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Use Caution with Pasture and Frost

Traditionally the average first killing frost occurs sometime around the second week of October, so we are getting near a frost despite the 80 degree day temperatures that we are having. The pastures may be more of concern for the entire area from both a frost and/or the lack of rain aspect. The combination may limit some of your ability to manage the grazing rotations. There are dangers that exist with livestock grazing certain forages when they are frosted on, or stressed by a lack of moisture. Some forage species are an annual concern for livestock producers because of the potential for prussic acid poisoning. However, the potential for toxicity in livestock is of wider concern this year because of dry conditions.

An article from OSU Extension Forage Specialist Mark Sulc addressed some of the concerns, but it is especially important in a year like 2014. During the Brown Co. Fair last week, most enjoyed the week without any rain for the fair, but knew they could use some moisture on pastures, and maybe even some other things. I talked to some producers that cut some soybeans that were extremely dry despite still having a green stem. The lack of substantial rainfall, extreme heat and dryness has some producers feeding hay and watering livestock. This is not the case in the entire Adams/Brown/Highland County area.

With fewer acres in grass in recent years, some chose to grow sudangrass, sudangrass hybrids, forage sorghums or sorghum-sudangrass crosses, which can produce excellent forage yields in a short time, but are capable of becoming toxic to livestock after a frost event or stressed. Keep in mind that Johnsongrass can be dangerous, too. These species convert quickly to prussic acid in freeze-damaged plant tissue. If the plants appear green, but kind of stand out because other grasses have stopped growing or gone dormant, you could be dealing with a risk of nitrate poisoning. The risk is less with bigger plants. The most risk is in the lower part of the plants.

"Animals can die within minutes if they consume forages such as the sorghum species that contain high concentrations of prussic acid in the plant tissue soon after a frost," Sulc said. "Ruminants are more susceptible to prussic acid poisoning than horses or swine because cud chewing and rumen bacteria help release the cyanide from plant tissue."

The signs of prussic acid poisoning appear rapidly after the animal eats forage high in prussic acid content, because it interferes with oxygen transfer in the blood stream of the animal, causing it to die of asphyxiation. Symptoms include staggering, labored breathing, spasms, foaming at the mouth and convulsions.

Making hay and silage from these forages after a frost reduces the risk of poisoning, Sulc said, because prussic acid in the plant decreases during the wilting and hay-drying process. But hay or silage that are not properly cured and dried before baling or ensiling should be tested for prussic acid before feeding them to livestock, he said.

"Because prussic acid is a gas, the longer the gas has to dissipate out of the plant, the less it is dangerous for livestock," Sulc said.

Other tips farmers can use to avoid prussic acid poisoning include:

- Don't graze on nights when frost is likely. High levels of the toxic compounds are produced within hours after a frost.
- Don't graze after a killing frost until plants are dry, which usually takes 5 to 7 days.

- After a non-killing frost, do not allow animals to graze for two weeks because the plants usually contain high concentrations of toxic compounds.
- New growth may appear at the base of the plant after a non-killing frost. If this occurs, wait for a hard, killing freeze, then wait another 10 to 14 days before grazing the new growth.
- Don't allow hungry or stressed animals to graze young growth of species with prussic acid potential.
- Graze or green chop sudangrass only after it is 18 inches tall. Sorghum-sudangrass should be 30 inches tall before grazing. Never graze immature growth.
- Don't graze wilted plants or plants with young tillers.
- Green chopping the frost-damaged plants will lower the risk compared with grazing directly, because animals will be less likely to selectively graze damaged tissue. However, the forage can still be toxic, so feed green chop with great caution after a frost.
- Feed green-chopped forage within a few hours, and don't leave it in wagons or feed bunks overnight.

There are lots of forages that may also be more prone to causing bloat after a frost. Clovers and alfalfa both would be on that list. Even several days after a killing frost it is recommended that livestock not be turned onto lush pasture when the forages are wet or when livestock is hungry. Exposing livestock to dry hay and maybe even some supplemental grain prior to turning livestock out may reduce the risk. There are also bloat blocks that can be used, but they need to be used prior to turning livestock out onto risky pasture.

Tire Amnesty Days in Adams Co.

If you have scrap tires around, here is your chance to get rid of them. No businesses or junk yards, but if you are in Adams Co. and have tires around the farm or home you can get rid of them this weekend free. Tires are accepted on or off the rim on Oct. 2 – 4 at the Adams Waste and Recycling location at 95 Trefz Road just off of Compton Hill Road (about 1 mile off of SR 125 just a few miles east of West Union) from 9:00 a.m. until 4:00 p.m. each day. For more information call Paul Braasch at 513-732-7745.

Highland Co. Dairy Banquet

The Highland Co. Dairy Banquet will be held on Monday, October 13 in Hillsboro at the Ponderosa Steakhouse Banquet Center. The event will begin at 7:30 p.m. and will include a meal and the recognition of the youth who participated in the Highland Co. Fair and top producers in the Highland Co. Dairy Industry.

Walnuts for Sale?

If you are looking for some extra money, black walnut trees, for the most part are loaded with walnuts this year. Many of the nuts have already dropped despite the fact we have not seen a frost. This is something young people could do once they get home from school. In addition to being able to sell the walnuts for a profit, many people just want the walnuts out of their yard, so it could be a win-win situation.

Where is there a market for black walnuts? My understanding is that the oldest black walnut station in Ohio is in Seaman, OH. The market has been at WC Milling for 45 years now. This year WC Milling will be buying black walnuts at the Seaman Farm, Garden and Pet Center in Seaman, which is located on SR 247 about a mile north of SR 32 just north of the train tracks. Hours for taking walnuts are Monday through Friday from 10:00 a.m. until 5:00 p.m. and Saturday from 8:00 a.m. until 1:00 p.m. They will buy black walnuts throughout October. Current price is \$13 per hundred pounds. The walnuts are hulled once you unload them and then weighed.

Dates to Remember

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| October 9 | Dairy Producer Farm Bill Meeting |
| October 16 | Dairy Producer Farm Bill Meeting in West Union at Frisch's at 9:30 a.m.
(Breakfast is on your own. Try to come early enough to be finished eating by 9:30.)
NOTE: Please call the Adams or Highland County OSU Ext. Office to pre-register. |
| October 22 | Dairy Producer Farm Bill Meeting in Hillsboro at FSA Office begins at 1:00 p.m. |