

# Polk County AgriLife Extension Beef/Forage & Natural Resources Newsletter

## Local Programs

6/11 Polk County Game Management Series, Feral Hog

6/15 Beef 101, Preparing for Winter

7/15 Polk County Game Management Series, Bobwhite Quail

## Additional AgriLife Programs

7/5-7/7 Beef Cattle Short Course

7/16 Reduce Winter Feeding with Stockpiled Forage and Winter Pasture

## Mower Types For Hay Production

Purchasing a mower or cutter for hay production can be overwhelming and a daunting task especially for new or inexperienced producers. There are multiply styles on the market that can vary from simple to complex in design and function. This discussion will provide a rudimentary overview of pros and cons of different styles.

To start, equipment can be divided up between mowers and mower conditioners. Mowers are simpler in design and will only cut and lay over crop. In contrast, mower conditioners have additional methods to condition crop. Mower conditioners allow crop to dry more quickly and evenly which can potentially lead to increased quality of hay. Additionally, it allows for hay to be baled earlier especially in heavy crop conditions. In contrast the advantages of a mower over a mower conditioner is mowers requires a tractor with less horsepower and are more economical. Mowers can be attached to the tractor by three point hitch or the drawbar. Three point hitch mowers are cheaper than drawbar models, but drawbar models will perform better in rough field conditions. Mower conditioners are typically attached via drawbar, however manufactures or now making models that attach to three point hitches. Drawbar models are either side pull or mid pull. Side pull modes have less maneuverability then mid pull models. Side pull models must cut in a circular fashion around fields, while mid pull models can cut up and down in fields. Another option is windrowers or swathers, which are basically a self-propelled mower conditioner.

Another decision to make when purchasing a mower conditioner is determining what type of conditioner to utilize. Conditioner types are divided between rollers or flails. The difference between the two types are the method of conditioning. In roller types the crop will pass between two large rollers which will crimp or crack the crop. Both steel and urethane rollers are available. For flail types the crop will pass over a large drum with spinning teeth while also being beaten against a metal hood. In contrast to the crimping action of rollers, flails beat the waxy layer off the crop. In general flails are best for light grassy crops such as bermudagrass.

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Rollers perform best in legumes, leafy crops, and cane type forages. Urethane rollers are gentler on delicate crop than steel rollers. Steel rollers work best in extremely abrasive crops such as cane type forages. A downside to rollers is they tend to plug and do not perform well in muddy conditions. Additionally, steel rollers are known to create an excessive amount of chatter and can make for uncomfortable conditions for the operator. For any conditioning system proper set up and adjustment is required to achieve successful conditioning of the crop.

One last consideration is cutter head design. Most producers in Polk County utilize disc cutters. Disc cutters are drums that spin and utilize centrifugal force to cut the crop. Disc cutters are very efficient in cutting crop and allow the operator to cut at fast speeds. Another option is a sickle bar cutter. A sickle bar cutter is an older design cutting system, but it has some benefits over disc cutters. Sickle bar cutters perform better in rocky field conditions and manufacturers recommend only using sickle bar cutters in fields with rocks and other debris. This is because rocks can cause serious damage to equipment and injury to the operator when struck with a disc cutter. Sickle bar cutters require less tractor HP than disc cutters and thus more economical for smaller producers. For this reason, many manufacturers provide sickle bar mowers specifically designed for small utility or compact tractors.

This discussion on mower types was very broad and only hit the high points. If you are in the market for purchasing a mower, please feel free to stop by the office and discuss which type would work best for your operation.

#### **Polk County Game Management Series, July 11<sup>th</sup> and August 15<sup>th</sup>**

This series will focus on increasing the knowledge of game management practices for landowners, hunters, and wildlife managers. July 11<sup>th</sup> will focus on Feral Hog with the speaker being Christopher Watts, Wildlife Damage Management Biologist for Texas Wildlife Services. The program will start at 10:00 a.m. at the Polk County Chamber of Commerce in Livingston and last approximately 1 hour. August 15<sup>th</sup> will focus on Bobwhite Quail and will start at 10:00 am at the AgriLife Extension Office meeting room. Topics will focus on quail biology and habitat management considerations. Cost is free, but **please RSVP to the extension office no more than three weeks before and no latter than three days before the program.**

#### **Beef 101, Preparing for Winter, July 15<sup>th</sup>**

Seminar will focus on management strategies for winter. Discussions will include supplemental feeding and winter pastures. Will also include strategies to increase the health and productivity of your cattle during winter. Seminar will start at 6:30 at the extension office meeting room with light refreshment. **1 CEU will be available. Please RSVP to the extension office by July 11<sup>th</sup>**



**July 2019**

Polk County AgriLife Extension  
602 E Church Street  
Suite 127  
Livingston, TX 77351  
(936) 327-6828

### **Beef Cattle Short Course, August 5<sup>th</sup>-7<sup>th</sup>**

Will take place in College Station and will include multiply concurrent sessions on a variety of beef and forage topics. CEUs will be available and for more information visit

<https://beefcattleshortcourse.com/>

### **Reduce Winter Feeding with Stockpiled Forage and Winter Pasture, August 16<sup>th</sup>**

Will take place in Overton with 2 CEUs offered. For more information visit  
<https://overton.tamu.edu/event/reduce-winter-feeding-with-stockpiled-forage-and-winter-pasture-2-ceus-overton-2/>

## **Management Tips**

- Avoid working your cattle during the heat of the day to prevent heat stress. Early morning or late evening is ideal time.
- If moisture is adequate apply a second application of nitrogen fertilizer on improved pastures. This will allow for an increased crop this fall.
- Late summer is the time to submit soil samples for winter pastures.
- If managing moist soil units for waterfowl, draw down of water should be completed by July to allow time for herbaceous plant growth before flooding this fall.
- Most herbicide brush applications become less effective during the dog days of summer.

## **Eastern Gamagrass**

Eastern gamagrass (*Tripsacum dactyloides*) is an important warm season native grass for both wildlife and livestock. The grass is rated as having fair value for wildlife and good value for livestock. Livestock will actively seek out the grass and I have witnessed cattle graze on eastern gamagrass before any other grass when turned out into a new pasture. Crude protein content can average around 12% during the boot stage of growth. In fact, the grass is considered an excellent forage crop for its nutritional quality and is aggressive growth. However, the grass is easily overgrazed and has been grazed out of most pastures. The grass makes excellent wildlife habitat for a variety of animals including ground nesting birds such as quail.

The grass is very large and robust and with a little practice can be easily recognized in the field. The grass grows from thick scaly rhizomes with leaves having rough sharp edges. Seed head is very beneficial in identification in consist of three long spikes 6-10 inches each with female seeds resembling hard beads at the bottom of the spike with male seeds stacked above. The grass seems to tend to grow on moist sites but can also be found on well drained sites. One of its most striking characteristics is its large leaves and stems that typically reach heights of 4-6 feet but can grow considerably taller.



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## Beef and Forage Workshop



**Chris Gregory,  
TPWD Biologist,  
Whitetail Deer  
Management  
Seminar**



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**TEXAS A&M  
AGRICULTURE  
EXTENSION**

July 2019

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