Wheeler County Farm & Ranch

F O C U S

September 2016

Dale Dunlap, County Extension Agent-AG/NR

Inside This Issue:

Wheeler County Crops/Range Field Day

Wednesday, September 14th, 2016

Registration:8:30AM

Wheeler Ag and Family Life Center

$10.00 Fee

Tour Stops

Tour Stop 1– Hardcastle Farm

9:00AM— Cotton Varieties– Industry Reps.
Herbicide Resistant Weeds– Dr. Peter Dotray– Extension Weed Specialist
Cotton Diseases– Dr. Jason Woodward– Extension Plant Pathologist

Tour Stop 2– Duncan Ranch

10:00AM--Old World Bluestem Fertilization Rates, Nutritional Values and Yields – Dr. Ted McCollum– Extension Beef Cattle Specialist

Tour Stop 3– Elmore Farm

11:00AM– Utilizing Cover Crops for adding Organic Matter and Grazing Potential- Mark Elmore and Dr. Jourdan Bell—Extension Agronomist

Tour Stop 4– Elmore Ranch

11:30AM– Demonstrating Shinnery Oak Control with Backpack Blower- Jodie Stockett-DOW

12:30– Veterinary Feed Directive (regulation affecting medicated feeds)
Dr. Ted McCollum– Extension Beef Specialist

TDA Laws & Regulations
Dale Dunlap– Extension Agent

LUNCH

4 CEU's Offered

Wheeler Ag and Family Life Center
Dale Dunlap Ag and Natural
7939 US Hwy 83
Wheeler, TX 79096
806-826-5243

TEXAS A&M AGRILIFE EXTENSION

Five things you should know about round-bale feeding

There exist so many variables in round bales as a feedstuff that common pricing by the bale or by some guesstimate of tonnage is seriously flawed.

1. Size matters

Round bales are often priced by the bale but the amount of hay in a bale depends on bale size and density. For example, assume a 5x6 round bale (5 feet wide and 6 feet in diameter or height) is priced at $52.50 per bale. If the bale weighs 1,500 pounds, the price is equivalent to $70 per ton.

A comparable 5x5 bale with equal density would weigh 1,046 pounds and be priced at $36 per bale to have a value of $70 ton. A 4x5 bale with equal density would weigh 833 pounds and would be priced at $29 per bale to equal that same $70 per ton of forage.

2. Density matters

The density of round hay bales varies considerably and typically ranges between 9 and 12 pounds per cubic foot (lb./ft^3). In the example above, the bales are assumed to have a density of 10.61 pounds per cubic feet. But bale density varies depending on the type of forage, adjustment of the baler and skill of the baler operator. Bales with lower density weigh less. They also are more difficult to handle and transport, and they have more storage losses.

3. Subtract storage losses

Round bale use inevitably results in storage and feeding losses. Hay loss with round bales varies widely depending on storage and feeding management, Peel says.

Well-managed bale storage and feeding might limit losses to 10% but combined storage and feeding losses frequently range up to 50% or higher. There is a lot of good research on this.

Round bales stored outside, uncovered and on the ground and fed in unrolled, exposed bales or in simple open-sided ring feeders will have the biggest losses, easily 30 -50%. In contrast, bales stored inside or covered, off the ground and fed unrolled or in cone-style feeders can limit losses to 5-15%.

4. Subtract feeding losses

The amount of hay actually consumed by cows drops dramatically with increased storage and feeding losses. At 10% loss, hay consumption is 1,800 pounds for each ton of hay; at 25% loss, hay consumption is 1,500 pounds and at 40% loss, hay consumption is 1,200 pounds, Peel says. From a cost standpoint, this makes big differences. At $70/ton, storage and feeding losses increase the effective hay price to $78 per ton for a 10% loss); $93 per ton for a 25% loss, and $117 per ton for a 40% loss.

"Storage and feeding losses combined with low bale density increases hay price further," Peel says. The low-density bale mentioned above -- 5x6 at 1275 pounds, priced at $52.50 per bale -- results in a hay cost of $91 per ton with a 10% loss; $110 per ton with a 25% loss; and $137 per ton with a 40% loss.

"The combination of low bale density and high storage and feeding losses result in actual hay cost nearly double ($137 versus $70) the stated per-ton price of hay in this example," Peel says. It's the same whether hay is purchased or produced, Peel notes.

5. Put a value on quality

The cost of hay also heavily depends on the pounds of crude protein and energy delivered to the cow, Peel says. Considering the variety of forages harvested as hay, the management and condition of the forage, baling conditions, and quality degradation during storage, this is a highly variable feedstuff.

An example is well-fertilized bermudagrass, harvested early, will have 12-15% crude protein, with total digestible nutrients (TDN) over 55%. Crude protein in under-fertilized, mature bermudagrass will drop below 6%, with TDN less than 50%. Prairie and meadow hay typically has crude protein values of 6-9% and TDN of 50-52%. If harvested late and very mature these values may drop to 4-5% for crude protein, with TDN below 50%.

Considering many nutritionists say rumen fermentation may be compromised at levels under 7% crude protein, this presents problems. A 1,400-pound beef cow in the middle third of pregnancy on dry forage and hay, eating 23 pounds of forage per day, could not get the 1.6 pounds of crude protein she needs each day from these lower values (23 x 0.06 = 1.38 pounds). Once she calves, those needs go up to 3.1-3.9 pounds of crude protein, depending on her milk production.

Peel says round bale technology is obviously convenient and saves labor, but this may have brought the industry to a poorer state. "Unfortunately, the convenience of round bales has also frequently encouraged production of low quality hay and poor storage and feeding management," he suggests.

As a possible sign of this, hay production per beef cow has more than doubled in the past 40 years in Oklahoma, he adds. "It appears that now significantly more hay is wasted and that poor pasture management has increased the number of days that cows are fed hay."

Optimize hay feeding

Peel suggests four ways to make the best of round bale feeding.

• Manage pastures to extend grazing and minimize hay needs. Consider stockpiling pasture for fall and winter grazing. Feeding hay costs 2.5 to 5 times as much as grazing. Every day that cows graze instead of receiving hay will save 50 cents to $1.50 per head in feed costs.

• Know the quantity and quality of purchased or produced hay. Buy tons … not bales. Weigh it and test it.

• Know how much hay cows are actually eating. Measure storage and feeding losses in order to know actual consumption and the true cost of your hay.

• Calculate the cost of hay nutrients compared to other supplemental feed sources. Projected record grain crops mean energy and protein from other feed sources will likely be cheaper this winter. Supplements using grain and/or byproduct feeds may actually be less expensive than poor quality hay.

Pick Wheat Grain Varieties for the Texas High Plains & Eastern New Mexico

Dr. Calvin Trostle, Extension agronomist, Lubbock, (806) 746-6101, ctrostle@ag.tamu.edu

Dr. Jourdan Bell, Extension agronomist, Amarillo, (806) 677-5600, jourdan.bell@ag.tamu.edu

Mr. Bryan Niece, Senior Research Assistant, Clovis, (575) 985-2292, bryanasc@nmsu.edu

This summary is derived from High Plains wheat grain testing coordinated by the AgriLife wheat breeding program based at Amarillo. Irrigated and dryland test sites range from Lamesa to Perryton and west, including a test site at NMSU-Clovis.

AgriLife High Plains Wheat Picks for 2016-2017

Our ongoing Picks criteria include a minimum of three years of data in Texas A&M AgriLife High Plains wheat variety trials across numerous annual locations. A “Pick” variety means this: given the data these are the varieties we would choose to include and emphasize on our farm for wheat grain production. Picks are not necessarily the numerical top yielders as important disease resistance traits (leaf or stripe rust, wheat streak mosaic virus), insect tolerance (greenbugs, Russian wheat aphid), or standability can also be important varietal traits that enable a producer to better manage potential risk. We look for **consistency** of yields, e.g. the regularity with which an individual variety is in the top 25% of yield at each location.

Table 1. Texas A&M AgriLife wheat grain variety Picks for the Texas High Plains based on yield performance and consistency from at least 20 multi-year, multi-site trial harvests in 2011-2012 & 2014-2016. Leaf rust and stripe rust are included (see footnote).

Wheat Variety "Picks", Texas High Plains (Preliminary, 8/3/2015)		
Full Irrigation	Limited Irrigation	Dryland
	TAM 111 (S/S) t	TAM 111
	TAM 112 (S/S)	TAM 112
TAM 113 (R/R)	TAM 113	TAM 113
TAM 114 (MR/R)	TAM 114	TAM 114
WB Grainfield (MR/R)	WB Grainfield	WB Grainfield
Iba (R/R)	Iba	Iba
	T158 (MS/MR)	T158
Winterhawk (MS/MR)	Winterhawk	Winterhawk

t Leaf rust/stripe rust resistance ratings: R, Resistant; MR, moderately resistant; MS, moderately susceptible; and S, susceptible

Two & three-year 'watch list.' Based on recent harvest data Gallagher (MR/R; Oklahoma St.) is under consideration as a Pick (comparable to Iba), and it has good rust resistance. Denali (S/MS) and Byrd (S/S) both from PlainsGold/Colorado State show good yields leading to discussion within AgriLife as possible Picks though susceptibility to rusts is a concern.

Additions in 2016: TAM 114 (initially tested as TX07A001505) is added for all production conditions. We would have added it in 2015 but there was little seed available. TAM 114 has good across-the-board resistance to rusts, good straw strength, desirable milling and baking qualities, and also has intermediate resistance to some biotypes of Hessian fly. WB Grainfield grain yields are good and key rust resistance is in place.

A special note about TAM 111: We initially decided to remove TAM 111 from our Picks list (removed from full irrigation in 2015) due to a modest decline in recent yields and its susceptibility to leaf and stem rust. After further review among the AgriLife wheat workers, we conclude that TAM 111 remains as good a choice as some of our other Picks for now. For producers as long as you understand that good management, which will include timely scouting for rusts and treatment if needed, is an important key for TAM 111, then it remains a good choice.

The Advantage of Variety Picks in Multi-Year Wheat Grain Production

"Pick" varieties with a minimum of three years in High Plains Texas A&M AgriLife testing continue to yield an average of 7 to 11% better as a group than all other varieties in both irrigated and dryland tests.

Frost Can Cause Prussic Acid Poisoning

Now that fall is officially at hand, frost will be hitting the county before long. This could lead to prussic acid poisoning in livestock when grazing certain pasture grasses and forage. While many plants contain the toxic material that causes poisoning, the greatest culprits are Johnson and Sudan grasses and sorghum or hybrids of these that cause the highest mortality if livestock graze them after a frost. The most dangerous time for the grazing of these plants is following frost when the plant material begins to wilt. Livestock should not be allowed access to the wilted material until it has dried completely following three or four days of good sunlight. Prussic acid poisoning acts rapidly and can kill animals within minutes. In most acute cases, animals become affected quickly after eating toxic material and can die in two to three minutes. Symptoms may include a brief period of stimulation followed by depression and paralysis. Signs of colic may be present. Stupor (loss of sensibility), difficult breathing and frequent convulsions may result. Death is caused by suffocation since oxygen remains in the blood and is not exchanged to the tissues. The key to prevent prussic acid poisoning in livestock is to be aware of plant materials that may cause poisoning and then keep cattle from grazing such plants until a safe period of time has passed.

Late Summer Supplementation with Protein For Young Cows

Because condition at calving and breeding are so important, it may at first seem silly to begin worrying about condition in the in this part of the summer. However, it must be remembered that there are few economical ways to increase body condition once winter has arrived. So, good body condition in the winter must depend on the nutritional program the previous summer. If young cows are still thin this time of year, which would probably be your two year old cows that are still growing and with suckling calf, it is with every likelihood, they will be thin going into the winter. Thought needs to be given about the most economical method of improving condition before winter. Weaning dates can be moved up; remember calves would be young and weaning weights will be reduced but prices are excellent. Removing the calf early will give a young cow a great opportunity to gain weight and be in good body condition as winter sets in. A well-planned supplementation program may offer help. When forage is available as in most cases around the county, feeding small amounts of protein supplements during late summer can efficiently increase weight and condition of spring calving cows. Feeding as little as .6 lbs/hd/day of soybean meal during August and September, increased cow weight by 25 lb. and improved condition score by .67 units. The same could be done with cottonseed cake and weight gains could be even more. The important point is that during late summer, high protein supplements can permit efficient increases in weight and condition when forage is available. If one waits until winter to try to increase cow weight, protein may not be sufficient and larger amounts of energy supplements or hay will be required. It is usually not economically feasible to try and improve body condition during winter conditions. A thin cow now means thinner cows in winter which results in poor cows at calving when February rolls around. The thought to remember is: what you are doing now affects body condition at calving and breed back time for next spring.

Wheeler County 4-H would like you to join Wheeler Ag Producers!

remind

To receive messages via text, text **@wheelerag** to **81010**. You can opt-out of messages at anytime by replying, 'unsubscribe @wheelerag'.

Trouble using 81010? Try texting **@wheelerag** to **(903) 705-6201** instead.