October 2022

# THE PANOLA EXTENSION

A Monthly Newsletter by the Panola County AgriLife Extension office

## UPCOMING EVENTS:

10/2-8: National 4-H Week
10/11: Last day to register for Junior 4-H Leadership Lab
10/16: Major Goat & Sheep Validation, 2-4pm, Beckville High School
10/18: 4-H Cookin' 5:30-7:00, Central Baptist Church
10/19: Panola County Food Show Entries Due
10/20: Panola County Hay Show, 6pm, Carthage Expo Center
10/21-22: Junior 4-H Leadership Lab, Woodlake
10/25: Major Breeding Heifer Validation, 6-7pm, Carthage Veterinary Hospital
11/1: Panola County Food Show, 4:30-7:00, Central Baptist Church
11/4: Major Livestock Show Entries Due
11/11: Veterans Day - Office Closed
11/15: 4-H Cookin' 5:30-7:00, Central Baptist Church
11/18: East Texas Beef & Forage Clinic, 8am-3pm, Henderson
11/20: Lamb, Goat, & Swine *(PCJLS & Major Swine)* Validation, 4-6pm, Expo
11/24: Thanksgiving Day, Office Closed November 23-25
11/27: Pen of Heifers Validation, 2-4pm
11/30: Breeding Heifers, Gilts, and Broiler entries due in office



**Panola County AgriLife Extension Service**

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## In This Issue:



TEXAS A&M AGRILIFE EXTENSION

# The Fed Continues to Raise Interest Rates: What Does it Mean For Farmers?

By: Kathy Bogardus, Senior Product Marketing Manager, FBN Finance https://www.fbn.com/community/blog/fed-interest-rates

As inflation continues to skyrocket, the Federal Reserve met once again to try to stabilize the economy. And as many analysts predict a possible recession, consumers are once more bracing for a rate hike of at least three-quarters of a point.

This is the third increase in less than 4 months as we saw a rate hike of 0.75% back in June and July. And as FBN's Chief Economist Kevin McNew predicted, the Fed is raising interest rates once again.

With inflation at the highest it's been in over 40 years, the Fed has to continue to try to curb this escalating situation. But the global market has been impacted by external factors like the ongoing conflict in Eastern Europe.

By increasing interest rates, the Fed is actively slowing down the economy which leaves the risk of recession higher than ever. And as the economy continues to shift, we turned to the experts to better understand this overwhelming issue.

## What should farmers focus on

We previously advocated for farmers to refinance and take advantage of the lower interest rates when they were available. If you locked in a lower rate but still need cash, we suggest you consider our Farmland Capital product. This program is similar to a second mortgage in that FBN will take a second lien position to whatever lien currently exists, which means that you won't lose that low rate interest loan.

Another option in an increasing rate environment is for farmers to consider locking in rates with longer terms. Farmers who can lock in rates for the next 10-30 years may have some certainty that they'll continue to remain profitable. And if rates drop, they can prepay and refinance at lower rates. Locking in for the long term may be the right thing to do now for many. Review our great land loan rates across a variety of term options.

With farm costs not going down anytime soon due to the cost of both inputs and fertilizer, it's good to look at ways to effectively run your operation. While the cost of fertilizer is likely to be elevated for some time, it's worth looking at adopting technology to make input usage more efficient. Thinking about strategic alternative investments to improve your ROI is a sound option.

## Is U.S. farmland at risk?

Farmland real estate has been a good long-term investment but with the uncertainties of the current economic climate, you might be wondering how this recent market turbulence will impact farmland values.

Farmland real estate is still holding value and there is strong confidence that it will continue to do so. Interest rates will have to get well above inflation rates and hold for a very long time before farmland values would be affected negatively.

Fortunately, farmland as an asset class is somewhat insulated from the turbulent U.S. economy. Recent data from the USDA shows U.S. farmland values actually increased 12.4% between June 2021 and June 2022, but the future of such values still remains uncertain.

[Learn more about how the economic shocks of 2022 are affecting farmland values in our recent FBN Research report. Unlock the free report today.]

Looking forward

While the '80s brought high inflation rates to the country due to energy and food price shocks that started in the '70s, the outlook for farmland values is not as dire as it was back then.

With interest rates well below current inflation rates and farmland valuations trending around fair value based on projected cash flows, there is still strong confidence in farmland values nationwide. Near-term global grain shortfalls from weather and war should further support farmland values even as the underlying investment calculus changes based on shifting interest rates.

And with the Federal Reserve now trying to get ahead of the curve, they risk creating a situation where rates are higher for longer than expected, causing longer term economic impacts. Finding the right balance is a precarious position for the Fed at the moment.

Source:

1. USDA Ag Land Values August 2022. 

# Health Literacy Month:

## *How to Evaluate Health Information on the Internet*

By Clarissa Moon
Adapted from the National Institutes of Health Office of Dietary Supplements

October is Health Literacy Month! Thus, it's a good time for a little refresher course on how to find trustworthy sources of information. While this article will focus specifically on websites, these concepts can also be applied to other sources like news/magazine articles, social media posts, and things like that.

The main things to keep in mind when evaluating a source of information are the 5 W's- Who, What, Where, When and Why.

WHO- Who runs the site? Who pays for the site? Who wrote the information presented? The more transparent they are with this, the better. Every website should be branded with the company information, clearly labeling who they are. Look to see if they have an "about" page where you can learn more about who works for the organization and their credentials. Bonus points if they have contact information for the author.

WHAT- What kind of page/organization is it? What information do they collect about their users? Any site asking for personal information should explain what they will and won't do with the information. It's a good idea to read both a website's cookie policy and privacy policy to see what information they gather about users and how it's used/stored. Also look at the language here. Is it unbiased and free of emotion? Does it include a lot of personal testimonies and first-person language? Are there spelling and grammar issues? Does the site include advertising that might influence content?

WHERE- where did they get their information from? Are the sources for text and graphics cited? Does this site link to/from other credible sources? Last but not least, look at the web address. Sites ending in ".edu" or ".gov" are excellent sources. ".Org" is usually nonprofits- possibly reliable, but you'll want to look at the site's mission/agenda (under why). ".com" sites are commercial/business and warrant a deeper look.

WHEN- When was the page last updated? Are there broken links? This could mean that they don't audit/update their website regularly. Lastly, look to see if they listed a date for the original posting, copyright or review. If there are references to other studies and articles, when were those published?

WHY- What is the purpose of the website itself and the organization behind it? Do they have goals or a mission statement listed? Is the information easy to read and understand? Does it provide useful information for you?

Last but not least, consider the big picture. What's the purpose of the article? Who is to benefit from the information provided? Does the article list opposing views and pros or cons of different practices? The internet is a great resource, but it is to be handled with great responsibility.

# Mouse Ear of Pecan

Lenny Wells
Pecan Horticulturist

https://extension.uga.edu/publications/detail.html?number=C893

## Introduction

Mouse ear of pecan is a growth abnormality resulting from a deficiency of nickel in the pecan tree. First reported in 1918, mouse ear was initially attributed to spring cold injury before bud break, and was later thought to be the result of a viral pathogen. At various times, the problem has also been considered a manganese deficiency or a copper deficiency. Only recently, the discovery was made that mouse ear indicates a severe nickel deficiency. The disorder occurs most frequently on newly transplanted trees in established orchards, but can also occur on sites where pecan has not previously been grown.

## Symptoms

Mouse ear first appears on the spring flush of growth. The most common symptom of mouse ear is a rounded or blunt leaflet tip. Affected leaves and leaflets are often smaller in size than healthy foliage. The rounded leaflet tips result from the buildup of urea to the point of toxicity in the leaf tissue. Nickel is required by the urease enzyme in plants for the efficient conversion of urea to ammonia. As a result, when nickel is at an insufficient level in the plant, urea is not converted as efficiently, and toxicity may develop.

Other symptoms of mouse ear include dwarfing of tree organs, poorly developed root systems, rosetting, delayed bud break, loss of apical dominance, necrosis of leaflet tips, and reduced energy storage by the tree. Symptoms may occur throughout the entire tree, or sporadically throughout the canopy, often evident only on a single major limb or terminal shoot. Mouse ear may consistently reappear from year to year, or may appear only occasionally, on the same trees. The degree of mouse ear severity within the tree canopy typically increases with canopy height.

A variety of abiotic and biotic factors may influence mouse ear. Severely affected orchards typically have high soil levels of zinc, calcium, magnesium, and phosphorous, but are low in copper and nickel. These orchard soils are also normally acidic and sandy in texture, with low cation exchange capacities. Nematodes are commonly associated with the roots of affected trees as well.

## Prevention

Mouse ear is easily corrected by the application of nickel as a foliar spray in mid-late April when the developing foliage is in the parachute stage. Severely affected trees may need another application 30 days after the initial spray and again in late September or early October to prevent mouse ear in the following spring flush. The fall application will ensure that nickel will be stored in the buds and stem tissues over the winter, where it will be available to the tree at bud break. When using foliar nickel sprays, be sure to follow all label directions.

## Cultural

*Recommendations*

In order to manage orchards for the prevention of mouse ear, the following steps should be taken: Monitor leaf tissue and soil samples regularly for the availability of nickel to pecan trees. At the present time, no set leaf sufficiency levels have been made for nickel, however research indicates that trees with nickel levels below 3 ppm often suffer from mouse ear symptoms. Growers should not allow nickel levels to rise above 15 ppm in pecan leaves.

*Do not make excessive applications of zinc* in orchards prone to mouse ear. Zinc competes with and inhibits the uptake of nickel by pecan roots from orchard soils. Foliar zinc should only be applied when zinc levels in the leaf are less than 50 ppm or when visual symptoms of zinc deficiency are present in the orchard. Repeated foliar applications of zinc to the orchard result in substantial accumulation of zinc in the soil, mainly concentrated around the base of trees due to the rinsing of foliar applied zinc down the scaffold limbs and trunk. Therefore, soil zinc levels should not be allowed to increase in sandy or acidic soils already low in nickel.

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*Maintain adequate soil moisture* at bud break. Since nickel is at relatively low levels in most orchard soils, and its absorption by the tree is among the lowest of many nutrients, it is important to maintain soil moisture in order to facilitate uptake.

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*Maintain soil pH at 6.5* for efficient uptake of available soil nickel.

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*Mouse ear prone* sites should not receive excessive or late applications of nitrogen, in order to ensure that senescing foliage can translocate nickel to bud and shoot storage pools prior to defoliation.

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*Avoid excessive applications of calcium* and magnesium to mouse ear prone sites. Most of the calcium and magnesium applied to orchard soils is applied in the form of dolomitic lime, therefore care should be taken not to over-lime orchard soils.

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*Carefully manage* phosphorous, iron, and copper levels in orchard soils, especially on sandy or acidic sites. These nutrients affect the uptake of nickel by pecan roots. Additionally, they may alter the availability of nickel within the pecan leaf.

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Figure 1. Pecan leaves exhibiting typical rounded, blunt leaflet tips.

Figure 2. Rosetting of pecan.

Figure 3. Necrosis of pecan leaflet tips.

Figure 4. Pecan tree suffering from nickel deficiency and mouse ear symptoms.

## *References:*

Wood, B.W., C.C. Reilly, and A.P. Nyczepir. 2004. Mouse ear of pecan: I. Symptomatology and occurrence. Hortscience 39: 87-94.
Wood, B.W., C.C. Reilly, and A.P. Nyczepir. 2004. Mouse ear of pecan: II. Influence of nutrient applications. Hortscience 39: 95-100.
Wood, B.W., C.C. Reilly, and A.P. Nyczepir. 2004. Mouse ear of pecan: A nickel deficiency. Hortscience 39: 1238-1242.

*East Texas*

# Beef & Forage Clinic

## Friday, November 18 | 8:00am-3:00pm

Rusk Co. Expo | 3303 FM 13 W | Henderson

RSVP by November 14 903-657-0376
Registration Fee: $25

**8:00am:** Registration Begins

**8:45am:** Welcome, Jamie Sugg, Rusk CEA-AG/NR

**9:00am:** Sandbur Identification & Control Using Pre-Emergent Herbicides in Warm Season Forages (1 Gen), Rob Brooks, Area Sales Manager, Bayer Range & Pasture

**10:00am:** Weed Control Considerations for Drought Recovery & High Fertilizer Prices (1 Gen), Dr. Vanessa Olson, Associate Professor & Forage Extension Specialist

**11:00am:** Break

**11:15am:** Horn Fly Identification, Insecticide Update & Control Using IPM Strategies (1 IPM), Lee Dudley, Panola CEA-AG/NR

**12:15pm:** Lunch

**1:00pm:** Aquatic Weed Identification & Control Using IPM Strategies (1 IPM), Ken Hale, CEO Boatcycle

**2:00pm:** Laws & Regulations Update (1 L&R), Lee Dudley, Panola CEA-Ag/NR

**3:00pm:** Adjourn

# Breast Cancer Awareness

By Clarissa Moon

When reading up on suggested breast cancer screening ages/times, I was surprised to learn that it's not as clear cut as I thought it was! There is no general consensus from the different agencies on when women should get screened and how often. Read the full story at cdc.gov, but the short version is that women aging 40-49 with average risk may want to get screened annually or biannually during these years. Women aging 50-74 years with average risk should get screened at least every two years (some agencies say once a year). Women aging 75 and over will want to weigh multiple factors when determining how to get screened. As it turns out, since mammography exposes patients to radiation (even though it's in very small doses), the repetition of this exposure can potentially cause cancer. Read more on this at cancer.gov

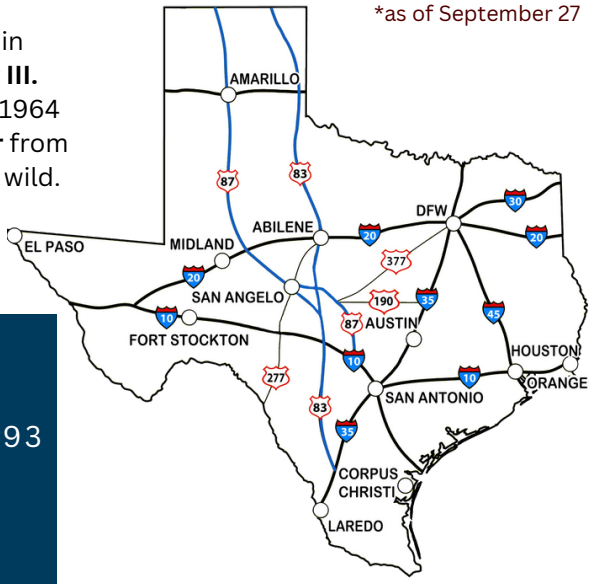
The bottom line is, every woman should make a screening plan with her doctor(s)! There are many factors at play with this including race, age, family history and more; and it's best to talk it over with the health care professionals to develop a plan. Also consider if you have insurance, what your plan will pay for when it comes to screenings. To learn more about risk factors for breast cancer and how you can manage your risk, view my article in the October 2021 Panola Extension or give me a call!


# WALK ACROSS TEXAS!

## So Far...Over 1,547 Miles Walked!

**The Moon Walkers** are in first place at **379 miles**! They're roughly in **Mountain Home, TX** which is the hometown for **Charles Schreiner III.** He started the **Texas Longhorn Breeders' Association of America** in 1964 to preserve the breed. Their numbers had declined to **1,000 or fewer** from the tens of millions in the late 19th century, when most of them ran wild.

*as of September 27




### Adult Teams:

**Moon Walkers - 379**
**Champions - 236.98**
**Team Winner - 230.95**
Panola Pig Parents - 221.21
Walking 9 to 5 - 154.10
Turner High Varsity - 134.93
Rotary Wheels - 76.35
Speedy Readers - 64
Tuner High JV - 49.95

Show Star

TEXAS A&M AGRILIFE EXTENSION

## 14th Annual East Texas Show Star Series

**Beef, Lamb, & Goat Clinic**
**Saturday, November 12, 2022**
**Rusk County Youth Expo Center**
**Henderson, Texas**

**Check-in 7-8 a.m.**

**Limit 1 Species**

**Rule, Registration, & Contact info**
**https://agrilife.org/etsss/**

**$25 per exhibitor by 11/5**

**$50 On Site Registration**

**Barns open at 4 p.m. on Friday, November 11th**

***No Out Of State Livestock***
**Bring Own Shavings**
**Generators Encouraged**



Show Star

TEXAS A&M AGRILIFE EXTENSION

**$15,000 in prizes and buckles!**

## Steer, Heifer, Goat, and Lamb Show

**Sunday, November 13, 2022**

**Rusk County Youth Expo Center**
**Henderson, Texas**

**Check-in 6:30-7:30 a.m.**
**Weight Cards due by 8 a.m.**

**$50 per animal Guaranteed 2 Rings**
**Limit 1 Species**

**Junior 12 & under**
**Senior 13 & over**
**Cattle - 8 breed format**
***No Out of State Livestock***

**Judges:**
**Sheep/Goats - Dr. Jeff Ripley**
**Dr. Billy Zanolini**
**Cattle - Dr. Joe Mask**
**Carl Muntean**

**Rules, Registration & Contact Info**
**https://agrilife.org/etsss**

**Bring Own Shavings * Generators Encouraged**
**Show Supply Trailer On Site**



# Animal Validation Dates

## Panola Co. Jr. Livestock Show:

**Steers*:**
Sept. 27, 6-7pm, Carthage Veterinary Hospital

**Market Barrow*, Lamb*, and Goat*:**
November 20, 4-6pm, County Expo Center

**Pen of Heifers*:**
November 27, 2-4pm, Location TBA

**Breeding Heifers and Gilts:**
All Entries turned into the office by November 30

**Market Broilers:**
All entries due to the Extension office by November 30

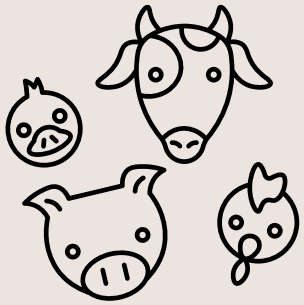
**Market Rabbits*:**
Entry forms due at Validation. February 2, 6-7pm, County Expo Center

## Animals attending a Texas Major Stock show:

**Registered Heifer*:**
Oct. 25, 6-7pm, Carthage Veterinary Hospital

**Market Barrow* & Breeding Gilts*:**
November 20, 4-5pm, Panola County Expo Center

**Market & Breeding Lamb* and Goat*:**
Oct. 16, 2-4pm, Beckville High School



***Denotes Animal must be present at the time of Validation.**

# NEW!!!

**Get the...**

# PANOLA COUNTY 4-H 2022-2023 Planner

**On our website or click here**

Titus-Coryell County 4-H Online

## PLANT ID CONTEST

**October 15 9:00-11:00**
**judgingcard.com**

OPEN TO ALL Texas 4-H & FFA Members!

**Registration Closes Oct. 7**

Junior- 3rd to 8th grade
Senior-9th to 12th grade

Fees: Individual $5 Team $20

The contest will include 40 plants that may be either grasses, forbs, legumes or woody plants from the master plant list.

# 2023 Project Fair

## Register By **FEB 1**

OPEN TO ALL Panola County 4-H, Clover Kids and FFA members, as well as students enrolled in art & photography classes or culinary/life skills classes!

Photography
Arts & Crafts • Foods
Fashion/Fabric/Fiber Arts
Floral Design
Educational Display • Clover Kids

Want to join in the planning group fun?
Just let Clarissa know!

## FEB 27 - MARCH 3

This is a TENTATIVE list and details are likely change between now and project fair. All rules are subject to change until the time of the event. Eligibility standards will be the same as those for Livestock Show. Exhibits must be a product of the past year's work (March 1, 2022- February 28, 2023)

# MAJOR

## Livestock Show

Entries Due **NOV 4**

Click Here to get entry forms!

LET US KNOW ABOUT YOUR

# Community Service

After you complete a community Service project LET US KNOW! Fill out the form on our website here!

# PANOLA COUNTY 4-H Food Show!

**NOVEMBER 1**

come & go 4:30-7:00pm

Central Baptist Church

*Family Life Center Building*

*More info on our website!*

**Entries Due Oct. 19**

**Click Here to Enter**

# PANOLA COUNTY 4-H CLUBS

**Beckville 4-H**
Club Manager: Brandy Dudley, 903-690-1108
3rd Monday, 6:00pm, Beckville Sunset Elementary School

**Carthage 4-H**
Club Manager: Kirstyn Jacks, 903-754-7506
4th Tuesday, 6:00pm, Expo Hall

**Fairplay 4-H**
Club Manager: Eric Pellham, 903-754-2582
2nd Monday, 6:00pm, Allison Chapel UMC in Fairplay

**Gary 4-H**
Club Manager: Jennifer Whitby, 903-692-1729
3rd Monday, 6:00pm, Gary ISD Cafeteria

**Shooting Sports 4-H**
Club Manager: Sabrina Scott, 903-930-9836
4th Monday, 6:00pm, Expo Hall

**Stillwaters 4-H**
Club Manager: Corie Young, 903-692-7737
3rd Monday, 6:30pm, Still Waters Cowboy Church

**Adult Leaders and Parents Association (ALPA)**
*Open to all parents, adult volunteers, and club managers*
Contact: Clarissa 903-693-0300 ext 217 or Corie Young 903-692-7737
1st Monday, 6:30, Expo Hall

# Avoiding Wrecks with Your Cattle Heard in Managing for Acorns

By: Lee Dudley – Texas A&M AgriLife Extension Agent Agriculture and Natural Resources Panola County

As the howling winds of cold fronts and hopefully rainstorms move through the county in the future months, we can expect to start seeing an increase in green acorns being knocked from the oak trees in our pastures. When we have a normal summer with adequate rainfall and ample moisture levels, we would not be bothered with this. But in years such as this one, when our standing forage supplies as well as our harvested supplies are well below normal levels, we can expect to see our already hungry cattle start to seek out and consume green acorns. With the consumption of large amounts of acorns, we can expect to see cattle experiencing upset gastrointestinal tracts; developing diarrhea, becoming dehydrated, constipated, and emaciated; ultimately dying.

Acorn poisoning is caused by a chemical called tannins. Poisoning from tannins found in all acorns, generally occurs as they fall from trees in the immature green stage, followed by over consumption by cattle. We can see this occur in our pastures where there is not much grass left nor hay is being fed. Such as the conditions we find ourselves in this year county wide. Sickness in cattle starts 8-14 days after the cattle started eating acorns, with an animals' tolerance level being influenced by the protein content of its diet. Those animals being supplemented with a high protein diet can consume more acorns without having poisoning symptoms.

Those cattle affected by acorn poisoning will have a poor appetite, appear dull, become constipated, suffering extreme weight loss, looking gaunt or "tucked up". They may also secrete blood in the manure and/or bleed from the nostrils. Profuse diarrhea may follow the constipation.

In addition, affected animals will drink large amounts of water and void excessive amounts of clear urine that could also contain blood. when clinical stages persist for three to seven days, many of the affected cattle will go down not being able to rise again. If these animals do not die, it may take as long as two to three weeks before they start to recover. If you are suspecting such a problem, we strongly suggest you contact a veterinarian as soon as possible.

To help correct the deficiencies of a stressed, thin cow heard, it is important to provide plenty of good-quality hay. When feeding hay, consider both the quantity and quality fed, and supplement when needed with the proper amounts of protein and/or energy supplements. Even if the hay is of poor quality, feeding in large enough amounts might provide adequate energy, but the cattle will be deficient in protein. Providing good hay but not enough of it can improve the protein deficiency but steal leave the cattle lacking in energy. For those cattle that become severally affected by acorn poisoning, treatment is of little value. However, for those cattle remaining on the "poor" oak tree pastures, provide supplemental feed containing hydrated lime (Calcium Hydroxide) and protein, which are "antidotes" for the tannins.

Obviously, acorn poisoning can be prevented by removing cattle from areas with oak trees when acorns have recently fallen. These pastures should be held in reserve for grazing in late fall or winter, when the acorns have had a chance to age, turn brown and become somewhat less toxic. No matter when cattle are turned onto oak tree pasture, remember that they still could be affected if they eat too many acorns. If you have any questions pertaining to this article or any others, contact Lee Dudley County Extension Agent Ag & NR Panola County at (903) 693-0300 Ext 161.

# Sprayer Management
# PREVENTING DELAYS

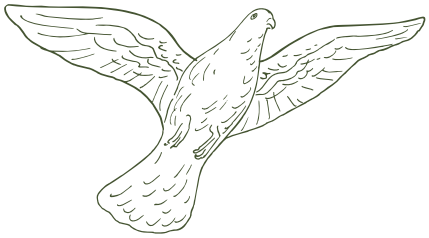
By: Lee Dudley – Texas A&M AgriLife Extension Agent Agriculture and Natural Resources Panola County

As we move into our fall months, we see many landowners parking sprayers for the season transitioning to other task on the farm. During this time, it is critical to remember about winterizing sprayers in preparation for the colder months. This simple practice can greatly payoff for you in early spring by avoiding unneeded breakdowns. The following are some practical guidelines for producers in preparing for those winter months. To prevent freezing, we need to check one more time to make sure there is no liquid left inside any of the sprayer parts. The Pump, acting as the heart of the

sprayer requires special care. add a small amount of oil and rotate the pump four or five revolutions by hand to completely coat interior surfaces. Make sure that this oil is not going to damage rubber rollers in a roller pump or rubber parts in a diaphragm pump. Check the operator's manual. If oil is not recommended, pouring one tablespoon of radiator rust inhibitor in the inlet and outlet part of the pump also keeps the pump from corroding. Another alternative is to put automotive antifreeze with rust inhibitor in the pump and other sprayer parts. This also protects against corrosion and prevents freezing in case all the water is not drained. To prevent corrosion, remove nozzle tips and strainers, dry and clean them, storing them in a dry place. Putting them in a can of light oil such as diesel fuel or kerosene is another option.

After ensuring all water is drained and pumps are winterized, we need to select a proper location to store the actual sprayer. In selecting your site for storage, make sure that the sprayer and its components will be protected from rain, sun, strong winds and even the occasional snow for our area. Moisture in the air, whether from snow, rain, or soil, rusts metal parts of unprotected equipment of any kind. While the sun usually helps reduce moisture in the air, it also causes damage. Ultraviolet light softens and weakens rubber materials such as hoses and tires and degrades some tank materials. The best protection from the environment is to store sprayers in a dry building. If storing in a building is not possible, try covering the sprayer with some material that will protect it from sun, rain, and snow. When storing trailer-type sprayers, put blocks under the frame or axle and reduce tire pressure during storage.

Always remember, winterizing your sprayer after the season is over will help prevent damage and save you both time and money in the spring. Be sure to read the owner's manual for your sprayer and pump. Using the wrong material to winterize your sprayer could void the warranty. For more information pertaining to sprayer maintenance or any other topic dealing with agriculture, fill free to contact your Panola County AgriLife Extension Agent for Agriculture and Natural Resources at (903)693-0300 Ext 161.



# Grilled Dove Breast

https://dinnertonight.tamu.edu/recipe/grilled-dove-breast/

### Ingredients

- 24 dove breasts deboned

### For the marinade

- 1/4 cup red wine vinegar
- 1/4 cup olive oil
- 1 clove garlic pressed
- 1 Tbsp. Worcestershire sauce
- 1 Tbsp. honey
- 1 tsp. granulated garlic
- 1 tsp. onion powder
- 1 tsp. chili powder
- 1/2 tsp. salt
- 1/2 tsp. black pepper

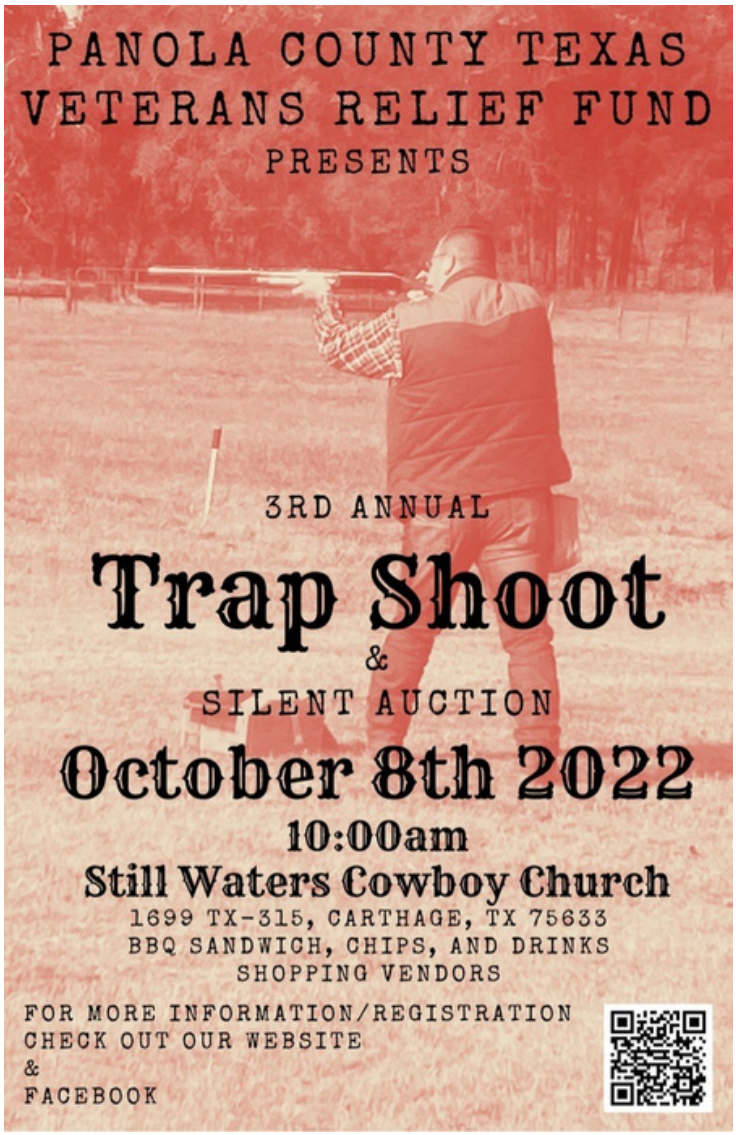
### Instructions

Wash your hands and clean your cooking area. Combine all measured marinade ingredients in a large bowl.

Add dove breasts to the marinade; turn breasts to distribute marinade evenly.

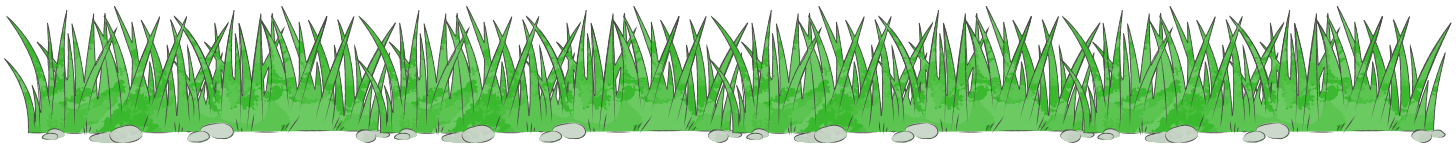
Cover and marinate in the refrigerator for 2 hours.

Grill dove over a medium-high heat flame for 4-6 minutes. Serve on a bed of greens and dip in your favorite side sauce.




# Maintaining St. Augustine Grass Lawns

By: Gene R. Taylor II, Assistant Professor and Extension Turfgrass Specialist
Jason Gray, Extension Assistant—Turfgrass Management the Texas A&M University System



St. Augustine grass (Stenotaphrum secundatum [Walt.] Kuntze) is a popular warm season turfgrass for home lawns. It is found in the United States, southern Mexico, South America, South Africa, western Africa, the Caribbean, the Hawaiian Islands, Australia, and the South Pacific.

St. Augustine grass is medium to dark green and coarse textured, and it has a low, dense growth habit. It grows well in nearly all soil types and tolerates shade, heat, salt and, to some degree, drought. It does not tolerate waterlogged soils or extended periods of cold weather. St. Augustine grass is an aggressive species that spreads rapidly by above-ground growth structures called stolons. If managed properly, St. Augustine grass forms a dense cover that handles light traffic and competes well with most weeds. St. Augustine grass is the most shade tolerant warm season turfgrass.

To keep your St. Augustine grass lawn in good condition, follow these guidelines for mowing, watering, and fertilizing, as well as for controlling weeds, insects, thatch, and eliminating compacted soil. Because many factors affect turf growth, these are general recommendations.

Begin a routine mowing program as soon as the grass begins to turn green in the spring. Remove no more than one-third of the leaf area during each mowing. Set the mowing height at 2 1/2 to 3 inches (3 to 3 1/2 inches in shady lawns). The lower the mowing height, the more frequently you will need to mow. Frequent mowing at a lower height produces higher quality turfgrass. It is best not to bag grass clippings. Grass clippings decompose quickly and return significant amounts of nutrients to the soil. If you do bag the clippings, consider composting them for use in the landscape.

For the months of September through February, Continue the fertilizer program begun in the spring, applying 1 to 1 1/2 pounds of nitrogen per 1,000 square feet every 8 to 10 weeks. Without soil test information, it is recommended that you use a fertilizer that either contains nitrogen only (21-0-0, ammonium sulfate) or is low in phosphorus (Examples: 21-3-6 or 15-0-15) to reduce the chance of excessive phosphorus build-up in the soil. Such build-ups can lead to deficiencies in iron and zinc.

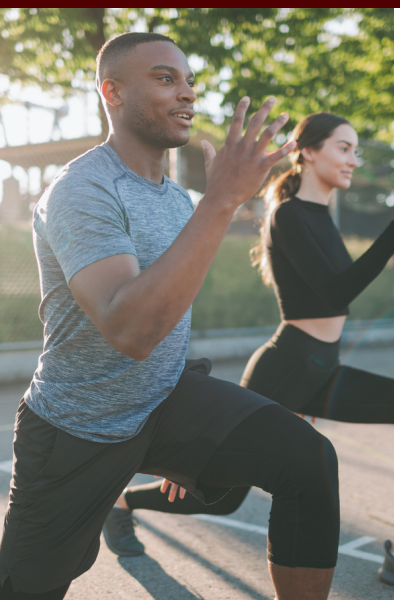
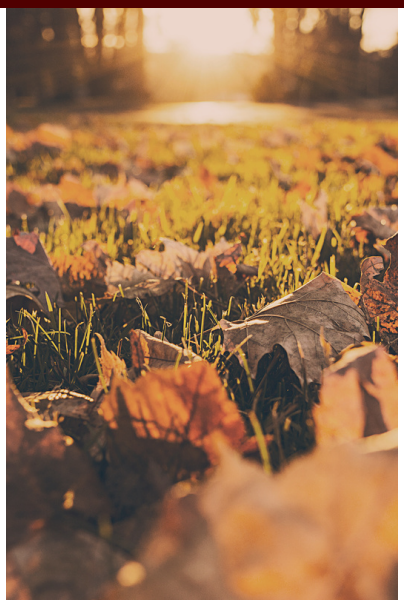
Continue fertilizing as recommended above until 4 to 6 weeks before the first expected frost. At that time, apply a low nitrogen, high-potassium fertilizer such as 5-10-10. Apply no more than 1/2 pound of nitrogen per 1,000 square feet. To calculate the amount of product needed per 1,000 square feet, substitute 50 for 100 in the spring formula.

Do not fertilize St. Augustine grass from December through February unless the lawn has been overseeded (planted with cool-season grass to maintain its green color in the winter). Fertilize overseeded lawns once in December and again in February with 1/2 pound of nitrogen per 1,000 square feet, using a nitrogen-only fertilizer such as 21-0-0. Have the soil tested to determine the nutrients needed. In the absence of a soil test, use a complete fertilizer with a 3-1-2 ratio of nitrogen, phosphorus, and potassium.

Even though St. Augustine grass is normally dormant in winter, you may still need to water it periodically when the weather is warm, dry, and windy. If the lawn has been overseeded, water as you would from March through May.

Apply preemergent herbicides for annual winter weeds when the average soil temperature drops to 70 ºF. Your county Extension agent can give you an estimate of that date in your area. Apply post emergent herbicides as needed.

For more information pertaining to management of our warm season lawns fill free to call the Panola County AgriLife Extension service at (903)693-0300 Ext 161.

# THE PANOLA EXTENSION

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