

The Newsletter From the Oklahoma Cooperative Extension Service

October 5, 2007

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Wheat Pasture Grazing Is Developing Slowly... If At All

by Derrell S. Peel

Wheat production challenges and uncertainty continue to delay producer interest in wheat pasture grazing in Oklahoma and suggests wheat pasture grazing may be less than previously thought. This is despite the fact that stocker budgets suggest strong value of gain potential over a wide weight range for feeder cattle. It is testament to the unusual and dynamic market and production conditions right now.

The latest Crop Progress report confirms that wheat planting continues slow in Oklahoma. As of the last day of September, the percent of wheat planted in Oklahoma was 41 percent, compared to 48 percent a year ago and a five year average of 56 percent. The percent emerged is even more delayed with 14 percent emerged, compared to 20 percent last year and a five year average of 28 percent. Some producers have delayed planting because of the short supply of seed leaving producers unwilling to take the risk of needing to replant. Although it is hard to imagine after all the rain earlier this year, some parts of the state, notably the northwest and part of the Panhandle and the south central part of Oklahoma are quite dry at this time. Producers are waiting for surface moisture before planting, once again because the risk of dry planting and the possibility of having to replant is too great this year. Some producers have already decided that the wheat production difficulties, the high cost of fertilizer and the risk of negatively impacting yield makes grazing too risky when wheat prices are so high. For all these reasons and more, it appears that wheat pasture grazing is not developing as fast, nor to the degree anticipated earlier.

Wheat production difficulties notwithstanding, the overall cattle market situation favors forage based gains and offers considerable return potential. Using auction prices this week in Oklahoma, the average value of gain for a 475 pound steer gaining a total of 440 pounds (ending weight over 900 pounds) was \$0.89/lb. That is a total gross margin per head of \$390. It is not often that feeder cattle markets offer this high of value of gain nor this wide of weight range, let alone both at the same time. Producers with any and all types of forage resources should be evaluating potential stocker cattle or calf retained ownership programs. Risk management

should not be overlooked but the generally good potential for forage based stocker programs is likely to persist for the foreseeable future. High grain prices make forage resources more valuable and gives cattle producers a chance to market more forage through cattle. These are unusual times in agriculture and, while that can be frightening, it also opens up new opportunities.

Don't Be Fooled by Plant Appearance

by Glenn Selk

The spring and summer of 2007 in Oklahoma has been good for growing summer annuals. Many of the fields planted with forage sorghums and millets have produced several cuttings of hay. In many cases, producers have not worried about nitrate accumulations because moisture has been adequate to plentiful. The plants have shown very little if any signs of stress. However, some of the samples currently being tested from second or third cuttings are containing important concentrations of nitrates. These high nitrate plants, either standing in the field, or fed as hay, can cause abortion in pregnant cattle, or death if consumed in great enough quantities.

In mid September, a field of forage sorghum in South-Central Oklahoma was examined carefully for nitrate content in second cutting re-growth. Over the course of two consecutive days, 72 samples (10 plants per sample) were gathered and measured for nitrate concentration. The average of the samples was 8935 parts per million (ppm) nitrate. Of the 72 samples collected, 26 were found to be above 10,000 ppm nitrate. The range in nitrate concentrations among the samples was from a low of 580 ppm to a high of 21,548 ppm. Most diagnostic laboratories consider forages with above 10,000 ppm nitrate to be potentially lethal to cattle if the forage is the entire diet.

Nitrates do not dissipate from suncured hay (in contrast to prussic acid), therefore once the hay is cut, the nitrate levels remain constant. Therefore, producers should test hay fields before they cut them for hay (if they have not been already cut). Stop by any <u>OSU County Extension Office</u> for testing details. Testing the hay crop before cutting gives an additional option of waiting and allowing for the nitrate to lower in concentration before harvesting the hay. The major sources of nitrate toxicity in Oklahoma will be summer annual sorghum type plants, including sudan hybrids, sorgo-sudans, sorghum-sudans, millets, and Johnsongrass. Other plants also may accumulate nitrates. See <u>OSU Fact Sheet F-2903</u>.

Some of the management techniques to reduce the risk of nitrate toxicity (**Note: the risk of this poisoning cannot be totally eliminated**), include:

1) Test the crop before you harvest it. IF it has an elevated concentration of nitrates, you still have the option of waiting for normal plant metabolism to bring the concentration back to a safe level. And experience tells us that we cannot estimate nitrate content just by looking at the field.

2) Raise the cutter bar when harvesting the hay. Nitrates are in greatest concentration in the lower stem. Raising the cutter bar may reduce the tonnage, but cutting more tons of a toxic material has no particular value.

3) Know the extent of nitrate accumulation in the hay. If you still have doubt about the quality of the hay, send a forage sample to a reputable laboratory for analysis, to get an estimate of the nitrate concentration. This will give some guidelines as to the extent of dilution that may be necessary to more safely feed the hay.

4) Allow cattle to become adapted to nitrate in the hay. By feeding small amounts of the forage sorghum along with other feeds such as grass hay or grains, cattle begin to adapt to the nitrates in the feed and develop a capability to "digest" the nitrate with less danger. Producers should avoid the temptation of feeding the high nitrate forage for the first time after a snow or ice storm. Cattle will be stressed, hungry, and unadapted to the nitrates. They will consume unusually large amounts of the forage and be in high risk for nitrate toxicity. Be sure to read <u>OSU Fact Sheet F-2903</u> closely before cutting and feeding any sorghum forage hay.

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