Texas A&M AgriLife Extension

Rusk County Ag News & Views

SPRING 2022

DID YOU KNOW...

… that the key to producing more bass is to grow more forage? A pond fertilization or supplementation feeding program can double or triple the pounds of forage fish (e.g., bluegill, redear sunfish, threadfin shad, tilapia) and double or triple the pounds of bass present. Pond fertilizers are available in granular, liquid and powder formulations. However, ponds that are muddy, acidic or full of weeds are not good candidates for fertility programs.

INSIDE THIS ISSUE:

Restricted Use[1] or State-Limited Use[2] Herbicides	Non-Restricted Use Herbicides
Grazon P+D	Milestone
Tordon 22K	Chaparral
Surmount	PastureGard
2,4-D	Redeem R&P
Weedmaster	Spike 20P
Banvel (Dicamba)	Spike 80DF
GrazonNext	Vista XLT
Weedar 64	Cimarron Extra
Weedone LV6	Remedy Ultra
Crossbow	Cimarron Plus
Cimarron Max	Reclaim
2,4-DB	VelPar L
GrazonNext HL	Amber
PasturAll HL	Pastora
PastureGard HL	

[1]**Restricted use:** for purchase and use only by certified pesticide applicators or persons under their direct supervision. Designation is placed on the product by EPA, and the label will state restricted-use.

[2]**State-limited use:** pesticides containing certain active ingredients, with the potential to cause adverse effects to non-targeted vegetation, are classified as SLU when distributed in containers larger than one quart liquid or 2 pounds dry or solid.

Rusk County Extension Agent's Radio Report

Tune in to 98.5 FM / 1470 AM Monday thru Friday at the 8am and noon hours to hear the Rusk County Extension Agents' Report on KWRD 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.

easttexastoday.com/kwrd

Find us on Facebook

Rusk County AgriLife Extension Ag

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Rusk County
903-657-0376

BQA Tip of the Month: Meeting Trace Mineral Requirements

Meeting trace mineral requirements is important for cattle performance and health. However, exceeding trace mineral needs does not result in improved performance, and depending on the amount of excess can lead to death or reductions in growth and reproduction. An increasing number of deaths associated with copper and other trace mineral toxicities are showing up. To meet animal requirements and help avoid trace mineral excesses, it is a good practice to only use a single well-formulated mineral supplement. Using multiple products (e.g. loose mineral supplements, mineral tubs, mineral blocks, etc.) at the same time is costly and can lead to excess.

How Multiple Livestock Species Can be Used to Benefit Your Ranch

Adaptive grazing with more than one species of livestock can multiply regenerative benefits, shape your landscape and add income to your operation.

When producers are asked why they raise cattle, their answer is almost always along the lines of "our livestock enterprise contributes to the profitability of the ranch." Yes, livestock should always be profitable, but some producers also see livestock grazing as an essential tool that is shaping the landscape and regenerating the soil on their ranch.

The tool of adaptive grazing uses higher livestock densities for short durations between long periods of rest to allow complete plant recovery and soil improvement. It is not prescriptive, but rather allows for changes in animal densities and pasture design in response to how the land and livestock respond. Adaptive grazing also can include using grazing multiple livestock species together on a ranch to reap even more benefits.

How and What Different Species Graze

Using multiple species for grazing, such as cattle, sheep, goats, pigs and poultry, allows for greater utilization of forages, improves soil health, increases biodiversity, improves wildlife habitat and creates opportunity for additional enterprises, profitability and risk mitigation. Grasses, forbs and woody plants are all forages that can be grazed by livestock. When using adaptive grazing, many producers find that any one species of livestock will consume a wide variety of plants, but, in general, the diets of cattle, sheep, goats, pigs and poultry do differ, and together they use more of the total forage available.

Let's just compare three ruminants:

— Cattle are grazers who eat mainly grasses, but they will consume some forbs and browse (leaves, young shoots and twigs of woody plants), because the latter two are generally higher in forage quality (i.e., protein and energy) and have some medicinal qualities.

— Sheep consume a greater proportion of forbs and browse compared to cattle, but this also depends on their environment. While cattle bite off large portions of a plant or plants by wrapping their tongue around forage and pulling, sheep bite off and eat select parts of plants. Sheep may only graze the youngest leaf or two and then move to the next plant.

— Goats are browsers who eat a higher proportion of woody plants than most other ruminants. They will consume some forbs, and if they need to, they will eat grasses. Because of this diet, a producer can use goats to turn the liability of brush encroachment into a profitable enterprise.

Cattle, sheep, and goats all have different foraging behaviors and preferences, but they may have a little bit of dietary overlap at times. For a grazier, such dietary overlap means animals will be competing for available forage. Dietary overlap will differ seasonally, with the greatest overlap occurring during the winter months (dormant season) when plant abundance and diversity are reduced.

When multiple livestock species live on a single ranch, the fact that they have different behaviors, different preferences and some dietary overlap sets the stage for increased plant and soil microbial biodiversity. Both of those outcomes are key to improving soil health.

Because goats eat more woody plants than other ruminants, they can help to tame brush encroachments on property.

MANAGING BEHAVIORS WITH GRAZING STRATEGIES

Grazing strategies can be adapted to change animal behaviors in order to achieve the desired impact on the land. Producers can use intensity, fencing and placement of water and mineral to alter behaviors.

— Intensity refers to the density of animals in a pasture/paddock that is grazed. The higher the density, the more competitive and the less selective an animal can be when grazing. This strategy encourages animals to eat what is available, even if it isn't preferred.

— Temporary fencing can be used to strategically place animals where greater intensity (or trample) is desired, or instead restrict access to areas of a pasture/paddock that need more rest. Paddock design, including shape and orientation, will affect grazing behavior. For example, pinch points in a paddock's design can be used to facilitate more hoof action in a particular area.

— Water and mineral placements are also powerful tools to help manage animal distribution. These locations will almost always receive proportionally higher impact. Water and mineral sources can be strategically placed in a pasture/paddock to draw animals into areas that would normally have minimal to no impact, such as brushy areas or areas avoided due to topography.

CHALLENGES OF MULTI-SPECIES GRAZING

Grazing different species of livestock in an operation does come with some challenges. The largest challenge is how infrastructure needs differ.

— Sheep and goats, including their lambs and kids, need to be able to access water, and they need different solutions for water than cattle. As animals that are smaller in stature, they need their own waterers that are easy to reach and use.

— Fencing is another challenge. Electric fence is a psychological barrier for livestock. With cattle, one strand will do the job. Although you *can* keep sheep and goats behind a single strand of temporary electric fence, sometimes you will need multiple strands. Goats in particular take more risks and may test the fence. One alternative for small ruminants is using a physical barrier like field fence or woven wire. However, this option is more costly and less adaptable when sectioning off pasture areas.

— Predation is another concern when grazing small ruminants, so the use of guardian animals (e.g., dogs and donkeys) to protect such livestock from coyotes, wolves, feral swine and other predators is recommended. Plans and staffing will need to include feeding and care of the guardian animals.

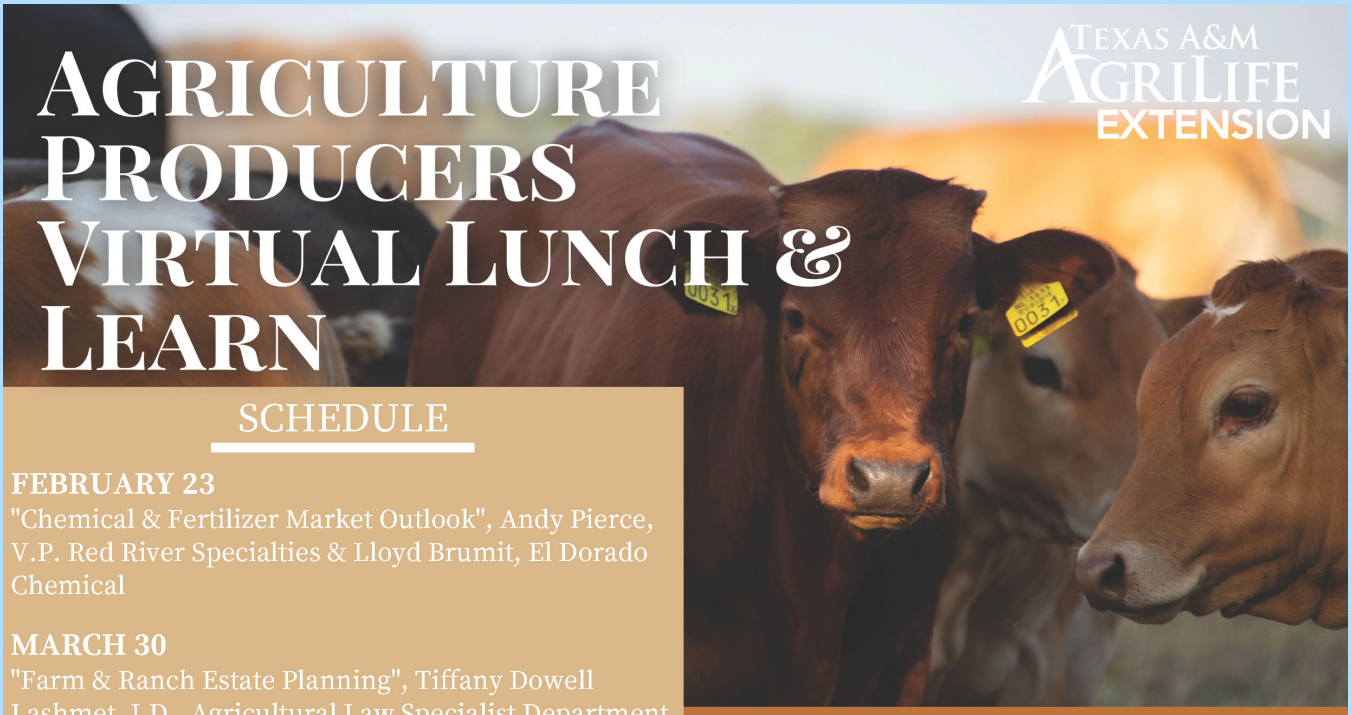
Sheep consume a greater proportion of forbs and browse compared to cattle, but can also be more selective in their grazing.

Producers would do well to consider the benefits of having multiple livestock enterprises. Using the complementary grazing behaviors of multiple species can reduce the risk associated with a single enterprise and increase overall profitability. In addition, producers gain greater flexibility and the ability to use income-producing livestock to improve their soil and shape the landscape they want while reducing or even eliminating costly inputs.

TIP:

If you plan to establish warm-season food plots for deer and other wildlife, now is the time to soil test and order seed and fertilizer. It's best to plant 2% (2 of every 100 acres) of the habitat base.

Agriculture Producers Virtual Lunch & Learn



SCHEDULE

FEBRUARY 23
"Chemical & Fertilizer Market Outlook", Andy Pierce, V.P. Red River Specialties & Lloyd Brumit, El Dorado Chemical

MARCH 30
"Farm & Ranch Estate Planning", Tiffany Dowell Lashmet, J.D., Agricultural Law Specialist Department of Agricultural Economics

APRIL 27
"Forage Pest Control: More Than Spraying" (1 General), Dr. Vanessa Olson, Associate Professor and Forage Extension Specialist, Texas A&M AgriLife

MAY 19
"Beef Cattle Market Outlook", Dr. Anderson, Professor & Extension Economist, Texas A&M University

JUNE 30
"Hog Control Technologies" (1 IPM), Dr. Aaron Sumrall, Director of Outreach for Field Engine Wildlife Research

JULY 28
"Regenerative Agriculture", Jeff Goodwin, Program Director Texas A&M Natural Resource Institute

AUGUST 31
"Winter Pasture", Dr. Lane, Retired Professor, Sam Houston State University Department of Ag Sciences

SEPTEMBER 28
"Regulations & Guidelines for Animal Antibiotics", Dr. Joe Paschal, Professor & Extension Livestock Specialist

JOIN US ONLINE FROM NOON TO 1:00P.M. EACH MONTH THROUGH SEPTEMBER

REGISTRATION: $20 (INCLUDES ALL 8 PROGRAMS & 2 TDA CEU CREDITS)

Registration deadline for first meeting is Feb. 17th. Complete form at bottom and return for meeting link.

This program is hosted by: Cherokee, Shelby, Angelina, Newton, Tyler & Panola Counties

Questions? Please contact the Cherokee Co Extension Office at 903-683-5416

Name: _____ TDA License #: _____

Email: _____

Phone: _____

Registration $20 made payable to: Cherokee Beef & Forage

Please mail this portion in with payment to: Cherokee County Extension Office PO Drawer B Rusk, Texas 75785

TEXAS A&M AGRILIFE EXTENSION

TRI COUNTY BEEF AND FORAGE WORKSHOP

Hosted by Cherokee, Rusk and Smith Counties

FRIDAY, APRIL 22
CHEROKEE CO EXPO | 611 SE LOOP 456 | JACKSONVILLE
3 TDA CEU HOURS (2 GENERAL, 1 IPM) PENDING APPROVAL

RSVP by April 20th to 903.683.5416

8:30AM	Registration $10
9:00AM	Fertilizer Options Dr. Vanessa Corriher-Olsen, Extension Forage Specialist
10:00AM	Herbicide Update, 1 General Rob Brooks, Bayer Range & Pasture Management
11:00AM	Animal Disease Traceability & Feral Hog Biosecurity Update, 1 IPM Dr. Hank Hayes DVM, TAHC Region Director
12:00PM	LUNCH - Ribeye Steak Sandwiches
1:00PM	Brushy Weed Control, 1 General Clint Perkins, Smith CEA-Agriculture & Natural Resources

Welcome to the 68th Annual Beef Cattle Short Course August 1-3, 2022

SAVE THE DATE

Texas A&M Beef Cattle Short Course

August 1, 2022—August 3, 2022

Registration is now live @

Beefcattleshortcourse.com

Rudder Tower
401 Joe Routt Blvd
College Station, TX 77843

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. This historical beginning and purpose is still the standard today for the Beef Cattle Short Course held at Texas A&M University. Today the highly respected TAM Beef Cattle Short Course is nationally and internationally recognized as the largest attended beef cattle educational program of its type in the world. It has gained the respect from organizations, associations, Land Grant universities and agencies alike as the focal point for beef cattle educational information. 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. A number of pesticide CEUs and veterinarian CECs are available to attendees. Additionally, over 150 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 1,700 participants attend the Beef Cattle Short Course to gain valuable knowledge about beef cattle production.

Planning ahead to feed problem newborn calves

Jason Smith for Progressive Cattle Published on 03 January 2022

While we all hope that every dam will claim her calf and provide it with what it needs to thrive, the reality is that some will not.

Hopefully orphaned or problem calves are not a common or regular occurrence on your operation. Nonetheless, the unfortunate reality is that all operations will experience situations from time to time that require intervention to ensure that a newborn calf gets off to the right start. Maybe a first-calf heifer doesn't claim her calf. Maybe the calf won't nurse. Maybe it needs to be moved inside and separated from its dam so it doesn't freeze. Whatever the reason, it is important to be prepared for such situations before they arise.

Colostrum is key

The importance and value of colostrum to a newborn calf cannot be overstated. Most calves that don't receive adequate colostrum in a timely manner will not survive. It's as simple as that. There is a common misconception that the calf will be fine if it receives some colostrum within the first 48 hours of life. That is often far from true. Calves are born with small openings in the gut that allow immunoglobulins from colostrum to be absorbed and to populate the immune system with antibodies. These openings begin to close immediately upon birth. Most of the closure occurs within the first 12 to 16 hours of life and is complete or nearly complete by 24 hours. Once closed, the immunoglobulins can no longer be absorbed intact, and therefore will no longer populate the immune system.

Ideally, a calf will receive colostrum from nursing its dam within the first few hours of life, however, some situations will require the calf to receive colostrum some other way. Milking the dam and either feeding her colostrum to the calf via bottle or (if necessary) esophageal tube should be the first choice. Nonetheless, some situations just won't allow that, or may require too much effort or risk. If that is the case, the dam's natural colostrum must be replaced with colostrum from another source.

Replacing colostrum

Two primary options exist to replace a dam's colostrum. One option is to replace it with colostrum obtained from a local dairy. While this is often the cheapest option, there are health risks associated with obtaining colostrum from another herd. Some diseases can be transferred through colostrum. Because of the risk, it is important to involve your veterinarian in determining whether colostrum from a different herd is the best option for your operation. The following guidelines may be useful if obtaining colostrum from a dairy is deemed the best option for your operation:

— Obtain multiple doses of fresh or frozen high-quality colostrum at least one to two months prior to the beginning of each calving season. Freeze or keep frozen until needed.

— Thaw frozen colostrum immediately prior to feeding by submerging it in warm water. Do not use a microwave, and do not re-freeze thawed colostrum. Warm to approximately 105°F. Avoid using boiling or excessively hot water. Cooking denatures immunoglobulins and renders them immunologically useless.

— Provide approximately 2 quarts of colostrum to the calf as soon as possible following birth and repeat at 8 to 12 hours of age. Discard any unused thawed colostrum.

Alternatively, a more bio-secure option is to utilize a commercially available colostrum replacer. Colostrum replacers typically consist of a dehydrated colostrum- or serum-based powder that need to be reconstituted with warm water immediately prior to feeding. These products are expected to provide a high enough level of IgG immunoglobulins to sufficiently replace the dam's colostrum and populate the calf's immune system with antibodies. These products also serve as a source of nutrients to the newborn calf.

Colostrum replacers and colostrum supplements are typically not equivalent to one another and should not be used interchangeably. The exception to this is that some products are designed to serve as a supplement or replacer when different amounts are provided to the calf. This is not true for all products, so follow the label. Supplements are typically less expensive than replacers but provide less immunoglobulins. As a result, supplements are not expected to sufficiently replace the level of antibodies provided by the dam's colostrum. However, supplements can be used to help boost antibody levels of calves that may have consumed low-quality and/or a small amount of colostrum. Examples of calves that may benefit from a supplement include calves born to underconditioned dams or those that get separated from their dams during or soon after nursing for the first time.

Colostrum replacers also differ from milk replacers and therefore should not be used as substitutes for one another. Milk replacers primarily provide the calf with nutrients rather than immunoglobulins and thus are not a substitute for colostrum. While often more expensive than obtaining colostrum from a dairy, colostrum replacers are typically more convenient, can be prepared more quickly and minimize the risk of disease transmission across herds. The following guidelines will help to ensure the successful use of colostrum replacers if they are part of your plan:

— Select and purchase a product that will fulfill its intended purpose.

— Obtain enough of the product to meet the needs of your expected "worst-case scenario" prior to the calving season.

— Some products require more than a single "dose" to effectively replace colostrum.

Read the label and follow its guidelines to properly store, prepare and administer the product.

Not being prepared to provide colostrum to calves in need can have long-lasting implications to their health and growth performance and ultimately can result in the loss of a calf that could have otherwise been saved. Have a plan, and if you find yourself in the situation where you are overprepared and don't need to put it to use, consider that a win.

TEXAS A&M AGRILIFE

CALIBRATION MADE SIMPLE

Quick Reference Guide for Pesticide Solutions

Boom Sprayers

1. Measure nozzle spacing.
2. Refer to chart below for length of calibration course.
3. Measure and mark calibration course as indicated in the chart.
4. Set gear and rpm that will be used in the field.
5. Drive course at determined gear and rpm.
6. Record time required to drive course.
7. Park sprayer, maintain same rpm as used to drive course
8. Turn on sprayer, catch water from one nozzle for time required to drive course.
9. OUNCES CAUGHT = GALLONS PER ACRE.

Nozzle Spacing	Length of Calibration Course
18 inches	226 feet
19 inches	214 feet
20 inches	204 feet
24 inches	170 feet
30 inches	136 feet
40 inches	102 feet

Boomless Sprayers (Cluster Nozzle)

1. Measure effective spray swath.
2. Refer to chart below for length of calibration course.
3. Measure and mark calibration course as indicated in the chart.
4. Set gear and rpm that will be used in the field.
5. Drive course at determined gear and rpm.
6. Record time required to drive course.
7. Park sprayer, maintain same rpm as used to drive course.
8. Turn on sprayer and catch water for time required to drive course.
9. PINTS CAUGHT = GALLONS PER ACRE

Effective Swath Width	Length of Calibration Course
15 feet	363 feet
20 feet	272 feet
22 feet	248 feet
24 feet	227 feet
26 feet	209 feet
28 feet	194 feet
30 feet	182 feet
35 feet	156 feet
40 feet	136 feet
45 feet	121 feet
50 feet	109 feet

percent solution	ounces per 1 gallon
1%	1.28
2%	2.56
3%	3.84
4%	5.12
5%	6.4
6%	7.68
7%	8.96
8%	10.24
9%	11.58
10%	12.8
11%	14.08
12%	15.36
13%	
14%	17.92
15%	
16%	20.48
17%	
18%	23.64
19%	
20%	25.6
21%	
22%	
23%	
24%	
25%	32

CROP	SPRING PLANTING DATE	FALL PLANTING DATE
Asparagus	2/1 – 3/15	N.R. *
Beans, Bush	3/15 – 4/15	8/1 – 9/1
Beans, Pole	3/15 – 4/15	8/1 – 9/1
Beans, Lima	3/15 – 4/1	7/15 – 8/15
Beets	2/1 – 4/1	9/1 – 10/15
Broccoli (plants)	3/1 – 3/15	8/1 – 9/15
Brussels Sprouts	N.R.	8/1 – 10/1
Cabbage (plants)	2/1 – 3/1	8/15 – 9/15
Cabbage, Chinese	2/1 – 2/15	8/15 – 9/15
Carrots	2/1 – 2/15	8/15 – 10/15
Cauliflower (plants)	2/15 – 3/1	8/15 – 9/15
Chard, Swiss	2/15 – 4/1	8/1 – 10/15
Collard/Kale	2/1 – 2/15	8/15 – 10/1
Corn, Sweet	3/15 – 5/1	8/1 – 8/15
Cucumber	3/15 – 4/15	8/1 – 9/1
Eggplant (plants)	4/1 – 4/15	7/15 – 8/1
Garlic	1/15 – 2/15	9/1 – 10/15
Kohlrabi	2/1 – 3/1	8/15 – 9/15
Lettuce (leaf)	2/1 – 3/1	9/15 – 10/15
Muskmelon (Cantaloupe)	3/15 – 5/1	7/15 – 8/1
Mustard	2/1 – 3/1	9/15 – 10/15
Okra	4/15 – 7/1	4/15 – 7/1
Onion (plants)	2/1 – 3/1	N.R.
Parsley	N.R.	8/15 – 10/1
Peas, English	1/15 – 2/15	8/15 – 9/15
Peas, Southern	4/15 – 6/1	7/1 – 8/1
Pepper (plants)	4/1 – 4/15	7/1 – 8/1
Potatoes (Irish)	2/1 – 2/15	8/15 – 9/15
Potatoes (Sweet) (slips)	4/1 – 5/15	N.R.
Pumpkin	4/1 – 5/15	7/1 – 8/1
Radish	2/1 – 4/1	9/15 – 10/15
Spinach	2/1 – 3/1	9/1 – 10/15
Squash, Summer	3/15 – 4/15	7/15 – 8/15
Squash, Winter	4/1 – 4/15	7/1 – 7/15
Tomato (plants)	3/15 – 4/1	7/15 – 8/1
Turnips	2/1 – 3/1	10/1 – 11/1
Watermelon	3/15 – 5/1	7/1 – 8/1
Watermelon (Seedless)	3/25 – 5/1	7/1 – 8/1

* Not Recommended

Need to view historical weather data, visit the webpage https://etweather.tamu.edu

For:

Chilling Hours / First and Last Frost (1996-current)

Historical Monthly Rainfall (1968-current)

Daily Weather (2001-current)

TEXAS A&M AGRILIFE EXTENSION

Rusk County
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Henderson, Texas 75652

Phone: 903-657-0376
E-mail: jdsugg@ag.tamu.edu

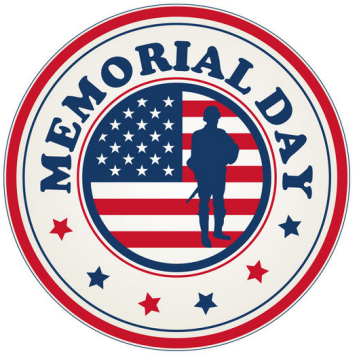
We are on the web:
rusk.agrilife.org

Easter Sunday
April 17

Office Closed
Good Friday
April 15

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.



Office Closed
Monday
May 30

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