AgriLIFE EXTENSION
Texas A&M System

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ERATH COUNTY
AG PRODUCERS NEWS

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AUGUST 2011

Erath County Extension Office
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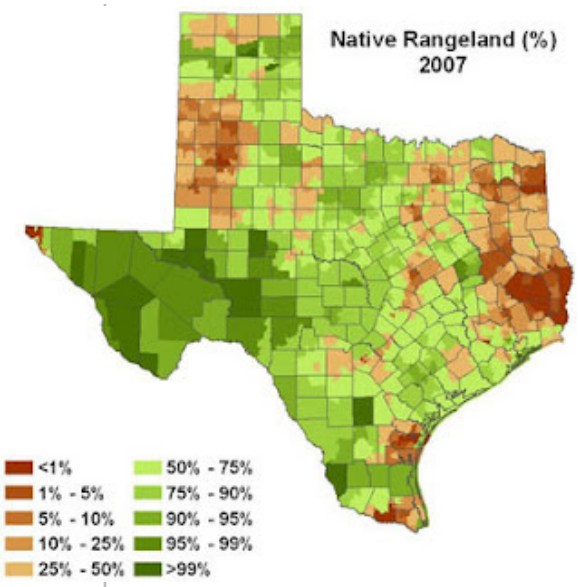
Texas Land Trends

Puts Changing Texas Lands into Perspective

I often find myself describing how the area around where I grew up has changed since I was a kid. Folks find it hard to believe that what is now a booming city known as Pflugerville was once thousands of acres of farmland with a sleepy town in the middle. Population 4000 became population 40,000 in the blink of an eye, and a lot of land changed along with it. In my Father's time, it was mostly large farms, covering hundreds, if not thousands of acres. Now, it's mostly neat suburbs and small lots. With the influx of new folks to Texas, it can be hard to see just what has changed, and how much.

The folks over at the **Institute of Renewable Natural Resources (IRNR)** and the **American Farmland Trust** have developed a new tool at **TXLandTrends.org** to help Texans understand the changing dynamic of land use in the state.

The website showcases various changes, ranging from land use, property size (in acres), land type (such as native grasses, forest, etc), and loss of agricultural lands over a variety of searchable areas, sorted by county, watershed, ecoregion, metro area, or statewide. Clear graphs and maps make changes easy to understand, but ample data is also provided. These can be viewed as overall, general trends by region, such as the I-35 Corridor or the Rio Grande Valley (briefings), or as detailed graphs, maps and charts, based on more local interests.



Map Courtesy of Texas Land Trends

This information is a helpful resource for landowners and conservation professionals, but probably is most helpful to general public in helping to convey information about our changing state to everyone. Even if you think you know how your area sits on all these topics, take a look and you may be surprised. I certainly was!

- by John M. Tomeček, PhD Student, Wildlife and Fisheries Sciences

IN THIS Issue

TEXAS A&M BEEF CATTLE SHORT COURSE:

CATLETT TO DISCUSS FUTURE OF CATTLE INDUSTRY

MORE THAN
7 CEUs Offered

Get first hand experience and knowledge through live animan demonstrations.

COLLEGE STATION – The Texas A&M Beef Cattle Short Course will feature a New Mexico State University economist who will address the future of the cattle industry and economic trends during the Aug. 6 general session in College Station.

Dr. Lowell Catlett, a Regents professor, dean and chief administrative officer in the university's College of Agricultural, Consumer and Environmental Sciences, will provide insights and an outlook on the agriculture industry, specifically beef-cattle production, plus the overall current state of the economy.

"Dr. Catlett is a noted, national speaker who provides varied and upbeat presentations," said Dr. Jason Cleere, AgriLife Extension Service beef cattle specialist and conference coordinator.

The largest beef educational event in the country! Coordinated by Texas AgriLife Extension

"His latest focus is the economy and what we can expect for agriculture and beef cattle markets in the future."

Meanwhile, the cattleman's college portion of the short course provides participants with an opportunity to choose workshops based on their level of production experience and the needs of their ranch.

"These 22 concurrent workshops will feature information on introductory cattle production, management practices in the areas of forage, nutrition and reproduction, record keeping, Brush Busters, cattle handling, landowner issues and much more," he said. "Our goal is to provide participants with information that will help them improve the efficiency and, ultimately, the profitability of their cattle operations."

Participants can also attend one of the popular demonstrations on the morning of Aug. 8.

"There will be demonstrations on chute-side calf working, cattle behavior, penning, selection and brush-busting," Cleere said. "These provide an opportunity for ranchers to see beef cattle production practices put to use."

Participants can receive a Texas Department of Agriculture private pesticide applicator's license during the short course and can earn at least seven pesticide CEUs if they are already licensed, Cleere added.

An industry trade show will be held during the event, featuring more than 120 agricultural businesses and service exhibits.

Texas A&M Beef Cattle Short Course is the place to earn BQA and CEU credits all in one spot.

Producers can register online at **http://beef.tamu.edu** or contact Cleere's office at 979-845-6931 and Youth (ages 13-18) can register for the Youth Track Program.

2 CEUs Offered for Applicator License:

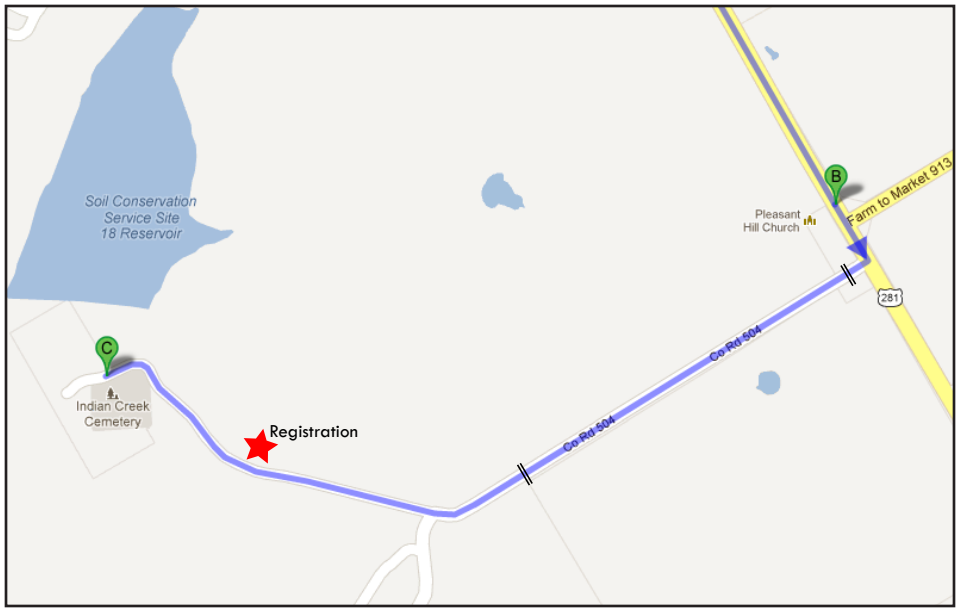
Native Rangeland Weed & Brush Management Field Day

THURSDAY
August 30
8-10:45am

Learn more about range management at essmextension.tamu.edu.

Texas AgriLife Extension Service in Erath County will host a Native Rangeland Weed and Brush Management Field Day on August 30, 2012. This program will focus on native rangeland weed management along with the control of prickly pear, mesquite and yucca.

In addition to the discussions, participants will have the opportunity to view the results of weed plots on native rangeland that were sprayed in April. Also, we will conduct a demonstration of equipment used for individual plant treatment applications and small area applications of herbicides. The equipment demonstration will include calibrating small sprayers and how to properly spray mesquite, yucca & prickly pear.



Directions to the field site:
From Stephenville: Travel South on Hwy 281 toward Hico. Turn right on County Road 504 just past Pleasant Hill Church. CR 504 will take you to Indian Creek Cemetery. Follow the road over two cattle guards and stay to the right going towards the cemetery. We will be set up on the side of the road.

The program will be held at a local ranch south of Stephenville. Registration will be at the field location from 8:00 – 8:30 a.m. with the program following. We will conclude around 10:45 a.m.

We will be moving around some, but you are welcome to bring a lawn chair along if you prefer to sit at the field stops.

2 hours of Continuing Education Units (general category) offered for persons in attendance with a current Texas private, commercial or non-commercial applicator license.

Cash or check only. Make checks payable to Erath Ag Committee. Mail or deliver to Erath County Extension Office, 112 W College, Rm 109, Stephenville, TX 76401.

If registering on site, please bring check or exact amount of cash.

Date: Thursday, August 30, 2012
Registration: 8:00 - 8:30 am
Program: 8:30 - 10:45 am
Cost: $10
CEUs offered: 2 (General)

EXPERTS SAY:

Texas cattle deaths due to prussic acid "isolated incident"

Texas Agricultural Experiment Station photo by Dr. Monte Rouquette

COLLEGE STATION - June 26, 2012 Texas AgriLife Extension Service experts said Tuesday the deaths of 15 cattle in Bastrop County recently were likely an isolated event and that no further problems are anticipated.

"There's a lot of information and misinformation that continues to circulate about this recent isolated case of cattle dying after consuming a Bermuda grass hybrid known as Tifton 85," said Dr. Ron Gill, AgriLife Extension livestock specialist. "It should be known that there is not a widespread problem or concern related to this forage or its use for grazing livestock or the production of hay for livestock consumption."

The single incident occurred when 15 cattle died with clinical signs and preliminary diagnostic results consistent with prussic acid poisoning, said Dr. Tom Hairgrove, AgriLife Extension animal health specialist. The cattle were in a pure field of Tifton 85 Bermuda grass.

Results of analyses of rumen contents and fresh forage from the field in question by the Texas Veterinary Medical Diagnostic Laboratory, an agency that is part of The Texas A&M University System, indicated potential prussic acid toxicity, and at this time there are no other known reported cases of prussic acid toxicity on Tifton 85 Bermuda grass, Hairgrove said.

"Tifton 85 is a hybrid Bermuda grass released from the forage breeding program at the USDA-ARS station at Tifton, Georgia in 1992 by Dr. Glenn Burton," said Dr. Larry Redmon, AgriLife Extension state forage specialist. "Dr. Burton is the plant breeder who released 'Coastal' Bermuda grass in 1943."

To date, there have been millions of acres of Tifton 85 Bermuda grass planted across the southeastern U.S., Redmon said. Since its release in 1992, Tifton 85 has become the most commonly planted Bermuda grass in Texas.

Due to its ease of establishment, excellent drought tolerance and excellent animal performance, literally millions of cattle, horses, sheep and goats have grazed Tifton 85 Bermuda grass since its release without incident. Many forage species, including Tifton 85, have the potential to produce prussic acid, a volatile and toxic compound.

"However, those levels have not been known to produce problems with grazing livestock," he said. "With production for more than 20 years across millions of acres in the south, we have not been able to identify a previous report of prussic acid toxicity in livestock grazing in or fed Tifton 85."

The pasture where the cattle died had been severely drought stressed from last year's unprecedented lack of rainfall. A moderate amount of fertilizer was applied in mid- to late-April, and the

"It should be known that there is not a widespread problem or concern related to this forage or its use for grazing livestock or the production of hay for livestock consumption." *- Dr. Ron Gill, AgriLife livestock specialist*

Tifton 85 is a hybrid Bermuda grass.

pasture received approximately 5 inches of precipitation within the previous 30 days and was at a hay harvest stage of growth, Redmon said.

"Thus, the pasture did not fit the typical young flush of growth following a drought-ending rain or young growth following a frost we typically associate with prussic acid formation in other species of forage," he said.

Because of this unique situation, AgriLife Extension and Texas Veterinary Medical Diagnostic Laboratory personnel have conducted multiple site visits and forage analyses of plants from several field environments across Texas in an attempt to confirm levels of prussic acid accumulation in Tifton 85 Bermuda grass. The diagnostic lab has also collaborated with other laboratories to perform quantitative forage analysis of prussic acid levels, said Dr. Tammy Beckham, Texas Veterinary Diagnostic Laboratory director. Repeated analysis is ongoing to assess potential for prussic acid accumulation in Bermuda grasses in Bastrop County. In addition, the U.S. Department of Agriculture has conducted DNA analysis to confirm the grass as Tifton 85.

Texas Veterinary Medical Diagnostic Laboratory, Texas AgriLife Research and AgriLife Extension were recently funded to implement a pilot project on an enhanced passive surveillance system to provide early detection of animal diseases, including cases resulting from environmental factors.

"The EPS program involves 40 veterinary practices and more than 100 large animal practitioners reporting as one of five data streams," Hairgove said. "In addition, three diagnostic laboratories in two states, livestock markets and harvesting facilities, and wildlife information is also included to provide a comprehensive view of animal health surveillance.

Federal, state and local animal health officials and participating private veterinary practitioners will continue monitoring for other signs of animal distress, as well as continue to sample plants to assess potential for prussic acid accumulation. - *Dr. Hairgrove*

"This incident was reported to the EPS, which is currently being used to monitor animal health over a broad geographic area in Texas and New Mexico, in coordination with the Texas Animal Health Commission and New Mexico Department of Agriculture. Through the EPS, there have been no other reported problems with Tifton 85."

While any livestock loss is unfortunate, currently this episode in Bastrop County appears to be an isolated incident, Hairgrove said.

"Federal, state and local animal health officials and participating private veterinary practitioners will continue monitoring for other signs of animal distress, as well as continue to sample plants to assess potential for prussic acid accumulation."

HAY Moisture and Temperature

At baling, the moisture content of hay for large round bales should not exceed 18%; for small square bales, moisture content should not exceed 20%. One way to get consistent readings with a moisture meter is to use an 18" length of 2" diameter PVC pipe with a threaded cap on one end. Pack the harvested forage into the PVC pipe, then insert the moisture meter into the hay to obtain a reading.

The temperature of hay baled will increase during the first few weeks after baling ("sweating" or "going through a sweat".) It is mainly caused by microbial activity, though it can include some final plant respiration.

At a moisture content of greater than 20% up to 35%, mold production becomes a great concern because it consumes nutrients in the hay and reduces its nutritive value. Mold also creates heat from respiration and produces toxins that make the hay less palatable. While mold-related heat up to about 120° F does not damage hay nutritive value, higher temperatures can. Protein breakdown begins at temperatures above 120° F and browning begins at about 140° F. This browning reaction can further increase temperature and take forage nearly to the point of combustion.

- **Hay temperatures less than 120° F are considered safe.**
- **Between 120 and 140° F: monitor closely (check temperature daily)**
- **Between 140 and 180° F: hay is likely to spontaneously combust, consider calling local fire department**

(Information from Dr. Vanessa Corriher, Extension Forage Specialist, Overton)

Texas AgriLife Extension Service photo by Wayne Becker

AGRILIFE EXTENSION

Helps Test New Mesquite Control Herbicide

Mesquite treated by a new chemical, Sendero, shows signs of mortality, (Texas AgriLife Extension Service photo by Dr. Charles Hart)

STEPHENVILLE – Texas AgriLife Extension Service range specialists have been working with Dow AgroSciences LLC since 2007 on a joint project to develop a new herbicide mix for mesquite control.

The result of the AgriLife Extension-led study is ***Sendero*** herbicide from Dow AgroSciences. The company is calling the product the "new standard for mesquite control in Texas," said Dr. Charles Hart of Stephenville, Texas, A&M University Assoc. Dept. head for Ecosystem Science and Management and an AgriLife Extension Range Specialist.

The recommended use rate of ***Sendero*** at 28 oz./acre has been approved through the Herbicide Use Committee as an official recommendation from AgriLife Extension & Research, Hart said. The AgriLife Extension Herbicide Use Committee approves Texas herbicide recommendations for rangeland weed and brush control used by AgriLife Extension and the U.S. Dept. of Agriculture Natural Resources Conservation Service.

The chemical comes with a high, 56-75 percent, control rating and is approved for use in the Natural Resources Conservation Service Environmental Quality Incentives Program brush control program as a broadcast application on mesquite.

Timing for mesquite control has not changed with this new herbicide, and everything that applies to the old standard of the Reclaim/Remedy Ultra mix also applies to Sendero, he said. Two important points, are that it is approved only for a broadcast application rate at this time, and it will not be used as a basal bark or stem application as the product will not mix with diesel or basal bark oils.

"We are still working on rates for individual plant foliar treatment," Hart said. AgriLife Extension's study, which involved five range specialists across Texas, looked at varying rates and mixes of three herbicides: clopyralid, triclopyr and aminopyralid. Fourteen different herbicide treatments were evaluated with a total of 164 aerial plots, each 10 acres in size, over the period of 2007-2011 as part of this study. All treatments were made in June or July at 4-5 gallons per acre total spray volume and applied by either helicopter or airplane.

In 2009, the mixture of aminopyralid plus clopyralid at a 1:4.6 ratio, which is the formula for what is now Sendero herbicide, was first evaluated and has proven to be effective at controlling mesquite in annual trials conducted through 2011, Hart said. "The new mixture showed higher average mortality and more consistent control across sites during the study."

Across three years and 14 sites, apparent mortality of mesquite averaged 66 % one year after treatment on plots treated with 0.61 pounds active ingredient per acre of the new herbicide, compared to 57 percent on plots treated with the current standard of 0.25 pounds active ingredient per acre of Reclaim plus 0.25 pounds active ingredient per acre of Remedy Ultra.

After two years post-treatment, Sendero plots averaged 77 percent apparent mortality compared to 60 percent for the Reclaim/Remedy Ultra on all but 2011 treated plots, which are yet to be evaluated two years after treatment.

Hart said the new herbicide has several advantages including: "one jug" premix herbicide for mesquite, no tank mixing of herbicides required; the product is non-restricted use, meaning a pesticide license is not needed to purchase or apply; no livestock grazing restrictions associated with the product; and it appears to be very specific to mesquite, leaving desirable shrubs unharmed.

For questions or comments regarding Sendero herbicide, contact one of the AgriLife Extension range specialists located around the state. A list can be found at **http://essmextension.tamu.edu/people/index.php** .

Feral Hog COMMUNITY OF PRACTICE

Provides Multi-state Expertise & Resources

COLLEGE STATION, Texas – Texas AgriLife Extension Service, part of the Texas A&M University System, along with other land-grant university Extension entities and agencies in a multi-state Feral Hog Community of Practice, have launched an important new resource, said a top project participant.

"Through this community of practice, experts from across the nation will produce and convey critical information to the public about feral hogs through web-based resources," said Dr. Jim Cathey, AgriLife Extension wildlife specialist who for the past year has served as leader for the effort. "We're providing these resources through eXtension.org, an interactive learning environment that delivers objective, well-researched knowledge from some of the best minds within the nation's land-grant university system."

Cathey said a "community of practice" is typically a group of professional educators with expertise in a topic or subject matter area who join together to address that area of mutual interest. It is usually a multi-institutional, multi-state and multi-disciplinary educational and informational effort to bring the best and most timely educational resources to the public.

"For the past year, our group has been developing educational resources for feral hog management and now those resources can be viewed by the general public," Cathey said. "And while some of these resources are targeted toward the feral hog situation in Texas, other resources are specific to feral hog management in partnering states."

Cathey said the website includes many creative resources aimed at the public and natural resource professionals. Through eXtension.org there are already 35 communities of practice related to other important public resource areas that can be viewed at www.extension.org.

"eXtension.org provides credible expertise, reliable answers based upon sound research, creative solutions to today's complex challenges, and answers addressing users' specific needs by means of trustworthy, field-tested data," Cathey said.

Some of the benefits of participation in the group include collaboration with peers from across the nation, reaching a large audience of Internet users and getting practical experience, while developing peer-reviewed articles and other materials to help hone professional writing skills.

SITE Specifics

View the site at:
extension.org/feral_hogs

Facebook Page:
facebook.com/FeralHogCoP

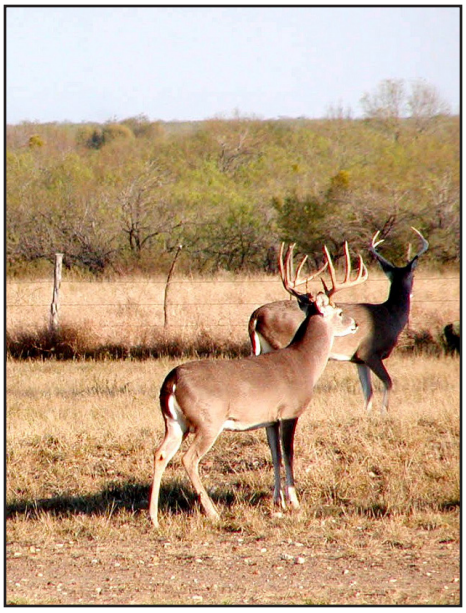
"This new resource area on **eXtension.org** will concentrate on the control, adaptive management, biology, economics, disease risks and human interface relating to feral hogs across the U.S.," Cathey said. "The goal of this community of practice is to provide critical information, resources and expert application of knowledge to meet the demand for timely and accurate information, as well as provide a venue to bring experts together to deliver new ideas and strategies to reduce feral hog numbers."

Leaders of this community of practice represent a mix of researchers, managers and Extension specialists, bridging the gap between research, management and outreach, he explained. Researchers and educators within universities and state and federal natural resource agencies also make up the community.

So far community of practice efforts related to feral hogs have led to recruiting 15 leaders and 38 members representing 17 states; resolving numerous *Ask the Expert* inquiries; face-to-face meetings; web trainings; developing a cache of FAQs, articles and videos; coordinating national feral hog webinars and creating a Feral Hog Community of Practice Facebook page.

Those interested in joining the community may provide contact information and will be sent an invitation to join. They may then establish an eXtension ID and password to access the group.

"You do not have to work for Extension to participate," Cathey said. "Resource professionals are welcome."



White tailed deer in Texas. (Texas AgriLife Extension Service photo)

Deer Management
IN CENTRAL TEXAS

Texas AgriLife Extension Service of Erath County will host a Wildlife Management Seminar focusing on deer management on October 25, 2012 at the TX AgriLife Research & Extension Center in Stephenville. (Corner of Hwy 281 & Lingleville Rd)

We have a great line-up of speakers for the seminar:

- **Dr. Dale Rollins,** wildlife specialist with Texas AgriLife Extension Service in San Angelo
- **Ricky Linex,** wildlife biologist with Natural Resource Conservation Service out of Weatherford
- **Mike Miller,** wildlife biologist with Texas Parks and Wildlife in Stephenville

To kick the program off we will begin with a lab practical which will cover plants, aging deer, scoring and other key elements of deer and wildlife management.

Dr. Rollins will be the lead presenter with ***Deer Management 101*** followed by Mr. Linex who will cover ***Deer Habitat Management and Concerns.*** Following lunch Dr. Rollins will speak again on ***Managing Plant Succession*** followed by Mr. Miller discussing ***Management Plans & other Management Strategies.***

The program will begin with registration from 9:00 – 9:30 a.m. and should conclude around 3:00 p.m.

Pre-registration: $25.00 (covers lunch and program materials)

Due by: October 22nd

Registration at the door: $30.00

Cash or check only. Make checks payable to Erath Ag Committee. Mail or deliver to Erath County Extension Office, 112 W College, Rm 109, Stephenville, TX 76401.

If you register at the door please bring check or exact amount of cash as limited change will be available.

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For more information on any of the articles or activities listed in this newsletter, please contact the Erath County Extension Office at 254-965-1460 or visit us on the web at: erath.agrilife.org

Whit H. Weems, Ed. D
County Extension Agent
Ag & Natural Resources