

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, Cannon Republic, AgriLife Today, Aggie Horticulture, and the Texas A&M Beef Cattle Browsing, who contributed and provided the educational information for this educational newsletter. For any further questions regarding your agricultural operation, please contact the Frio County Extension Office (830) 334-0099, located at 400 S. Pecan St. Pearsall, Texas, or e-mail brianna.gonzales@ag.tamu.edu. Visit the Frio County AgriLife Extension website at <https://frio.agrilife.org>.



Sincerely,

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



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Helpful Texas A&M AgriLife Extension Service Websites:

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

BQA TIP



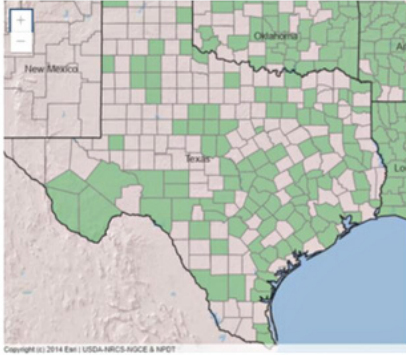
PAY ATTENTION TO HOW FAST YOUR CATTLE ARE ENTERING THE CHUTE

- When working cattle through a squeeze chute steps should be taken to prevent cattle from hitting the head gate with a lot of speed or force, this can result in bruises and other issues.
- If cattle are moving faster than desired, the head gate can be partially closed and then reopened to slow down the animal prior to catching them.
- For some animals it may work better to keep the head gate closed and allow them to enter the chute and close the tailgate behind them.
- Once stopped the head gate can be slowly opened to catch them.

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

RANGELAND PLANT IDENTIFICATION

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



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

Crowpoison Distribution

Crowpoison is found in yards and rangelands in many Texas counties. However, it is not usually seen in croplands due to plowing. It is one of the first plants to emerge and flower. In fact, it can be seen flowering most months of the year. I have seen this species blooming in my neighborhood since January. Just a few here and there at first but now that it has warmed up a little, they're everywhere.

Crowpoison Look-a-Likes

There are other plant species that are very similar. Click on the scientific name to see images and read about two look-a-like species.

1. Runyon's Onion (*Allium runyonii*) has the distinct garlic/onion smell and typically blooms during the spring, not most of the year like crowpoison. Flowers of Runyon's onion are white and/or pink in color.

2. Star-of-Bethlehem (*Ornithogalum umbellatum*) also lacks the distinct garlic/onion odor, just like crowpoison. However, Star-of-Bethlehem is missing the two bracts at the base of the flower stalks.

Crowpoison

Nothoscordum bivalve

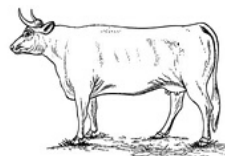


Plant Identification Tips

Crowpoison is a native, perennial forb that has a bulb - just like most of the lilies it is related to. It is a low growing plant that is typically 5-22 inches tall. Another common name for this plant is false garlic. Crowpoison does not have a distinct onion or garlic odor when the plant stems and leaves are crushed.

Crowpoison is a monocot, meaning it has grass-like, narrow leaves that are around 6-16 inches long.

The flowers have six tepals, or petal-like structures, with a green to brown stripe in the center. The tepals are mostly white with a small yellow-colored section at the base that can be seen on the inside. It has six yellow stamens, male organ with pollen, and a greenish-yellow pistil, female organ. It also has two **bracts**, leaf-like structures, at the base of the flower stalks.



Livestock & Wildlife Value

Livestock and wildlife will graze, but small portion of diet. Important early pollen and nectar source for insects, bees, and butterflies.



Fun Fact

Common Name from Cherokee Legend

Crowpoison gets its common name from a Cherokee legend. Legend states that they used this plant to make a poison to kill crows that consumed their corn crops. In reality, it is not certain if this plant is poisonous to crows or even to humans. However, some sources report it is poisonous to humans.

Parts of this article were derived from:
<https://www.wildflower.org/expert/show.php?id=6740>

Richardson and King. 2011. *Plants of Deep South Texas*, 1st Ed., Everbest Printing Company.

Stacy L. Hines, Ph.D.
Assistant Professor, Rangeland Habitat Management Specialist
361-265-9203 | stacy.hines@ag.tamu.edu

Soil moisture key to cropping conditions around state

When it comes to soil moisture, Texas agriculture is divided into “haves” and “have-nots.”

Texas A&M AgriLife Extension Service agronomists Calvin Trostle, Ph.D., in Lubbock, and Ronnie Schnell, Ph.D., in Bryan-College Station, said the soil moisture conditions have changed dramatically for parts of the state, while other parts continue to deal with various levels of drought. East Texas and far West Texas, including El Paso County, are faring well and are considered out of the drought, according to the U.S. Drought Monitor. Some parts, especially large swaths of Central Texas and the Panhandle, are mired in extreme, or D3, to exceptional, or D4, drought levels, according to the drought monitor. D3 drought levels indicate major crop and pasture losses as well as widespread water shortages and restrictions. D4 levels indicate exceptional widespread crop and pasture loss, and water shortages in reservoirs and wells at emergency stages. Trostle said there are stark differences around the Panhandle, which range from moderate to exceptional drought levels. But even within the drought monitor’s picture of Texas’ water and soil moisture conditions, the local reality may be as bad or better than expected. “There is a difference between the dark red versus red, but there are always the possibilities that local conditions could be very different,” he said. “If a producer gets 3 inches of rain over a few weeks, they are in a much different situation than what the map shows. We don’t get into or out of droughts quickly, but soil moisture is a big factor in the drought monitor and what growers are monitoring when planning their crop decisions.”

Soil moisture defined by rainfall deficits or deluge

Texas State Climatologist John Nielsen-Gammon, Ph.D., Bryan-College Station, said dry parts of the state have been experiencing below-normal rainfall and drought conditions for years. As a result, conditions across the state reflect the long- and short-term weather patterns. The state is no longer stuck in a La Niña pattern, which means Texas should expect normal chances for rain. La Niña delivers above-normal temperatures and below-normal rainfall for most of the state. But Nielsen-Gammon said many areas are so deep in drought that it will take time and multiple rain events to return to normalcy. Over the past 90 days, most of the western half of Texas has received 50% of its normal rainfall while parts of deep East Texas have received 150% of their normal rainfall. “East Texas normally gets a lot more precipitation in winter anyway, but that pattern was exaggerated this winter,” he said. “There is really no dividing line to the drought. Most of it has been going on for years, and what we see around the state reflects the long-term rainfall deficit versus short-term rainfall that might improve the situation some.” Nielsen-Gammon said there is a decent chance for precipitation in drier areas of the state over the coming weekend.

Soil moisture: Catch it. Keep it. Reap it.

Trostle and Schnell are hopeful rainfall will materialize in their respective regions. Brazos County and surrounding counties are not experiencing drought, according to the monitor, but Schnell said the topsoil needs moisture after a dry spell followed heavy rains in December and January. “We have good deep moisture, but if the current dry spell moves into another week, it could impact sorghum plantings,” he said. “We caught really good rains over winter, but it’s been dry for weeks now, and the topsoil is dried out.” Schnell said most corn plantings in southern and Central Texas started in late February due to warmer-than-normal soil temperatures, and that seeds were planted deeper in some fields to reach enough moisture to get the crop started. Trostle said some farmers might like clean, tilled fields, but that goes against principles he recommends to operations in drier areas or dealing with drier-than-normal conditions. His three-phase rule of thumb for rainfall is “Catch it. Keep it. Reap it.” Catching and keeping moisture represents added crop value, Trostle said. For example, in cotton, 1 inch of incremental water equals about 60 pounds of fiber yield per acre, or around \$48-\$50 per acre with current prices. “Do you have stubble or a cover crop that can catch that rainfall and slow down the water enough to soak in and prevent it from running off the field?” he said. “Keeping it starts with minimizing tillage because you can lose half an inch of rainfall by disturbing the soil. That could be \$25 of cotton per acre. Reaping it is just taking advantage of the moisture and doing everything possible to maximize its impact on your yield.”

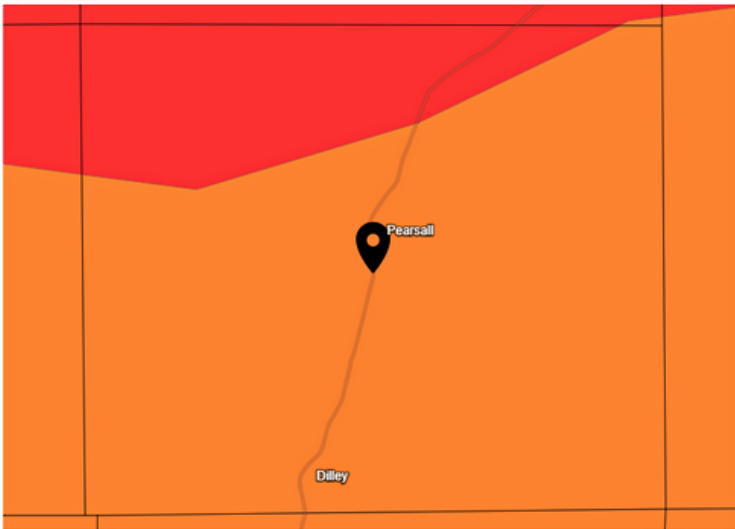
Soil moisture key to cropping conditions around state (continued)

Weekly Crop Report - South Region

Temperatures were abnormally warm with windy conditions. Wheat and oat crops continued to progress under irrigation and will begin to head soon. Corn and sorghum planting continued, with most corn acres planted already with slow germination reported. Cotton planting was underway, with some fields already emerging. Some cotton and sorghum plantings were delayed as producers waited for rain, but other cotton and corn fields were being dry planted. Pasture and rangeland conditions continued to improve, but forage availability was poor, and livestock supplemental feeding continued. Farmers with irrigation were watering crops. Citrus, sugarcane, onion and cool-season vegetable harvests continued. Citrus farmers were irrigating trees where water was available, and some will be harvesting their late-season oranges soon.

FARM & RANCH - agrilifetoday.tamu.edu

U.S. Drought Monitor



U.S. Drought Monitor for Frio County



Source(s): NDMC, NOAA, USDA
Updates Weekly - 03/14/23

Drought.gov

D0 - Abnormally Dry



- Producers begin supplemental feeding for livestock
- Planting is postponed; forage germination is stunted; hay cutting is reduced
- Grass fires increase

100.00%
of Frio County (D0-D4)

D1 - Moderate Drought



- Dryland crops are stunted
- Early cattle sales begin
- Wildfire frequency increases

100.00%
of Frio County (D1-D4)

D2 - Severe Drought



- Pasture conditions are very poor
- Soil is hard, hindering planting; crop yields decrease
- Wildfire danger is severe; burn bans are implemented

100.00%
of Frio County (D2-D4)

D3 - Extreme Drought



- Soil has large cracks; soil moisture is very low; dust and sand storms occur
- Row and forage crops fail to germinate; decreased yields for irrigated crops and very large yield reduction for dryland crops are reported
- Need for supplemental feed, nutrients, protein, and water for livestock increases; herds are sold

19.69%
of Frio County (D3-D4)

D4 - Exceptional Drought



- Exceptional and widespread crop loss is reported; rangeland is dead; producers are not planting fields
- Seafood, forestry, tourism, and agriculture sectors report significant financial loss
- Extreme sensitivity to fire danger; fireworks restrictions are implemented

0.00%
of Frio County (D4)

Prepare Beds, Prune, & Plant:

Tips from AgriLife Extension



With the official start of spring, now is the time to prepare your garden for the future flowers, vegetables, and plants you'd like to enjoy through the upcoming season and into the summer and fall months. "If you have not already done so, now is the time to prepare final beds for planting flowers and vegetables," said Larry Stein, Ph.D., horticulture specialist at the Texas A&M AgriLife Extension Service, Uvalde. "You may want to consider renting or buying a garden tiller to speed up the process; however, a strong back and a garden fork will still do an excellent job."

He said for every 100 square feet of bed area, work in a several-inch layer of either compost, pine bark or sphagnum peat moss, plus 5 pounds of a 3-1-2 fertilizer like 15-5-10. Pruning of evergreens and summer flowering trees and shrubs is typically completed in early March; however, it is best to take a wait-and-see approach this year, said Stein. Prune spring flowering trees and shrubs as soon as they finish blooming. Now is also a prime time to establish, renovate and/or aerate lawns. Stein, who is also an associate department head and professor within the Department of Horticultural Sciences in the Texas A&M College of Agriculture and Life Sciences, offered additional gardening tips for March.

Check your region's freeze date

See the planting guide on the Aggie Horticulture website for your area's average last killing freeze date. Remember, though, that killing freezes can occur after this date. Stein said North Texans still have time to plant seeds of their favorite annuals in flats to transplant outdoors when the danger of frost is past.

Keep an eye on tomato, pepper transplants

Often, tomato and pepper plants started outdoors from seed will grow so quickly that they will catch up with commercial plants in size within a few weeks. Stein said for many gardeners, this is the only way to obtain rare or heirloom varieties. But because this has been a winter with erratic weather patterns, it's best to keep an eye on young tomato transplants so that they may be covered if the threat of a late frost occurs. He also said gardeners shouldn't be in a hurry to set out young pepper plants. Wait until the temperatures seem to be settled.

Plant warm-season vegetables

Plant warm-season vegetables from seed. The planting guide can suggest prime planting times for corn, beans, squash and other vegetables.

Pot up to protect from frost, repot for summer color

Many gardeners opt to pot up their transplants in larger containers to grow a more extensive root system prior to planting and to make it easy to move the plants inside in case of a late spring frost. Repot overgrown container plants as well as plant containers of tropical plants for a stunning display of summer color.

Select and order plants

Now is the time to select and order caladium tubers, as well as geranium and coleus plants for late April and early May planting. Do not plant caladiums until soil temperature reaches 70 degrees.

Beware of what you buy

Beware of close-out sales on bare-root trees and shrubs. The chance of survival is relatively low on bare-root plants this late in the season. Your best bet at this time of year is to depend on container-grown or balled and burlapped plants for landscape use.

Prepare and plan for color

Start hanging baskets of petunias and other annuals for another dimension in landscape color. Plant dahlia tubers in fertile, well-drained soil. Blue plumbago can be planted now for season-long, low-maintenance color.

Fertilize flowers

Fertilize roses every four to six weeks from now until September. As camellia and azalea plants finish blooming, fertilize them with three pounds of azalea-camellia fertilizer. Check mulch on azalea and camellia beds and add where needed.

Divide summer and fall perennials

Dig and divide summer and fall flowering perennials just before they initiate their spring growth. One attractive begonia plant can yield a number of others through careful rooting of stem cuttings.

Thin wildflower seedlings

Now is a time to thin larkspur and other wildflower seedlings. Plants will bloom much better if thinned to about 4 inches apart. Transplant or share the extras with gardening friends. Enjoy spring-blooming wildflowers and make a note to not mow until they have set and realized their seed. Wildflowers will respond to fertilizer just as other plants do.

Collect oak leaves for mulch

Continue to collect oak leaves to amend your planting beds; they are slow to break down, so they make an excellent mulch the first year but will significantly help the tilth of the soil in the coming years.



Learn more:

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



2023 South Texas Peanut Growers Association Annual Meeting

PROGRAM HIGHLIGHTS

2023 South Texas Peanut Growers Association Annual Meeting (hosted by Frio & Atascosa counties) was a great success! Special thank you to our speakers, Emi Kimura- State Extension Peanut Specialist, Bob Whitney- Extension Organic Program Specialist, John Cason & Michael Baring- Texas A&M AgriLife Research of Stephenville and College Station, Josh McGinty & James Grichar- Texas A&M AgriLife Research of Corpus Christi, Landon Yosko- Evergreen Underground Water Conservation District, and Sara Nicholson- Frio County FCH Agent. Big thank you to Sesajal for sponsoring the meal and to all the producers/attendees for joining us!





CANNON REPUBLIC

Paul Harvey was spot on when he said, “despite all our accomplishments, we owe our existence to a six-inch layer of topsoil and the fact it rains.” With these critical resources at the front of mind, Cannon Republic was founded with the mission to regenerate the soil, better utilize available water, and preserve farmer sovereignty.

This last year we saw many producers, particularly in South Texas, struggle with a lack of rainfall and a dramatic increase in the cost of fertilizer. Fortunately, as producers began retooling their operations to best utilize their water and inputs based on the weather, Cannon Republic has emerged as a solution that addresses both these issues.

Cannon Republic is a regenerative agriculture and environmental services business that provides natural certified organic products through our partnership with the largest, and only of its kind, biological carbon deposit in the United States. With the aim of reducing synthetic inputs, retaining water, and carbon sequestration, CR Foundation SB products provide the soil with a carbon heavy amendment, the highest quality humic acid in the USA, and 10-40 billion living microbes per gallon/tablespoon.

Our products have a long track record of increasing yields and reducing inputs for row crops, sod, hay, nurseries, and tree farms. By applying our products, we have demonstrated as much as a 50% reduction fertilizer use and 50% less nitrogen leaching into watersheds!

Our products were developed over the past two decades with the help of the foremost soil microbiologist Dr. Elaine Ingham, formally with Oregon State University, creator of the USDA soil biology primer, and now primary at the “Soil Food Web Institute” focused on regenerative ag around the world. In her words, “this is the best Humic Acid product I have ever seen and has some wonderful disease-suppressing bacillus.”

The unique histosol deposit, like peat moss, is composed of 94% carbon and has a low pH (3-5). Unlike peat moss, our source material contains 72 trace minerals, lignin, and high concentrations of microbiology. Additionally, unlike Leonardite derived humic acid which makes up a vast majority of the humate market, our source material contains 67.7% plant available humic acid compounds (humic, fulvic, and ulmic acids), is soft mined from the surface (6-8" at a time), and is never exposed to heat, pressure, or chemicals.

Companies like Chevron and Black Rock (owners of Archer Daniels Midland and Golden Peanut) are pushing for alternative drought tolerant crops that help their shareholders uphold their Environmental Sustainable Governance (ESG) goals. In addition to these renewable energy initiatives, we are also seeing many farmers adopting cover crops, strip till, and no till practices due to carbon-based incentives.

The largest contributor to the greenhouse gas (GHG) footprint produced by agriculture (30% of all GHG) comes from the manufacturing (33%) and application (50%) of synthetic fertilizers. The greatest way to combat GHG, across all industrial sectors, is by sequestering carbon in the soil. Additionally, for every 1% increase of carbon to the soil, you increase the soil's water holding capacity by 25,000 gallons of water per acre.

How can this help you? The high number and diversity of bacteria and fungus in CR Foundation SB increases plant nutrient cycling, increases water retention, reduces nitrogen leaching, protects against pests and pathogens, and is continually producing more carbon in the soil. The biology is complemented by humic acid that remediates heavy metals and aids nutrient absorption in plants.

We ask you to join us in the critical mission of improving soil, stewarding our water, and helping farmers flourish!

COME AND FEED IT

Written by:

Coleman Hemphill

CSO, Co-Founder

Cannon Republic

Coleman@cannonrepublic.com

325-226-4538



SPONSOR



TEXAS A&M AGRI LIFE EXTENSION

2023 South Texas Agriculture Symposium

Tuesday, April 11, 2023 8:00 am-2:30 pm

Hosted by Texas A&M AgriLife Extension - South Texas Based Specialists

Modifying Practices to Increase Success in 2023

- Tips for Ranching/Farming Financial Management
- Weather-Related Challenges for Horticulture Plants in 2023
- Plant Disease Basics: Why is my plant sick?
- How Weeds Adapt to Our Control Efforts
- Why Plant Phenology Matters in Rangeland Habitat Management
- Management to Promote Rangeland Soil Health
- Predator Management: Is it worth it?
- Considerations When Harvesting Game for Taxidermy
- Dealing with Desert Termites and Fall Armyworms in Pastures

(This event will be broadcasted live for all participants.)

2 General Pesticide Applicator CEUs!

LOCATION:

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

COST:

\$10 per participant (cash only)

RSVP:

Frio County Extension Office
Brianna Gonzales - CEA
(830) 334-2752

***Lunch Sponsored By:
Cannon Republic***

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PRIVATE WATER WELL SCREENING

Hosted by: Frio, Atascosa, La Salle, McMullen, Dimmit, & Zavala Counties
(Private water wells should be tested annually)

WHEN: Wednesday, April 19, 2023.

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

COST: \$15.00 per water sample
(Please bring water samples in by 9:00AM)

***Samples Screened For: Fecal Coliform Bacteria, Nitrates, Salinity, Hydrocarbons**

WATER SCREENING RESULTS PROGRAM

Do you know how to read the results of your private well water test?

WHEN: Thursday, April 20, 2023, at 6:00PM.

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

TOPICS: Bacteria Contaminates, Saline Levels, Hydrocarbons, Nitrates, and
Recommendations for each positive element.

Speaker- Joel Pigg, Extension Program Specialist, College Station.

**For More Information or RSVP: Brianna Gonzales, Frio County Extension Agent,
(830) 334-2752 or brianna.gonzales@ag.tamu.edu.**

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****For more information please contact:***

Brianna Gonzales-

Frio County Extension Agent, at

(830) 334-2752

brianna.gonzales@ag.tamu.edu

2023 Texas A&M
**Beef Cattle
Short Course**

Save the Date!

**August 7th - 9th, 2023
College Station, Texas**



Frio County Texas A&M AgriLife Extension