread in the place of desired forage. “Overgrazing is the most common cause of weed problems in pastures,” according to Charles Stichler, Eric Prostko, and Steve Livingston, associate professors and extension agronomists and professor and extension agronomist with the Texas A&M University System. “At least a pound of grass can be grown for every pound of weed controlled.” There are a variety of methods available to producers and landowners to manage for weeds on their property, but there is one method that is often overlooked that can not only help curb the spread of weeds in your pasture, but also improve the overall health and forage yield of your pasture as well. This can be achieved by looking at alternative grazing systems, specifically rotational grazing.

Rotational grazing is a grazing system that involves subdividing a pasture into multiple smaller pastures, or “paddocks,” and rotating your livestock through each paddock to allow recently grazed sections a rest period. This rest period is essential for the health of desired forage plants, as it allows them to regrow, rebuild nutrient content, and establish a deeper root system, which will help the plant bounce back from grazing pressure and better survive droughts. Continuously grazed pastures do not allow the plants to rest and regrow and will oftentimes prevent the plant from regrowing at all (Stichler, et al.). This is what allows weeds to spread and choke out your desired species. Producers should utilize this rest period to eliminate present weeds while forage can regrow and take the weed’s place. This rest combined with effective weed control can potentially increase the forage yield of a producer’s pasture. According to the article, Pastures for Profit: A Guide to Rotational Grazing by the USDA NRCS, “Rotational grazing also can

increase the amount of forage harvested per acre over continuous grazing by as much as two tons dry matter per acre” (Undersander, et al.). When managed effectively, rotational grazing offers more benefits than just weed control. Rotational grazing is known as an intensive grazing system because deciding when to move livestock is dependent on the height of forage after grazing, and stocking rates are heavily evaluated. As a rule of thumb, animals should be moved into a new paddock when forage reaches about four inches in height after grazing (Undersander, et al.). Because of this, the state of forage should be checked daily to ensure livestock are rotated on the appropriate day and overgrazing is avoided (Stichler et al.). How many paddocks should be installed is up to the producer and the pasture in question, as there are multiple factors to determine paddock set-up, including established fencing, water sources, etc. When setting up paddocks, fencing can either be permanent or temporary to allow the producer to change the layout of their system as they see fit.



Reshaping your grazing management plan into a rotational grazing system is intensive, but the outcome of a rotational system will prove to be an overall benefit to improved grazing land by helping prevent the spread of weeds, and improve the overall forage quality and yield of your pasture. Consult with your local county extension agent for guidance in setting up a rotational grazing system on your property.

Stichler, C., Prostko, E., & Livingston, S. (n.d.). Managing Warm Season Improved Pastures. In Extension Education in Austin County. Retrieved from <https://austin.agrilife.org/agriculture/crops-soil/managing-warm-season-improved-pastures/>

Undersander, D., Albert, B., Cosgrove, D., Johnson, D., & Peterson, P. (n.d.). Pastures for Profit: A Guide to Rotational Grazing. Retrieved from https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1097378.pdf

Photo source: <https://agriflifeextension.tamu.edu/library/ranching/rangeland-risk-management-for-texans-patch-grazing-and-sustainable-rangeland-production-2/>



COVID-19 and recession cut cotton demand

AGRILIFE TODAY - MAY 27, 2020

Cotton producers face an uncertain market future as demand for cotton and cotton products, like apparel, tumbled due to COVID-19 stay-at-home orders and economic recession, said a Texas A&M AgriLife Extension Service economist. John Robinson, Ph.D., AgriLife Extension cotton marketing specialist, College Station, said cotton and the industries that touch it are sliding alongside the economy. The cotton market's post-pandemic recovery could last into late 2021 due to reduced demand during a recession and a subsequent oversupply. Retail apparel sales numbers dropped 79% from March to April, Robinson said. Two contributing factors have been bad for sales of retail apparel and trickled down to cotton markets, Robinson said. First, sheltering-in-place mandates meant stores closed and people were not making retail purchases, Robinson said. Second, gross domestic product, which measures the value of all final goods and services produced, is negative in the U.S. and globally, indicating a recession. Millions of Americans have lost their jobs, the economy slowed, and people are spending their money on necessities rather than discretionary items like clothes, he said. Recession affect on cotton Robinson said during recessions consumers will often shift spending on food to buy cheaper items like ground beef versus a ribeye steak. But a recession makes the cotton market especially sensitive to economic boons and busts. "Historically, if you plot a recession, cotton consumption moves together alongside it," he said. "When times are tough, clothing is discretionary. People will put off buying new clothes until times are better. That makes cotton more vulnerable than any other ag product I can think of." Robinson said the export market has been "decent enough," but suspects those numbers are being propped up by China. The Chinese government supports cotton prices by buying up reserves. "They ordered 100,000 bales of cotton," he said. "But they're just holding them. At this point they're not spinning them into yarn." A major apparel producer like China holding a glut of U.S. cotton worries Robinson about the 2020 season and 2021 marketing year. Reduced demand going forward will likely reflect in slower export sales in 2021. U.S. Department of Agriculture demand forecasts for total consumption have steadily dropped since March and reflect a slowdown and excess supply, he said. Meanwhile, the USDA's preliminary estimate for U.S. cotton acres released March 31 was 13.7 million acres. The cotton acreage estimates won't be updated until June, but Robinson said expectations are that the number will be closer to 12 million-13 million acres. The USDA reported cotton farmers planted 13.7 million acres in 2019, a 3% reduction from 2018. Beyond the pandemic response Despite the reduction in acres, the expectation for 2020-2021 is that the U.S. will have more cotton than it needs. Futures market prices, which have ranged between 48 cents per pound to 58 cents per pound in the last few months, will likely not improve. By comparison, the futures market price for 1 pound of cotton was 70 cents in January, Robinson said. According to AgriLife Extension budget calculations, most farmers' break-even price, which is the cotton cash price needed to cover input costs alone, is 60-70 cents per pound, depending on individual costs and eventual yield. Cash prices generally fall 4-8 cents below futures market prices. "If we end up with excess cotton, it will continue to trade in that low range, because I don't see any fundamental economic reason for it to rise," he said. Robinson said federal price support mechanisms, along with additional funding from the Coronavirus Aid, Relief and Economic Security Act, should get farmers to next season. He believes the lag, both in economic and logistical terms, could mean cotton markets won't return to normal until Christmas 2021, if COVID-19 is controlled beyond the initial outbreak. "If we have a vaccine and all the assurances that we've got it licked medically, we might see the economy start picking back up at a rapid pace," he said. "There has to be demand for products, and the lag will likely take months when you're talking the global cotton supply chain and people having confidence and ability to spend money. The last thing on an unemployed person's mind is new apparel."



THE KEY STRATEGIES TO SURVIVING DROUGHT

Drought management is a strategy; however, the key to surviving drought is having a flexible plan do with the different circumstances of drought. Here are some key strategies to devising and plan and surviving drought.

Step 1. Prioritize your strategic ranch goals.

To form an effective plan first determine your desired end point. You need to develop specific, measurable, attainable and trackable goals for your operation.

- Maintaining the ranches value and equity if land sales become necessary
- Preventing long-term damage to forage
- Maintaining livestock financial equity
- Keeping the integrity of a breeding herd intact

Step 2. List available resources to use during a drought

It is important to identify these resources and make quick decisions if necessary

- Hay or other feed sources
- Grazing pastures to send livestock to
- Potential buyers and or marketing options for livestock reduction

Step 3. Selecting the appropriate enterprises

Drought effects various ranches in different ways. Makes sure you have a appropriate mix of livestock classes for the frequency of your drought. In West Texas where droughts are more common than not It is a good strategy to have a stocker animal. Often in less severe droughts these animals can be sold without sacrificing the integrity of your breeding herd. Diversity of income on your ranch can help you pull through the most severe droughts.

Step 4. Developing a plan for each of your Enterprise.

One of the most crucial is developing a plan for each of your enterprise (cattle, sheep, hay, etc...)

Develop production calendars to determine when to make critical decisions

- Know which months have the most forage production
- Plan for a systematic stock reduction feeding strategy when the lack of rainfall is at a critical level.
- You should inventory your forage every year and plan
- Plan a strategy for dangerously poisonous plants as well

Step 5. Plan for Resource flow

From the financial standpoint of the ranch you need to know the lowest level of production your ranch must have to cover costs, overhead expenses and cash flow needs. It is important to develop a cash reserve before you must make critical cost reduction decisions.

Step 6. Implement and monitor.

Monitoring the supply and demand of resources by taking inventory is key especially in forage production, which is the most limiting factor during a drought. It is near impossible to forecast 100 percent accuracy of rainfall, and as drought worsens you will need to monitor and make decisions more frequently to maintain your goal. Formulate a stock reduction strategy before the drought season begins. There is no one who can predict the severity or the length of a drought so it is important to devise a good plan that can be adjustable for every situation.

- Include records of your decisions and the consequences
- Establish phot point monitoring.

Step 7. Evaluate and adjust once the drought is over.

Just like a storm a drought will run its course and once the drought is over it is important to evaluate the plan you implemented and note the parts that worked and what did not work and make adjustments for the next upcoming drought the key is to always have a plan well ahead of time.



Rainwater Harvesting

MATLIN SAIN: PRESIDIO COUNTY EXTENSION AGENT

Are you interested in conserving water and using a more sustainable approach to water your backyard or garden? Rainwater harvesting is by far the most sustainable approach when it comes to conserving our precious resource: water. Conserving Rainwater does not have to be difficult. It is quite simple and can be customized to your garden or backyard and to whatever your water needs are. Landscaping is the most popular use for rainwater harvesting because it requires little to no chemicals for treatment and the maintenance is easy to complete. However, if you do plan to use your rainwater for personal use, there are extra steps that you will need to take to ensure your harvested water is safe to use within your home. The basic components of a rainwater harvester are:

Roof or Catchment Area:

- Metal roofing is recommended, however regular asphalt shingles will work. The goal is to avoid contaminants from the roof going into your water container
- Slope Of Roof: The steeper your roof, the quicker water will run-off. A steeper roof is suggested to avoid water from sitting still on the roof as this could cause algae or bacterial growth
- Sizing of a Catchment Area: Calculate how many gallons of water you can catch by using
- this calculation below:

$$\begin{array}{ccccccc} \text{Harvested} & = & \text{catchment} & \times & \text{rainfall} & \times & 0.623 \\ \text{water (gal)} & & \text{area (ft}^2\text{)} & & \text{depth} & & \text{conversion} \\ & & & & \text{(in.)} & & \text{factor} \end{array}$$

Gutters and Downspouts:

- Gutters: Generally, gutters should be 5 inches wide. However, if you live in an area that is known for heavy rainfall, you will need wider gutters and more suitable downspout
- Downspouts: Rule of thumb is one square inch of downspout area for every 100 square feet of catchment area

Storage:

- When storing your water, it is important to factor in the above equation to determine how many gallons of water you will be harvesting
- Use a storage container that does not allow light to filter into your tank to prevent algae growth
- Find a safe, level place to put your container where animals or young children cannot be trapped

Treatment:

If you plan on using your harvested water for personal use, you will need to do the following:

- Roof water Quality: It is important to know if there are specific contaminants on the roof or within the roof structure that could impact your water quality. These could be microbiology, chemical, or debris
- Pre-Storage Treatment: Use a filter within your tank to prevent debris from being collected within the tank. It is also good to clean your gutter system often to prevent debris from clogging your gutters

Distribution:

- Components of distribution include pipes or lines, and pumps if necessary to move water to your desired locations
- Typically, water lines or a water hose works effectively for watering your garden or backyard For more information about Rainwater Harvesting contact your local County Extension Agent or go to <https://rainwaterharvesting.tamu.edu/rainwater-basics/> for the basics on Rainwater Harvesting.



Path to the Plate: Onions

KAILEY SCOTT: CROCKETT COUNTY FCH AGENT

DID YOU KNOW?

- Onions are one of the oldest vegetables in continuous cultivation dating back to at least 4,000 BCE. The ancient Egyptians are known to have cultivated this crop along the Nile River.[1]
- Onions are among the most widely adapted vegetable crops. They can be grown from the tropics to subarctic regions. This adaptation is primarily due to differing response to day length. Unlike most other species, day length influences bulbing in onions as opposed to flowering.1
- If used as green onions, they may be picked from the time they are pencil size until they begin to form bulbs.[2]
- Onions will keep longer if not washed until just prior to preparation. Whole, dry bulb onions should be kept in a cool, dry, dark place with plenty of air movement. Do not store onions in a plastic bag. Refrigeration is only necessary when trying to extend the shelf life of sweet or mild onion varieties with high water content. Whole peeled or cut onions should be refrigerated after purchasing 4
- Onions are fat free, saturated fat free, cholesterol free, very low in sodium, high in vitamin C, and a good source of dietary fiber.

AgriLife Extension's Dinner Tonight has an array of great recipes using onions, including Savory Onion and Mushroom Pork Roast, Skillet Gnocchi, and Black Eyed Pea & Jalapeno Pepper Salsa. For more creative and delicious recipes using onions and other wholesome ingredients, visit dinnertonight.tamu.edu/.

Savory Onion and Mushroom Pork Roast

- 20 fresh baby carrots
- 3 pound lean pork loin trimmed
- 1 cup button mushrooms chopped
- 1 cup baby portabella mushrooms chopped
- 1 large onion chopped
- 1/2 teaspoon Worcestershire sauce
- 1/4 teaspoon dried rosemary
- 1/2 teaspoon dried thyme
- 1/2 teaspoon black pepper
- 1 (10 3/4 ounce) can reduced sodium cream of mushroom soup undiluted
- 3/4 cup chicken broth reduced-fat, unsalted
- Optional: 1 tablespoon cornstarch, 2 tablespoons cold water

Directions: First add carrots to the bottom of a 5- quart slow cooker. Add roast to slow cooker. In a large bowl, combine mushrooms, onions, Worcestershire sauce, rosemary, thyme, pepper, soup and broth: pour over pork. Cover and cook on low for 8-10 hours or until meat is tender. In a small sauce pan, bring 1/2-2 cups of liquid from the slow cooker to a boil. In a small cup, combine cornstarch and water until smooth and add to sauce pan. Stir together until thickened. Serve pork and vegetables with gravy. If desired, sprinkle fresh-fried onions on top!

1. <https://extension.uga.edu/publications/detail.html?number=B1198&title=Onion%20Production%20Guide>
2. <https://aggie-horticulture.tamu.edu/vegetable/files/2013/09/EHT-037.pdf>
3. <https://dinnertonight.tamu.edu/recipe/savory-onion-mushroom-pork-roast/>
4. https://buyeatlivebetter.org/main_documents/factsheets/msu_extension_food_fact_sheets/OnionFFS.pdf



PATH TO
THE PLATE

"Texas A&M AgriLife Extension is an equal opportunity employer and program provider."

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating