

COW/CALF CORNER

The Newsletter

From the Oklahoma Cooperative Extension Service

May 18, 2020

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Feed and forage situation

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

A large area of low-level drought is building in the west from western Kansas to northern California and the Pacific Northwest. Some of the worst drought areas are in Colorado and surrounding regions and in Oregon. Drought in south Texas has improved somewhat in recent weeks but some drought continues along the gulf coast from Texas to Florida. In the latest Drought Monitor map, 17.42 percent of the country is in some level of drought (D1-D4) with just 7.10 percent in D2 – D4 levels. Currently just 1.21 percent of D3 level drought exists and no D4 at this time. Another 16.89 percent of the country is abnormally dry (D0). This is a critical growth period and any expansion of drought conditions may have significant implications for pasture and hay production in the West.

The May 1 USDA hay stocks report shows that total hay stocks at the beginning of the hay marketing year are at 20.4 million tons, up 37.0 percent year over year. May 1 hay stocks were up year over year in nine of the top 10 states ranging from a 25.0 percent year over year increase in Kentucky to a 193.8 percent year over year increase in Missouri. Of the top ten states, only Montana was down 5.5 percent year over year. Regionally, the biggest concern is the southeast with total May 1 hay stocks down 22.8 percent year over year in Alabama, Georgia, Florida, North and South Carolina and Tennessee. Hay stocks were down each of these states except Florida, which was even with last year.

The Livestock Market Information Center (LMIC) projects 2020 alfalfa hay production to increase 4.0 percent resulting in larger ending stocks and season average prices down nearly 17 percent year over year to \$150/ton. Total other (non-alfalfa) hay production may decrease 1-2 percent in 2020 but a slight buildup of ending stocks is projected to push season average prices down fractionally to \$132.50/ton.

Feedgrain supplies will be abundant with large ending stocks of corn this year getting larger in the coming corn crop year. Corn ending stocks are projected by the LMIC at 2.9 billion bushels by the end of August 2020 and growing to 3.3 billion bushels by the end of the 2020-2021 crop year. Corn production in 2020 is projected at a record 15.2 billion bushels. The season average corn price is projected at \$3.35/bushel, dropping to \$2.85/bushel in the coming crop year. Decreased ethanol production is forcing some producers to adjust rations due to a reduced supply of dried distillers grains (DDG). However, plenty of feedgrain supplies ensures that ration costs will be the lowest in several years. Protein feeds are expected to remain abundant and affordable.

Cattle producers will have many challenges ahead working through the disruptions due to COVID-19. It appears that the overall feed situation will be favorable and provide more flexibility for feeder and feedlot cattle operations. Potentially emerging drought conditions are a threat and may reduce production and marketing flexibility in affected regions.

Storing large round bales

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

As hay is being cut and put in large round bales, it is always important to reduce hay storage losses. University of Tennessee animal scientists conducted a trial to compare different methods of storing large round bales of grass hay. The hay was cut and baled in June in Moore County, Tennessee. The bales were weighed at the time of harvest and storage. Then they were weighed again the following January at the time of winter feeding. The following table lists the type of storage and the resulting percentage hay loss.

Table 1. Losses of hay stored using six methods of storage (Source: Dr. Clyde Lane, University of Tennessee Department of Animal Science)

Type of Storage	Percentage (%) of Hay Loss
On ground, no cover	37%
On old tires, no cover	29%
On ground, covered	29%
On old tires, covered	8%
Net wrap on ground	19%
In barn	6%

Average spring, summer, and fall rainfall in Tennessee will generally be greater than that experienced in much of Oklahoma. However the rankings in storage loss between the storage methods will be present in Oklahoma as well.

An Oklahoma State University fact sheet by Dr. Ray Huhnke summarizes differences in storage loss that can be expected in an Oklahoma ranch setting. Source: [Oklahoma Cooperative Extension Fact Sheet BAE-1716 “Round Bale Hay Storage”](#).

Table 2. Percentage (%) dry matter loss of round hay bales.

Storage Method	Storage Period	
	Up to 9 months	12 – 18 months
Exposed		
Ground	5 - 20	15 - 50
Elevated	3 - 15	12 - 35
Covered		
Ground	5 - 10	10 - 15
Elevated	2 – 4	5 -10
Under roof	2 - 5	3 - 10
Enclosed barn	Less than 2	2 -5

Obviously, it would be ideal to store the hay inside, but that option will not always be available. The next best option is when the hay is stored on something that gets the hay off of the ground under a rain shedding cover.

Other important storage concepts can be used as the hay is being harvested this summer.

The storage site is an important consideration in reducing bale losses. Select a site that is not shaded and is open to breezes to enhance drying conditions. The site should also be well-drained to minimize moisture absorption into the underside of the bales. As much as 12 inches of the bottom of a bale can be lost through moisture absorption resulting from the wicking action.. Ground contact can account for over half of the total dry matter losses. Where practical, keep bales off the ground using low cost, surplus materials such as discarded pallets, racks, fence posts, railroad ties, and used tires. Another alternative is to use a layer of crushed rock about six inches deep to ensure good drainage within and around the storage site. Some expense may be necessary to obtain surplus materials, however, if 10 to 20 percent of the hay crop is saved each year, then it will not take long to recover those original costs.

Uncovered bales should be stored in rows, buffed end-to-end, and oriented in a north/south direction. The combination of the north/south orientation and at least three feet between rows will provide for good sunlight penetration and air flow, which will allow the area to dry faster after a rain. Vegetation between rows should be mowed. Research has shown that orientation is a minor consideration if the bales are used before early spring because the losses are relatively small until that time. If stored into the summer, bales oriented in an east-west direction can experience severe deterioration on the north-facing surface.

The source of these and other ideas about hay storage can be found in Dr. Ray Huhnke’s Oklahoma Cooperative Extension Fact Sheet [“Round Bale Storage” BAE-1716](#).