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FOR IMMEDIATE RELEASE

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Prussic acid and nitrate poisoning are concerns after a light frost

In recent weeks I have discussed the dangers of Johnsongrass in areas being grazed, and often find many that are not aware of the risk. We have had a couple of light frosts, but the forecast for this Sunday is a low in the 20s. This will most likely get the entire area into temperatures that can cause problems for plants like this. The following was in a recent Beef Blog and written by Glenn Selk, a Beef Specialist from Oklahoma State University Extension.

Although late October has been very warm and “summer-like”, the average first frost date for much of the Southern Plains is here. Soon a cold front will bring near-freezing to sub-freezing nighttime temperatures

It was discovered in the early 1900s that under certain conditions sorghums are capable of releasing hydrocyanic acid or commonly called prussic acid. Prussic acid when ingested by cattle, is quickly absorbed into the blood stream, and blocks the animal's cells from utilizing oxygen. Thus the animal dies from asphyxiation at the cellular level. Animals affected by prussic acid poisoning exhibit a characteristic bright red blood just prior to and during death. Lush young regrowth of sorghum-family plants are prone to accumulate prussic acid especially when the plants are stressed such as drought or freeze damage. **Light frosts** that stress the plant but do not kill it, are often associated with prussic acid poisonings.

Producers should avoid grazing fields with sorghum type plants following a light frost. The risk of prussic acid poisoning will be reduced, if grazing is delayed until at least one week after a "killing freeze". As the plants die and the cell walls rupture, the hydrocyanic acid is released as a gas, and the amount is greatly reduced in the plants. One can never be absolutely certain that a field of forage sorghum is 100% safe to graze.

Cattle that must be grazed on forage sorghum pastures during this time of year should be fed another type of hay before turning in on the field, and should be watched closely for the first few hours after turn in. If signs of labored breathing, such as would be found in asphyxiation, are noted, cattle should be removed immediately. Call your local veterinarian for immediate help for those animals that are affected. Be certain to read [OSU Fact Sheet PSS-2904 “Prussic Acid Poisoning”](#) before turning cattle to potentially dangerous fields.

Frosts also stress the plant before a hard freeze kills it. Plant stress from frosts will impair the normal metabolism of the plant. Therefore the plant continues to take up nitrates from the soil but is inefficient at converting the nitrates to protein. Therefore nitrate accumulations may reach dangerous levels. Testing the forage before grazing or cutting for hay will provide important knowledge about the safety or danger in the forage. Visit with an OSU County Extension office about testing procedures and read [OSU Fact Sheet PSS-2903 Nitrate Toxicity in Livestock](#)”.



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LAMB 509 class Coming Soon

LAMB 509 is a 2-day short course designed to address several factors associated with producing consistent, high quality, wholesome lamb at the farm, packing-plant and retail levels. This is a hands-on program that will enhance your understanding of quality attributes that affect consumer acceptability and ultimately consumer demand of lamb products. The objectives of the LAMB 509 are to:

- **Improve** the competitive position of Ohio lamb producers through marketing high quality, consistent, wholesome lamb products.
- **Explain** and teach through hands-on training the differences in value determining factors that influence prices received for market lambs and lamb products.
- **Provide** an overview of muscle quality attributes affecting lamb and discuss the management, environmental, nutritional, and genetic factors that contribute to muscle quality deficiencies.
- **Enhance** the understanding of the numerous links in the production chain between the producer and the consumer and the interaction among these links.

The program is being held December 13-14, 2016 at the Animal Sciences Building on the Ohio State University Columbus Campus. A maximum of 32 spaces will be available on a first-come first-served basis. Registration deadline is November 23, 2016. You can e-mail me at dugan.46@osu.edu or call/stop by the OSU Extension Office for a copy of the registration form.

Registration fee for LAMB 509 is \$125/participant. This fee covers all meals, materials and parking arrangements. This program is the result of a partnership with the Ohio Sheep and Wool Program, the Ohio Sheep Improvement Association, The Ohio State University Extension and The Ohio State University Department of Animal Sciences.

Tentative Schedule

Tuesday December 13, 2016

8:00 a.m. - Arrival in Columbus Welcome/Outline of LAMB 509, Live Animal Evaluation, Ultrasound Evaluation and Demo, Grid Pricing, Lamb Harvest and Adjourn - 7:30 pm.

Wednesday December 14, 2016

7:30 a.m. Grading Procedures, Carcass and Retail Fabrication, Processing and Product Development Retail Product Discussion, Open Discussion, Review Live, Carcass and Retail Values. Adjourn 8:00 pm.

Dates to Remember

Veterinarian Feed Directive Meetings with new FDA rules starting on January 1 for feeding medicated feeds, minerals, etc. Representatives from feed companies, OSU Extension and local Veterinarians will be available to answer questions. These rules will apply to all producers, **including youth**.

Nov. 15 Clinton Co. Extension Office in Wilmington at 6:30.

Nov. 15 Cherry Fork Community Center by Cherry Fork Farm Supply.
Social hour 5:00, Meal at 6:00 and program at 6:30 p.m.

Nov. 17 Hillsboro Elks by Master Feed Mill in Hillsboro at 6:30 p.m.

Nov. 29 Union Stockyards in Hillsboro with meal at 6:00 and program at 7:00 p.m.