



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



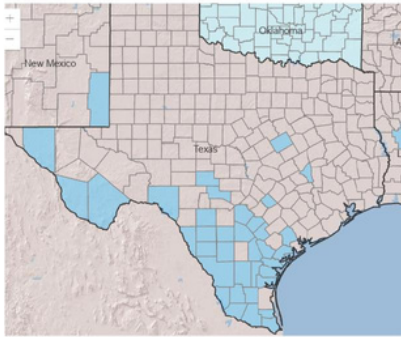
Rumen Acidosis in Cattle

- Rumen acidosis is a condition in cattle when pH in the rumen drops to low for normal rumen function and microbial growth.
- Acidosis can lead to reduced animal weight, liver abscesses, foot abscesses, founder, and death. Acidosis is most often caused by a sudden increase in feeds that contain a large amount of rapidly fermentable carbohydrates like wheat, barely, corn, oats, grain sorghum, wheat midds, rice bran, soybean hulls, and similar feedstuffs.
- To help prevent acidosis it is important to gradually increase the amount of these feeds in the diet. Also feeding whole corn is safer than steam flaked corn.

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

RANGELAND PLANT IDENTIFICATION

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

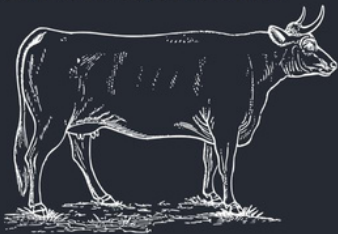


Distribution Map Credit: USDA Plants Database @ plants.usda.gov

Buffelgrass Distribution

Buffelgrass is found throughout most of South Texas and the far western counties. It is a non-native, invasive grass that is highly adaptable, growing across a multitude of soil types.

Buffelgrass was introduced to South Texas in the 1940s following extreme drought conditions, when people were seeking drought tolerant grasses that would help reduce soil erosion and provide forage for livestock. Best seeding method research was conducted in the 1970s and by 1976, buffelgrass was 90% of the seeded rangeland south of San Antonio.



Buffelgrass easily seeds in disturbed areas. Seed germination occurs at low water potential and the highest seedling production occurs when seeds are on the soil surface and up to 0.4 inches below the soil surface. Seeds are easily disbursed by wind, water, animals, humans, & vehicles.

Buffelgrass

Pennisetum ciliare

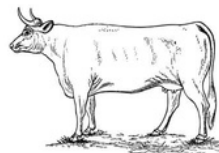


The Buffelgrass inflorescence or seed head looks like a long, cylinder-like feather duster!

Plant Identification Tips

The buffelgrass inflorescence or seed head looks like a long, cylinder-shaped, purplish colored feather duster. The spikelets, or flower/seed containing structures, have dense purplish colored bristles. When the spikelets are removed from the rachis, or the central stem of the inflorescence, it is rough to the touch and has a zig-zag pattern.

It's a perennial, non-native invasive bunch grass that is typically 3 feet in height. The bunchgrass looks messy because stems branch a lot at the nodes (like our elbows). The leaves are about 0.1-0.4 inches wide and can be 4-18 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 membrane and white hairs around the leaf collar that often extend on the upper side of the leaf blade. When dormant, turns golden-brown.



Livestock & Wildlife Value

moderately palatable forage for livestock during growing season.
can provide cover for wildlife



ISSUE WITH BUFFELGRASS

Monoculture Decreases Diversity

Non-native, invasive grass that out-competes other species, forms monocultures, which reduces diversity of plants, insects, and wildlife species. Easily seeds across a variety of soil types and can double in percent cover every 2-3 years.

Parts of this article were derived from:

1. Scherner et al. 2017. <https://www.jstor.org/stable/26420886>
2. USFS, 2014. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5410107.pdf

Stacy L. Hines, Ph.D.

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FORAGES FOR BEEF CATTLE

David Bade and Donald J. Dorsett*

Pasture forages for beef cattle can be roughly divided into five categories—warm-season perennials, warm-season annuals, cool-season perennials, cool-season annuals and legumes for pastures. Each of these forage types can meet the nutritional requirements of beef cattle when they are at their peak production (Fig. 1). However, none are able to satisfy the nutritional needs of a cow with calf or a growing animal, which are at their low point in production.

WARM-SEASON PERENNIALS

Warm-season perennial pastures tend to be the best grasses for a cow-calf operation because they do not have to be planted each year. Once established, these pastures continue to produce for many years. The annual grasses are the most expensive grasses for forage because they must be planted each year, the seed is costly, there is a limited production season and they require high rates of fertilizer.

Warm-season perennial pastures, such as bermudagrass, bahiagrass or kleingrass, generally have a longer growing season than cool-season plants. Since they are perennial plants, they regrow from roots each year. Because they do not have to re-establish yearly, they maintain top forage production for longer periods. They also tend to be lower in digestibility and in protein because of the fiber buildup during the warmer part of the growing season.

Warm-season perennial grasses respond well to fertilization and, with heavy fertilization, can produce large amounts of hay or grazing per acre. If fertilized and managed properly, they work well in almost any livestock production program.

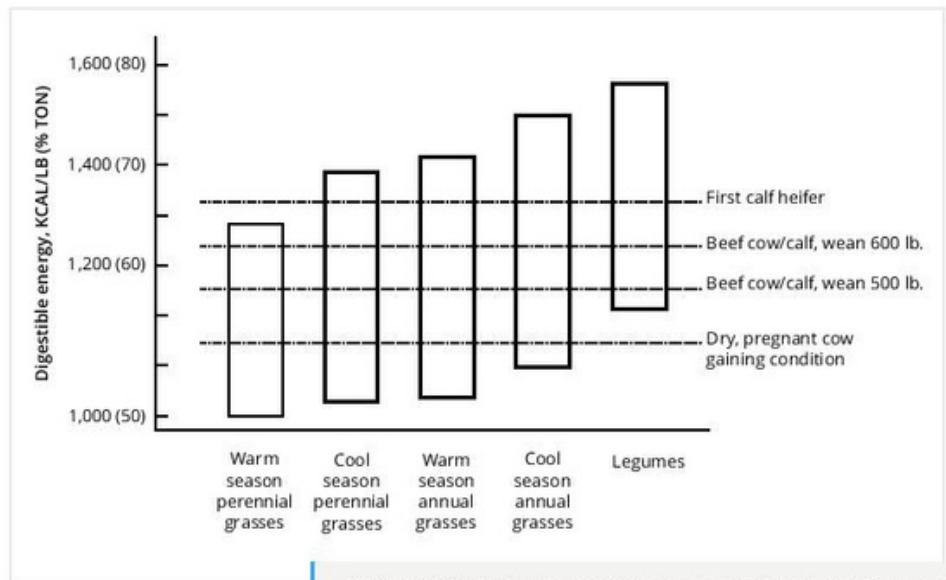


Figure 1. Variation in energy content of various forages relative to the requirements of various classes of cattle.

WARM-SEASON ANNUALS

Warm-seasoned annual grasses, such as the sudans or forage sorghums, play definite roles in livestock production. Being annual plants, they are expensive because land must be prepared and seeded annually. They offer higher quality (digestibility) grazing than perennial warm-season plants, but their production period is shorter. They use less fertilizer, will serve as temporary pasture and maintain a relatively high carrying capacity of two or three animals per acre for 30- to 45-day periods. Their prime role in forage production, however, is for high quality hay.

COOL-SEASON PERENNIALS

Cool-season perennial plants have limited use in Texas. Tall fescue and tall wheatgrass are the only cool-season perennial plants that adapt to Texas climate. They generally do not offer high quality nutrition for maximum animal performance.

*Professor and Extension Forage Specialist and Associate Professor Emeritus

FORAGES FOR BEEF CATTLE (continued)

David Bade and Donald J. Dorsett*

COOL-SEASON ANNUALS

Although cool-season annual plants, such as oats, wheat, rye, barley, triticale and ryegrass, are expensive pastures because of the cost to establish each year, they are high in nutritional value. Winter annuals are best adapted to stocker operations or to cow-calf combination programs. Because of their expense, annual pastures may not be the best types of pastures for dry pregnant cows, which can be maintained very well on less expensive forages such as high quality hay.

LEGUMES

Legume forages might also be considered for a livestock operation. Temperate legumes include clovers, medics, peas, vetch and alfalfa. They can be overseeded into permanent pastures or seeded with winter annual pastures. Legumes have the unique ability to fix their own nitrogen if they are properly inoculated (nitrogen-fixing bacteria is added to the legume seed before planting). They require high levels of phosphorus, potassium and, in acid soil, lime. Cool-season or temperate legumes produce most of their growth during the late winter-spring period, when they are very useful in beef cattle operations. Warm-season or tropical legumes, such as cowpea, soybean, and peanut, can provide high quality forage during the summer. However, they are used as a salvage crop in drought years when they do not “yield” well as a row-crop.

Learn more:

<http://agrilifelearn.tamu.edu/>

A YEAR-ROUND FORAGE SYSTEM

No grass meets the production and quality requirements of livestock year-round. Consequently, livestock producers can benefit by combining two or more forage plants into a forage system. By growing adapted summer and winter forage species, livestock producers can furnish grazing for most of the year. Although this requires management and planning, it reduces hay and feed costs.

Sodseeding or overseeding legumes or small grains in conjunction with a warm-season perennial pasture offers several advantages over clean-tilled or prepared seedbed cool-season pastures:

- ▶ Sodseeding allows a longer productive period for any given acre of ground. The cool-season grass may not be as productive as on a clean-tilled seedbed, but using with a warm-season perennial plant, the sodseeded pastures will extend the spring green-grazing period by as much as 60 days.
- ▶ If winter pastures are adequately fertilized, the base grass or warm-season grass also benefits.
- ▶ Sodseeded pastures offer a higher level of nutrition and enhance animal performance.

Any warm-season perennial grass (bermudagrass, bahiagrass, kleingrass or even native grasses) can be overseeded. The problem is competition in late spring between an overseeded pasture and a warm season perennial pasture that is beginning to grow. There is direct, heavy competition in this overlap growth period for nutrients, moisture and sunlight. During dry springs, an overseeded winter pasture takes the elements for growth and might completely retard the growth of a warm-season grass. Heavy competition with the warm-season grasses may result in a thinning of native or bunch grass stands when they are continually overseeded.

Rainy weather helps soil moisture levels

Recent rainy weather improved soil moisture conditions for many wheat and cool-season forage producers, but most of Texas remains below normal rainfall, according to Texas A&M AgriLife Extension Service experts

John Nielsen-Gammon, Ph.D., state climatologist in the Texas A&M College of Arts and Sciences Department of Atmospheric Sciences, said parts of the state received beneficial rainfall over the past week and that cooler temperatures will help soils retain the moisture.

“The Thanksgiving weekend was a lucky shot,” he said. “As late as Tuesday, the computer models were saying that the storm could move through quickly and miss us, could stall in an ideal spot, or slide south. It ended up stalling in an ideal spot, producing a broad swath of precipitation across the middle of the state.”

Midland to San Angelo, Corpus Christi, McAllen and northeastern areas of the state received good rains that should provide decent soil moisture for the rest of the year, Nielsen-Gammon said. The largest totals for the week were in southeastern Texas.

Port Arthur received 5.95 inches and Baytown 5.43 inches. Elsewhere in the state, Carthage in northeast Texas recorded 5.06 inches, Santa Anna recorded 4.1 inches, and several stations near Brownsville recorded 3-4 inches.

But the outlook for the rest of the winter is dry, he said. There is around a two-out-of-three chance of below-normal rainfall for December through March, with the worst odds of receiving rainfall toward the southern and western parts of the state.

Temperatures will also be above normal most of the time, but there will be cold air farther north waiting to blow into the state occasionally, he said. The effect of La Niña tends to wear off by April or so, but more importantly, La Niña itself will probably dissipate by then.

“It’s about time; this is the third La Niña winter in a row,” he said. “It’s time to be hopeful that the pendulum will swing in the other direction so that an El Niño might develop over the summer and tilt the odds in favor of a wet winter next time around.”

Rainy weather improves regional conditions

Reagan Noland, Ph.D., AgriLife Extension agronomist, San Angelo, said the recent storm systems delivered good moisture throughout most of the region. Most locations received 2-3 inches, with some catching up to 4 inches of rainfall.

Noland said the moisture will help planted wheat and any cover crops planted by producers in the region. “Everyone got rain. It was slow and was able to soak in, and the winter crops will certainly benefit from the moisture,” he said. “We are still in a deficit for the year, but we are in much better shape than two months ago.”

Much of the Rolling Plains received 1-2 inches of rain that has improved soil moisture conditions in wheat fields, said Emi Kimura, Ph.D., AgriLife Extension agronomist, Vernon. The rains helped moisture conditions but hindered the region’s cotton and peanut harvests.

Rainy weather helps soil moisture levels

Kimura said the moisture should sustain the wheat crop through December but that additional rains will be needed into January and February. Most producers utilize the wheat for grazing and decide in late February whether to continue utilizing fields as forage or taking the crop to grain.

“A lot of producer decisions regarding wheat will come down to weather and grain prices going forward,” she said. “But so far, so good. At least there is some optimism. It was depressing to talk about any crop a few months ago because it was so dry.”

Much of the region had not received significant moisture since the August rains that dried quickly under triple-digit temperatures and high winds, Stein said. Water tank and pond levels remained a concern, but producer optimism about wheat and winter forages is higher.

Stein said the moisture will help the spectrum of plant life from trees and landscape plants to pastures and crops in the field. Many producers planted wheat and ryegrass before the rainfall and that the moisture could influence future plantings.

“It was as dry as I have ever seen it after that August rain,” he said. “It dried out so quickly and was very dry and hot. It’s no longer powder dry. People talk about getting a million-dollar rain, well this one was probably a billion-dollar rain.”

Learn More by Visiting:
AGRILIFETODAY.TAMU.EDU

Texas Crop and Weather Report – Nov. 30, 2022

SOUTH:

Moisture levels were short to very short under cool weather conditions. Range and pasture conditions were poor to very poor, with some improving where there was rainfall. The summer crops were finished for the season, including the coastal Bermuda grass fields. Peanut harvest continued and was close to completion. Pecan producers reported another normal harvest this year. Winter oat plots looked promising. Farmers and ranchers prepared seed beds and planted fall crops. The little moisture received in some areas was adequate to get seeds to sprout and cooling temps aided plant growth. In some areas, livestock and wildlife were doing well thanks to improved range conditions, but in other areas they required supplemental nutrition. Cattle prices at local markets were consistent, while some cattle producers were preparing for the winter months by reducing their stock. Cattle were generally in good condition, with some livestock producers putting out extra hay and taking advantage of the cooler temperatures to work their cattle. Hay producers completed their baling for the fall. Feed prices for cattle and deer were high, and corn demand increased due to deer producers and hunters supplementing their wildlife.



DECEMBER GARDEN CHECKLIST

Howdy & Happy Holidays!



Don't forget to give your landscape a steady amount of water, through irrigation or by hand, if there is not adequate rain.



Continue to enjoy the fairly widespread fall color this year; more than likely another result of the crazy year as most things seemed to be about two weeks late this season.



There is still time to select and plant such annuals as pansies, violas and ornamental cabbages and kale; if you have deer pressure they will quickly devour these plants!



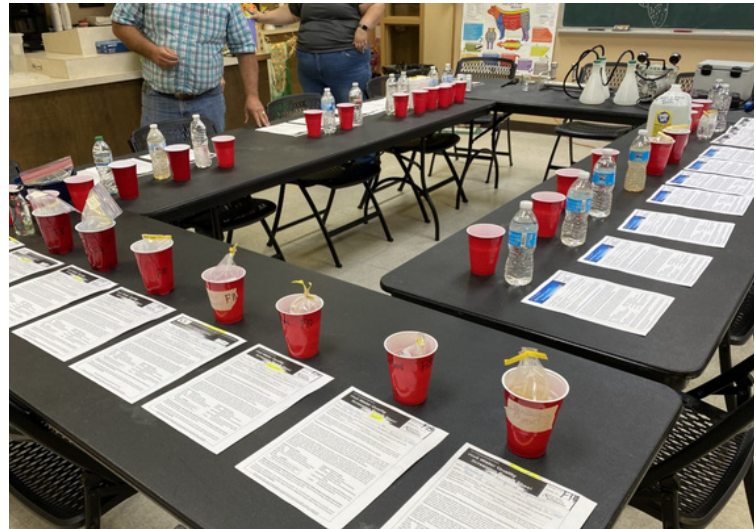
Learn more:

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

TEXAS A&M
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2022 Frio County Ag & Natural Resources Program Highlights

SEE Y'ALL NEXT YEAR!





Merry Christmas



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

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