

**DID YOU KNOW...**

.....that the double-crested cormorant, which used to migrate from the Great Lakes to winter in the south, now calls Texas home? Each winter morning, thousands of these fish predators (also known as water turkeys) fan out across public and private lakes to eat fish all day long. Until recently, landowners had little recourse because the birds were under federal protection as a migratory species. Now, however, a landowner can request a permit from the Texas Parks and Wildlife Department to control cormorants that are depleting fish populations.

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**Rusk County**

**Ag News & Views**

FALL 2016

**2016 Rusk County Hay Show**

**The Rusk County Hay Show is scheduled for Thursday, October 20th, 6:00 PM at the Henderson Civic Center 1005 TX-64 Henderson, Texas**



There is no cost to attend the event and a meal will be served by the Rusk County Extension Agriculture and Natural Resources Committee.

Several prizes will be placed in a drawing for people that entered hay in the event. Martin LP Gas has donated a fish cooker which is raffled to a lucky hay producer this year.

The speaker for the event will be Rusk County trapper James Johnston.

A forage report will be provided free of charge for each sample of hay. The committee will also have free hay show caps for each producer that submitted hay for this years hay show. Producers of the top 10 hay samples will be recognized and their hay sample will be auctioned off to area businesses.





Find us on Facebook

**Rusk County AgriLife Extension Ag**

**Rusk County Extension Agent's Radio Report**



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

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

*Jamie Sugg*

Jamie Sugg  
 County Extension Agent-Agriculture  
 Rusk County



# TEXAS A&M AGRI LIFE EXTENSION



## Beginning Farmer and Gardener Conference

September 22-23, 2016

Overton Research and Extension Center  
1710 FM 3053 N  
Overton, TX 75684

### Program Agenda

#### Day 1

8:00 AM	Registration Begins
8:30 AM	Welcome <b>Soils, Dr. Leon Young</b> <b>Water, Dr. Monty Dozier</b> <b>Farm Loans, Mr. Charlie Rand</b>
Noon	Lunch (Included) <b>Business Planning, Dr. Blake Bennett</b> <b>Marketing, Panel Discussion</b> <b>Crop Production, Dr. Joe Masabni</b>
4:15 PM	End of Day 1

### Registration Information

**Fee: \$60 for 2 days, \$40 for 1 day.**  
Registration Deadline September 20, 2016  
Additional \$5 for late registration after  
Cancellation policy: No refund

Make checks payable to:  
Texas A&M AgriLife Extension Service

Mail to: Dr. Joe Masabni, P.O. Box 38,  
Overton, TX 75684

#### Day 2

	<u>Organic Production</u>	<u>Conventional Production</u>
9:00AM	<b>Diseases, Dr. Tom Isakeit</b> <b>Insects, Dr. Alan Knutson</b> <b>Weeds, Dr. Joe Masabni</b>	<b>Weeds, Dr. Joe Masabni</b> <b>Diseases, Dr. Tom Isakeit</b> <b>Insects, Dr. Alan Knutson</b>
Noon	Lunch (Included) <b>Pollinator Management, Mr. Terry McFall</b> <b>Community Gardens, Mr. Stephen Hudkins &amp; Dallas Co. Master Gardeners</b>	
3 PM	End of Day 2	

For more information, contact Dr. Joe Masabni at [jmasabni@tamu.edu](mailto:jmasabni@tamu.edu) or 903.834.6191  
Or your local County Extension Agent

**PRIVATE PESTICIDE  
RECERTIFICATION REQUIREMENTS**

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



Phone: 903-657-0376  
E-mail: [jdsugg@ag.tamu.edu](mailto:jdsugg@ag.tamu.edu)

Rusk County  
113 East Fordall Street  
Henderson, Texas 75652



## EARLY BLIGHT CONTROL IN TOMATOES

### Survival and Dispersal

The fungus spends the winter in infected plant debris in or on the soil where it can survive at least one and perhaps several years. It can also be seed borne. New spores are produced the following season. The spores are transported by water, wind, insects, other animals including man, and machinery. Once the initial infections have occurred, they become the most important source of new spore production and are responsible for rapid disease spread.

### Control

1. Use only clean seed saved from disease-free plants.
2. Remove and destroy crop residue at the end of the season. Where this is not practical, plow residue into the soil to promote breakdown by soil microorganisms and to physically remove the spore source from the soil surface.
3. Practice crop rotation to non-susceptible crops (3 years). Be sure to control volunteers and susceptible weeds.
4. Promote good air circulation by proper spacing of plants.
5. Orient rows in the direction of prevailing winds, avoid shaded areas, and avoid wind barriers.
6. Irrigate early in the day to promote rapid drying of foliage.
7. Healthy plants with adequate nutrition are less susceptible to the disease.
8. Minimize plant injury and the spread of spores by controlling insect feeding.
9. Hand picking diseased foliage may slow the rate of disease spread but should not be relied on for control. Do not work in a wet garden.
10. Use resistant or tolerant varieties.  
The preventative fungicide chlorothalonil (Bravo) used on a seven to ten day schedule gives effective control.

**Fungicides for Early Blight Control**

Fungicide	Typical Application Interval	Examples of Trade Names
azoxystrobin, pyraclostrobin	7 to 14 days	Quadris, Amistar, Cabrio EG
Bacillus subtilis	5 to 7 days	Seranade (Organic)
chlorothalonil	7 to 14 days	Daconil, Bravo, Echo, Fungonil and others
copper products	7 to 14 days	Bordeaux Mixture, Kocide, Tenn-Cop, Liqui-cop, Basicop, Camelot
hydrogen dioxide	Commercial only, see label	Oxidate (Organic)
mancozeb and maneb	7 to 14 days	Dithane, Penncozeb, Manex, Mancozeb, Maneb
potassium bicarbonate	5-14 days as needed	Armcarb 100, Firststep
ziram	7 to 14 days	Ziram

# Pesticides: Carefully Follow Label Directions

Reading and understanding product labeling is vital for taking care of cattle and preventing drug-residue violations. Extra-label drug use without veterinarian direction is prohibited.

Some notable issues:

- Non-lactating dairy cattle are dairy heifers & calves under 20 months of age & dairy bulls, not dry dairy cows.
- Lactating dairy cattle are dairy breed animals over 20

months including spring heifers and dry cows.

- Use products only for indicated diseases.
- Use proper dosage of a product.
- Administer products for appropriate duration of therapy.

Depending on the infestation level, this can calculate to thousands of bites each day! Horn flies spend the majority of their time on the animal and the

females only leave periodically to deposit eggs into very fresh manure.

Luckily there are a number of products that can be used to control for horn flies. Some of the most typically and commonly used are feed additives, insecticide impregnated ear tags, dust bags and back rubbers/oilers.



## TEXAS HISTORICAL COMMISSION PROVIDES FREE ASSISTANCE FOR PROPERTY OWNERS

Texas has nearly one million archeological sites scattered across the state, from burial grounds to battlefields. More than 95 percent are on privately-owned land, many unknown even to the landowner.

In an effort to preserve, document and learn more about these sites, the Texas Historical Commission (THC) has an “all-volunteer army,” better known as the Texas Archeology Stewardship Network (TASN), offering free assistance to landowners wanting to learn more about their sites, or determine if they have a significant site on their property. Unless a landowner wishes otherwise, the sites are left intact with its location protected.

Ron Coleman of Rusk County has joined this statewide network, and he is ready to provide assistance to landowners who have questions or concerns about cultural resources such as

archeological sites or historic cemeteries. Ron may be reached at 832-744-5819 or at [j.ron.coleman@gmail.com](mailto:j.ron.coleman@gmail.com)

“The purpose of the program is to protect the sites,” said THC state archeologist Pat Mercado-Allinger. “No one can enter the landowner’s property without permission. Nor is information about a site accessible to the public.”

TASN members—commonly referred to as “stewards”—arm landowners with useful information and suggestions on how to protect a site from looters and other potential destruction. One of the most successful and innovative programs of its kind, TASN has served as a model for similar programs in other states. Stewards are not professional archeologists, but highly trained and motivated avocational archeologists who work on a volunteer basis. Many stewards are landowners themselves, and coordinate with other historic preservationists throughout the state.

Stewards are available to help find, record, and monitor potential archeological sites. They help obtain protective designations and record private artifact collections. Some are available to talk to schools and preservation groups and others assist THC archeologists on digs and surveys.

If you have property that you would like examined, or want to learn more about the program, contact the THC’s Archeology Division at 512/463-6096, email [archeology@thc.state.tx.us](mailto:archeology@thc.state.tx.us) or visit [www.thc.state.tx.us](http://www.thc.state.tx.us) for more information about your regional Stewards.

*The Texas Historical Commission is the state agency for historic preservation. The agency administers a variety of programs to preserve the archeological, historical and cultural resources of Texas.*



## Rusk County Farmers' Market

**Hours of operation:**  
Saturdays - 7:00 a.m. until sold out  
Tuesdays - 1:00 p.m. until sold out

**Location:** Henderson Community Center,  
Parking Lot at Fair Park

Locally grown vegetables, herbs, fruits, handmade crafts,  
jewelry, candles, jellies/jams and brown bag mixes.

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

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



If you would prefer to receive  
the Ag & Natural Resource  
Newsletter via e-mail, please  
email me at

[jdsugg@ag.tamu.edu](mailto:jdsugg@ag.tamu.edu) and I will  
add you to a mailing list. The

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

## BQA TIP OF THE MONTH - ANIMAL HANDLING

Understanding the flight zone make moving cattle easier. The flight zone is the comfortable distance that livestock maintain between you and them. The flight zone of cattle will vary depending on their disposition. Calm cattle have a very small flight zone while more temperamental cattle have a large flight zone. The flight zone will also increase as cattle become excited or agitated. Cattle should be worked from the edge of the flight zone; this area is commonly referred to as the pressure zone. As you move into the pressure zone cattle will move away from you and as you move out of the pressure zone cattle will generally stop.

### Zika Websites and Mosquito Useful Information:

<http://preventingzika.org/>

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

<https://www.epa.gov/insect-repellents/find-insect-repellent-right-you>

<http://www.texaszika.org/>

## RECORD-KEEPING PROMOTES DECISION MAKING SUCCESS



Keeping records for an agricultural enterprise is oftentimes looked on as unimportant or unnecessary. Too many times producers would rather fix fence, cut hay or work cattle. These activities are important to maintain, grow and expand any enterprise, but record-keeping is also a vital part of the enterprise.

There are many different methods to keep records, from handwritten notes, computerized spreadsheets, to a data management system. Each system allows individuals to collect data about their specific enterprise. However, just collecting the data is not very useful if it is not analyzed to see where losses or profits have been made.

When choosing a record-keeping method, there are a few key points you need to keep in mind. Items to consider include but are not limited to: what data points need to be collected, how this data will be analyzed and used, and how



transferable is the data if another record-keeping method is chosen. Computerized spreadsheets and data management systems can be very helpful in data analysis, but if the user is not comfortable using the new technology, these systems may not be beneficial.

After discussing a few methods of record-keeping, let's take a look at the "why" to keep and maintain records. If a cow-calf producer finds it necessary to reduce cow numbers due to a drought as happened not too many years ago, the first animals to go are the open cows, old cows and cows with poor dispositions. But, if the producer still needs to reduce cow numbers and is down to the 6- and 7-year-old cows, how does he or she choose which ones to liquidate from the herd? If records were kept on the herd such as calving date, calf weight, weaning weight and how fast the cow rebred, this data would be beneficial in deciding which cows need to be sold and which females are more productive in the enterprise. If financial records were kept concerning supplements and sales, the differences can become even more obvious.

Oftentimes, producers may not actually realize or understand the cost per animal until they begin keeping the records needed to analyze the financial health of a given enterprise. Unfortunately, the realization may come too late when producers have already made decisions that can have a negative

impact on the future of the operation. Sound record-keeping will help alleviate these problems.

Once records have started to be kept and analyzed over years, decision-making becomes even more successful and profitable. The more years of records a producer has, the more informed his or her decisions will be.

Just as fixing fence, cutting hay and working cattle lead to the success of an operation, record-keeping is equally, if not more, important to managing a successful enterprise. It is valuable to take time to analyze costs associated with each enterprise and asset in the enterprise. This is true for a cow-calf operator, stocker operator, custom hay baler or whatever enterprise an individual may own or manage.

Remember, when it comes to managing agricultural operations, record-keeping translates into decision-making tools. These decision-making tools can make a bad manager good and a good manager great.

**By Devlon Ford  
(Noble Foundation)**



# Pesticide Applicator Training ~2 Events~ 10 CEUs

Thursday, December 1, 2016

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



- Weed Control in Pastures & Hay Meadows (2 hours)
- Getting the most out of your spraying equipment
- Beef Cattle External Parasite Control
- Records, Your Best PPE

**On Site Registration**  
**Cost: \$35/ person**  
(includes lunch)

*5 Pesticide CEUs Course # 0747689  
(1 Laws & Regulations; 1 IPM & 3 general)*

**7:30 Registration starts**  
**8:30 Program starts**  
**11:45 Lunch served**  
**3:00 Adjourn**

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Tuesday, December 6, 2016

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

*5 Pesticide CEUs Course # 0747687  
(1 Laws & Regulations; 2 IPM & 2 general)*

**On Site Registration**  
**Cost: \$35/ person**  
(includes lunch)

**7:30 Registration starts**  
**8:30 Program starts**  
**11:45 Lunch served**  
**3:00 Adjourn**

- Pesticides and Pollinators
- Mosquito Control Update
- Turfgrass Insect Pest Update
- Urban Forestry
- Wild Pig Control in Urban Environments

For more information on this program please contact Pam Hickman @ 903-834-6191.

# Toxic Plants, Nitrate Toxicity and Prussic Acid Poisoning

We usually worry about toxic plants, nitrate toxicity and prussic acid poisoning in drought years; and this year has been anything but a drought. However, it never hurts to study and seek to fully understand these issues. After all, you never know when the next drought will come. Having a grasp of understanding of these issues will serve us well.

## TOXIC PLANTS

There are numerous plants in Texas that can be toxic to livestock (cattle, horses, goats, etc.). **Toxic Plants of Texas** is a great website with a list of toxic plants ([essmextension.tamu.edu/plants/?collection=toxics](http://essmextension.tamu.edu/plants/?collection=toxics)) along with images, livestock affected and livestock signs. Always make sure your livestock have sufficient forage/feed that will meet their nutritional needs.

## NITRATE TOXICITY

When livestock consume forages, nitrate is normally converted in the rumen from: nitrate to nitrite to ammonia to amino acid to protein. When forages are unusually high concentration of nitrate, the animal cannot complete the conversion and nitrite accumulates. Nitrite is absorbed into the bloodstream directly through the rumen wall and converts hemoglobin in the blood to methemoglobin which cannot carry oxygen. An animal dying from nitrate (nitrite) poisoning actually dies from asphyxiation, or a lack of oxygen.

Many plants can accumulate nitrate. Plants in the sorghum family — Johnsongrass, sudangrass, forage sorghum and sorghum hybrids. Turning cattle into holding pens or corrals full of manure with careless weeds or grasses can result in immediate poisoning.

Nitrates do not accumulate when there is normal rainfall or

irrigation. Under those conditions, nitrate nitrogen absorbed by roots and moved into the plant is rapidly transformed into plant proteins. However, under dry conditions, plant roots continue to absorb small amounts of nitrogen, but the plant has too little water to keep growing. Nitrate accumulates and is stored in the lower leaves and stems, ready for the plant to mobilize and use when rapid growth resumes. Following rainfall and some time for active growth, once high nitrate plants will eventually have safe levels (as long as they are not harvested at high nitrate levels).

## Preventing Losses

Never turn hungry animals into possibly high nitrate forages. Have hay tested before feeding if you suspect that it is high in nitrate. Nitrate levels remain constant in hay.

Ensilage forages high in nitrate. When hay is properly fermented, nitrate levels are reduced by 40 to 60 percent.

Test drought-stressed warm season annual hay crops for nitrate prior to harvesting since the nitrate levels will not diminish after harvesting.



## PRUSSIC ACID POISONING

Prussic acid poisoning is also called hydrocyanic acid or cyanide poisoning. Cryogenic compounds can develop in plants that are stressed; in the rumen the compounds are converted to cyanide, which can kill livestock.

Livestock can show symptoms of intoxication within 5 minutes of eating plants with the poison, and may die within 15 minutes. Salivation and labored breathing occur first, followed by muscular tremors, uncoordinated movements, bloating, convulsions and death from respiratory failure.

Prussic acid can accumulate in plants in the sorghum family, such as johnsongrass, sudangrass, forage sorghums and grain sorghum. It appears to occur when plants are injured by frost. Severe drought stress can also cause prussic acid to form.

High concentrations may be associated with rapid growth, such as shortly after a rain irrigation on previously drought-stressed fields, or warm weather after a cool period. Under good conditions, toxic concentrations can also form in young, rapidly growing plants. Prussic acid dissipates from plant properly cured for hay.

## To prevent prussic acid poisoning:

1. If plants have been damaged by frost, defer grazing until they either are well recovered from injury or cut for hay, or after a killing freeze and the plants have been allowed to dry.
  2. Do not graze plants in the sorghum family until they are 2 to 3 feet tall.
  3. Remove all livestock from the feed source when an animal is found to have died suddenly after grazing forages under poor growing conditions.
- 
4. After plants have grown rapidly, such as shortly after a rain irrigation on previously drought-stressed fields or warm weather after a cool period, wait at least 2 weeks after the plants begin to grow before grazing.

Contact the **Texas A&M Veterinary Medical Diagnostic Laboratory** (<http://tvmddl.tamu.edu>) for more information on Nitrate or Prussic Acid analysis.

# East Texas Beef and Forage Clinic



Henderson Civic Center  
1500 Forest Parkway, Henderson, TX  
Friday, November 18, 2016  
(5 CEU Hours—3 General, 1 IPM, 1 L&R)

**Registration**  
(8:00—8:30 a.m.)

## Welcome

Jamie Sugg, County Extension Agent Agriculture, Rusk Co

**Aquatic Weed Control (1 Gen)**  
Ken Hale, Boatcycle

**Herbicide Update (1 Gen)**  
Mari Palacio, Dow AgroSciences

## Break

**Mosquito Abatement & Control and Livestock Pest (1 IPM)**  
Dr. Sonja Swiger, Texas A&M AgriLife Extension Livestock/Veterinary Entomologist

## Lunch

**A Perspective on Pesticide Toxicology (1 Gen)**  
Michael Hare, Texas Department of Agriculture

**Agricultural Pesticide & Container Recycling (1 Laws & Regs)**  
Richard Marburger, US Ag Recycling

**Registration \$30 per person.**

***Please RSVP to the Rusk Co Extension Office at 903-657-0376 by Nov. 14<sup>th</sup>  
to guarantee lunch reservation.***

*Sponsored By: Rusk County Electric Coop, Dow AgroSciences, Red River Specialties, El Dorado,  
Merial*

Individuals with disabilities who require an auxiliary aid service or accommodation in order to participate in this meeting are encouraged to contact the Rusk County Extension Office at 903-657-0376 for assistance before November 4, 2016.

Texas A&M AgriLife Extension is an equal opportunity employer and program provider. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

# RUSK COUNTY HAY SHOW

Thursday, October 20  
6:00 p.m.

Henderson Civic Center  
1005 TX-64, Henderson, Texas

Free Meal

Door Prizes and Awards for winners

CEU hours  
will be  
available

All hay samples due by  
September 23rd

*Enter your hay NOW!*

For more information call 903-657-0376

Persons wishing to attend with special needs are asked to call in advance, so that necessary accommodations can be made.

**\*\*Important - we need a gallon bag of hay**  
**Hay will not be returned to producer.**

----- Entry Number  
(Show use only)

**RUSK COUNTY HAY SHOW**  
**Henderson Civic Center**  
**1005 TX-64, Henderson, TX 75652**

October 20, 2016 @ 6:00 P.M.  
INFORMATION SHEET

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

**CLASS OF HAY ENTERED:**                      **Did you raise or purchase this hay?**  
(Circle one)      Raised              Purchased

\_\_\_\_\_ Hybrid Bermuda grass (Coastal, Jiggs, Tif 85, Tif 44, Alicia, Etc.)

\_\_\_\_\_ Common Bermuda grass

\_\_\_\_\_ Bahia Grass

\_\_\_\_\_ Mixed (All Others)

**CUTTINGS:**

\_\_\_\_\_ 1<sup>ST</sup>      \_\_\_\_\_ 2<sup>ND</sup>      \_\_\_\_\_ 3<sup>RD</sup>      \_\_\_\_\_ Other

Give other identification of entry if more than one sample of the same grass and the same cutting is entered. (For personal identification of entries)

\_\_\_\_\_  
\_\_\_\_\_

**ENTRIES ARE DUE BY - September 23, 2016**