

September 2022

# THE PANOLA EXTENSION

A Monthly Newsletter by the Panola County AgriLife Extension office



## UPCOMING EVENTS:

- 9/2: East Texas Forage Conference, 8am, Hallsville, TX
- 9/5: Labor Day - Office Closed
- 9/6: 4-H Council Meeting 6:00pm, ALPA Meeting 6:30pm, Expo Hall
- 9/10: Fall Cattleman's Roundup, 10:00am-4:00pm, Expo Hall
- 9/11: Walk Across Texas! Begins
- 9/14 Chronic Conditions class orientation, 10am, Turner Community Center
- 9/15: Fall Virtual Fishing Skill-a-thon begins
- 9/17: 4-H Craft Workshop
- 9/22: Panola/Harrison Wildlife Information Seminar
- 9/23: Hay Samples Due
- 9/26: Thompson Feed Meeting, 6:00pm, Carthage Civic Center
- 9/27: PCJLS Steer Validation, 6-7pm, Carthage Veterinary Hospital
- 10/2-8: National 4-H Week
- 10/10: County 4-H Food Show
- 10/20: Panola County Hay Show, 6pm, Carthage Expo Center
- 10/25: Major Breeding Heifer Validation, 6-7pm, Carthage Veterinary Hospital

## Panola County AgriLife Extension Service

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110 S. Sycamore St.  
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Carthage, Texas 75633

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**Facebook:**

[/PCAgriLife](https://www.facebook.com/PCAgriLife)

## In This Issue:

- Staying Vigilant with Armyworms
- It's Time to Get your Hay Samples Analyzed
- 5 Show Hogs Every 4-H Member has Raised at Least Once
- The Whole Story on Whole Grains or "Wholey" Grains - Good Wholesome Fun
- 4-H 4 More.
- Stockpiled Forages Reduce Need, Cost of Hay, and Supplemental Feed
- Is Now the Time to Restock Pastures Stressed by Drought?
- Limestone: Who, What, When, Why & How

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife Extension Service

TEXAS A&M  
AGRI LIFE  
EXTENSION



# STAYING VIGILANT WITH ARMYWORMS

By Lee Dudley



**Fall Armyworm  
Adult Moth**



**Inverted "Y" on  
head of Fall  
Armyworm**

Armyworms primarily are abundant during August through early November; however, we have already received early reports from around East Texas of outbreaks. Some coming from right here in Panola County. In a matter of days, armyworms can occur in very large numbers, consuming a field overnight, moving in large masses or "armies" to adjacent fields in search of more food.

Not being able to overwinter in the area due to our cold temperatures, the eggs they hatch from are deposited here by the moths (Figure 1) that fly north from South Texas, re-infesting the area each year. With outbreaks often occurring in late summer and fall following periods of rain, which create favorable conditions, just as the weather patterns we have been experiencing this past month. Armyworm moths fly and mate during the night after which, females can lay up to 1000 eggs at a time in masses on suitable host plants or other surfaces close by. Eggs will begin to hatch in 2-3 days of being laid, making it hard to find them at this stage.

Fall armyworms are green, brown, or black, with a distinct white line between the eyes forming an inverted "Y" (Figure 2) pattern on the face. There are four black spots aligned in a square on top, near the back end of the caterpillar. Armyworms are very small at first, causing little plant damage; as a result, infestations often go unnoticed. The caterpillars feed for 2-3 weeks reaching a size of 1 to 1.5 inches at maturity, before pupating. It is at the end of their larvae stage where they consume roughly 80% of their total food intake. Fortunately, this stage in

the life cycle last only a few days. Given their large appetite, number, and mobility, armyworms can damage entire fields in a few days or even hours.

Once the worms complete feeding they tunnel back into the ground, entering an inactive non-feeding stage where they transform into pupae for 7-10 days at which time they re-emerge as the armyworm moth repeating the cycle again. In all, development from egg to adult requires about four weeks during the warmer summer temperatures and is longer during cooler fall weather, allowing for several generations a year.

The key to being able to manage armyworm outbreaks is early detection before they can cause severe economic damages. Caterpillars can be observed feeding throughout the day but are typically most active early in the morning and late in the evening. They can often be observed easily at these times. For most days, look for the larvae under loose soil and fallen leaves on the ground beneath the grass canopy. Presence of chewed leaves can indicate their presents. Once the larvae reach a size greater than 3/4 inch, the quantity of leaves they eat increases dramatically, which is one reason infestations can go un-noticed. There are several active ingredients that control fall armyworms effectively, but formulations, sites for use, and applicator requirements vary widely. Always consult the product label for specific instructions on application rates, methods, and timing. Below, your Panola County AgriLife Extension service has provided you with a list of recommended herbicides suitable for management in out pasture settings. Remember this list is for reference only and before applying any pesticide products, the applicator should always read and understand the label fully.

**TREY HARVEY**  
Owner  
439 South  
Shelby Street  
Carthage, TX  
903-692-1597

TAH FARM SUPPLY PRESENTS  
**Fall Cattleman's**  
**Roundup**  
Save The Date  
**September**  
**10th**  
10am-4pm  
Carthage Expo Center  
1735 Ball Park Rd  
Carthage, Tx 75633

We Invite You To Join Us!  
Lunch served at 12pm by Circle M Cafe

# NEW!!!

Get the...

## PANOLA COUNTY

# 4-H

2022-2023



# Planner

On our website under 4-H!!!

## IT'S TIME TO GET YOUR HAY SAMPLES ANALYZED

By Lee Dudley

Utilizing forage and feed supplies with the proper nutritional value for cows is an important consideration for producers as we start to make plans for fall and winter-feeding programs. Testing hay can provide information producers need to meet the nutritional requirements of cattle, keeping them in proper body condition through winter months. By determining the hay supply's crude protein content and total digestible nutrients, which is the measurement of available energy in the forage, producers can determine if supplemental feeds will be necessary and at what rates. And trust me with the extreme drought we currently find ourselves in this will be a critical management practice for those cattle still on pasture come fall and winter.

Knowing the quantity and quality of supplemental feed needed can save producers in the long term. Often, we find hay is better than we thought, therefore we can save money by not supplementing. However, other times we find the

hay wasn't as good as we wanted, so we do need to provide our cows with additional protein and or energy supplements to make sure they are in proper body condition before calving allowing us to optimize pregnancy rates in the future.

Now is the time to get this task accomplished. Currently until September 23rd, the Panola County AgriLife Extension Service is collecting hay samples from area producers. Turning in your samples not only gets you this valuable information at no to little cost, but it also enters you into our annual hay show that will be held on October 20th and is sponsored by the Panola Soil and Water Conservation District. The PSWCD will pay for the first two samples brought in by individuals with a \$5 charge for each additional sample. Remember get your forage samples turned into the AgriLife Extension office no later than September 23rd for the opportunity to learn what your hay has to offer. For more information contact the Panola County AgriLife Extension office at (903) 693-0300 Ext 161

**Hay Samples Due Samples due in office by SEPT. 23**

# UPCOMING EVENTS

## **WALK ACROSS TEXAS!**

**CLICK HERE  
TO REGISTER!!!**

**Sept. 11 - Nov. 5**

**8 weeks | 832 Miles**

Teams can consist of 3-8 people. Don't have a team?  
Don't worry. Send Clarissa an email and she'll assign you one!

**Is there a cost?** NO, it's FREE!

**How do I sign up?** Visit [HowdyHealth.org](https://www.HowdyHealth.org) to create a profile and do a short pre-program survey.

**Do I have to walk?** You can do any sort of physical activity! You can count minutes you've spent gardening, biking, push-mowing, etc. Any activity that raises your heart rate counts.

**Who is the WAT! program for?** Anyone who wants a fun, motivational team approach to being more active. There are adult and youth versions of the program.


**How do I join a team?** Team captains will create a team in Howdy health. They can invite members to the team via email within the system OR they can give you a team code that you will put in when you register.



**Pro Tip:** If you want to create a team of adults, but don't want everyone to have to log their own activity, you can join the YOUTH league and the captain will log activity for everyone on their team!

Panola County Adults 2022 League Code (for any adults in the community): [watL-220901-93487](#)

Panola County 2022 YOUTH League Code: [watLY-220830-97319](#)

A close-up photograph of a pig's snout, showing its nostrils and the texture of its skin. The pig is looking directly at the camera. The background is blurred, showing other pigs and people in a barn setting.

By Lee Dudley

# 5 SHOW HOGS EVERY 4-H MEMBER HAS RAISED AT LEAST ONCE

Without any doubt, we all know that show hogs have the biggest personalities of all the four-legged animals you will come across at a livestock show. They are as different as the people that show them. Every showman has had one of these hogs, whose personalities are so big the barn wouldn't quite be the same without them.

## 1) The one that knocks the bottom out of the feeder

This is the kind of hog that feeders and showmen love. You better be on time to feed, because if you're not this guy will let you know. Although he's not a huge fan of the diet he must be on to make weight at the show, you can bet he will be the biggest bodied, freshest middle one on show day because he literally ate everything you threw in his feeder... even if he wasn't supposed to. He's also the crafty one, because he will find any way possible to open that gate and get into the feed room.

## 2) The Game-Day Player

This one comes to play...but only on the day it matters the most. It doesn't matter how many hours you spend driving him at home, because every time he is just going to walk the fence and squeal in the corner. This one isn't a fan of jackpot shows, he's just simply "too good" for that. You better not use this one for showmanship; he's just not quite into that. It feels like torture waiting in the ring with this

one because you just know this hog is going to embarrass you out there. But you get in the ring and everything changes. He floats across the ring like nobody's business; you immediately get penned and win your class....ugh what a relief!

## 3) The Loudmouth

If this hog was a person, he would be Donald Trump. This one will let you know that he's there! It doesn't matter whether you are in the practice pen, showmanship ring, or he's just hanging out in his pen. This one has a full range of sounds, anywhere from loud oinks to ear shattering screams. Again, probably not a showmanship hog, because you'll hear his voice more than the man on the microphone. It's not that he's mad; he just wants his voice to be heard!

## 4) The Sweet Tooth

This hog loves treats. Marshmallows, Oreos, wafers, if it's sweet, this hog will eat it. This one quickly realizes that if he's going to do something, there better be a reward involved. If he gets on the scale, he clearly earned a sweet treat. If this one get upset in the ring, all you need is a vanilla wafer and everything will be okay. This one is the baby of the show barn, and usually the one your mom just LOVES because he's just as sweet as his favorite food.

## 5)The “One”

All showmen have had that one hog that was just the “one.” This one is the game day player, every day. From the minute you saw this barrow or gilt as a baby, you knew he was special. You barely have to teach him to drive, because this one was born with it. This one never has an off day, never gets sick, and is your favorite hog in the barn. When you get to the show, everyone stares when you drive down the alley. On show day, this one is ready to go and when this one walks in the ring, it’s all over.

With that being said, it is time to start looking for your next show hog. You know that one with more personality than anything else in the barn, the one that makes everyone turn their heads as he walks by. Yes, that’s right its show season again, time for us to hit the roads in pursuit of one of the five types of hogs you will read about in this article. As always, if you need assistance in finding one, please contact the extension office at (903) 693-0300 Ext 161 by the first of September.

# Thompson Feed Meeting

**Sept. 26, 6:00-7:30pm, FREE**

**Carthage Civic Center | 1gen CEU**

How to weather this winter with an evening of networking neighbors/cattlemen

**Speaker: Dr. Doug Hawkins**  
with Purina Animal Nutrition

## FREE STEAK DINNER



## Panola/Harrison Wildlife Information Seminar

**September 22, 2022 | Civic Center Carthage**

**Registration 5:30pm | Meal 6:00pm | Program 6:30pm**

**RSVP by calling (903)693-0300 ext 160 before September 19th.**

Sponsored by Panola & Harrison County Soil and Water Conservation Districts

### Topics:

1) Conservation programs their benefits for landowners as well as Texas  
Speaker: Northeast Texas Conservation Network

2) Property Tax Valuations, answering the who’s, what’s, when’s, where,  
and whys of a Wildlife Exemption  
Speaker: Texas Parks and Wildlife Area Biologist Team



# THE WHOLE STORY ON WHOLE GRAINS

By Clarissa Moon

You've probably heard that whole grains are better for you, but do you know why? And how can you tell if a product is *actually* whole grain?

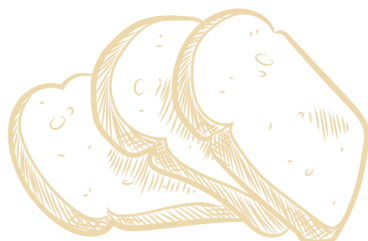
Grains fall into three main categories: whole, refined, and enriched.

"WHOLE" refers to the entire grain kernel, containing the germ, endosperm, and bran. All three parts of the grain are present and intact in the product.

"Refined" means that the germ and bran have been removed during the milling process, leaving only the starchy endosperm. Most pastas, white bread, and white rice are all made from refined grains.

"Enriched" or "Fortified" means that the product is made from refined grains, but has had some nutrients added back into it. Many breads, cereals, and crackers are made from these grains.

As you can see on the graphic on the next page, many of the grain's nutrients are found in the bran and germ; which you don't get with refined grains! Consuming whole grains has been associated with a lower risk for cardiovascular disease, certain cancers, and other health conditions. This is why we encourage everyone to make at least half of the grains they consume whole grains!



Unfortunately, some food labels can be misleading and confusing; so it's important to know how to identify the different grains.

Whole grain products may have a stamp (on the next page) on the packaging that is from the Whole Grains Council, making these products easy to spot. However, there are other terms to look for including '100% whole grain', 'rolled', 'sprouted', 'whole grain', or 'cracked wheat'. These terms refer to little variations in the grains or processing, but all refer to whole grains. The best way to be sure a product is whole grain, however, is to look at the ingredients list! All whole grains will include the word 'whole' in this section. Aim for products with "whole grain \_\_\_\_" as their first or second ingredient.

## THE SECRET to DECODING WHOLE-GRAIN LABELS



- **"100% WHOLE GRAINS"**  
The only label that means 100% of the grains used are whole grains.
- **"HIGH FIBER" or "EXCELLENT SOURCE OF FIBER"**  
Contains at least 20% (around 5 grams) of your daily fiber requirement.
- **"GOOD SOURCE OF FIBER"**  
Contains 10–19% of the daily fiber requirement (around 2.5–5 grams).
- **"ORGANIC"**  
At least 95% of the ingredients are certified organic (don't use pesticides or other chemicals).
- **"WHOLE GRAIN" OR "WHOLE WHEAT"**  
At least 51% of the grains used are whole grains.
- **"MADE WITH WHOLE GRAINS"**  
This term doesn't mean much since a majority of the grains could be refined.
- **"MULTIGRAIN"**  
This term simply means it's made with more than one type of grain but they might be refined.

myfitnesspal

Terms to look out for include 'multigrain', 'stone-ground', 'made with whole grains'. These terms can be misleading and do not necessarily mean that the product is whole grain.

Learning to read labels can be tricky, so be sure and reach out to yours truly, or a registered dietician, for help. For more information on whole grains and the terms discussed in this article, visit <https://foodinsight.org/whole-story-on-whole-grains/>

#### Recipe

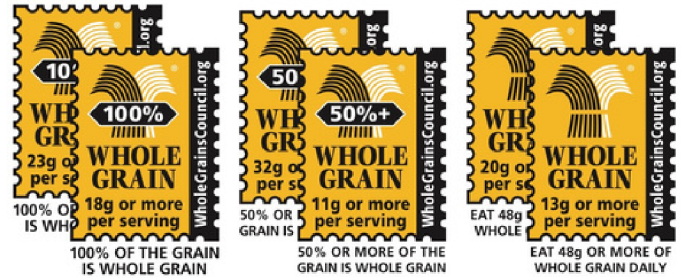
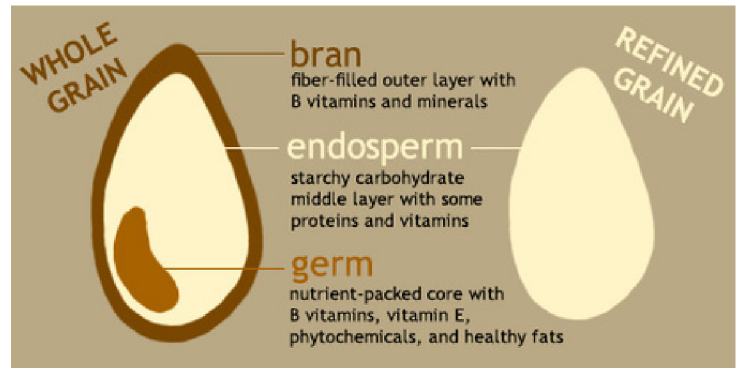
<https://foodhero.org/recipes/applesauce-french-toast>

*Graphics from...*

<https://blog.myfitnesspal.com/the-secret-to-decoding-whole-grain-labels/>

<https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains/>

<https://wholegrainscouncil.org/whole-grain-stamp>



# 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\*:

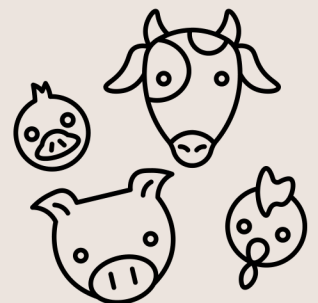
Oct. 25, 6-7pm, Carthage Veterinary Hospital

### Market Barrow\* & Breeding Gilts\*:

November 20, 4-5pm, Panola County Expo Center

### Market & Breeding Lamb\* and Goat\*:

TBA Beckville FFA Lead Contact



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





# 4-H 4 MORE.

By Clarissa Moon

The “4-H 4 More” campaign is a mission to reach more Texas youth with the 4-H program. The premise of the campaign asks every current member to bring 4 friends with them to join 4-H. Thanks to the Texas 4-H Foundation, every member who recruits 1, 2, 3 or 4 friends to join 4-H will receive some gifts!

- 1 Recruit:** Free 4-H 4 More t-shirt
- 2 Recruits:** Your \$25 enrollment fee returned back to you via a gift card
- 3 Recruits:** leather portfolio with 4-H emblem
- 4 Recruits:** Free backpack and state-wide recognition

Any number of recruits: Great stuff to add to your leadership and citizenship activities!

How does it work? When a new member enrolls in 4HOnline, there will be a spot for them to type in the name of the 4-Her who recruited them. This detail is very important as it’s the only way for the state to track the recruiting members and get them their prizes! Incentive items will be mailed to your address in 4HOnline in December and August 2023, so be sure to recruit friends all year long!



# 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 classes or culinary/life skills classes!*

- Photography
- Arts & Crafts • Foods
- Fashion/Fabric/Fiber Arts
- Floral Arrangements
- 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)



# Stockpiled Forages Reduce Need, Cost of Hay, and Supplemental Feed

By: Adam Russell, communication specialist for Texas A&M AgriLife  
Resource: Dr. Jason Banta

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Stockpiled forages and winter annuals can reduce the need for and cost of hay and other supplemental feed for beef cattle producers in regions with adequate annual rainfall, said a Texas A&M AgriLife Extension Service expert.

Dr. Jason Banta, AgriLife Extension beef cattle specialist, Overton, said producers can reduce the need for hay and supplements by providing stockpiled forage mid-November through December and winter annuals October through May.

“If they choose these options, we want them to know how to best utilize them,” Banta said.

For stockpiled Bermudagrass and bahiagrass, producers should bale the field for hay or graze the pasture 3-6 inches tall in the first part of September each year. Then fertilize and allow growth until the first frost, which is typically by mid-November in East Texas, Banta said. After the frost, the forage can be utilized until the first part of January.

“Utilizing stockpiled forage helps us avoid feeding hay for 4-6 weeks potentially,” he said.

Banta said producers should “strip graze” the pasture by using electric fencing to restrict cows’ access to the forage if possible.

“Provide access to what they could eat in two to four days,” he said. “Then every few days move the fence to allow more access. Restricting access will help prevent the cattle from wasting the available forage.”

The forages should be utilized by the first of January to mid-January in high rainfall areas because rain will begin to reduce quality and palatability for cattle, Banta said.

“If we fertilize and have good growing conditions, the stockpiled forage should meet all nutrient requirements for dry cows,” Banta said. “Additionally, it will meet the requirements for most lactating cows. However, in some situations small amounts of supplements may be needed depending on the forage quality, milk production and body condition score of the lactating cows.”

In those cases, Banta said lactating cows should generally receive 1-2 pounds of a high-protein supplement per cow per day.

Legumes and winter annual grasses such as ryegrass, small grain rye and wheat, can also be used to reduce the need and cost of hay.

“Those forages will be extremely high in both protein and energy,” he said.

However, utilizing winter annuals and legumes differs for replacement heifers, pregnant females in late gestation, and cow/calf pairs, Banta said.

“If abundant winter annual forage is available, pairs and replacement heifers can be grazed full time in lieu of feeding hay,” he said. “In contrast, pregnant females in late gestation should be limit grazed on winter annuals to avoid potential increases in calf birth weights and calving problems.”

Banta said late-gestation cows should be limited to two-hour grazing sessions daily.

“After a couple days, the cows should be used to the routine and become easier to remove from the winter annual pastures,” he said.

Grazing dry cows or pairs on winter annuals or legumes should also negate any need for protein or energy supplements, Banta said. Producers should, however, provide minerals with moderate-to-high, 5-13 percent, magnesium to reduce the chances of grass tetany in lactating cows.

“If utilized effectively, grazing stockpiled forages and winter annual forages can tremendously reduce winter feeding costs for producers,” he said. “Whatever is spent on seed and fertilizer can be more than made up in quality forage.”

# 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

**For September only:** meeting September 6





# WELCOME TO TEXAS 4-H

Texas has more than 550,000 youth who are involved in 4-H experiences each year and we are pleased that you have decided to join 4-H! Here is some information about our enrollment process and how we need your partnership in getting your membership entered and approved. All membership records change to an inactive status in August. The Texas 4-H year officially starts on September 1 but enrollment opens on August 15th. Enrollment procedures and payment method options vary in each county, so check with your local county office for more information.

## Youth Club Member Participation Fee

\$25.00 August 15 - October 31st  
 \$30.00 November 1 to the completion of 4-H year  
 (clover kids are free)

## Adult Volunteer Application Fee

\$10.00

### About 4HOnline!

- 4HOnline is the official registration system for adult and youth members directly involved with 4-H.
- 4HOnline is a partnership between the 4-H family and the local county office. ([counties.agrilife.org](http://counties.agrilife.org))
- 4HOnline is a secured system that is in compliance with the PCI Security Standards Council. Texas 4-H nor 4HOnline shares or sells any personal information to third party vendors without your knowledge or permission.
- 4HOnline is based on “zero-based enrollment.” Each year at the start of the enrollment cycle all 4-H membership in Texas goes to zero and everyone must re-enroll. This process is based on federal accounting policies.

### Did You Know?

- Most questions can be answered by calling the local county office. ([counties.agrilife.org](http://counties.agrilife.org))
- An approved youth or adult member record means a person is officially enrolled with Texas 4-H.
- An approved youth or adult member record means a person can register for state or district level events.
- Adult volunteers are required to be screened through the Texas 4-H Youth Protection Standards program every three years. The screening process can take up to two weeks.
- A youth that is 8 years old and going into the 3rd grade must wait until September 1st to enroll for proper fees to be accessed. The Texas 4-H year officially starts September 1.





# TEXAS 4HONLINE FAMILY ENROLLMENT TIPS

<http://texas.4honline.com>

## NEW FAMILY

1	2	3	4	
			YOUTH	Adult
Select to set up a profile Setup only one family profile per household.	Start adding a member Enter one enrollment profile at a time. The Next button will take you through each screen.	Review Fees Youth Fees vary with date enrolled. Adult Fees pay \$10.00.	Review enrollment and fees. Click Back to make corrections. Click Submit.	Review enrollment and fees. Click Back to make corrections. Click Submit.
Enter an e-mail address that is checked often. This will be how you get communication.	Youth selects at least one club and one project. Adult selects volunteer type, clubs and projects.	Add and select a credit card to pay for the fees.	Status changes to pending. Local county office reviews and approves.	Adult completes Screening and Required trainings.
Create a password. Requirements are displayed on the screen if not validated.	Enter information in all the fields on the Questions screen. Youth Birthdate and school grade determines eligibility.	Or select payment collected by county office. A confirmation screen will popup.	Payment is locked-in. Credit card is charged or county mails payment.	Status changes to pending. Local county office approves. Payment is locked-in. Credit card is charged or county mails payment.
Complete all family information.	Complete the Health and Consents Screens. Click Next through each screen.	Select payment and agree to Payment and Refund terms.	Status changes to approved after payment is received.	Status changes to approved after payment is received, screening approved and trainings completed.

Contact the local county office before starting a profile, to make sure you are selecting a club which fits your family needs.  
Find your local county office online at: <http://counties.agrilife.org>

## RETURNING FAMILY

1	2	3	4	
			YOUTH	Adult
Login with the family email address and password. Requirements are displayed on the screen if not validated.	Click Enroll Now next to the member's name.	Review Fees Youth Fees vary on date enrolled. Adult Fees are \$10.00.	Review Enrollment and fees. Click Back to make corrections. Click Submit.	Review Enrollment and fees. Click Back to make corrections. Click Submit.
Contact the local county Extension Office for password assistance or click Reset Password link.	You can only enroll one member at a time.	Add and select a credit card to pay for the fees.	Status changes to pending. Local county office reviews and approves.	Adult completes screening and required trainings. (if applicable)
<b>Do Not Create a NEW Family Profile.</b>	Click Next through each screen. You must enter school, grade, clubs and projects.	Or select payment collected by county office. A confirmation screen will popup.	Payment is locked-in. Credit card is charged or county mails payment.	Status changes to pending. Local county office approves. Payment is locked-in. Credit card is charged or county mails payment.
Review and update family information.	Complete the Health and Consents Screens.	Select payment	Status changes to approved after payment is received.	Status changes to approved after payment is received, screening approved and trainings completed.

If the family has moved to a NEW county in Texas, contact local county office to have the FAMILY PROFILE moved to the new county. **Do not create a new profile.**

The system will send automatic notifications to the family email address in the system!



# Is Now the Time to Restock Pastures Stressed by Drought?

By. Lee Dudley: AgriLife Extension Agent Agriculture & Natural Resources Panola County

With the rains our area received late in August, we have started filling phone calls from area producers asking if it is time to start restocking their pastures after having to reduce numbers during the drought. To keep it simple, our answer currently is to advise producers to use caution and stick to a strategic plan when thinking about restocking herds after a drought. We need to keep in mind that no one made near enough hay to meet current demands for winter and with the cost people were asking for hay, most bought very little to any extra hay.

Even with the much-needed rains, many producers might start thinking about possibly making two more cuttings of hay with the second fall around Thanksgiving. And it would not be the first time hay has been cut in East Texas late into November. However, we need to remember how severe this drought was, most our forages completely stopped growing and went into a stressed induced dormancy. With the moisture, entering the root zones, it will take some time for root development to recover. With the month of September and possibly cooler weather is just around the corner, this will hamper area forage development.

With the rains and flush growth comes the threat of the ever-destructive armyworm. Worms have already been reported in counties to our north and south, so it stands that eventually those little moths will find their way to the tender growth here in Panola County. Daily monitoring and scouting fields are the best management tool along with the use of long-lasting residual pesticides.

Now is the time to start thinking about utilizing cool season forages with planting times around the corner. Then again there is the question will the rains continue or will we turn dry again. With long range weather forecast sitting at 50- 50 for dryer or wetter than normal winter. The use of winter forages could be key to help area producers stretch lower the normal hay supplies. Additionally, when planning winter feeding program knowing the quality of our hay supplies will be more important this year than ever.

To help area producers understand the quality of their hay, the Panola County AgriLife Extension Service is partnering with the Panola SWCD and NRCs to host this year's hay sampling drive. Samples are currently being taken at the Panola County AgriLife Extension office until September 30th. If you need assistance in collecting your samples fill free to contact our office at 903-693-0300 Ext 161 to schedule a site visit.



# 4-H Craft Workshop

September 17 | 9am-12pm | Location

**BEADED INDIAN CORN**

**PILLOW CASES**

**MYSTERY CRAFT**



**\$15 - Still Waters Cowboy Church, Carthage**  
**Register by September 10**

**Bring Your Own Fabric**

1 yard fabric for the main body, 1/3 yard for the cuff (optional), 1/8 yard for the accent trim (optional)

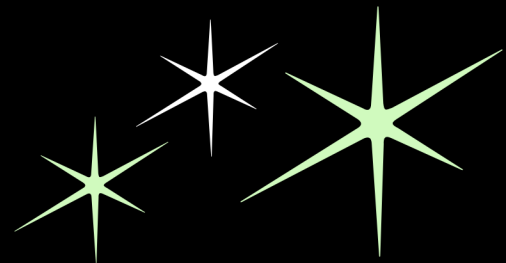
# Spark

formerly Junior Leadership Retreat

**NOVEMBER 11-13**

Texas 4-H Center  
Brownwood, TX

Open to 3rd-8th Grade 4-Hers



Hands on Workshops

Service Learning

Fun

Recreation

Make New Friends

Dances

Theme Night

# LIMESTONE

## Who, What, When Why & How

By: Vanessa Corriher-Olson

Associate Professor, Forage Extension Specialist Soil & Crop Sciences Texas A&M AgriLife Extension

### WHO NEEDS LIMESTONE:

Many Texas soils are acid soils; that is, the soil pH is less than 7.0. Soil acidity is caused by various environmental, climatic, and cultural factors. The most common of these factors are:

- 1) Parent material from which the soil is derived.
- 2) Leaching by rainfall or irrigation that removes basic elements such as calcium, magnesium, and sodium from the soil profile leaving acidic hydrogen, aluminum, and manganese.
- 3) Cultural practices such as nitrogen fertilization, removal of harvested crops and associated basic elements, and soil erosion, which results in a loss of basic elements. Some plants are more sensitive to acid soil conditions than others. It is important to understand which species are more sensitive to soil acidity so limestone inputs may be made at the appropriate time.

Soil pH is a measure of hydrogen ion (H<sup>+</sup>) concentration in the soil solution and is used to indicate whether a soil needs any limestone. A lime-requirement test (buffer-pH test) is recommended to more accurately predict the amount of limestone needed to raise soil pH to a desired level.

### WHAT IS LIMESTONE:

Limestone is primarily composed of calcium carbonate, but many contain small amounts of clay, silt and dolomite. Dolomitic limestones come from natural deposits which contain both calcium and magnesium carbonates. The magnesium content of limestone is especially important where soils are deficient in this essential plant nutrient. If a soil test indicates low magnesium, dolomitic limestone can be used to correct both the nutrient deficiency and pH.

The value of limestone is in its ability to neutralize soil acidity. Limestone's properties differ considerably, and these differences influence the limestone's ability to neutralize soil acidity. Effectiveness depends on the purity of the liming material and how finely it is ground. Pure limestone has a calcium carbonate equivalence (CCE), or neutralizing value, of 100%. All other liming materials are compared with this standard. The CCE of commercial limestone products should be available through the vendor. Agricultural limestones used in crop production systems are mainly ground calcium carbonate. Impurities contained in some limestones lower the neutralizing value.

### WHY SHOULD YOU APPLY LIMESTONE?

Soil acidity reduces plant nutrient availability and increases aluminum and manganese toxicities. As pH drops below 5.5, the concentration of soluble aluminum increases and becomes toxic to plant root growth. Below pH 5.2, the concentration of manganese also increases and can become toxic. Optimum nutrient uptake by most crops occurs at a soil pH near 7.0. For specific crop recommendations contact your local County Extension Agent. The availability of fertilizer nutrients such as nitrogen, phosphorus, and potassium generally is reduced as soil pH decreases. Reduced fertilizer use efficiency and crop performance can be expected when soil acidity is not properly controlled.







### WHEN SHOULD YOU APPLY LIMESTONE:

Timely soil sampling is important because limestone requires both soil moisture and time to neutralize soil acidity. Early sampling and limestone application several months in advance of crop growth provide time for pH adjustment. Soil pH fluctuates during the year becoming lowest in the fall, in part because of fertilizer applications and plant removal. Under intense grass production using high rates of nitrogen fertilizer, sandy soils will rapidly increase in acidity. Sampling at least every other year is recommended.

Although limestone can be applied at any time, several factors should be considered when planning an application. Soil moisture is critical to the reaction of limestone, therefore rainfall patterns in the area should be used as a guide. Coarse limestone reacts more slowly and, as will all limestones, is most effective when incorporated into the soil. When a more rapid and longer lasting pH adjustment is needed, the use of finely ground limestone is available.

### HOW SHOULD YOU APPLY LIMESTONE?

Liming materials differ in their ability to neutralize acid soils. Pure calcium carbonate is the standard against which other liming materials are measured and its neutralizing value or CCE is considered 100%. Fine limestone neutralizes much more acidity than coarser material. Anything larger than a BB pellet is too large of a particle and essentially has no value for neutralizing acid soils.

∅ Dry bulk limestone is typically applied using fertilizer spreader trucks.

∅ Liquid lime is a combination of very fine limestone in water with 1 to 2 % clay to form a suspension that is about 50 to 60% solids. The material is typically spread using a tank truck equipped with a boom and high-volume nozzles. Liquid lime is usually more expensive per ton than limestone applied dry due to increased costs for finely ground materials, freight, and product application.

The amount of limestone recommended to neutralize an acid soil is based on applying ECCE 100% limestone. If one ton of limestone is recommended per acre, and the cost of the ECCE 62% coarse limestone is \$48/ton applied in the field, the actual cost of one ton of the coarse limestone is \$77.42

$62\% \text{ divided by } 100 = 0.62 \times 2,000 \text{ lbs/ton} = 1,240 \text{ lbs of lime}$   
so you will need more of the 62% ECCE coarse limestone to equate to 1 ton or 2,000 lbs of lime.

$2,000 \text{ lb/ton divided by } 1,240 \text{ lb/ton} = 1.61 \times \$48/\text{ton} = \$77.42$

Compare this to the cost of a ton of the fine limestone (ECCE 100%) selling for \$50

$2,000 \text{ lb/ton divided by } 2,000 \text{ lb/ton} = 1 \times \$50/\text{ton} = \$50.00$

Soil pH should be routinely monitored as part of annual soil testing to determine crop nutrient needs. The Texas A&M AgriLife Extension Service's Soil, Water, and Forage Testing Laboratory in College Station evaluates soil pH and provides a limestone recommendation, where appropriate, as part of a routine soil test (<http://soiltesting.tamu.edu>).





# — THE PANOLA EXTENSION —

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