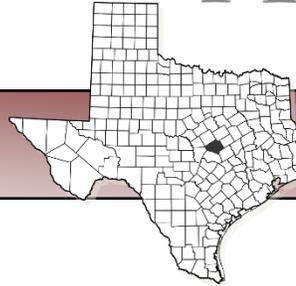


# BELL COUNTY

TEXAS A&M  
AGRI LIFE  
EXTENSION

## AG & NATURAL RESOURCES



## NEWSLETTER

AUGUST 2017

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### YOUTH SPOTLIGHT

WHITNEY GRANTHAM, CEA—NR

With the ever growing need for agriculture and natural resource education in our world, we realize that it is imperative to provide our youth with a strong background and understanding of this practical knowledge. One day, our students may be challenged with solving the controversial issues that face these industries.

Texas 4-H provides members with the opportunity to gain an upper hand in understanding these topic areas as well as the issues facing them through the Texas 4-H Livestock Ambassador Program and the Texas 4-H20 Water Ambassador Program. Through these programs, youth learn how to educate others in the respective subject matter and become more articulate advocates for agriculture and our natural resources. After traveling the state through one of the offered leadership academies, students return to their communities to give back through service and education. The 4-H Livestock Ambassador Program has been in existence for ten years, and this Summer, the 4-H20 Program hosted their first set of ambassadors.

Below is the list of Bell County Ambassadors who have attended an academy this summer. We are excited for these youth ambassadors to serve within the county.

#### TEXAS 4-H20 AMBASSADOR PROGRAM

KOLBY DAGUE—1ST YEAR

#### TEXAS 4-H LIVESTOCK AMBASSADOR PROGRAM

ERIN STEGLICH—3RD YEAR

CLARA STEGLICH—2ND YEAR

BRAYLEE MACKIE—1ST YEAR

KOLBY DAGUE—1ST YEAR

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## SUMMER BEEF CATTLE NUTRITION

LYLE ZOELLER, BELL COUNTY CEA—AG

**A** beef cow requires energy, protein, minerals, and vitamins in its diet. What determines how much of these nutrients are required? What determines if they need to be supplemented in the diet?

Many factors affect the amounts of required nutrients. A female performs many functions – body maintenance, activity, weight gain, reproduction, and milk production that all require nutrients. The amount of nutrients required depends on body size, environmental conditions, how far an animal travels, desired rate of gain, stage of gestation, and level of milk production.

The nutritional value and quantity of available forage determine if nutrients need to be supplemented in the diet. During most of the year, warm-season forages are likely to be deficient in some minerals, especially phosphorus and certain trace elements like copper and zinc. In most situations, supplementation should include at least year-round provision of salt and a mineral with 8 percent to 12 percent phosphorus and a similar level of calcium. Vitamin A, which usually is low in dry or weathered forages, should be injected or fed in mineral or other supplements if it is suspected to be deficient. Mineral and vitamin supplementation should be a high priority because deficiencies can be corrected for relatively little cost. After addressing mineral and vitamin needs, protein and energy deficiencies must be considered. Forage protein and energy vary seasonally. Warm season forage typically becomes deficient in protein in mid-summer and again in winter. Forage lacks adequate energy content primarily in winter, but energy available to the animal is restricted more often by a limited supply of forage rather than by deficiencies in plant composition.

### Factors Affecting Supplementation

Many factors affect the type and amount of protein or energy supplement that a beef cow may require. There are six critical factors that affect supplementation needs.

**Forage Quantity.** The amount of available forage obviously affects the need for supplemental feed. As forage supply declines, the opportunity for animals to selectively graze decreases, and so does diet quality. Then, supplementation may become necessary.

**Forage Quality.** Poor quality forage has less than 6 percent to 7 percent crude protein (CP) and is low in digestibility, with less than 50 percent total digestible nutrients (TDN). These deficiencies limit the amount of such forage that an animal can eat. Because both consumption and nutrient content of poor quality forage are low, supplemental needs are high. Medium quality forage (7 percent to 11 percent CP, 50 percent to 57 percent TDN) eliminates or significantly reduces the need for supplementation. High quality forage (above 12 percent to 14 percent CP and 57 percent TDN) can be consumed in the largest amounts and usually removes any need for supplementation, except possibly for high milking cows in low body condition. However, forage that is high in quality but low in quantity, a common situation in early spring, increases the need for supplementation of dietary bulk and energy. The amount a cow can eat in a day ranges from as little as 1.5 percent of body weight for very low quality forage to near 3.0 percent for very high quality forage. The typical amount is 2.0 percent to 2.5 percent.

*Article continued on the next page.*



**Body Condition.** The level of body condition (amount of fat) affects supplemental requirements. Low body condition markedly increases the need for supplemental nutrients, and meeting such needs often is cost prohibitive. Moderate body condition significantly reduces or eliminates the need for supplements. Fleshy cows generally need little if any supplement and the daily amount of forage required often can be reduced. If forage consumption is not reduced, higher production is possible or reserves of stored body energy can be maintained.

**Body Size.** The potential for forage consumption is related to body size, so larger animals may not require more supplement than smaller ones. Adjustments in stocking rate, to allow adequate amounts of forage per cow, may offset differences in size but will increase the cost per cow. But if forage is sparse or limited, larger cows require proportionately more supplement.

**Milking Level.** Higher milking cows can consume somewhat more forage, but not enough to completely satisfy extra needs. When forage quality is

inadequate, higher milking cows need more supplement; from 50 percent to 100 percent more may be required for high versus low milk production in cows of the same body size.

**Age.** Young animals are still growing and require extra nutrients, but their body size is not as large as mature animals. Because of their smaller body size, growing heifers cannot consume as much forage as mature cows. For these reasons, young females require higher quality diets than mature cows and often require more and different supplements.

Native Range conditions across most of Bell County are currently in the poor quality forage category as many have gone dormant with the hot and dry summer weather. Many of the improved pastures of Bermuda, Klein and old world bluestem are still in the mid-range of forage quality. Summer time protein deficiencies in pastures are not uncommon but often overlooked if cows are still in good body condition from a fairly good spring.

*Anyone who would like additional and more complete information, please contact the Texas A&M AgriLife Extension Office in Bell County.*



## CEN-TEX BEEF SYMPOSIUM

On September 29, 2017 the Mackie Bounds Ranch operation will host the Cen-Tex Beef Symposium. Join us for great presentations and a ranch tour. More information will be provided soon through the Ag email list and area newspapers.

## TEXAS GRAZING CONFERENCE

Register now for the Texas Grazing Conference going on August 29th –31st at the Waco Convention Center. This is a program of the Texas Grazing Lands Coalition, AgriLife, USDA, Noble Foundation, and other.

Register online now at  
[www.regonline.com/TXgrazland2017](http://www.regonline.com/TXgrazland2017).



MARK YOUR CALENDARS FOR THE

# 2017 CONSERVATION EXPO

## WHEN

THURSDAY SEPTEMBER 21, 2017

DOORS OPEN AT 8:00 AM

PROGRAM: 9:00 AM—3:00 PM

## WHERE

BELL COUNTY EXPO CENTER

301 W. LOOP 121

BELTON, TX 76513

## COST

\$25/PERSON

3 CEUS OFFERED

LUNCH WILL BE PROVIDED

## TO REGISTER

CALL THE BELL COUNTY

EXTENSION OFFICE AT

(254) 933-5305

OR

VISIT

<https://bell.agrilife.org/>

AND REGISTER UNDER THE  
2017 CONSERVATION EXPO TAB

## PROGRAM TOPICS & SPEAKERS

### Wildlife Tax Valuation

*Derrick Wolter, Texas Parks & Wildlife*

### Soil Health and Plant Identification

*Nathan Haile, NRCS and Matt Machacek, NRCS*

### Pond Management

*Ricky Linex, NRCS*

### Bell County Groundwater

*Dirk Aaron, Clearwater*

### Riparian Management

*Kyle Wright, NRCS*

### Plan my Operation

*Lori Hazel, Texas Forest Service*

**VENDOR BOOTHS WILL BE AVAILABLE FOR VIEW-  
ING THROUGHOUT THE DAY**

**NEW LANDOWNERS & SMALL ACREAGE**

**LANDOWNERS, REGISTER NOW**



*Every drop counts!*



TEXAS A&M  
FOREST SERVICE

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

## THE 2017 DOVE SEASON IS FAST APPROACHING

DERRICK WOLTER, TEXAS PARKS AND WILDLIFE

**M**ourning doves and white-winged doves can both find a place to call home in Central Texas. The two species, though both doves, are quite different in behavior. The mixture of agriculture and urbanization found locally in allows each species to thrive, meaning good things for those hunting doves in Bell County.

Roughly 10 percent of the nation's 350 million mourning dove reside in Texas, along with about 9 million white-winged dove. Each fall, over 415,000 Texas dove hunters take to the field in pursuit of these prolific and fast-flying game birds.

The mourning dove is the more reserved of the two species, with nests dispersed in trees along field edges and the birds found in strong association with rural, agricultural settings. White-wings prefer the urban life, nesting in large colonies within developed cities, towns and suburbs. They roost and feed there too, but large flocks also make flights to feed in adjacent ag fields.

Based on field observations by Derrick Wolter, Texas Parks and Wildlife Department (TPWD) biologist for Bell County, prospects for the 2017-18 hunting season look good to excellent. "We received good rainfall throughout the early part of the nesting season and into early summer. That's great for farmers, ranchers and anyone looking to grow something in their yard, but heavy rain and thunderstorms are a hazard for nesting doves since they build relatively poor nests."

Regardless, good rainfall makes for excellent habitat, an abundance of natural foods and both mourning and white-winged doves are strong re-nesters. TPWD has been banding doves (with numbered,

aluminum leg bands) in Bell County for over a decade and 2017 data indicate healthy recruitment of hatch-year (young of the year) birds once again. Good news for hunters heading to the field.

To make the most of the upcoming dove season it pays to practice before heading to the field. "The average hunter takes five shots to bag one dove; that's three boxes of shotgun shells to get your bag limit! Effective shooting leads to better hunts and more birds in the bag," according to TPWD dove program leader Shaun Oldenburger.

The 2017-18 dove hunting season for Bell County is from Sept. 1 – Nov. 5 and Dec. 15 – Jan. 7, 2018. The daily bag limit for doves is 15 and the possession limit 45.

Hunters are reminded that all current hunting licenses expire Aug. 31 and in addition to a 2016-17 hunting license, anyone born after Sept. 1, 1971, must successfully complete a hunter education training course. Those under 17 and those 17 and older who purchase a one-time deferral license may hunt legally in Texas if accompanied by a licensed hunter 17 years or older who has passed hunter education or who is otherwise exempt.

A Migratory Game Bird endorsement and Harvest Information Program (HIP) certification are also required to hunt dove. HIP certification involves a brief survey of previous year's migratory bird hunting success and is conducted at the time licenses are purchased.

Hunting and fishing regulations for the new season can be found in TPWD's 2017-2018 Outdoor Annual, available in print form at license retailers; digital version online and in the free Outdoor Annual mobile app available for Apple and Android devices.



***"Based on field observations by Derrick Wolter, Texas Parks and Wildlife Department (TPWD) biologist for Bell County, prospects for the 2017-18 hunting season look good to excellent."***

## AG EMAIL LIST

Please e-mail me and ask to be added to the Texas A&M AgriLife e-mail list for Bell County. Most information is sent out from this office will be e-mailed in the future.



[L-Zoeller@tamu.edu](mailto:L-Zoeller@tamu.edu)

Bell | Texas AgriLife Extension x

Secure | <https://bell.agrilife.org>

TEXAS A&M  
AGRILIFE  
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 Extension Education  
in Bell County

Don't forget to check out  
our website at  
<http://bell.agrilife.org>

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2017 Conservation Expo 2017 Professional Irrigators Conference 2017 Professional Group

About Bell County

UPCOMING EVENTS

SEP 21 2017 Conservation Expo September 21 @ 9:00 am - 3:00 pm

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