

Marion County Extension Newsletter

Volume 7, Issue 2

May 2013

TEXAS A&M AGRI LIFE EXTENSION



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County Agent AG/NR

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Topics Covered:

1. **From the Garden:** Scorpions
2. **Beef Today:** Cattle Trends
3. **Water:** Fracking and well water
3. **Health and Wellness:** How much water to drink
4. **Community Development:** Recycling
5. **Upcoming events:** Announcements
6. **Credits**

<http://forages.tamu.edu/>

HOWDY, and WELCOME to the Texas A&M AgriLife **FORAGES web site!**

At this site you will be able to read or download forage-related publications that will help with forage species selection, establishment, management, and utilization. There is information on soil fertility, grazing management, incorporating legumes into your forage system, and minimizing winter feeding costs. You will also find information about our Pasture & Livestock Management Workshop for Novices, how to manage forage pests, information about upcoming events, and links to other sites you will hopefully find useful.

From the Garden

The most common species in Texas is the striped bark scorpion. Adults are about 2 ½ inches long. Striped bark scorpions are yellowish tan with two broad, dark stripes running the length of the back and a dark triangular mark on the front of the head above the eyes. Immature striped bark scorpions may be lighter in color.



Scorpions are nocturnal, hiding during the day and becoming active at night. This behavior helps them manage temperature and water balance, which are important functions for survival in dry habitats. Many species dig burrows in the soil. Their bodies are flat, which allows them to hide in small cracks and under stones, bark, wood, or other objects on the ground. From these hiding places they wait or search for prey. Chief foods are small insects, spiders, centipedes, earthworms, and other scorpions. Once they capture their prey, they use their large pincers to crush and draw it toward the mouth so the prey's body juices can be ingested. Typical life span of a scorpion is 3 to 8 years.

The striped bark scorpion mates in the fall, spring or early summer and the gestation period lasts about 8 months. Females usually give birth to 13 to 47 young, with an average of 31. The immature scorpions molt 3 to 7 days after birth and remain on the mother for another 3 to 7 days. There are five or six molts to maturity. A striped bark scorpion lives for approximately 4 years.

The striped bark scorpion can be found indoors or outdoors in a wide variety of habitats. It is often found under rocks or boards and in debris. Striped bark scorpions are active foragers that do not burrow and are distinctly associated with dead vegetation, fallen logs, and human dwellings. It is common for this scorpion to climb trees and walls, and they often are found in the attics of homes. During periods of hot weather, scorpions may move into living areas to escape the high temperatures in attics.

The sting of a scorpion may be painful or even deadly, depending on the species. Of the 1,500 species of scorpions worldwide, only about 20 to 25 are regarded as dangerous. A scorpion's venom is a mixture of compounds, including neurotoxins that affect the victim's nervous system. Stings from dangerous species may cause paralysis, severe convulsions, cardiac irregularities, breathing difficulties, and even death. Antivenins are available in areas where dangerous scorpions live.

The stings from Texas scorpions produce only moderate reactions in most people because the poison has little effect on the nervous system. Severity of the sting is dependent upon the individual scorpion and the person's reaction to the venom. A person who is stung by a scorpion should be watched closely for adverse reactions. As with any arthropod venom, allergic reactions are possible. An ice

pack applied to the affected area will relieve some pain. If swelling and/or pain persists or if breathing difficulties occur, immediate medical attention is necessary.

Scorpions are difficult to control with insecticides alone. Therefore, the first control strategy is to modify the area surrounding a structure.

- Remove all trash, logs, boards, stones, bricks and other objects from around the structure.
- Keep grass closely mowed near the structure. Prune bushes and overhanging tree branches away from the structure. Tree branches can give scorpions a path to the roof.
- Store garbage containers in a frame that keeps them above ground level.
- Never bring firewood inside the structure unless it is placed directly on the fire.
- Install weather-stripping around loose-fitting doors and windows.
- Plug weep holes in stone or brick veneer structures with steel wool, copper mesh, pieces of nylon scouring pad, or small squares of screen wire. (Steel wool will rust when wet, so it should be used only on dark-colored facades.)
- Use sealant around roof eaves, pipes, and any other cracks into the structure.
- Keep window screens in good repair. Make sure they fit tightly in the window frame.

Naturally derived pesticides for managing scorpions include active ingredients such as rosemary oil, cinnamon oil, clove oil, thyme oil, peppermint oil, and pyrethrum. Naturally derived products generally degrade more quickly than synthetic pesticides so they may not provide a long residual control. Synthetic pesticides for scorpion control may contain active ingredients such as permethrin, cyfluthrin, cypermethrin, lambda-cyhalothrin, deltamethrin, propoxur, carbaryl or bifenthrin. Look for products containing these active ingredients or consult a pest control operator.

Apply pesticides around the foundation of the house and up to 1 foot above ground level on the exterior walls. Also apply pesticides around doors, window eaves, and other potential points of entry. Indoor treatments should be directed at potential points of entry, corners, cracks, and crevices where scorpions hide. Follow directions on the package for dosage, mixing, and application methods. For more information about scorpions or other nuisance pest contact the Brock Fry at the County Extension Office at 903-665-2421.

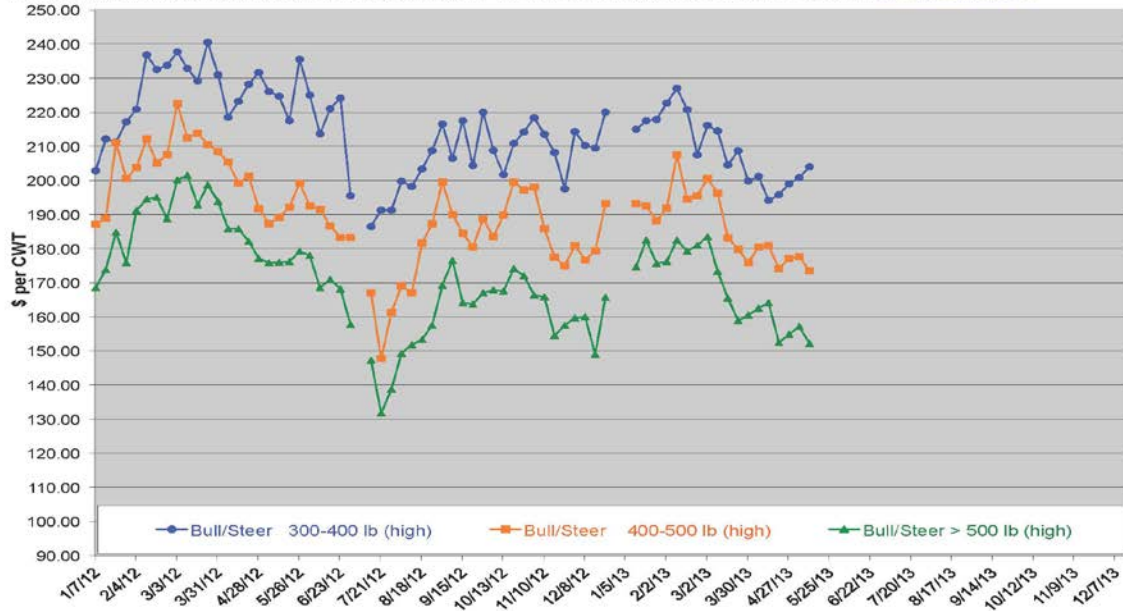
Beef Today

Calf Price Trends

Trend of Highest Prices Reported for Various Weight Calves, Average of 3 East Texas Livestock Auctions

For a weekly email copy of this chart, please contact your Local Texas AgriLife County Extension Agent

For information on beef cattle production, please visit the Texas A&M Extension Beef Cattle Website: <http://beef.tamu.edu>

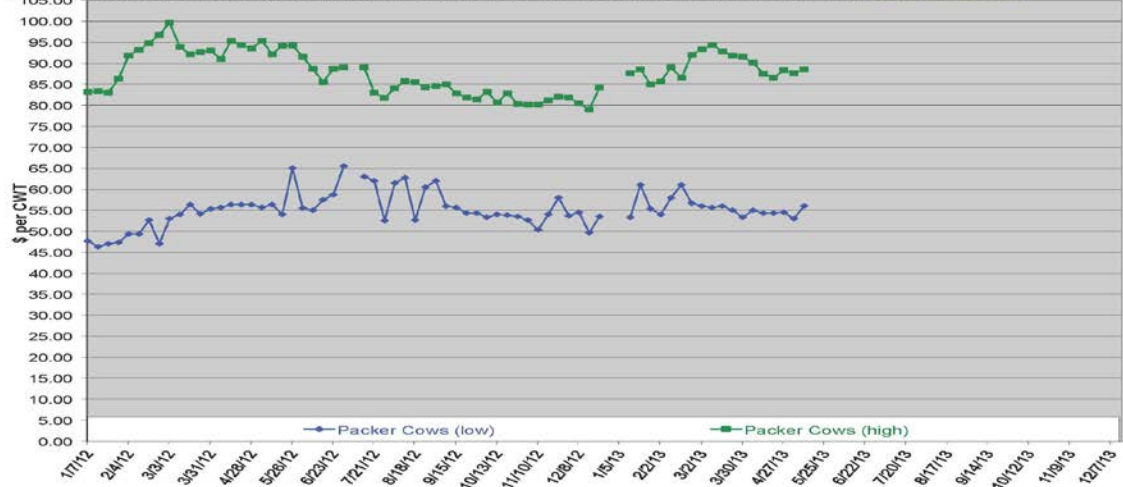


Packer Cow Price Trends

Trend of High and Low Prices Reported for Packer Cows, Average of 3 East Texas Livestock Auctions

For a weekly email copy of this chart, please contact your Local Texas AgriLife County Extension Agent

For information on beef cattle production, please visit the Texas A&M Extension Beef Cattle Website: <http://beef.tamu.edu>





TEXAS A&M
AGRI LIFE
EXTENSION

**May 30-31
2013**

**Texas A&M
College Station
campus**

for more information

Dr. Rick Machen

rmachen@ag.tamu.edu

Office 830.278.9151

To register go to:

<https://agriliferegister.tamu.edu>

Keyword: Grassfed

Register by phone 979.845.2604

Texas A&M AgriLife Extension Service is pleased to announce the third conference focused on grassfed beef production.

Consumer interest in natural, grassfed and organic beef is on the rise. If you'd like to learn more about grassfed beef production and how it's different, mark your calendar for May 30-31, 2013 to be in College Station for this year's **Grassfed Beef Conference**.

We're excited about the interest among participants and the outstanding lineup of speakers that will come together for this information-sharing opportunity. As we (hopefully) emerge from the drought, now is the time to re-evaluate forage and beef production systems.

Here's a quick preview of the agenda:

- Overview of the US Beef Industry
- Handling Cattle for Wholesome Beef
- Defining natural, grassfed and organic
- Carcass fabrication... a demonstration
- Growing forage – the fundamentals
- Consumers... and their expectations
- Cattle types suited for grassfed beef
- A Taste of Texas Beef
- Forage-based nutrition for cattle
- Marketing a unique product
- Preventative herd health
- Economics and Sustainability





I'll bet the beef is good.

It had better be. The Texas Beef Quality Producer program is all about the food.

The TBQP program was developed to assist cattlemen in producing a safer, more wholesome food product. Better beef management practices help deliver a better meal for the all-important consumer. Get ready to participate in an upcoming Texas Beef Quality Producer training near you.

The TBQP program is built upon a proven system of Best Management Practices. This half-day session allows producers to become BQA trained. You should get your seat reserved now because producers are finding the benefits go well beyond the ranch gate... through the livestock market, to the feedyard and most importantly, all the way to the consumer.

Our nation's Beef Quality Assurance (BQA) programs are vital. They help cattlemen give the consumer a wholesome eating experience – even with market cows and bulls. And a good eating experience with beef brings the consumer back for more.

Call or go online to RSVP for your seat.

Stacy Fox, TSCRA, sfox@tscra.org

800-242-7820 • www.texasbeefquality.com

A collaborative effort of:

TEXAS A&M
AGRI LIFE
EXTENSION



Next Event: Corrigan, Texas - May 31, 2013

Corrigan City Hall

101 West Ben Franklin Street

Corrigan, TX 75939

Registration - 9:30 a.m.

Program - 10:00 a.m.

Program should conclude around 3:00 pm

Lunch is included

Please RSVP to:

TSCRA at 800-242-7820 or the Polk Co. Extension Office at 936-327-6828



Training programs cover Beef Quality Assurance, industry updates, record keeping, environmental stewardship and proper management practices associated with genetic selection, cattle handling, culling, vaccination, drug use and more.

Can't make the next training?

BQA certification is available online! Visit www.texasbeefquality.com

A SPECIAL THANKS TO OUR SPONSOR

zoetis™

Winter Pastures for Central and East Texas



Friday, August 23, 2013

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

Winter pastures can be utilized to greatly reduce the amount of hay and supplementation that is needed during the winter-feeding period, greatly reducing feed expenses and increasing the economic bottom line of an operation. **During this intensive day-long program Drs. Vanessa Corriher-Olson and Jason Banta will cover the following topics:**



- Cool-season forages and variety selection
- Monthly and seasonal forage production potential
- USDA web soil survey demonstration
- Establishment and fertilization
- Grazing and utilization strategies
- Impact of cool-season annuals on warm-season perennials
- Appropriate mineral supplementation
- Armyworms and other cool-season forage insects
- Estimated costs

Cost: \$60/ person
(includes lunch and program materials)

Limited to the first 50 people to register!

Register online at: <https://agriliferegister.tamu.edu>;
keyword pasture
or call Extension Conference Services @ 979-845-2604



2 Pesticide CEUs Available (1 IPM and 1 general)

9:30 Registration starts
10:00 Program starts
12:00 Lunch served
5:00 Adjourn

For more information on this
program please contact Michelle
Sensing @ 903-834-6191.

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Facts about Fracking

...and Your Drinking Water Well

Hydraulic fracturing:

The mechanical fracturing of water supply aquifers, oil/gas reservoirs, and for salt solution mining has existed for decades: new technology has made ‘fracking’ more prevalent. Hydraulic fracturing uses large quantities of water under pressure within a borehole to fracture the rock to increase production. In the water well industry, fracking can double the volume of yield in a well; in the oil/gas industry, fracking a well may be the difference between economic profit and loss.

Geology:

Liquids and gases move through the subsurface in either consolidated or unconsolidated rock material. Within unconsolidated material, like sands and gravels, the porous space between the rocks and grains are all interconnected. You cannot hydraulically fracture porous material because the pressure rapidly dissipates. In consolidated rock material, existing fractures and cracks in the rock may not be interconnected – forcing these fractures to open and connect increases the porosity and permeability of the rock. Fracking allows liquids and gases already within the rock to flow because of the increased permeability. Keeping the fractures open and interconnected by propping them with sand or small ceramic beads is key. Fracking the vertical thickness of a production zone to increase porosity has been an industry practice since the 1940’s.

New technology:

Vertical wells were the norm until the development of new drilling technology in the 1970’s that allowed for directional subsurface drilling. Used most commonly in the oil and gas industry, horizontal boreholes can extend for thousands of feet within a narrow production zone. It is not uncommon for a well to extend vertically one thousand feet or more, and then turn 90 degrees and continue horizontally within a rock layer for thousands of feet. Another important technological development has been the design of packers or bladders that expand within the borehole to seal short sections in preparation for fracking. In the past, a well would be fracked over the vertical production length – today, the horizontal borehole can be fracked at higher pressures over multiple, shorter sections. New packer designs also allow for rapid entry/exit from the borehole and increased pressures that can be sustained for longer periods of time. Production rates have soared, making smaller oil and gas reservoirs more accessible for development.

Chemicals injected:

In addition to the sand or ceramic beads used to prop open fractures (known as ‘proppants’), other chemicals are used during the fracking procedure. Chemicals include those to manage the density and viscosity of the fracking solution, dissolve scale, and flush clays that may clog fractures. Public disclosure of chemicals used and their associated health risks, if any, is the basis of current controversy. The Governor of Texas recently signed a bill requiring the Railroad Commission of Texas (RRC) to write disclosure rules for hazardous chemicals by July 1, 2012. The bill requires the RRC to complete rulemaking for all other chemicals used in the process by July 1, 2013. Potential water quality impacts are the focus of on-going EPA environmental studies.

Water use and disposal of waste:

Several million gallons of water are needed for each fracking process, and a well can be fracked multiple times over the entire length of the borehole. Some concern has been expressed that pumping groundwater from a water supply aquifer or from a surface water source will reduce the amount available for other uses, and could impact private wells. Proper wastewater management and disposal also are important because wastewater will contain some of the hydrocarbon constituents released from the oil or gas reservoir, in addition to the original fracking solution. The RRC regulates wastewater management from oil and gas development, and the Texas Commission on Environmental Quality (TCEQ) regulates the wastewater treatment facilities.

Recommendations for private well owners:

Under current regulations and with proper management of the drilling process, it is unlikely that hydraulic fracturing will have any adverse impacts on your water well. However, individuals who use private water wells as a source of drinking water are responsible for ensuring that the water is safe for consumption. Because the potential exists for the quality of well water to change, it is recommended that private well owners obtain a background water sample and then test periodically thereafter (typically once per year) to monitor the quality of water in their well. Routine testing is important, since some water contaminants cannot readily be detected during routine household use. Further, if a change in taste, color, or odor is detected, it can be difficult to establish the cause of the change without having first measured the original, background or baseline chemistry of the well water. Keep in mind that if a private drinking water well is in an area undergoing oil or gas exploration and development, it is possible that the aquifer may already contain naturally occurring contaminants from normal geologic processes. Small concentrations of petroleum constituents and natural gas have been known to seep towards the surface from reservoirs. Dissolved methane and hydrocarbons are not expected to be found in groundwater, but may be present under natural conditions if the aquifer is in proximity to an oil and gas producing zone. Methane may also be associated with coal beds. If you find these constituents in your baseline water quality testing, you should speak to a professional and do further testing. After fracking, or any oil/gas development activity, retesting your water quality to compare against baseline is recommended. If significant change from baseline is detected, then further investigation by a professional is recommended. Any change in water taste, smell or color also calls for expanded water quality testing.

The EPA also maintains a Drinking Water Hotline that is available Monday---Friday from 8:30 AM-4:30 PM Eastern time at 1-800-426-4791 to assist with your drinking water quality questions.

For more information:

To locate a Texas National Environmental Laboratory Accreditation program (NELAC) certified drinking water laboratory in your area:

http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf

For additional information, contact your local County Extension Office, Kristine Uhlman

(kuhlman@tamu.edu, 979-845-1641), Diane Boellstorff (dboellstorff@tamu.edu, 979-458-3562) or Mark McFarland (ml---mcfarland@tamu.edu, 979-845-2425).

Health and Wellness

Water: How much should you drink every day?

Water is essential to good health, yet needs vary by individual. These guidelines can help ensure you drink enough fluids.

[By Mayo Clinic staff](#)

How much water should you drink each day? It's a simple question with no easy answers. Studies have produced varying recommendations over the years, but in truth, your water needs depend on many factors, including your health, how active you are and where you live.

Although no single formula fits everyone, knowing more about your body's need for fluids will help you estimate how much water to drink each day.

Health benefits of water

Water is your body's principal chemical component and makes up about 60 percent of your body weight. Every system in your body depends on water. For example, water flushes toxins out of vital organs, carries nutrients to your cells and provides a moist environment for ear, nose and throat tissues.

Lack of water can lead to dehydration, a condition that occurs when you don't have enough water in your body to carry out normal functions. Even mild dehydration can drain your energy and make you tired.

How much water do you need?

Every day you lose water through your breath, perspiration, urine and bowel movements. For your body to function properly, you must replenish its water supply by consuming beverages and foods that contain water.

So how much fluid does the average, healthy adult living in a temperate climate need? The Institute of Medicine determined that an adequate intake (AI) for men is roughly 3 liters (about

13 cups) of total beverages a day. The AI for women is 2.2 liters (about 9 cups) of total beverages a day.

What about the advice to drink eight glasses a day?

Everyone has heard the advice, "Drink eight 8-ounce glasses of water a day." That's about 1.9 liters, which isn't that different from the Institute of Medicine recommendations. Although the "8 by 8" rule isn't supported by hard evidence, it remains popular because it's easy to remember. Just keep in mind that the rule should be reframed as: "Drink at least eight 8-ounce glasses of fluid a day," because all fluids count toward the daily total.

Factors that influence water needs

You may need to modify your total fluid intake depending on how active you are, the climate you live in, your health status, and if you're pregnant or breast-feeding.

- **Exercise.** If you exercise or engage in any activity that makes you sweat, you need to drink extra water to compensate for the fluid loss. An extra 400 to 600 milliliters (about 1.5 to 2.5 cups) of water should suffice for short bouts of exercise, but intense exercise lasting more than an hour (for example, running a marathon) requires more fluid intake. How much additional fluid you need depends on how much you sweat during exercise, and the duration and type of exercise. During long bouts of intense exercise, it's best to use a sports drink that contains sodium, as this will help replace sodium lost in sweat and reduce the chances of developing hyponatremia, which can be life-threatening. Also, continue to replace fluids after you're finished exercising.
- **Environment.** Hot or humid weather can make you sweat and requires additional intake of fluid. Heated indoor air also can cause your skin to lose moisture during wintertime. Further, altitudes greater than 8,200 feet (2,500 meters) may trigger increased urination and more rapid breathing, which use up more of your fluid reserves.
- **Illnesses or health conditions.** When you have fever, vomiting or diarrhea, your body loses additional fluids. In these cases, you should drink more water. In some cases, your doctor may recommend oral rehydration solutions, such as Gatorade, Powerade or CeraLyte. Also, you may need increased fluid intake if you develop certain conditions, including bladder infections or urinary tract stones. On the other hand, some conditions such as heart failure and some types of kidney, liver and adrenal diseases may impair excretion of water and even require that you limit your fluid intake.
- **Pregnancy or breast-feeding.** Women who are expecting or breast-feeding need additional fluids to stay hydrated. Large amounts of fluid are used especially when nursing. The Institute of Medicine recommends that pregnant women drink 2.3 liters (about 10 cups) of fluids daily and women who breast-feed consume 3.1 liters (about 13 cups) of fluids a day.

Beyond the tap: Other sources of water

Although it's a great idea to keep water within reach at all times, you don't need to rely only on what you drink to meet your fluid needs. What you eat also provides a significant portion of your fluid needs. On average, food provides about 20 percent of total water intake. For example, many fruits and vegetables, such as watermelon and tomatoes, are 90 percent or more water by weight.

In addition, beverages such as milk and juice are composed mostly of water. Even beer, wine and caffeinated beverages — such as coffee, tea or soda — can contribute, but these should not be a major portion of your daily total fluid intake. Water is still your best bet because it's calorie-free, inexpensive and readily available.

Staying safely hydrated

Generally if you drink enough fluid so that you rarely feel thirsty and produce 1.5 liters (6.3 cups) or more of colorless or light yellow urine a day, your fluid intake is probably adequate. If you're concerned about your fluid intake or have health issues, check with your doctor or a registered dietitian. He or she can help you determine the amount of water that's right for you.

To ward off dehydration and make sure your body has the fluids it needs, make water your beverage of choice. It's also a good idea to:

- Drink a glass of water or other calorie-free or low-calorie beverage with each meal and between each meal.
- Drink water before, during and after exercise.

Although uncommon, it is possible to drink too much water. When your kidneys are unable to excrete the excess water, the electrolyte (mineral) content of the blood is diluted, resulting in low sodium levels in the blood, a condition called hyponatremia. Endurance athletes, such as marathon runners, who drink large amounts of water, are at higher risk of hyponatremia. In general, though, drinking too much water is rare in healthy adults who eat an average American diet.

Community Development

Since graduation the Leadership Marion County has partnered with the 1933 Study Club and has been on a mission to obtain a functioning recycling program for Marion County and Jefferson. The groups recently visited River's Recycling in Kilgore and got the scoop on what happens with a successful program and how it works. The groups also meet and received bids from two different recycling companies for Marion County. The hope in all this is that cost can be reduced by sending more of our trash that currently goes to a landfill to a recycling center ultimately reducing the amount of cost for hauling off trash. This recycling effort is going to be an education for those of you who have never participated in one before. As we get closer to having a recycling program the Extension office will aid in the educational effort. I think you will find that it will help you as well as reducing cost for the trash we produce. If you are interested in helping with the recycling efforts you are invited to the next meeting of the Leadership Marion County and 1933 Study Club at Kelly Park at 6:00 p.m. on June 13, 2013. For more information contact Brock Fry 903-665-2421 or email bafry@ag.tamu.edu.



Upcoming events

TEXAS A&M AGRI LIFE EXTENSION

WHAT LAND & MINERAL OWNERS NEED TO KNOW ABOUT THE OIL AND GAS BUSINESS AND UPDATE
ON OIL AND GAS ACTIVITIES IN THE MARION COUNTY AREA

MAY 30, 2013 6:00 –9:00 PM

Location: Kelly Park Community Center

130 Kelly Park Rd., Jefferson, TX 75657

R.S.V.P. by May 29 (903) 665-2421

BBQ meal included Cost: \$25

TOPICS

Recent Leasing and Drilling Activity in the Marion County Area

Royalty and Lease Bonus (What to ask for and Why)

Cotton Valley Liquids Plays in your Area

Latest Horizontal Drilling Technology Developments

Understanding your Oil and Gas Lease

Lease Clauses & Lessor's Rights

New Developments in Oil and Gas Law

How to Protect your Mineral Rights:

Stay informed- (Oil and Gas Information and Where to Get it)

Know the Value of your Lease

Know the Operators Duties Under Your Lease:

Duty to Develop and Protect Against Drainage

Lease Termination-(How to know when it happens)

Limitations Issues- (Before it's Too Late)

Royalty Payment Issues

(How to Read Your Check Stub)

Surface Damage Issues

(Dealing With Drill Sites and Pipelines in Your Backyard)

Update on the Future of Natural Gas Prices



Phillip Baldwin Jr. Attorney at Law

Marshall, Texas

26 years Experience in the East Texas Oil and Gas Industry

BA Geology Centenary College (1983)

J.D. South Texas College of Law (1986)

Vice President and General Counsel

Westchester Gas Company and Affiliates (1990-2002)

Private Practice Phillip Baldwin Jr. PC (1998-present)

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating. If you need assistance for a disability please call in advance so necessary accommodations can be made (903)665-2421.



Home Water Program

'Irrigation Quick Fixes'

Dr. Dotty Woodson

Extension Water Resources Specialist

Biological and Agricultural Engineering Department

'40 Gallon Challenge'

Dr. Diane E. Boellstorff

Assistant Professor and Extension Water Resources Specialist



The *40 Gallon Challenge* is a call for residents and businesses to reduce our region's water use on average by 40 gallons per person, per day. The challenge began in 2011 as a voluntary campaign to increase water conservation.

Location: House of the Seasons

409 S. Alley St. Jefferson, TX 75657

Cost: \$20.00

Date: June 18th 2013

Time: 6:00 p.m.

Please R.S.V.P. by June 14th call 903-665-2421

Educational programs of Texas A&M AgriLife Extension are open to people of all ages without regard to race, color, sex, socioeconomic level, disability, religion or national origin. Anyone having special needs to facilitate attending programs should call the Extension office for arrangements in advance 903-665-2421.

Recycling meeting:

June 13, 2013

Kelly Park Community Center

6 p.m.

For more information contact the Marion County Extension office.

Phone: 903-665-2421



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“Improving Lives. Improving Texas.”