

Texas A&M AgriLife Extension Service, Walker County

Agricultural Education Events &

News Update

(March Edition 2014)

This newsletter is an effort to inform you of upcoming agricultural educational events and related activities in the Walker County area with upcoming preregistration requirements. There are also a couple of programs mentioned in this newsletter which while may be a little outside our immediate geographic area, include topics of interest to numerous landowners.

If you are in need of a Texas Department of Agriculture (TDA), **Private Pesticide Applicator License**, I encourage you to contact the Extension office at (936) 435-2426. We are building the list for our spring 2014 Licensing class. When we have enough individuals on the roster, we will schedule this training and notify those who have indicated their need for the license. Cost of this training is \$60.00 per person & includes class fee, manual and workbooks. Following completion of the training class & successful test examination with TDA the license fee is an additional \$60.00.

2014 Walker County Farmers Market:

If you are interested in participating as a member of the Farmers Market, please contact



the Extension office at (936)435-2426 for information. The 2014 Grand Opening date has been set –more information as we get closer..

http://walker.agrilife.org/

In This Issue: Educational Programs –

- ✓ Ongoing March, Walker County Grown Fresh!
- ✓ March 6th Vegetable Production Tips with the Walker Co Master Gardeners- 10:30 AM at Huntsville Public Library

Also of Note in this edition:

- WC Master Gardener Spring Plant Sale
 —Saturday, March 8th (8:00 AM-2:00

 PM) at the Walker Co AgriLife
 Extension Office
- Walker Co Vegetable Planting Chart & List of Recommended Varietiesavailable online
- Water Resources for Livestock Producers
- eXtension & Online Webinar
 Education Opportunities
- Other Extension Onsite Trainings



2014 Walker County "Grown Fresh!" From LEAF-PRO to Dinner Tonight

The 2014 Walker County "<u>Grown Fresh!</u>" program series is showcasing timely information on how to grow common home vegetable garden products with emphasis on proper environmental management and

ultimate utilization of the produce in a nutritious addition to the family diet.

Selected vegetables which are suitable for production in Walker County will be discussed during the course of this educational effort. Featured vegetables will be discussed prior to optimum spring planting dates/time. This effort will allow program participants to plan for and work their gardens shortly prior to recommend planting time. Participants will learn how to produce and manage healthy, locally adapted food products which will encourage and support added selfsustainability options for their family. Production recommendations will utilize Texas A&M AgriLife Extension & Walker County LEAF-PRO information. Each featured vegetable product will include demonstration(s) on preservation, or fresh utilization in the daily family diet as appropriate. Nutritional information and utilization methods will be provided to program participants regarding the healthy benefits of the home produce based on the Texas A&M AgriLife Extension, Dinner Tonight program.

<u>Grown Fresh! Class Schedule: (6:00 PM) at the</u> Walker Co AgriLife Extension Office.

Past -February 11th - Parsley, Radish, Turnip, Bok Choy, Irish Potato, + Irrigation Methods Mustard, Beets +Pest Management, with Hot Water Bath Canning

Past -February 25th - Corn, Beans, Tomatoes, with, Salsa Demonstration

March 11th - Cucumber, Eggplants, Peppers, Pumpkin, Squash, with Vegetable Pickling, Squash Recipe(s) Demonstration

March 25th - Muskmelon, Cantaloupe, Watermelon, Okra, with Pickling Cont., Watermelon Vinaigrette Recipe Demonstration

The 2014 Walker County "Grown Fresh!" program series will be offered for participation with a onetime \$50.00 per couple fee, or \$25.00 per person to include the entire 6 meeting series or an onsite (with prenotification) \$20.00 per person/per educational

program fee. Reservations can be made by contacting the Walker Co AgriLife Extension office at (936) 435-2426.

Vegetable Gardening March 6th, 2014 (10:30 AM) –Huntsville Public Library

Learn tips to producing a healthy, productive spring home garden with the Walker Co Master Gardeners. Secrets to success by some of Walker County's best vegetable gardeners will be presented for your benefit.

To register for this class, please contact the Huntsville Public Library at (9360 291-5472.

Spring Plant Sale! March 8th (8:00 AM- 2:00 PM)- WC AgriLife Extension Office (Tam Road & Hwy 75N)

Walker County Master Gardeners would like to invite you to come out to the sale for your 2014 Heirloom Tomatoes, Peppers, Asparagus crowns, Herbs, Roses, Ornamentals, Natives, Fruit Trees, Shrubs and more.

Did you know that we have resources posted online for you at the Walker County, Texas A&M AgriLife Extension web page?

Home page: http://walker.agrilife.org/

Some of the really useful information which is available for home gardeners this time of the year is the <u>Vegetable Planting Chart</u> for Walker County, and the <u>Vegetable Varieties</u>

Recommended List for Walker County. These are posted on our Horticulture Publications page. Thinking about growing a garden this year?

Check these resources out at: http://walker.agrilife.org/publications/horticult ure/

Water Resources Information for Agriculture Producers:

Water will be an issue for the residents of this state for years to come. Hopefully you have already realized this as an individual with a vested interest in agriculture; either as a producer or as a daily consumer of agricultural products.

In reviewing some of the resources which are available, I have found some information that may fit a niche interest —not a "mainstream" (bad pun totally intended) topic by any means in our part of the state; however, you may have run into a situation during 2011 or beyond where this may possibly have been of interest.

Rainwater Harvesting for Livestock

By Billy Kniffen & Rick Machen

A lack of stock water will prohibit rangeland use by livestock during certain seasons of the year or may require hauling water during dry months or drought conditions. Improper distribution of watering sites will contribute to the following:

- Excessive grazing in areas near water sources.
- Uneven utilization of the rangeland.
- Livestock traveling long distances to get to water which reduces grazing time, forage intake, weight gain or milk production.
- Loss of forage from excessive trailing and trampling.

Water Requirements of Livestock

The following factors demonstrate how water consumption is influenced by the type and physiological status of livestock, nature of the forage and weather conditions:

- Green forage is higher in moisture content than dry forage and reduces water consumption.
- High temperatures increase consumption, while cool temperatures reduce consumption.
- Increased humidity in the air reduces daily consumption.
- Water consumption increases with age, weight, pregnancy and lactation.

Table 1. Average daily consumption of water by various livestock species.

Cattle 7 to 18 gallons
Horses 8 to 18 gallons
Sheep and goats 1 to 4 gallons
General rule: Provide 2 gallons of water per 100 pounds of body weight daily.

Sources of Water

Rivers, streams, springs and existing stock ponds provide the least expensive source of water. Water wells provide water in many locations where surface water is not available. Windmills, solar powered pumps or electric submergible pumps, and piston-engine driven pumps are used to bring water to the surface. Another option may be rainwater captured in a storage container (tank) as a supplemental or as the sole source of water for livestock.

Rainwater Capture

Rainwater capture is done with a collection surface, conveyance to a storage tank and a watering trough. You can capture rainwater as runoff from a house, barn, rain barn or specially prepared surface area on the ground. During a one-inch (25.4 mm) rainfall, approximately 0.6 gallon (2.3 I) of water falls on each square foot (0.09 m²) of surface area. Runoff is collected more efficiently from smooth surfaces, such as tin roofs. Efficiency decreases as the surface becomes rougher and more porous. You can capture runoff from an existing or newly constructed roof (or a "paved" area on a hillside) surface conveyed through guttering and piping, cleaned with a roof washer and/or screen, and stored in a collection tank for livestock.

The two most expensive parts of the system are the roof or paved surface and the storage tank. If an existing system (barn roof and storage tank) is in place, the cost to add rainwater to the system is minimal. In some areas of the western United States, the soil or rock is treated to shed water, and the runoff is collected at a low point for wildlife and/or livestock. Storage tanks can be made of concrete, fiberglass, corrugated metal (with or without special liners), steel or polyethylene. Polyethylene tanks are the least expensive (by per stored gallon) up to approximately 4,000

gallons. Corrugated metal tanks with special liners are also a cost effective option. However, local availability may dictate the container choice. Covered tanks reduce evaporation and keep water cleaner. Algae must have sunlight to grow. By using translucent material and closing the top, algae problems will be minimal.

All livestock prefer to drink cool, clean, fresh water. Smaller (more narrow and shallow) watering troughs allow more frequent water replacement, thus keeping water cooler and fresher. Larger herds require more linear trough space to allow more animals to drink at the same time. Evaluate fill rate to ensure water is readily available for livestock. For sheep and goats, troughs need to be cleaned regularly to prevent parasite and disease contamination.

Consider small/young animals that may accidentally fall into troughs and provide them a way to escape. Most troughs use a float valve to maintain water level. Protect floats and valves by keeping livestock and wildlife away from the hardware.

Place the water trough at a lower elevation than the tank to allow gravity flow from the tank to the trough. If the tank and trough are at the same elevation, only the tank volume above the trough float is available water. If the storage tank is lower than the watering trough, the water must be pumped up hill.

How much water do you need?

The amount of water needed depends on the kind of animal, number of animals, annual rainfall and the expected length of time between rainfalls. In addition to domestic livestock requirements, allow for some use by wildlife when calculating water demand. The lower the average annual rainfall, a larger roof and storage container are needed, as the following examples demonstrate:

Example:

2 mature horses in a 30-inch annual rainfall region with rare occasions of 2 months between significant rainfalls.

2 horses x 10 gallons of water per day = 20 gallons of water consumed per day.

20 gallons x 60 days of storage = 1,200 gallons of water storage needed as a minimum.

Capturing 1,200 gallons of water in a 1" rainfall requires a 2,000-square-foot roof (2,000 sq' x .6 gal/1" rainfall = 1,200 gallons).

Capturing 1,200 gallons of water in a 2" rainfall requires a 1,000-square-foot roof (1,000 sq' x .6 gal/1" rainfall = 1,200 gallons).

Livestock requirements in these calculations can be adjusted by increasing or decreasing storage capacity while inversely decreasing or increasing the roof surface area. Also, if supplemental water is available or can be provided during dry times, you may reduce the surface area or storage capacity.

Also, in areas where rainfalls of 1" or more are frequent, you may not need to capture the total amount during a single rainfall. Thus, the catchment area and storage tank size may be reduced or increased. A chart is listed as a resource (see link to publication below) to help you determine a water budget more accurately. These calculations do not include evaporation losses from the storage tank or watering trough.

This complete publication: <u>E-450 Rainwater</u> <u>Harvesting/Livestock</u> is available free online from the AgriLife Extension Bookstore http://www.agrilifebookstore.org/default.asp

Other Educational Opportunities:

eXtension Webinars & other ONLINE TRAININGS:

Computer savvy agricultural producers have an almost unlimited amount of educational resources available to them. The following information is provided to assist you with your search for trustworthy educational material and education. If you are interested in these online courses or webinars, please follow the links with each one well in advance of the posted date to insure that your computer is set

up properly to work with the system requirements.

Integrating Perennial Grasses for Sustainable Agricultural Systems to Maximize Farm Profitability. March 11, 2014 (2:00 PM CT) 1+hours

The future of agriculture could include a perennial grass-based sustainable farming system within its landscape that will encourage environmental services, decrease use of fossil fuels and chemical products, improve diversity of plants and animals, generate more locally grown foods and bioenergy feedstock, and improve farm profitability. Biodiversity within agricultural landscapes will promote productivity and sustainability of our agriculture through food, feed, fiber, and fuel. Dr. Lee will discuss sustainable agricultural systems integrated with perennial grasses; how to design and establish market potential, a case study, and an on-farm example For registration and webinar details go to: https://learn.extension.org/events/1463

Organic Blackberry Production: Tips Learned from an Ongoing Research Study March 13, 2014 (2:00 PM EDT) 75 minute session

The learning objectives of this webinar include the impacts of weeds on blackberry growth and yield; methods for weed control; fertigation for planting establishment; the effects of post-harvest irrigation on productivity, plant water status and soil moisture; and root growth in blackberry. While this webinar focuses on trailing blackberry, grown predominantly for a machine-harvested, processed market, the outcomes of this study are also of importance in the production of other types of blackberry.

For registration and webinar details go to: http://www.extension.org/pages/70279/organic-blackberry-production:-tips-learned-from-anongoing-research-study

Onsite Trainings & Workshops:

Ranch Management University

April 70-11th, 2014- College Station, TX

The Ranch Management University is an intensive 5-day event that targets new or inexperienced ranchers and landowners and covers the fundamentals of soils and soil fertility, forage establishment, pasture management, utilization by livestock, and wildlife management. Basic livestock management practices such as castrating, and vaccinating calves are demonstrated. Grazing management, stocking rate, and body condition scoring are also highlighted. Horse and small ruminant management presentations are also conducted Additionally, several wildlife management topics are covered for those interested in managing white-tailed deer, turkey, feral hogs, and farm ponds. Approximately one-half the workshop involves lectures and discussion, with the remainder consisting of the field demonstrations of various how to methods of soil sampling, calibrating sprayers, and sampling hay. Various forage species, including bermudagrass and other introduced forages, native forages, small grains, annual ryegrass, and clovers are studied by workshop attendees. Additional demonstrations include hog trap management, and pond fisheries management. Plenty of time is allowed for interaction with Texas A&M University faculty with expertise and experience in all management facets of the soil-plant-animal interface and wildlife management.

Workshop Fee \$500.00 Registration & other program information:

https://agriliferegister.tamu.edu/index.cfm/publicHome/

Be sure to follow the links into the Events postings by date.

Solar & Wind Pumping Workshop April 23, 2014 –San Antonio, TX

This course will provide instruction on renewable energy methods available to operate landscape irrigation systems. Energy costs are projected to rise in the future as fossil

fuels are depleted. As a result, both the public and private sectors are turning towards renewable energy to provide power for the future. Solar and wind energy technologies are emerging in Texas and across the country as the two leading sources of renewable energy. The goal of this course is to teach students how to design and operate pumping systems that utilize wind and solar energy. Students will also learn how to determine peak irrigation water requirements, calculate irrigated area and determine water storage requirements. WHO SHOULD TAKE THIS COURSE

The Solar and Wind Pumping course is essential for anyone responsible for designing or managing irrigation systems on urban landscapes such as residential lawns, sports fields, parks, and commercial properties that use reclaimed or harvested rainwater and need solutions to provide pressurized irrigation. The course will also benefit municipalities and city water utility personnel, particularly those interested in developing urban water conservation programs.

This course is approved for Texas Nursery Landscape Association (TNLA) Education Credits, 8 Hours.

Workshop Fee (Licensed Irrigators \$155.00) (TNLA Member –Not TCEQ Irrigation Licensed \$123.75) Registration & other program information:

https://agriliferegister.tamu.edu/index.cfm/publicHome/

Be sure to follow the links into the Events postings by date.

<u>Aggie Processed Meat Technology School</u> April 24-25th, 2014 –College Station, TX

What Participants Will Learn?

By attending the Aggie Processed Meat School you will discover both the science and the art of making processed meat products. The first day will focus what you should consider when choosing the meat products and other ingredients to include in the processed meat item. That afternoon the participants will learn the art of making sausage and cured and whole muscle products. Then the next day experts will demonstrate cooking, smoking, and thermal processing consideration. Finally, participants

will learn about ways to evaluate the finished product for quality and safety.

Who Should Come?

Anyone who wants to learn the basic science and art of making processed meat products. This would include people that are directly involved in processed meat production as well as others in your company (such as quality control, business management, public relations and marketing personnel) who need a good overview of how processed meat products are made and the how's and why's of the process.

Fee (School Fee \$325.00) Registration & other program information:

https://agriliferegister.tamu.edu/index.cfm/publicHome/

Be sure to follow the links into the Events postings by date.

Forage Systems & Fertilizer Strategies April 25, 2014 – Overton, TX

- Soil Testing and Plant Nutrients
- Forage Species and Establishment
- Designing a Forage System for your Cow-Calf or Stocker Operation
- •Introduction to the USDA Web Soil Survey: Making it Work for You
- •How to Get the Most Out of Your Fertilizer Dollar
- •The Good, The Bad, and The Ugly: Alternative Fertilizers

Fee (School Fee \$60.00) Registration & other program information:

https://agriliferegister.tamu.edu/index.cfm/publicHome/

Be sure to follow the links into the Events postings by date.

<u>Beef 101</u> - May Session May 13-15th, 2014 –College Station, TX

Beef 101 is a three-day intensive hands-on program designed for anyone who has an interest in expanding their knowledge of the total beef industry. This is the foremost educational experience for basic information about the beef industry provided anywhere in the U.S. The workshop, which has been conducted for the past 24 years in the Texas

A&M University Department of Animal Science facilities is currently offered three times yearly. A maximum of 40 participants per session are accepted to allow for maximum hands-on participation and interaction with faculty, staff and graduate student instructors. The Beef 101 workshop begins with evaluation of beef cattle to learn about how cattle are raised, fed and handled. Participants also estimate cattle parameters that will later be measured on the beef. The animals are harvested with participants having the opportunity to observe the transformation from cattle to beef. Later, participants learn about the procedures for beef carcass grading and the various premium programs now being applied to many carcasses.

The consistently most highly rated activity associated with Beef 101 is conducted on the second day of the workshop. Participants are given a unique opportunity to team up in small numbers with an instructor to cut an entire side of beef into component parts. Beef anatomy, beef cut identification and component part yields and values are discussed at length during and after the day-long laboratory activity.

To round out the beef continuum from beef cattle to beef cuts to the plate, a thorough discussion of beef palatability, including sampling various cuts will demonstrate how various cuts, grades and technologies may affect the eating experience of beef consumers. Participants in former Beef 101 classes include representatives from state beef councils, national or international beef and meat associations, major communication/advertising groups, many food companies (foodservice, retail, distributors, packers), chefs, sales representatives, governmental agencies and personnel from a number of foreign countries.

Fee (School Fee \$550.00) Registration & other program information:

https://agriliferegister.tamu.edu/index.cfm/publicHome/

Be sure to follow the links into the Events postings by date.

2014 TAMU Grassfed Beef Conference

May 29-30, 2014 - College Station, TX

This conference is a fast-paced comprehensive look into the exciting and challenging arena of grassfed beef production.

Fee (Conference Fee Through 5/23 \$250.00, 5/25-5/26 \$300.00, Onsite \$300.00)
Registration & other program information:
https://agriliferegister.tamu.edu/index.cfm/p
ublicHome/

Be sure to follow the links into the Events postings by date.



If you have questions or would like more information regarding Extension Educational Programs, call us at (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 one week in advance is needed, so that we may have ample time to acquire resources needed to meet your needs. Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M AgriLife Extension Service is implied.

Reggie Lepley

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