Livestock Update

Beef - Horse - Poultry - Sheep - Swine

May 2012

This LIVESTOCK UPDATE contains timely subject matter on beef cattle, horses, poultry, sheep, swine, and related junior work. Use this material as you see fit for local newspapers, radio programs, newsletters, and for the formulation of recommendations.

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Scott P. Greiner, Extension Project Leader
Department of Animal & Poultry Sciences
Dates to Remember

**BEEF**

**AUGUST**
6-7  Tri-State Beef Cattle Conference. Washington County Fairgrounds. Abingdon.  
*Contact:* Scott Greiner (540) 231-9159; email: sgreiner@vt.edu

**OCTOBER**
*Contact:* Paige Pratt, (540) 231-4732; email: pipratt@vt.edu

**HORSE**

**SEPTEMBER**
13-16  VA State 4-H Horse and Pony Championship. Virginia Horse Center. Lexington.  
*Contact:* Celeste Crisman, (540) 231-9162; email: ccrisman@vt.edu

**SHEEP**

**AUGUST**
25  Virginia Performance Tested Ram Lamb Sale. Shenandoah Valley AREC. Steeles Tavern.  
*Contact:* Scott Greiner, (540) 231-9159; email: sgreiner@vt.edu
Spring Calving Herds
- Finish calving
- Give pre-breeding vaccinations to cows – IBR, PI3, BVD, BRSV and Lepto
- Begin estrous synchronization programs for AI
- Breed heifers 2 to 4 weeks before cows
- Solicit veterinarian to give breeding soundness exams to all bulls
- Supplement 1st calf heifers with energy through breeding
- Implant calves at turnout if not implanted at birth
- Keep high quality, high magnesium, high selenium minerals available
- Make 1st cutting of hay
- Implement grazing management strategies

Fall Calving Herds
- Creep graze calves while on cows
- Evaluate marketing options for calves- sale season, weaning/backgrounding strategy, retained ownership
- Vaccinate calves according to weaning and marketing schedule
- Wean calves based on marketing plan for calves (most value-added sales require 30+ days weaning prior to marketing)
- Implant calves at turnout
- Deworm calves if needed
- Make 1st cutting of hay
- Continue feeding high magnesium minerals to prevent grass tetany
New Case of Bovine Spongiform Encephalopathy (BSE or Mad Cow) Confirmed in California Dairy Cow

W. Dee Whittier, Extension Veterinarian, Cattle
VA-MD Regional College of Veterinary Medicine – Virginia Tech

On April 24, 2012 the US Dept. of Agriculture announced that a case of BSE had been confirmed in a dairy cow in central California. The cow had been delivered to a rendering plan where routine testing discovered the disease. BSE is a disease of cattle that involves the degeneration of the brain because of the accumulation of abnormal material in the brain cells. The disease is classified as an infectious disease, spread by exposure to a protein called a prion.

The USDA assured consumers in the announcement that no parts of the cow entered the food chain and that discovery of the case documents that an effective system is in place to protect the US food supply from contamination. Even though the cow might have given milk that was marketed in recent times, milk has been shown to neither transmit the disease to calves who might have drunk it, nor to humans.

BSE has been a special health concern because people can become infected with the prions that are involved in causing the disease. These people develop a degenerative brain condition known as Variant Creutzfeldt-Jakob Disease (vCJD) which is inevitably fatal. However, less than 200 cases of vCJD have been reported globally, most in the United Kingdom where an outbreak of cattle BSE occurred from 1986 to 2009. At its peak, over 36,000 cases of BSE in cattle were diagnosed in one year. By banning ruminant derived protein from cow diets and culling animals likely exposed, the number of new cases of the disease decreased and the last case was confirmed in the UK in 2009.

The USDA also announced that the type of spongiform encephalopathy which the California cow had was classified as atypical. In July 2007, the UK Spongiform Encephalopathy Advisory Committee (SEAC) suggested that atypical BSE may be a distinct strain of prion disease. Unlike typical BSE, cases of atypical BSE, according to SEAC, may have risen spontaneously (although transmission through feed or the environment cannot be ruled out). Recently reported French surveillance data support this theory that unlike typical BSE, atypical BSE appears to represent sporadic disease.

Prior to the newest discovery, only 3 cases of BSE had been found in US cattle, despite an active surveillance program. The first of these cows had been imported from Canada which has had several cases of BSE. Both of the prior U.S.-born BSE cases were also classified as atypical and were in cows 10 years of age or older. This would suggest that no BSE contaminated cattle feed has been present in the US.

The implications of the California BSE cow are most likely related to the public perception of safety in beef consumption. Despite assurances from public health authorities, it has been documented that consumers err on the safe side in changing their eating preferences. This has been observed in a number of food contamination episodes involving not only meat, but fruits and vegetables as well.
Yet another possible implication of this case is its possible impact on the importation of US beef by other countries. Beef exports now account for over ten percent of the use of US produced beef. A decision to halt imports of US beef by any of major trading partners would have serious impacts on beef prices. Official import/export recommendations for meat animals are made by an international committee called the OIE. Because the US is in strict compliance with OIE recommendations to prevent the introduction or spread of BSE in the US, this single case should not result in any changes in import/export relationships. However, import/export decisions are very political and difficult to predict and negotiate. One item of good news is that Mexico, a major US beef trade partner announced late in the day on April 24 that it would not impose any changes on its beef trade relationship with the US.

Only time will tell about the long-term results of this new case of BSE. All participants in the US beef industry should hope that consumers, import/export regulators, politicians and the media will behave responsibly and consider well the extensive scientific data that supports continued exportation of US beef and the enjoyment of this nutritious product domestically.
The fifth Tri State Beef Cattle conference will be held August 6th and 7th at the Washington County Fairgrounds in Abingdon, VA. An afternoon tour of beef operations will be held on August 6th followed by a meal and evening speaker. On Tuesday the 7th, there will be several speakers covering market outlook and planning, forage and fertilizer economics, feeder cattle health, risk management, and a panel of stocker and cow calf operators. A steak lunch will be provided. A trade show will accompany the conference and include representatives from agribusiness firms supporting the beef business including animal health and equipment companies, feed suppliers, marketing agencies, lending institutions and related businesses. The meeting is being sponsored by Virginia Cooperative Extension, University of Tennessee Extension and North Carolina Cooperative Extension. Registration information and complete details will be available through local Virginia Cooperative Extension Offices after July 1. Registration for the conference is $20 before July 23 and $25 after July 23. Additional information can be obtained from Dr. Scott Greiner, Extension Beef Specialist, Virginia Tech, phone 540-231-9159, email sgreiner@vt.edu, on the web at http://www.apsc.vt.edu/extension/beef/index.html or through your local Extension office.
Butterflies in the stomach...or are they?
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Virginia Tech MARE Center

Spring is upon us and summer is rapidly approaching. This means fun things like horse shows, trail rides, and other activities that you put off during the winter are picking up. Sometimes, though, the things we enjoy about our horses make them stressed. There are a number of things that can make a horse feel more than butterflies in the stomach.

**General stress:** Mental as well as physical stress can increase the concentrations of cortisol, a stress-related hormone, which decreases protective factors in the stomach.

**Intense exercise:** Research suggests the link between intense exercise and gastric ulcers may be due to an increased sloshing of stomach acids during work, but it could also be related to other factors, including transportation stress and changes in diet.

**Intermittent feed deprivation:** Lack of feed in the stomach and gastrointestinal tract is a confirmed risk factor for causing ulcers in the horse. This can happen due to standard management practices of meal feeding horses, or when horses go off feed while traveling or adapting to new places.

**High grain diets:** Adding more grain to the diet can increase the risk for ulcer formation. Grain is digested differently than forages, resulting in increased acid production and decreased gut pH.

**Stall confinement:** Horses that have limited turnout appear to be at a greater risk for ulcers. This is most likely due to changes in management, including intermittent feeding, limited forage intake, limited contact with other horses, etc.

**Transportation:** This issue probably adds a combination of factors, including general stress, intermittent feeding, and confinement issues, along with changes in diet and surroundings. The combination leaves the horse at greater risk for ulcers.

**NSAIDs (non-steroidal anti-inflammatory drugs):** Drugs like bute, even when used according to directions, can upset the digestive system and result in ulcers.

General tips for preventing ulcers include:
- Maintain consistent feeding schedules
- Increase forages, and include some legumes such as alfalfa, particularly while traveling
- Use hay feeders that slow intake, allowing the horse to “graze” longer on hay
- Make certain to feed the correct grain supplements so you feed as little as possible to maintain weight
- Vary your exercise program to allow periods of recovery

With a little foresight and consideration, you and your horse can have a happy, healthy summer!

For more information on equine health care and management, contact your local extension office or the Virginia Tech MARE Center!