Texas A&M AgriLife Extension

Rusk County Ag News & Views

SPRING 2017

DID YOU KNOW...

...that the pecan tree is the official state tree of Texas. Native pecan trees have shown to be an estimated 150 years old and can grow an average of 70-100 feet tall!
...and the state pepper is the jalapeño.
...the state grass is the sideoats grama.
...the state motto is "friendship".
...the state vegetable is the 1015 sweet onion
...the state fruit is the Texas red grapefruit.
...and the official dish of Texas is chili.

INSIDE THIS ISSUE:

Horticultural Crop Webinars

Don't miss these special educational webinars focusing on Small Acreage Horticultural Crops. The 2017 schedule is as follows: (date – topic)

All webinars are held between noon and 1 p.m. To participate in a webinar, click on the appropriate link on the date of the webinar at 11:30 am to test the connection and make sure audio and video are working properly.
Webinars will start promptly at noon.

NOTE: The password for all webinar meetings is "online" (without quotes)

All webinars will be presented by Dr. Joe Masabni

- March 3 — Insects and Diseases You Should Know in a Vegetable Production
- April 7 — Ginger Production
- May 5 — Cover Crops
- June 2 — Fertilizer Use in the Vegetable Garden
- July 7 — Tomato Grafting
- August 4 — Fall Vegetable Gardening
- September 1 — Food Safety
- October 6 — Successful Watermelon and Tomato Production
- November 3 — Growing Vegetables in Containers
- December 1 — Hugelkultur

Website: http://aggie-horticulture.tamu.edu/smallacreage/webinars/

Rusk County Extension Agent's Radio Report

Tune in to 100.7 FM Monday thru Friday at 12:30 PM to hear the Rusk County Extension Agents Report on KPXI radio in Henderson, Texas.

We will be discussing a wide array of agricultural, natural resource, 4-H, and Family and Consumer related issues and events.

Find us on Facebook

Rusk County AgriLife Extension Ag

Jamie Sugg
County Extension Agent-Agriculture
Rusk County

Establishing Bermudagrass from Sprigs

As temperatures rise we often start getting an itch to plant. When it comes to establishing bermudagrass from sprigs there are several things to keep in mind before we start tilling the soil…

1. **Location:** Choose a well drained soil; bermudagrass does not do well on wet-land (except for Jiggs Bermudagrass).

2. **Variety Selection:** Match variety to soil type, average rainfall, production goals, and willingness to manage (provide fertility, etc.).

3. **Weed Control:** Destroy existing vegetation by spraying actively growing weeds with glyphosate. Ideal time to start is the year prior to actual planting. In late summer/early fall year prior to planting, destroy existing vegetation with 5 quarts/acre of glyphosate. Weed control following establishment can be critical to achieving a stand.

4. **Soil Fertility:** Obtain a soil sample the fall prior to planting. Apply recommended limestone during land preparation. Any recommended phosphorus should be applied during seedbed preparation to incorporate into the soil. When sprigs begin to green up, apply 40 to 60 lbs. of actual N/acre and any potassium (K) according to soil test recommendation.

5. **Sprigs:** Identify a reliable source of sprigs well before planting time. Your County Extension Agent may know of someone locally who provides sprigs. Plant into a moist seedbed at 2 to 2 ½ inches deep. Do not plant deeper than 3".

6. **Planting Date:** Sprigs can be planted from March, when danger of a heavy freeze is past, until August. The earlier you plant, the longer you will have to get established and the better chance they will survive a severe winter. The underground rhizomes develop much slower than the above ground stolons and are necessary for winter survival. Planting later into the summer increases the risk of losing newly planted sprigs to drought.

To establish a seeded bermudagrass plant about May in northeast Texas. Optimum temperatures for bermudagrass seed germination are when daily low temperatures reach 60F. Planting after mid-June is discouraged because of normally hot and dry weather conditions. Prepare a good firm seedbed and pack with a roller. After the first rain, kill any emerging weeds. After the weeds turn brown, broadcast the bermudagrass seed at 5 to 10 lb/acre and pack again to press the seed into the soil surface.

Source: Vanessa Corriher-Olson, Associate Professor, Forage Extension Specialist

TIP:

If you plan to establish warm-season food plots for deer and other wildlife, now is the time to soil test and order seed and fertilizer. It's best to plant 2% (2 of every 100 acres) of the habitat base.

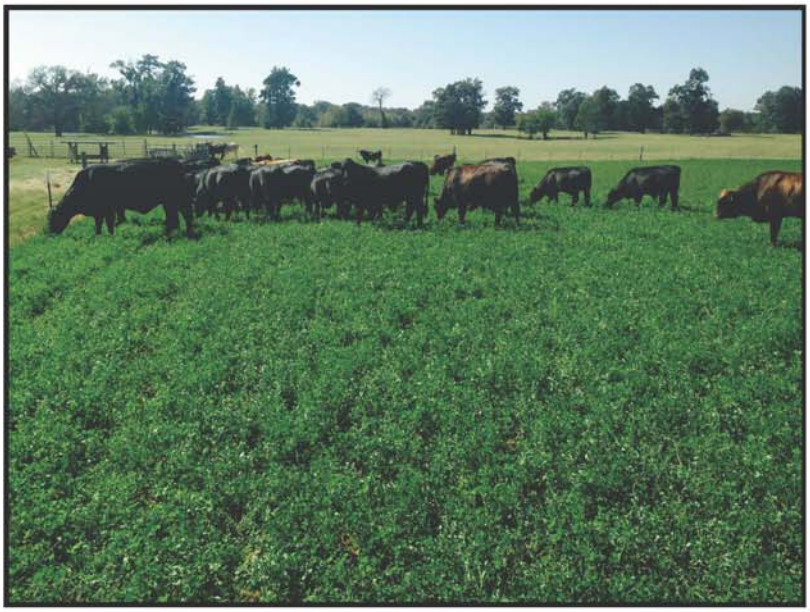
East Texas Alfalfa Conference

TEXAS A&M AGRILIFE RESEARCH TEXAS A&M AGRILIFE EXTENSION

Soil & Crop Sciences Department

Friday, March 24, 2017

Texas A&M AgriLife Research and Extension Center
1710 N. Hwy 3053
Overton, TX 75684



Alfalfa is a perennial legume that can be grown throughout the South Eastern United States. However, success of alfalfa is often based on location, soil type and soil pH. The question often arises; can we grow alfalfa in East Texas? This conference will answer this question as well as many others.

- **Alfalfa Agronomics**
- **Insect Pest of Alfalfa**
- **Alfalfa Disease Issues**
- **Utilization & Feeding**
- **Economics**

2 Pesticide CEUs Available (2 general)

Preregister by March 21, 2017; Cost: $20/person
On-Site Registration Cost: $30/person
(Includes conference materials, lunch and snacks)
Register online at: https://agriliferegister.tamu.edu/Pasture;
or call Extension Conference Services @ 979-845-2604

Registration starts 7:30 am
Program starts 8:15 am
Adjourn & Optional Field Tour 3:45 pm

TEXAS A&M AGRILIFE EXTENSION

New Feral Hog Toxicant Information Program

April 4, 2017

Supper served starting at 5:30 p.m.

Program at 6:00 p.m.

BAR NONE COWBOY CHURCH

9162 State Highway 43 E

(1/2 way between Henderson and Tatum)

Tatum, Texas

FREE to attend

1 CEU - General

Tri-County Beef & Forage Workshop

TEXAS A&M AGRILIFE EXTENSION

Friday, April 28, 2017
Tri-County Livestock Market, Inc.
23733 US HWY 79 North, New Summerfield, TX 75780

3 CEU Hours for Texas Dept. of Agriculture (2 General and 1 IPM)
Please RSVP by Monday, April 24th, for meal planning, to 903-683-5416
Registration fee of $10.00 with checks/money orders made payable to:
Cherokee Beef and Forage

8:00	**Registration**
8:30	**Fertility Management in Hay Meadows** (1 General) Dr. Rouquette, *Texas A&M Regents Fellow & Professor of Forage Physiology*
9:30	**Using Herbicides Near Desirable Trees** (1 General) Mari Palacio, *Dow AgroSciences Range & Pasture Specialist*
11:00	**Fever Tick Update** (1 IPM) Dr. Hank Hayes, DVM *Region 4 Director—Texas Animal Health Commission*
12:00	**Lunch**
12:30	**Beef Cattle Market Outlook** Dr. Anderson, *Professor & Extension Economist*
1:30	**Bull Selection & Management** Dr. Cleere, *Associate Professor & Extension Beef Cattle Specialist*
2:30	**Adjourn**

PROGRAM SPONSORS:

HERITAGE LAND BANK
Your Partner in Rural Lending

DOW
Dow AgroSciences

Cherokee, Rusk, and Smith Counties Cooperating

Anyone needing special assistance at an Extension Program should contact the Texas AgriLife Extension Office of Cherokee County at (903)683-5416 at least one week prior to the program or event.

PREGNANCY DETERMINATION: Methods, Pluses, and Minuses

There has long been interest in diagnosing pregnancy. Some 4000 years ago, reference is found in Egyptian records to determining pregnancy in women based on changes in skin color and moistness (there were no experimental results reported on accuracy of the method). In beef cattle, the most common method for some time has been rectal palpation of the reproductive tract. My colleague, Dr. Bruce Carpenter, presented information at the Texas A&M Beef Cattle Short Course comparing three methods for determining pregnancy. A summary of his presentation follows:

- Rectal palpation – is a very quick process requiring little equipment. It does require some training and experience, especially for evaluation in early stages of pregnancy though, in practice, many cattlemen test cows when weaning calves, culling open cows at that time. Cows can be sorted, based on pregnancy determination, right out of the working chute. Direct cost is low, from about $4-10/head. Indirect cost comes from misdiagnosis. An open cow called pregnant can cost up to 8 months of a cow's cost without return. A pregnant cow called open, if culled, incurs unnecessary costs included in replacing with a new female.
- Blood test – are highly accurate (≥95%). There are two types. In one (BioPryn® from BioTracking, Inc.), blood samples are sent to a lab for analysis, with a cost of $2. 50-3.00 per sample plus shipping. Results are available within 24 hours of when the laboratory receives them, so cows must be held for that period before management decisions are made to keep or cull at that time. In the other test (Bovine Pregnancy Test from Idexx), available through veterinarians, samples can be analyzed in groups as collected, so cows can be evaluated and management decisions made the same day. Some practitioners prefer to analyze samples in their clinic; cost is usually $4-5 per sample with no shipping required. There are other private laboratories around the country that perform the blood analysis service as well. Cows must be individually identified, with ear tags, etc. Both of these are essentially yes/no tests, so stage of pregnancy is not determined.
- Testing can be done as early as 28 days post breeding (i.e, in first-calf heifers). Lactating cows should not be tested until at least 75 days after calving because the protein being measured stays in the system from the previous pregnancy for about 75 days. This is not a problem in herds with controlled breeding/calving seasons of 90 days or less because all cows will have calved and be 75+ days after calving by the end of the breeding season. So, as Dr. Carpenter indicated, just wait the recommended 28 days (or more) from when bulls are removed to bleed and test.
- Ultrasound – is also highly accurate but does require expensive equipment and training and skill. Besides merely determining pregnancy, ultrasound can be used for such things as determining fetal gender and number and viability of fetuses.

Open cows cost. There are effective and feasible ways to determine pregnancy.

(Dr. Bruce Carpenter, Texas A&M AgriLife Extension Center at Fort Stockton, TX; BCarpent@ag.tamu.edu)

Texas Animal Health Commission

Fever Tick Situation Report

February 6, 2017

Statewide Quarantine Summary

141 Infested Quarantined Premises:

- 53 permanent quarantine zone premises
- 88 non-permanent quarantine zone premises
- Counties with infested premises quarantines include: Cameron, Kleberg, Live Oak, Maverick, Starr, Webb, Willacy and Zapata

98 Exposed Quarantined Premises:

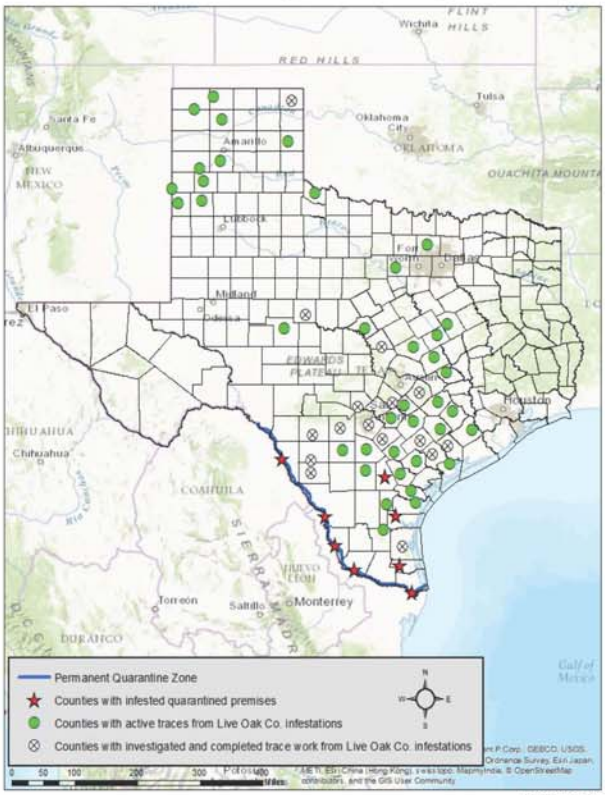
- 41 permanent quarantine zone premises
- 58 non-permanent quarantine zone premises

2,083 Adjacent/Check Quarantined Premises:

- 314 permanent quarantine zone premises
- 1,769 non-permanent quarantine zone premises

Counties with exposed, adjacent or check premises quarantines: Bastrop, Bee, Caldwell, Calhoun, Cameron, Colorado, Denton, Dewitt, Dimmit, Falls, Fayette, Frio, Goliad, Gonzales, Hidalgo, Jim Wells, Karnes, Kendall, Kinney, Kleberg, Live Oak, Maverick, McMullen, Milam, Mills, Parker, Runnels, Starr, Uvalde, Val Verde, Webb, Wharton, Willacy and Zapata.

Infested Quarantines and Live Oak County Traces by County



For more information regarding the fever tick program and terminology used, please visit http://www.tahc.texas.gov/news/brochures/TAHCBrochure_FeverTickFAQ.pdf

Live Oak County Control Purpose Quarantine Area (CPQA)
November 28, 2016 to January 29, 2017 Reporting Period

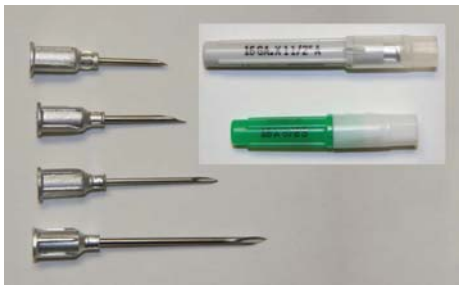
Out of State Traces: 19 head **Texas Traces:** 415 head
Acreage under Quarantine: Approx. 61,212

Live Oak Co. Quarantines		Inspections and Treatments				Movement Permits Issued	
Type	Total	Species	Inspected	Infested	Treated	Species	Total
Infested	8	Bovine	3,111	315	2,187	Bovine	135
Exposed	2	Equine	255	2	151	Equine	52
Adjacent/ Check	268	Wildlife	244	0	69	Wildlife	24
Released	0	Other	0	0	0	Other	0

Live Oak County Dipping Vat Inspections and Treatments: 2,632 head

BQA: TIP OF THE MONTH - Needle Selection

Proper needle selection is important to reduce risk of broken needles and ease the process of giving injections. Both needle length and gauge (thickness) should be considered. Shorter needles (i.e., 5/8 and 3/4 inch) make it easier to properly give subcutaneous injections. For intramuscular injections, a 1-inch needle is sufficient even on mature bulls and cows; longer needles increase risk of bending and breaking. For thicker products, a 16-gauge needle works well. Either a 16- or 18-gauge needle is fine for thinner products. Needles smaller than 18-gauge should be avoided for giving injections to cattle.



(Jason Banta, Ph. D., jpbanta@ag.tamu.edu , Texas A&M AgriLife Extension Beef Quality Assurance Coordinator)

TEXAS A&M AGRILIFE EXTENSION

Rusk County
113 East Fordall Street
Henderson, Texas 75652

Phone: 903-657-0376
E-mail: jdsugg@ag.tamu.edu

We are on the web:
rusk.agrilife.org

PRIVATE PESTICIDE RECERTIFICATION REQUIREMENTS

Licensed private applicators are required to re-certify every five years by obtaining 15 continuing education credits, including two credits in laws and regulations and two credits in integrated pest management (IPM), prior to expiration of the license.

Restricted Use[1] or State-Limited Use[2] Herbicides	Non-Restricted Use Herbicides
Grazon P+D	Milestone
Tordon 22K	Chaparral
Surmount	PastureGard
2,4-D	Redeem R&P
Weedmaster	Spike 20P
Banvel (Dicamba)	Spike 80DF
GrazonNext	Vista XLT
Weedar 64	Cimarron Extra
Weedone LV6	Remedy Ultra
Crossbow	Cimarron Plus
Cimarron Max	Reclaim
2,4-DB	VelPar L
GrazonNext HL	Amber
PasturAll HL	Pastora
PastureGard HL	

[1]**Restricted use:** for purchase and use only by certified pesticide applicators or persons under their direct supervision. Designation is placed on the product by EPA, and the label will state restricted-use.

[2]**State-limited use:** pesticides containing certain active ingredients, with the potential to cause adverse effects to non-targeted vegetation, are classified as SLU when distributed in containers larger than one quart liquid or 2 pounds dry or solid.

List of herbicides that do not require a Pesticide Applicators License:

- Milestone
- Chaparrel
- PastureGuard
- Redeem R&P
- Spike 20P
- Spike 80DF
- Vista XLT
- Cimarron Extra
- Remedy Ultra
- Cimarron Plus
- Reclaim
- VelPar L
- Amber
- Pastora

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If you would prefer to receive the Ag & Natural Resource Newsletter via e-mail, please email me at jdsugg@ag.tamu.edu and I will add you to a mailing list.

The benefit of being on the e-mail list (other than saving us money on postage) is that I will e-mail weekly Livestock Market reports and trends to that list.

EFFECTS OF TRANSPORTATION OF CATTLE

In today's beef industry, most stocker calves and feeder cattle may be transported multiple times from weaning to slaughter. In addition, cull breeding stock destined for slaughter may be transported several times. Most of this transportation is by tractor-trailer trucks. A Cattle Transportation Symposium was held to assess current research and field experience on the effects of transportation. Some conclusions from the conference, funded by the Beef Checkoff :

- **Loading density** – Space required is generally said to be about 1.3 sq. ft/cwt body weight, from slightly more to slightly less as weight increases. This paper reported variation in space allowed in practice varied depending on location in modern semi-trailers. Belly and deck compartments tended to be loaded slightly more densely; the nose and back tended to be loaded markedly less dense. A truck with more axles increases weight that can be carried and therefore density; this tends to result in overloading light calves and under loading heavy finished or mature cattle. The authors stressed the backs of cattle should not touch the roof or top of a compartment. Bruising increased with both over and under loading.

- **Duration and distance** – Distance is more import than duration, which includes any time waiting after loading, both driving and stationary periods, and waiting to unload. After a maximum of 28 hours on a truck, USDA regulations provide that livestock must be unloaded, fed and watered, and rested for at least 5 hours. One study reported cattle transported to commercial feedlots traveled an average of 317 miles, or about 7 hours at an average speed of 62 mph; the study concluded most transporters adhere to regulations. Weight shrink increases fastest with longer transportation duration at higher temperature.

- **Feed and water withdrawal** – Research has shown cattle fasted without feed and water lose body weight depending on length of time fasting as follows: 12 hours (6%), 24 hours (8%), 48 hours (12%), 96 hours (14%). Initial loss is mostly water but is more from body tissue as time increases. (One study showed with average transport of 636 miles about half of weight loss was from muscle tissue). Regaining weight loss may require up to 5 days.

- **Weather and trailer environment** – Cattle trailers are not climate controlled. Ventilation comes from perforations in walls and roof openings. Variations, especially rapid, in temperature and humidity impact cattle comfort and stress. Effects are larger during stationary periods. Temperature-humidity index (THI) is lower in belly and back compartments, due to less solar radiation; highest THI tends to be in the nose, due to lower airflow immediately behind the tractor. One study showed highest death loss at ambient temperature of <5 deg. F; some lack of ability to walk was observed at temperatures >86 deg. F. Bedding during extremely cold temperatures provides some comfort and insulation; a survey found that bedding was less likely when hauling cull animals to slaughter, suggesting economic value and future performance had some influence on whether to bed.

- **Animal handling and driver experience** – Loading and unloading stresses cattle more than transport itself. Stresses are lower when animals are handled slowly, gently, and quietly which, contrary to some common thought, often requires less time to load and unload, not more time. Drivers should be trained in effective handling methods, and should recognize anticipated conditions to be encountered on a haul. Shrink at unloading tends to be lower with drivers having >6 years of experience. The report emphasized that more and better driver training is needed.

- **Animal factors –** Cattle age, condition, temperament, and previous handling/loading/ transporting experience determines how well they may accommodate hauling. Younger calves generally experience more stress and have more subsequent health problems; heavier calves have fewer problems than lighter calves. Cull cows are more affected by long hauls than finished cattle. Inherently calmer cattle have fewer hauling problems than nervous, aggressive animals.

- **Transportation, handling, and carcass value** – The National Market Cow and Bull Beef Quality Audit reported 63% of market cow carcasses and 54% of finished cattle had bruises associated with hauling and handling. Other research showed bruising occurred most frequently on the round in cows and in the high-value rib-loin area in finished animals.

- **Fitness for transport –** Two industry segments were identified as the largest source of transportation-related problems, those being livestock auctions and cull dairy cows. Auctions have identified barriers to improvement of low influence over consigners, inadequate help, and insufficient time. Often cull dairy cows are less fit to be hauled than most other animals. Problems are reduced among all cattle if they are fit.

Recommendations in this summary included:

- feeding within 24 hours before loading if to be hauled >4 hours;
- feeding and watering within 5 hours of loading if to be hauled >12 hours;
- animals should be in good health and fit for hauling;
- animals should be handled as little and as gently as possible; animals should be rested at least 5 hours after 48 hours or more of hauling.

(Prof. Anim. Sci. 32:707; Agriculture and Agri-Food Canada, Colorado St. Univ., Texas A&M Univ., National Cattlemen's Beef Assoc.)