Forage Focus

UNIVERSITY OF MISSOURI Extension

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Got Some Good Hay or Haylage?—Enter it in the Ozark Empire Fair Hay Show

If you have some good hay or haylage you are proud of, it's easier than ever to enter it in the Ozark Empire Fair hay show. All you have to do is call your local Extension Center or an extension specialist that you know and we will come out to the farm and sample the bales for you. For $23, we can enter that hay in the hay show. This is cheaper than what we would charge for a standard hay test and there is no additional effort on your part. Since all entries are now only judged by its RFQ (Relative Forage Quality) value, there is no need to bring hay to the fair for subjective judging. We can now accept haylage and judging of round bales is easier. We would like to have all entries submitted by July 13 if possible.

Nitrate and Prussic Acid Concerns in a Drought

Probably about one of every three calls I'm getting right now is on a concern over nitrate or prussic acid toxicity in sudangrass, millet or Johnsongrass. These are concerns since there were several cows killed in the 2011 and 2012 droughts from these issues. So far I have not heard of any horror stories of cow deaths but would not be surprised to start hearing some. If you have these forages, be aware of nitrate poisoning that can occur in a drought if nitrogen fertilizer was applied in the spring or early summer. Nitrates accumulate in the lower stalks and can reach toxic levels in the leaves when the metabolism of the plant slows down in a drought. Death can happen rapidly if cattle graze on sorghums, millets and Johnsongrass and have no other feed sources to dilute down the problem. If nitrogen fertilizer or manures were not used, it's rarely a problem. Hay can remain just as toxic as the day it was cut for hay. Prussic acid poisoning can occur in some sorghums and Johnsongrass in a drought. Millets and some types of sudangrasses do not have this issue. This cyanide-like poisoning is primarily an issue in drought conditions when there is little else to eat and the forage is less than 20 inches in height. For this reason, we suggest waiting until the height is over 20-24 inches before turning cattle in to a pasture. Do not mow it down to fix this problem unless you will plan to wait on the regrowth to get some height to it again. Prussic acid poisoning will dissipate in the hay curing process.

Droughty Johnsongrass. Photo credit: Terry Halleran

Watch for Fall Armyworm in Forages

Fall armyworms can make their way into forages and consume lots of valuable forage during the hot, dry summer. I've had one preliminary report that a stand of sudangrass in Webster County was hit. These worms will march across a field rather quickly and decimate a field quickly. The established economic threshold for fall army worms is four or more half-grown or larger worms per square foot. Contact my office for insecticide recommendations if needed.

Fall armyworm. Photo credit: Purdue University

Warm Season Grasses—Drought Insurance for the Livestock Producer

With the significant drought most are in right now, we are finding that those who have warm season grasses established are fairing the best through the ordeal. When the fescue is drying up and growth has nearly stopped, warm season grasses may not always be thriving but are maintaining themselves better for hay and pasture. The pictures below are some success stories we are seeing this summer:

Right—Big bluestem (variety OZ 70) owned by J.D. McKee of Ozark County, photographed on June 13, 2018. This stand was established in 2016 and today is very thick and produces very well. J.D. was planning to harvest for hay the following week. Pictured is MO Dept of Conservation Private Lands Conservationist Brad McKee and MU Extension Livestock Specialist Randy Wiedmeier.

Left—J.D. McKee's big bluestem hay harvest from June, 2017. This cutting tested 15% protein, 51 TDN and had and RFV of 110. J.D. also keeps a healthy stand of Wrangler bermudagrass and claims that he gets many more bales per acre off the bluestem and with much less fertilizer requirements. He planted another bluestem stand this year. That field is struggling to establish more than this one did due to the dry weather. Photo Credit: Brad McKee

Right and Bottom Right —Red river crabgrass established this year by Clint Hetherington of Stone County. Photo taken on July 4. This field was full of blackberries last year. It was cleared this spring and established to crabgrass with the intention of planting to a novel endophyte fescue this fall. Photo Credit: Clint Hetherington.

Above —Switchgrass owned by Ed Cahoj of Polk County as he turned cows out on it on July 4. This field was established several years ago and has served Ed very well for hay and grazing. He is careful not to graze close or cut hay low to maintain the health of the stand. Photo Credit: Ed Cahoj