Upcoming Events:
- June 16—CGC Extension Council Mtg
- June 18—Black & Gold Picnic
- June 24-26—CGC 4H Camp
- June 29—SMQA training; Perryville
- July 15—Chamber Ag Tour: Purina Research Farm
- July 15– Swine, goat, lamb nomination due
- July 16—Solar Day
- July 17– CGC Extension Scholarship Due
- July 22—SMQA training; Jackson
- July 25, 28, 29—Perry Co. 4H Fair

Country of Origin Labeling (COOL) Repeal

Country of Origin Labeling (COOL) became a mandatory process in March 2009 and required grocery retailers to provide country-of-origin labeling information on fresh beef, pork, lamb, chicken, goat, wild and farm-raised shellfish, peanuts, pecans, ginseng, and macadamia nuts. In the beef industry, costs associated with complying to COOL include detailed record keeping, line sorting and segregation in the packing house, the label itself, and discounts for cattle that originate from Canada or Mexico, leading U.S. trading partners. Has the benefit of origin information outweighed the cost? K-State conducted a consumer demand impact to answer this exact question: how has consumer demand been influenced by COOL?

Their results: there is limited awareness of COOL, little use of origin information in purchasing decisions, and no evidence of a demand increase in covered beef, pork, or chicken products as a result of COOL.

Given these findings, compliance with COOL results in an economic loss for the U.S. meat and livestock supply chain spanning from producers to consumers. Cattlemen have used this study to testify before the House Ag Livestock Subcommittee to repeal COOL which passed with a 38 to 6 vote on May 20, 2015.

But has the damage already been done? On May 18, 2015, the World Trade Organization ruled for the fourth time that the U.S. COOL rule violates international trade obligations and discriminates against Canadian and Mexican livestock. This rule adds costs and burdens to cattle solely based on their origin. If Congress does not take action to bring COOL into compliance with international obligations, Canada and Mexico will be awarded retaliatory tariffs.

Canada has since published their list of products, by state, for possible retaliation. The National Cattlemen’s Beef Association calls on Congress to fix the COOL rule and supports legislation to repeal COOL before tariffs are awarded and the U.S. suffers further damages to the economy and trade relationships.


Revitalizing the Missouri Dairy Industry

The dairy industry has long been an important part of Missouri agriculture, yet the number of milk cows in our state has declined by 40% since the end of the 20th century. This year’s Breimyer Agriculture Policy Seminar will focus on efforts to reverse this trend and keep milk production and processing as vital components of our state’s economy.

The 2015 Breimyer Seminar will be held in Columbia on July 13, 2015. Agenda and registration information is available at: <http://agebb.missouri.edu/mgt/breimyer/index.htm>.

Pre-registration is needed by July 1.
Preparing for hot weather and minimizing heat stress

Summer heat have you panting? Your livestock will be looking for relief from the heat as well. Heat stress in livestock can cause reduced feed intake and efficiency, reduced milk production, increased disease, decreased reproductive performance, and decreased fetal growth and colostrum quality in pregnant animals. The following practices can help you minimize heat related stress and identify susceptible animals.

Susceptible animals

Feedlot animals the closest to finishing are most at risk. They experience radiant heat from the dirt or concrete pens and have the least amount of lung capacity relative to body weight to help dissipate heat. Young and old animals are next in line because they do not have the body reserves to withstand long periods of heat. Dark hided animals are at a higher risk of heat stress and some incidences of death have been reported when black-hided animals were on pasture with no shade and limited water resources.

There are six stages of heat stress and being able to recognized heat stressed animals becomes important in hot summer months. Stages 5 and 6 are at risk of death if not relieved.

1) Elevated breathing rate, restless attitude, increased time standing
2) Cattle may begin to drool and group together
3) Respiratory rate increases, excessive drooling/foaming
4) Open mouth breathing begins and drooling decreases
5) Protruding of the tongue
6) Labored breathing with head down, isolation from the herd

Managing stress

Having an action plan to reduce the heat load on animals can help lower the negative impacts of hot weather.

Water needs increase during hot weather because cattle have increased water loss through breathing and sweating. Drinking water is the fastest way for cattle to reduce their core body temperature. Be sure there is adequate access to cool, clean water. Extra water tanks may be needed in periods of extreme heat.

Move feeding time to late afternoon or evening. Body heat reaches maximum a few hours after eating so avoid morning feeding when body heat would reach max at the hottest part of the day. If two feedings are required consider a smaller meal in the morning and larger portion in the evening.

Air movement improves animal cooling and having mounds in pens gives cattle more elevation and access to more wind. Provide shade for animals and if shade is not practical such as a feed yard, consider turning out temporarily to shade especially in the mid-day heat. Wetting the ground or adding bedding to the ground can reduce the ground temperature where cattle lay.

Fly control is important during hot weather because flies will add to the stress of the hot days.

Lastly, do not work cattle during temperature extremes. If working the animals is absolutely necessary, keep it short, calm, run smaller groups, make sure water is available in holding pens and work them as the sun comes up. Do not work cattle in the evening after a heat stressed day.

The risk of summer heat stress is another reason to have a defined calving season. Cows which have been heat stressed in late gestation have calves with lighter birth weights and produce lower quality colostrum. This can lead to decreased calf vigor and increased disease susceptibility in calves. As mentioned earlier, young animals are at increased risk to heat stress because they do not have reserves to handle the heat. Trying to get females bred in periods of extreme heat can be difficult as bulls may not want to perform and female reproductive performance is hindered. Heat stressed cows may not show heat, follicles may develop correctly, estrous cycles may be irregular, and more embryonic death can occur.

Know when livestock are at risk by paying close attention to weather and the Livestock Weather Hazard Guide:
http://www.noble.org/Ag/Livestock/Heat/


Early Pregnancy Detection

For spring-calving cows (January – April) pregnancy detection usually occurs in the fall. Cull prices are generally 5–10% higher in August than October. Identifying cull cows early allows producers flexibility in their marketing to optimize revenue. Marketing open cows in August also allows producers to sell more weight because cows nursing a calf typically lose weight from August to weaning time. Producers that use early pregnancy detection on heifers have the advantage to market that open female as soon as they are identified or put weight on her and market at a later time, both allowing that female to maintain a maturity class A for carcass quality.

Early detection and marketing of open cows reduces the expense to maintain those females. Maintenance cost can vary greatly depending on the time of year and forage availability. To maintain a 1250 lb. bred cow during the winter requires approximately $1.30 per day.

There are several methods of pregnancy detection available to producers. Pregnancy can be detected in cows as early as 30 days using ultrasound and blood tests. Palpation requires cows be at least 35-50 days pregnant and the experience of the person palpating makes a big difference in the ability to detect early pregnancies. Stressing cows early in pregnancy can result in a slight pregnancy loss. Anywhere from 1-3.5% loss has been reported when palpation or ultrasound have been used between days 40 and 75 of gestation.

The blood pregnancy tests use a diagnostic technique which measure specific proteins secreted by the fetus. These tests are 99% accurate in determining an open cow. It is important to know that these tests must be performed a minimum number of days post calving. This is to prevent interference of the proteins from the previous calf. Therefore it is important to keep accurate calving records and know the post-partum interval of cows before conducting a blood pregnancy test.


<table>
<thead>
<tr>
<th>Method</th>
<th>When pregnancy can be detected</th>
<th>Age of calf</th>
<th>Sex of calf</th>
<th>Experienced technician needed?</th>
<th>Cost per cow</th>
<th>When results are known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palpation</td>
<td>35-50 days</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>$3 - $10</td>
<td>Immediately</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>30 days</td>
<td>Yes</td>
<td>Potentially</td>
<td>Yes</td>
<td>$5 - $15</td>
<td>Immediately</td>
</tr>
<tr>
<td>Blood test</td>
<td>28 days</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>$3 - $5</td>
<td>2 - 4 days</td>
</tr>
</tbody>
</table>

Tissue collection for testing

Blood can be collected to test for pregnancy, disease, or to generate genomic data or verify parentage. Blood and other genetic material can be collected by the producer and sent to a lab for testing. This provides the producer with an option to collect samples at their convenience. Companies that provide the testing services typically provide the supplies necessary to collect the samples.

Tips on collecting genetic material can be found at: http://extension.missouri.edu/p/G2140#table
Hay Quality

The wet weather delayed harvest and some cases cut hay was rained on several times or tedded several times or put up wetter than the recommended moisture of <18%. If hay was put up wet (>20% moisture), the warm temp bacteria will increase and the respiration from more bacteria increases internal temperatures of hay. Wet hay should be monitored for temperature and should not be stacked to improve air circulation. Ideally, while monitoring temperature, the hay should not be placed in a barn. If internal temperatures reach 130 degrees Fahrenheit, monitor hay daily. If temperature rises to 150 degrees, then the likelihood is temperatures will continue to increase. Fire is imminent if internal temperature exceeds 175 degrees. More information is available in the following guide from Virginia Tech: http://pubs.ext.vt.edu/442/442-105/442-105.html

Hay quality after rainfall may be a concern. Research out of Iowa State indicated that fresh cut hay that was rained on took a little longer to dry but quality was not diminished significantly. However, hay that was field dry and received a rain quality did decrease significantly. Approximately every inch of rain dropped dry matter by 5% and digestibility by 10%. Most nutrient loss occurs from leaching with rain and shattering from tedding and raking multiple times.

Another concern this year is ergot. The cool, wet spring weather, delayed harvest, followed by warm June temperatures could increase the likelihood of ergot showing up in grass seed heads. For more information following the MU link on ergot poisoning: http://extension.missouri.edu/news/DisplayStory.aspx?N=1908

Anthony Ohmes, SE Region Extension Agronomist

SOLAR for Farm, Home and Business

Thursday, July 16th, 2015
6:00 PM – 9:00 PM
Cape Girardeau County Extension
684 W. Jackson Trail, Jackson MO

MU Extension will be offering a informational meeting on solar energy on July 16th at the University of Missouri Extension Center in Jackson from 6:00 pm to 9:00 pm. Topics will include learning about the components and options available, benefits of solar energy, net metering, passive solar, determining how much solar your operation may need and applying for grants that may be available. There is a fee for this meeting of $15 if you register by July 14th or $20 at the door. Please contact the extension office at 573-243-3581 to register.

Livestock Waiver of Liability

The Missouri Cattlemen’s Association led legislation that expands the equine liability waiver to include livestock and encourages all livestock owners to make a small investment for a sign that offers protection for your family farm or ranch. Equine professionals already owning a sign will need a new sign to comply with the law.

Signs are available from Butch Meier or can be ordered from www.mocattle.org. Cost is $20 for Polyethylene or $35 for Aluminum.

Cape Girardeau County Extension Offers Scholarship

Awarding one cash scholarship of $200 paid directly to recipient.
Application available online: http://extension.missouri.edu/capegirardeau
Or at the office: 684 West Jackson Trail, Jackson, MO
Call extension office for details: 573-243-3581
Applications due July 17, 2015