

# Walker County Agriculture News Update

**July 2017** 

Greetings from the Walker County, Texas A&M AgriLife Extension office!

"Gardens are not made by sitting in the shade" – somewhat of an excerpt from Rudyard Kipling

#### Well yes...

If you have ever raised a successful garden you know the accuracy of that statement. This quote eludes to both physical work and sunshine. Raising a crop is work. Hopefully under good growing conditions; plenty of sun, good soil, proper nutrients and adequate moisture, your effort will bring in a crop. The same holds true with our turf grasses, pastures and hay fields. On a related note: I find interesting the number of people who wonder why they have thin lawns under shade trees. I would wager they have more often sat under a shade tree rather than raising a successful garden.

Glad to have you here! Read on.

• When you have the opportunity, let others hear your message.

# Do you have a few minutes? If so, help us with a brief survey:

Texas A&M AgriLife Extension is conducting a statewide online survey to determine what you see as educational strengths of AgriLife educational programs in your county. This survey will also allow you to voice concerns on topics you see us working with which may not be a priority to you... (*here is your chance to help guide our future*): https://agrilife.az1.qualtrics.com/jfe/form/SV\_0V6YPEIYLTWuwHr

#### **Pond Problems?**

This week seems to have been the pond question highpoint of the year. Phone calls, walk ins, and emails have been steady. The past month with warm weather and good growing conditions have caught up with our pond and lake owners. If you have issues with aquatic weeds, we have an excellent online tool to help identify these plants and then provide recommendations for control options. Check out <a href="http://aquaplant.tamu.edu/plant-identification/">http://aquaplant.tamu.edu/plant-identification/</a> If you would like a little help. If you are unsure of your plant ID, feel free to call us for additional assistance.















# 4-H Program Sponsors: Help those who are helping our youth!

TU-MILE Sportsman's Association Banquet August 18, 2017 Walker County Fairgrounds 6:00 PM TU-MILE SPORTSMEN'S ASSOCIATION

This locally based organization has been an outstanding supporter of the 4-H & Youth Shooting Sports program and our outdoor education/wildlife activities. During the past year, TU-MILE Sportsman's Association has donated \$30,000.00 to 4-H programs in a six-county area. Walker County is fortunate to be one of those counties. Funds were utilized to purchase items allowing members greater opportunity to learn about and excel in various outdoor sporting events. Additionally, the association is planning to provide five \$1,000.00 scholarships to graduating seniors. This year's banquet will include youth events, special raffles, gun giveaways and much more. Admission tickets are: Kids 8 & under (free), Ages 9-17 (\$25), Adults (\$65), Couples (\$120). For more information, or to purchase tickets please contact Jody Crawford (936) 714-3499.

### **Upcoming Events:**

# Walker County Local Working Group: NRCS Conservation Planning Meeting

#### **YOUR INPUT IS NEEDED**

Help determine local natural resource priorities and criteria for USDA conservation activities and program planning for the upcoming fiscal year.

#### FOR MORE INFORMATION

Contact the NRCS office in Walker County at (936) 291-1901 ext. 3, your local Walker Soil & Water Conservation District Board member, or visit www.tx.nrcs.usda.gov and www.tsswcb.state.tx.us.



#### **GET INVOLVED**

Be part of the process that helps manage the natural resources that your community depends on for the future.

1<sup>st</sup> Friday Webinars (Monthly Horticulture Topics) Walker County, Texas AgriLife Extension Office 12 Noon – 1:00 PM (FREE)

We are still offering these sessions! The presentations have been full of outstanding information. I know the August 4<sup>th</sup> topic is a big one for many home gardeners-DON'T MISS IT! If you wish to watch the webinar on your own computer at home or elsewhere, you do have that option. All you must do is go online to <a href="http://aggie-horticulture.tamu.edu/smallacreage/">http://aggie-horticulture.tamu.edu/smallacreage/</a> and click on the link for that date, then inter the password which is: online

Interested in some additional horticulture topic trainings? If so, here is the answer! These webinars will be shown at the Walker County AgriLife Extension office. Trainings will be held the first Friday of the month. If you wish to attend, RSVP to (936) 435-2426. RSVP is requested for those attending here on-site is so that we may contact you in the event of any changes.

I am providing this set of diverse presentations as continuing education credit for our Walker County Master Gardeners; however, <u>anyone</u> is invited to attend. Bring your lunch with you! The remaining 2017 schedule is:

- 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

#### The Edible Yard Symposium

Friday & Saturday, September 8th & 9th, 2017

Friday, Sept 8<sup>th</sup> \$20 (Garden Tours/Workshop/Demonstrations)

Saturday, Sept 9th Symposium \$60 (Lunch included)

Walker County Storm Shelter (455 Hwy 75 North), Huntsville, TX

You can Register online at the Walker County Master Gardener Facebook page/ Eventbrite Link or

email: edibleyardsymposium@gmail.com

Have you ever wondered if you could create an attractive home landscape of edible plants instead of our more common ornamental versions? The answer is yes! The Walker County Master Gardeners would like to invite everybody to attend our Edible Yard Symposium. Join us to learn more about creating a home landscaped yard that is both attractive and useful!

Speakers for the symposium will include:

#### Dr. Mark Vorderbruggen

Forager, father, husband scientist, adventurer, and highly productive insomniac ...Dr. Mark "Merriwether" Vorderbruggen doesn't have time to sleep. Having learned foraging from his parents, this skill is now shared to thousand through classes, Facebook, Instagram, his website www.foragingtexas.com, and now with his book, Idiot's Guide: Foraging. After 18 years as a chemist using plants' naturally



Photo Credit: Alabama Cooperative Extension Service

occurring compounds to make the oil industry greener, he's now doing the same for our as R&D manager for a consumer cleaning product company, and he also writes a monthly "Taste of Nature" column for the women's fashion/lifestyle magazine Charm East Texas.

#### **Judy Barrett**

Judy Barrett is the author of several gardening books. Her book, What Can I Do With My Herbs? was published by Texas A&M Press in the spring of 2009. What Makes Heirloom Plants So Great? (2010). Recipes From and For The Garden (2012). YES! You Can Grow Roses (2013). Her newest book, Easy Edibles: How to grow and enjoy fresh food, came out in the fall of 2015. A new book is in the works.

#### **Angela Chandler**

Angela Chandler is a lifelong gardener with a passion for learning and teaching. She and her husband Fred tend a ½ acre micro-homestead in Highlands, Texas. They include ornamentals, vegetables, fruits, chickens, goats, bees, and rescued dogs. Angela is a member of the Harris County Master Gardener Association (Retired), and a member of the Garden Writer's Association. She has been published in local and national print media.

#### Joseph Johnson

Joseph Johnson, the Gardens Manager for The Gardens at Texas A&M University since 2016, oversees the design, construction and maintenance of The Gardens. The Gardens project will restore, preserve, and develop nearly 40 acres into a variety of themed spaces for teaching, research, extension/outreach, and community involvement and enjoyment. Construction on the first portion, the 7 ½-acre Leach Teaching Garden, began in June and is expected to be completed by early 2018. Joseph was most recently the director of horticulture with the 252-acre Shangri La Botanical Gardens and Nature Center in Orange, Texas since 2010. Previously, Joseph managed more than 50 acres of landscaped gardens and 300 acres of campus as well as interior public spaces and satellite properties for the University of Texas M.D. Anderson Cancer Center in Houston.

## **Out of County Events:**

TAMU Beef Cattle Short Course
August 7<sup>th</sup> through 9, 2017
Texas A&M University, College Station, Texas
Online Registration (see provided link):

https://events.tamu.edu/EmsRegics/RSForm.aspx?data=hHr80o3M7J4zFZgEmJqFJA%3d%3d

The Texas A&M Beef Cattle Short Course has a rich tradition and historical place in the programs emanating from the Department of Animal Science at Texas A&M University. Dating as far back as 1942, Professor John K Riggs started the first in a series of Beef Cattle Short Courses held on the campus of Texas A&M College to discuss the results of beef cattle research from the Texas Agricultural Experiment Station with Texas beef producers.

The Cattleman's College features more than 20 concurrent sessions. Topics include animal health, nutrition, reproduction, breeding, genetics, selection, research, marketing and handling. Management sessions will cover business, forage, range, and purebred cattle. Topics such as landowner issues and fence building will be featured at this BCSC. Sessions are designed for everyone, from the newest member of the industry to the most seasoned producer.

Pesticide CEUs, veterinarian CECs and BQA credits are available to attendees Additionally, over 125 agriculture related businesses and trade show exhibitors annually attend the course and attest to the fact that it is the most highly attended activity of its kind anywhere in the United States. Annually over 1400 participants attend the Beef Cattle Short Course to gain valuable knowledge about beef cattle production.

# Gus T. Canales Lectureship on Prescribed Burning July 31st through August 3, 2017

Kingsville, Texas

Online Registration (see provided link):

https://moneyconnect.tamuk.edu/C20209 ustores/web/product detail.jsp?PRODUCTID=26&SINGLESTORE=true

This four-day lectureship is designed to teach the participant the safe use of fire as a rangeland and wildlife habitat management tool. It provides the formal training necessary to qualify the participant as a Certified Prescribed Burn Manager in the state of Texas.

#### Participants will learn to:

- Apply principles learned in classroom training in a hands-on prescribed burn
- Understand weather factors as they affect prescribed fire
- Develop a burn plan
- Identify the various techniques of prescribed burning
- Discuss fire behavior and how to control a fire
- Recognize the effects of fire on various vegetation types
- Understand the legal requirements for prescribed burning
- Become familiar with safety equipment and tools needed for prescribed burning

Registration is \$500, which includes all workbook materials, equipment, refreshments and meals. Weather permitting, a live 500-acre burn is scheduled for August 3rd on East Foundation's El Sauz Ranch in Port Mansfield, Texas. Transportation to and from the burn site will be provided by King Ranch Institute of Ranch Management.

#### **Texas Grazingland Conference**

August 29, through August 31, 2017

Waco Convention Center (100 Washington Ave., Waco, TX) \$125 person includes all session, a ranch tour, two mixers and two lunches: <a href="https://www.regonline.com/txgrazland2017">www.regonline.com/txgrazland2017</a>

When you open a program flyer and the first concurrent session is titled "How to Not Go Broke Ranching", then you look to the side bar and see a featured speaker topic of "It Takes Ten Dimes to Make a Dollar", and right above that, it is noted that Wyman Meinzer will be the keynote address. Well, personally that sounds like an interesting conference. You may want to consider attending this one.

The conference will feature a keynote address from Wyman Meinzer, State Photographer of Texas. He will also be signing books at the tradeshow. Tim Cansler of Cansler Consulting in Washington D.C. will also be addressing attendees.

Concurrent sessions will feature both wildlife and livestock grazing issues with successful producers discussing how healthy ecosystems contribute directly to profitable ranching. You will learn solutions to keeping your ranch healthy and profitable, whether your focus is livestock or wildlife. In addition, attendees will take a tour to the Flat Top Ranch, renowned for its wildlife, rangeland restoration efforts, and soil and water conservation. The deadline to register for the conference is August 10.

#### **Ranchers Leasing Workshop**

September 1, 2017

8:30 AM - 1:00 PM

Hildebrand Equine Complex, College Station, TX (if you haven't seen this facility- you need to)

Cost: FREE/No Charge

RSVP to Kim at (806) 677-5626 or Kim.Garcia@ag.tamu.edu

Items of discussion during this workshop will include drafting and negotiating grazing, hunting, and livestock leases.

## **Online Educational Topics:**

#### **2017 Texas Range Webinar Series**

12:00 PM (Recommended: check each webinar prior to day to confirm starting time)

No Cost for non-CEU recipients/\$10.00 with CEU's

Enroll in Course: <a href="http://naturalresourcewebinars.tamu.edu/upcoming/">http://naturalresourcewebinars.tamu.edu/upcoming/</a>

August 3 – The Legume Family: Taxonomy and Important Family Members

**September 7** – (1-CEU-IPM) <u>Understanding and Controlling Invasive Species</u>

October 5 – Forage Forecasting: Decision Support for Rangeland Systems

November 2 – (1- CEU-IPM) The Tools in our Land Management Toolbox

**December 7** – <u>Grazing with a purpose – Managing for what you WANT</u>

#### **Water Resources Webinar Series**

I chose to include this information as it addresses questions that are fielded periodically here at the AgriLife office. If you ever wonder what real problem could happen around the farm or ranch, think about what can go wrong with your water well(s). Knowledge on this subject matter is a very good thing to have.

The National Ground Water Association (NGWA) is pleased to provide these webinars to you with the support of the U.S. Environmental Protection Agency and the assistance of the Rural Community Assistance Partnership.

#### **Drought and Your Water Well**

July 25, 11 a.m. ET (10 a.m. CT, 9 a.m. MT, 8 a.m. PT)

Presenter: Gary Hix, CWD/PI, In2Wells LLC, Tucson, Arizona https://register.gotowebinar.com/register/8519597017611252995

This webinar explores how drought affects water well productivity and other reasons unrelated to drought for why wells might yield less water. The lesson also provides guidance on what well owners can do. Gary Hix is a registered geologist, NGWA Certified Well Driller/Pump installer, and a past president of the Arizona Water Well Association.

# Water Well System Components Vital to Water Quality August 8, 11 a.m. ET (10 a.m. CT, 9 a.m. MT, 8 a.m. PT)

Presenter: Denis Crayon, CHST, Summit Drilling Co., Bridgewater, New Jersey https://register.gotowebinar.com/register/3579895894293186051

This webinar describes water well system components that protect water from certain harmful contaminants—and what well owners should do to stay on top of related maintenance. Denis Crayon, a water well system professional, is on the NGWA Board of Directors.

#### Turbid Well Water and What to Do About It

August 15, 3 p.m. ET (2 p.m. CT, 1 p.m. MT, 12 PT)

Presenter: Richard Thron, MGWC, Mantyla Well Drilling Inc., Lakeland, Minnesota https://register.gotowebinar.com/register/5215741597517033475

Well owners will learn some of the causes for "turbid" water (water with suspended matter in it), why they should be concerned, and what to do to protect or improve the water quality. Richard Thron is a president and owner of his company and a former president of NGWA.

# Shock Chlorination: What You Should Know August 23, 3 p.m. ET (2 p.m. CT, 1 p.m. MT, 12 PT)

Presenter: Jeffrey Williams, MGWC, CVCLD, Spafford and Sons Water Wells, Jericho, Vermont <a href="https://register.gotowebinar.com/register/3127553512091454467">https://register.gotowebinar.com/register/3127553512091454467</a>

This webinar explains why shock chlorination is a procedure best done by experienced water well system professionals to achieve effective well system disinfection. Jeffrey Williams is vice president of his company and a former president of NGWA.

#### Planning for a Water Well

September 6, 11 a.m. ET (10 a.m. CT, 9 a.m. MT, 8 a.m. PT)

Presenter: Mark Layten, CWD/PI, Kickapoo Drilling Co., Downs, Illinois https://register.gotowebinar.com/register/9038858976030184963

This webinar examines important considerations for persons getting a water well for the first time or a replacement well. Mark Layten is a member of the Illinois Association of Groundwater Professionals and NGWA.

#### **Additional Information of note:**

#### You have probably noticed we frequently talk about fire as a tool.

Texas Parks & Wildlife has a recently released YouTube video titled "The Business of Burning". In less than 7 minutes, they will explain the value of prescribed burning and the organization of a controlled burn. https://youtu.be/iizneuHZ2Ew

#### Myth Busting Cattle, Climate Change and Greenhouse Gas Production

By, Joe C. Paschal, Livestock Specialist, Texas A&M AgriLife Extension

A myth is an unproved or false collective belief that is used to justify a social institution. One popular myth is that cattle production is the major cause of global warming or climate change because of the production and release of greenhouse gases into the atmosphere. These include carbon dioxide ( $CO_2$ ), methane ( $CO_4$ ) and nitrous oxide ( $NO_2$ ) among others. Global warming is caused by the molecules of these gasses trapping the heat of the sun's radiation as it is reflected from the Earth. A good deal of naturally occurring water vapor is also a major factor causing global warming. Methane and nitrous oxide have a much greater warming potential (25 to 300 times more) than carbon dioxide which is why it is considered more important to reduce them too.

In 2010, carbon dioxide represented 76% of all worldwide greenhouse gas emissions while methane represented 16% and nitrous oxide was 6%. Agriculture and forestry contributed a total of 24% of all greenhouse gas emissions but 20% of that amount was removed from the atmosphere by plants. In 2014, agriculture accounted for only 9% of all greenhouse gases produced in the US, much less than electricity production, transportation and industry. Cows don't release any carbon dioxide or nitrous oxide but they do produce methane. Methane is created by the digestion of coarse forages and released through eructation or belching, but cows are not the biggest source of methane, agricultural or otherwise. All beef production, including dairy, is responsible for only 9.4% all global or 1.9% all US greenhouse gas emissions.

This small level of emissions can be and is being reduced with the use of improved forage varieties, grain finishing, ionophores, and growth implants. Improved forage varieties have lower structural carbohydrates and are more digestible releasing less methane. Grain finishing produces less methane, grain is more digestible and allows cattle grow faster and more efficiently than on grass. Ionophores reduce methane production in the rumen by shifting the microbial population from methane producers to producers of more easily absorbed volatile fatty acids. Finally, growth implants reduce methane production implants increasing growth and efficiency, reducing the amount of feed fed overall.

Cattle production does contribute to the greenhouse gas emission as does all of agriculture, but far less than other sources. In addition, cattle producers and the agricultural sciences are continuing to reduce those emissions and improve the efficiency and productivity of beef. For more information on this and other topics, contact your local County Extension Agent.

For more information contact your local County Extension Agent. (\*Reggie's note: Please make sure you read the article carefully before you call.)

For more information and references:

World greenhouse gas emissions: <a href="https://www3.epa.gov/climatechange/ghgemissions/global.html">https://www3.epa.gov/climatechange/ghgemissions/global.html</a>
US greenhouse gas emissions: <a href="https://www3.epa.gov/climatechange/ghgemissions/sources.html">https://www3.epa.gov/climatechange/ghgemissions/sources.html</a>
FAO Revised Report: <a href="http://www.fao.org/news/story/en/item/197623/icode/">http://www.fao.org/news/story/en/item/197623/icode/</a>
Beef facts:

http://www.explorebeef.org/CMDocs/ExploreBeef/Beefs%20Shrinking%20Environmental%20Footprint Fact%20Sheet.pdf

# In This Issue:

# GREEN IS THE THING.

#### Dr. Paschal's news article printed above reminded me...

I posted information last year on the volatile subject of greenhouse gas emissions. (*Pun completely intended.*) For this issue, I updated the original information to round it out with Dr. Paschal's information.

My original writing followed a very poorly worded news print story which I had the misfortune to read. To say the least, it torqued me up a bit at the time. The detractors of agriculture are good at posting rants online. They also find outlets into print media. Sometimes, just sometimes, the benefactors of agriculture should consider a response as the facts stand.

A few standing facts follow.

# GREEN IS THE THING By Reggie Lepley

I guess it's in vogue today to point fingers rather than doing something to solve a problem. A newspaper joined the fray against a \$51 million-dollar county industry (2013 Walker County, Texas beef cattle income numbers). I used that specific year's income example as I was not in the office to pull up current numbers and I could find 2013 data on the web. The article as written was decidedly anti-beef production among other things. As is typical, it got me to thinking.

Greenhouse gasses and agriculture's role was the topic of the release. Part of what they were specifically bemoaning was enteric fermentation and the role ruminate animals play in the global warming debate. Yes, cow belching, burping, or eructation, go ahead and pick the term you are most comfortable with. I'm sure you are familiar with the concept that green formerly living things decompose.

It crossed my mind that North America has been home to sizable numbers of ruminant animals for a very long time. To place some overall perspective on the issue. As of January 2016, the US cattle inventory reported at 92 million cattle & calves (*this includes 9.32 million dairy cows*). By the way, the most current estimates on American Bison (*1990's*) populations were 20-25 thousand on public land and 250,000 in private ownership. You should soon see where I am going with the cattle/bison comparisons.

Interestingly in 2015 the US population was 321.4 million people.

How many farmers are feeding all those residents? I like history and have mentioned the topic several times in my newsletters. Let's have a little historical review: 1930/1 farmer fed 9.8 people, 1950/1 fed 15.5 people, 1960/1 fed 25.8 people, 1970/1 fed 47.7 people, 1980/1 fed

75.7 people, 1990/1 fed 100 people, 2015/depending on who's numbers you read 1 farmer feeds 144-155 people.

You may ask why I chose to begin looking at numbers around the decades of the 30's to 40's? Simply enough, this is when widespread modern mechanization was available for adaption. More farmers could buy and operate tractors. The post WWII years was the time frame when almost everybody shifted from horses and mules to tractors. I have talked to enough of the "old timers" here in Walker County to have heard the information myself. This was soon followed by available petroleum byproduct fertilizers and then development of crop protection chemicals.

#### More fun with history coming up!

The US population in 1870, close to the height of the Bison removal/harvest/slaughter-pick your favorite term there also, was 38.55 million people vs 321.4 million in 2015 (*a 733.72% change*). A little more info, the 1790 US population was 3.92 million people. If you are doing the math that works out to an 8,098.98% change in US population from 1790 to 2015.

So, I'm guessing all these people require feeding by somebody or they better get to farming for themselves. I remember saying this in previous newsletters.

It seemed that the article intended us to turn away from the systems that are providing food and fiber for all. Oh, back to that enteric greenhouse gas issue, 25 % of methane (enteric fermentation) in the US is originated by cattle. The balance of methane production is 10 % by manure management (*start adding*), 7 % other, 9 % coal mining, 18 % landfills (*remember all those people must do something with the stuff nobody wants*), and 31 % from natural gas and petroleum systems. Those percentages are just accounting for methane and not the total for all greenhouse gasses as referenced in Dr. Paschal's article. The total methane contribution to greenhouse gas percentages are much smaller although methane does contribute large warming potential along with nitrous oxide.

Please, go back and read what Dr. Paschal wrote in his article above. You will note he said methane represented only 16% of all greenhouse gasses while 76% was from carbon dioxide, and 6% from nitrous oxide. For full disclosure and transparency purposes, my research of the topic indicated total greenhouse gas emissions in 2015 were composed of: 10% Methane, 5 % Nitrous Oxide, 3 % Fluorinated Gasses, and 82 % Carbon Dioxide. Keep in mind these numbers fluctuate as new reports are released.

From a distance, it looks like when we stop driving, heating/cooling our houses, throwing stuff away, and eating, the greenhouse gas emission situation is an easy problem to solve.

By the way, in the 1500's the American Bison population was estimated to be 30-60 million head. Nobody complained about their enteric issues or had much of a care about them traveling through their yards, crops and fences, over their roads, or down main street in town. That population of wild roaming eructating beasts was 20.5% of our current four-legged methane bio-machines. If you are paying attention, that percentage has not increased as much

as the percent population change. A 387.13% change in ruminant numbers vs the 8,098.98% change in human population. Regardless, we couldn't feed our population with the original bison herds for a variety of reasons.

Since the news article wanted us to leave the equipment, fertilizers and enteric beasts behind which are supporting us, we better have more people learning to farm with one horsepower hay burning bio-engines. Otherwise somebody will be very hungry. (*I need to remind you at this point that I wrote the original response for a different crowd as this was originally directed to a non-ag producer clientele.*) For our "Ag" crowd which this newsletter is directed to, I will point out a fact from one of the links provided by Dr. Paschal stating that the United Nations Food and Agriculture Organization (FAO) projects in 50 years, the world population will need 70% more food.

There are people wanting us to go back to pre-1950's numbers and thinking it is a good thing. Interestingly, the photo attached to the news article which originally twisted me up, just happened to depict a guy who plowed his field with a water buffalo.

That might just tell you something itself.

If you have questions or would like more information regarding Extension Educational Programs, call us at (936) 435-2426.

Reggie Lepley,
County Extension Agent – Agriculture & Natural Resources
Walker County
(936) 435-2426

Provisions from the American Disability Act will be considered when planning educational programs and activities. Please notify the Walker County Extension Office if you plan on attending an Extension Educational program and need specialized services. Notification of at least three to five days in advance is needed, so that we may have ample time to acquire resources needed to meet your needs.

Educational programs of the Texas A&M AgriLife Extension
Service are open to all people without regard to race, color,
religion, sex, national origin, age, disability, genetic
information or veteran status. The Texas A&M University
System, U.S. Department of Agriculture, and the County
Commissioners Courts of Texas Cooperating