



Northeast Missouri

Ag Connection

Your local link to MU for ag extension and research information

<http://agebb.missouri.edu/agconnection>

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2014 Show-Me-Select Heifer Sale held at Palmyra

The Northeast Missouri Show-Me-Select Replacement heifer sale in Palmyra, Missouri reached a record sale average of \$3,208.

The MU educational heifer management program included 19 producers with 286 heifers. The heifers were bred to sires with calving-ease and growth genetics. The sale average was \$1,031 higher than last year. The top lot sold belonged to Jim and Sharon Schlager and brought \$4,050.

Highest average price from a consignor was \$3,765 on 23 head from Keithley/Jackson Farms, Frankford, Mo. Other top consignors were Jim and Sharon Schlager, Canton, Mo. \$3,756 on 8 head; McCutchan Angus, Monticello, Mo., \$3,333 on 3 head; Deer Creek Cattle Co. Clarksville, Mo. \$3,331 on 21 head; Prairie View Farms, Monroe City, Mo. \$3,323 on 26 head.

Fifty buyers purchased over \$900,000 worth of bred heifers. Thirty repeat buyers purchased 191 head, or 67 percent of the total consignment. Calving surveys returned by these buyers provide important information to consignors to improve animals consigned to future sales.

The Show-Me-Select heifer development program takes nearly a year to complete. The heifers undergo a pre-breeding examination usually 4 to 8 weeks before breeding. This exam includes a pelvic measurement, reproductive tract score, and weight. Heifers may be bred artificially or by natural service. Sires must meet specific calving ease EPD requirements based upon breed. This year 195 head, or 68 percent, of the heifers in the sale were synchronized and bred AI. The choice to AI had a \$71 price advantage over those bred naturally in the sale.

Heifers must be pregnancy tested within 90 days of breeding by a veterinarian to determine expected calving date. The use of ultrasound has helped many of the veterinarians improve their accuracies on calving dates. During the development period the heifers undergo an extensive health program and are vaccinated at weaning, pre-breeding, and pregnancy examination as well as treated several times for internal and external parasites. Heifers are also screened for blemishes, body condition, muscling and structural soundness by a MU Extension livestock specialist and USDA graders.

Averages of other Show-Me-Select sales from fall 2014 were Joplin, \$2,889 on 521 head; Kingsville, \$2,769 on 298 head; and Fruitland, \$3,033 on 168 head.

This was the 18th year for the Show-Me-Select heifer sale in Palmyra and over 30,283 heifers have been through the program and 5,088 head have been sold. There were several new consignors this year and more are expected to start next year. If you are interested in the program, contact your local MU Extension livestock specialist.

Source: *Daniel Mallory, Livestock Specialist*

Private Pesticide Applicator Training

Individuals needing to obtain or renew Private Pesticide Applicator Certification to purchase restricted use pesticides may do so by attending one training session. In addition to attending a training session each farm must possess the official Private Pesticide Applicator Reference Manual, available at each training session for \$12 (cash or check).

Individuals already in possession of the reference manual may take it to a training session to avoid purchasing a new manual.

Farmers and landowners are required to hold a Private Pesticide Applicator certificate in order to purchase, apply, or supervise the application of restricted use pesticides for the purpose of producing any agricultural commodity. Private Pesticide Applicator certification is valid for 5 years, at which time the individual may renew their certification by attending another Private Pesticide Applicator training session. Individuals unable to attend a training session may contact their University of Missouri Extension County office to schedule time to watch a three hour training video at the office and purchase the training manual to receive certification.

Individuals up for renewal should receive a reminder postcard from the Missouri Department of Agriculture. Individuals needing a first time certification, as well as individuals needing to renew an expired certification can do so at one of these training sessions or by watching the training video. For more information contact your University of Missouri Extension County office using the contact list on the front page of this newsletter or go online to extension.missouri.edu.

Source: *Max Glover, Agronomy Specialist*

County	2015 Private Pesticide Applicator training sessions
Adair	February 11, 2pm, Adair County MU Extension office
Audrain	February 18, 3pm and 7pm, Audrain 4-H Center
Boone	February 25, 6:00 pm, Boone County MU Extension office
Clark	February 11, 7pm, Clark County MU Extension office
Knox	February 19, 3pm and 7pm, Greenley Memorial Research Center
Lewis	February 9, 7pm, Highland High School Ag Classroom
Linn	February 9, 2pm and 6:30pm, MU Forage Systems Research Center
Macon	February 12, 1:30 pm and 6:00 pm, Macon County MU Extension office
Marion	February 12, 9am at Philadelphia Community Center, 7pm Palmyra Sesquicentennial Building
Monroe	March 10, 3pm and 7pm, Monroe County MU Extension Office
Pike	February 26, 3:30pm and 7pm, Pike County Courthouse Commissioner's Room
Putnam	February 25, 2pm and 6:30pm, Putnam County Courthouse Old Soldiers Room
Ralls	February 25, 6:30 pm, Mark Twain High School Ag Classroom
Schuyler	February 11, 6:30pm, Schuyler County Courthouse Assembly Room
Scotland	February 3, 2pm, Memphis Housing Authority
Shelby	February 10, 3pm and 7pm, Shelby County MU Extension office
Sullivan	February 10, 2pm, Sullivan County USDA Service Center

When is it too late to frost seed?

In northern Missouri late February to early March is generally the best time to frost seed legumes into pastures. Weather, such as deep snow followed by prolonged cold, may interfere. Here is some advice from the Missouri Grazing Manual, courtesy of the MU Forage Systems Research Center, to help in planning around weather to get legumes seeded into established pastures.

The limiting factor regarding which species can be successfully frost seeded is tolerance to cold weather while in the seedling stage. Red and white clover can be frost seeded with very consistent success due to high seedling vigor and frost tolerance in the seedling stage. Although quite susceptible to freezing in the cotyledon stage, these clover species become very hardy after the emergence of the first trifoliate leaf. Alfalfa and birdsfoot trefoil are less tolerant of cold temperatures in the seedling stage and are thus more susceptible to stand failure when frost seeded. Most successful frost seeding will occur if seed is broadcast late February through early March in north Missouri. The seed must come in contact with the soil for frost seeding to be effective. For this reason competition from established forages and weeds must be controlled.

Spring grazing will allow some of the seed to be trampled into the soil, if soil moisture is not excessive. If chemical suppression of the sod is to be used, it should be done the previous fall. Waiting until spring when green growth has begun to apply herbicides makes frost seeding much less effective. Pasture burning to retard cool-season grass growth in the spring generally occurs too late as legume seedlings should already be up and growing by the optimum fire date. However, broadcast seeding immediately into the ash bed following a spring burn has been reported work with adequate rainfall after seeding.

Sod disturbance combined with frost seeding works quite well as the roughened soil surface is more conducive to good seed-soil contact due to freezing-thawing activity. If pastures are to be harrowed for manure dispersion, broadcast seeding at the same time often gives better results than simply frost seeding, particularly with birdsfoot trefoil and alfalfa. If a harrow is used, seeding is usually delayed until later in

the spring after the risk of late frost is lessened. The success rate is generally high if slight sod disturbance is combined with broadcast seeding and harrowing in spring.

For more information on frost seeding legumes into pasture visit extension.missouri.edu, click agriculture, crops, forages and select the publication for the legume you are interested in seeding.

Source: *Max Glover, Agronomy Specialist*

Prescribed Burning as a Pasture Management Tool

Most people think of a grassland fire as a bad thing, but in certain situations it can be beneficial. Prescribed burning, using fire as a management tool in pastures, has become more widespread in recent years. Burning in the late winter and early spring is most common. This helps to remove the accumulated plant material and opens the canopy for new seedlings to emerge. Burning is beneficial to a stand of native warm season grasses and also has wildlife habitat benefits.

Ideal conditions for burning includes: moist soil, humidity of 30 to 60 percent, temperature between 45-75 degrees with less than 70 percent cloud cover, and wind speed of 10 to 15 miles per hour. A light wind helps the fire to move across the field in an expected direction. The lack of wind can result in erratic and unpredictable fire patterns. Check the weather forecast to make sure the wind is not predicted to change directions during the time of the prescribed burn. Topography also plays a role in management of the fire. Fire travels uphill faster than downhill. Be aware of heavy fuel sources, such as downed trees, brush piles or logs, which may be within the prescribed burn area.

A drip torch can be useful when lighting the fire. Typically, it is a can with a long spout holding a fuel mixture ignited on the end and drops the fuel at a steady rate as a person walks along the area to be ignited. If a drip torch is unavailable, a handheld propane torch or even matches can be used to set the fire. In addition, some local Soil and Water Conservation Districts have rental equipment available at the county USDA Service Center.

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Use of a backfire is critical to control the fire. A backfire is a small slow fire that is set on the downwind side of the field. This will help stop the fire when it reaches the edge of the field. A fire break such as a mowed or tilled strip around the edge of the field is important to contain the fire in the desired area. To effectively stop the fire at the edge of the field, the fire break and the back fire combined should be 50 feet wide. A backpack sprayer or an ATV equipped with a sprayer can be used to wet areas along the backfire and to extinguish wooden fence posts if they begin to burn. Adding one quart of dish soap per 50 gallons of water will help the water to adhere to the grass leaves. A rake and a leaf blower are useful tools as well.



Finally, make safety a priority. Be aware smoke from the fire may be a hazard especially if it is blowing across a major road or toward a home. Protect sensitive areas such as telephone boxes located near a fenceline. Wear suitable clothing when conducting a prescribed burn of grasslands. Avoid wearing nylon or polyester based clothing which can melt and burn skin. Leather boots and gloves are most effective to protect feet and hands, as they will not ignite easily or melt. Goggles will help to protect eyes from smoke and embers. It is important to notify your neighbors and local fire department.

Source: *Valerie Tate, Agronomy Specialist*