



Northeast Missouri Ag Connection

Your local link to MU for ag extension and research information
<http://agebb.missouri.edu/agconnection>

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Animals and Your Responsibilities

Animals, whether they are farm livestock or pets, are a great source of pride to their owners but they can cause problems at times also. It is very important to know not only the laws in Missouri related to animals but also use common sense practices for both livestock owners and non-livestock country residents. Here is a summary of the things you need to know:

Farm Livestock {cattle, horses, sheep, goats, etc.} must legally be kept enclosed in a fence or other enclosure (building). Chapter 272 of the Missouri Statutes discusses fences in detail*. Depending on what county your land is located, either you as a livestock owner {general law counties} or you and your neighbor {local option counties} are responsible for keeping livestock enclosed. There are legal requirements as far as the fence (4-barbs or the equivalent in the local option counties) but common logic is to keep livestock in no matter what kind of a fence.

Different livestock take different strength fence too – cows will stay in a fence that a bull or yearlings will not. A bull or stallion that constantly gets out is a big problem that needs to be addressed. If your animals get out into someone else's fields (crops, hay & gardens) then you may be responsible for any damages. This would depend on the county's fence and boundary law and the condition of the fence. However, remember if your trees or limbs or other debris ruins a fence because you wouldn't do anything about them, you could be held liable. **Fencing** is not the only responsibility when it comes to your livestock. MU Guide 453 discusses Farmer's Liability for Their Animals in more detail.

Dogs can be a unique problem in rural areas. Some dogs attack livestock and that is unacceptable to livestock owners. Dogs can hurt and even kill livestock and once they start doing that they will not quit. Missouri has a state law related to this in chapter 273 of the Missouri Revised Statutes. The law allows livestock owners to kill dogs that attack livestock after first reporting it to the county sheriff. It is imperative for rural dog owners to restrain their dogs to avoid straying on other property owners.

Animal care (both livestock and pets) is essential at all times of the year but summertime is especially critical. Water is vital to provide to livestock in the summer in particular and it is very important to check on livestock regularly. This also includes checking water gaps (especially after heavy rainfall events) and making sure cattle stay in your pastures and have sufficient forage.

University of Missouri Extension Animal Related Publications

- Guide 453 – Farmer’s Liability for Their Animals
- Guide 810 – Missouri’s Fencing and Boundary Laws
- Guide 811 - Missouri’s Fencing and Boundary Laws: Frequently Asked Questions
- Guide 851 – Stockman’s Liability Under the Missouri Nuisance Law

These publications can be found at:
<http://tinyurl.com/mu-animal>

For further information, contact your regional ag business specialist.

Source: Joe Koenen, Ag Business Specialist

Stockpiling Tall Fescue for Winter Grazing

Now is the time to begin making preparations for winter cattle feeding. Winter feed accounts for a large part of a cattle producer’s costs. Grazing stockpiled forages during the winter can reduce feed costs significantly. Stockpiled forages can provide high quality feed well into the winter months.

For more information about the value of applying nitrogen fertilizer to grow stockpiled forages compared to purchasing additional hay or grain visit the Decision Tools page at www.beef.missouri.edu/tools/index.htm on the MU Beef website. Scroll down the page to the Nutrition heading and click on the Stockpile Pasture Decision Tool.

Mindful selection of the pastures to stockpile is important. Begin by choosing pastures that are relatively weed free. Weeds break up the canopy and allow cold temperatures to infiltrate down into the forage earlier in the season. Tall fescue is the most common forage stockpiled for winter grazing. The upright growth pattern and waxy coating on the leaves make tall fescue less susceptible to freeze damage compared to other cool season grasses. The top of the canopy will turn brown from cold temperatures, but underneath, dense stands of tall fescue will remain green well past January 1.

Prepare the pastures to be stockpiled in late summer by grazing or mowing forage to a three to four inch stubble height. Apply nitrogen fertilizer at a rate of 50-80 pounds per acre by mid-August. This allows enough time for maximum forage growth before winter. In August, tall fescue will produce approximately 20 pounds of dry matter for every pound of nitrogen fertilizer applied, up to 100 pounds of nitrogen per acre, with adequate moisture.

Fall applications of nitrogen fertilizer are not as detrimental to red clover and other legumes in the stand, as spring applications of nitrogen fertilizer. Ammonium nitrate or polymer coated urea are the best sources of nitrogen to apply. Untreated urea fertilizer can rapidly volatilize if adequate rainfall is not received immediately after application, making it a less desirable fertilizer choice, especially this time of year when temperatures are warm. Ammonium sulfate fertilizer is also effective.

The quality and quantity of the forage available will decline as the winter progresses. High quality stockpile will have about 17% crude protein in December and will decline to about 12% by March. Total Digestible Nutrients (TDN) will drop about five percentage points from December to March. The amount of forage available will also decline through the winter, dropping by 40 to 45% from December to March.

Graze stockpiled pasture with a high legume content early in the season. These will deteriorate more rapidly due to the weather than pure grass stands. Utilization of the forage can be increased by using strip grazing. Start grazing the pasture close to the water source and progressively provide more pasture to the animals every three to seven days. Cattle can readily graze stockpiled forages through three or four inches of snow, even up to six inches of snow, but a quarter to a half an inch of ice can be detrimental to grazing.

Source: Valerie Tate, Agronomy Specialist

Buying Distillers Now Might Save Money Later

This is the time of year when wet and modified wet distillers grains should be bought, as traditionally the price weakens during the summer months. Wet, modified and dried distillers can be stored for use during the winter, if stored properly. Modified wet distillers runs about 50% dry matter and currently is around \$100.00 per ton and producers can purchase it now and store it until needed this winter. If producers prefer to utilize wet distillers grains, these run about 70% moisture (30% dry matter) and can be mixed with crop residues and/or low quality hay. According to the by-product feed list which can be found at: <http://agebb.missouri.edu/dairy/byprod/bplist.asp> current prices for wet distillers grains is currently around \$75.00 per ton. Producers living closer to an ethanol plant might be able to utilize this product more efficiently and economically.

Mixing crop residues and/or low quality hay with wet distillers and ensiling wet distillers grains makes a good quality feed product for the winter. Modified wet distillers grains can be stored outside in a pile or bagged without packing it down like the wet product. It is recommended to cover it with plastic or some other method to minimize spoilage at the surface. The product stores well mixed with forage or without. An MU Extension publication can be downloaded: <http://agebb.missouri.edu/beef/nutrition/StorageWetCornCo-Products.pdf>

There is additional research based information available from University of Nebraska and Iowa State University.

Source: *Wendy Flatt, Livestock Specialist*

Cattle Handling Facilities



A well designed facility for working cattle will make handling more efficient and reduce stress and injuries for both livestock and producers. Livestock owners have the responsibility of providing a comfortable healthy environment so animals can reach their full potential. High levels of stress can cause lower conception rates, suppress immune function, and reduce weight gain. Reductions in these areas can severely affect the bottom line of the operation. Cattle build upon previous experiences in working facilities; if cattle balked the last time, they will probably balk again. Livestock producers need to

determine what causes cattle to balk and try to eliminate distractions. Distractions may include: a shadow crossing the alleyway, entering a dimly lit barn, or a coat thrown over the fence blowing in the breeze. These may seem relatively insignificant but multiple distractions can lead to big problems. A good way to prevent cattle from balking is solid sided alleys and crowding pen, completely removing visual distractions from the outside and preventing animals from trying to return to the group. This provides only one way for the cattle to escape, the direction intended.

Another area to examine is noise levels. Effective ways to reduce noise is by adding rubber bumpers at metal on metal contact points and securing panels of the alley and working facility to prevent swaying back and forth causing a constant rattle.

When upgrading or designing a new working facility consider the three following recommendations: 1) visit other operations when working cattle to see different equipment and how designs work, 2) design the facility to have adequate pens to sort cattle multiple directions, and 3) make the lead-up alley long enough to hold at least three cows to maintain a continuous flow of cattle into the chute. Time and labor can be reduced if facilities are designed to safely and efficiently increase flow of cattle. Contact your local MU Livestock Specialist or Natural Resource Engineer for recommendations on space requirements for holding pens, crowding pens, and sorting alleys.

Source: *Daniel Mallory, Livestock Specialist*

Disease of Fruit and Vegetables Appearance

The past couple of years brought very little disease in fruits and vegetables, due to lack of rainfall. Although it is nice to have the rain this year, disease potential increases. Diseases to be aware of this time of year include Septoria Leaf Spot and Early Blight on tomatoes. Both will cause the lower leaves of the plant to turn yellow with brown spots or lesions. Septoria Leaf Spot is caused by the fungus *Septoria lycopersici*. It affects the tomato foliage and can be severe when wet, humid weather persists for an extended period of time. The leaves will turn slightly yellow and many small spots will appear on the leaf. Early Blight is caused by the fungus *Alternaria*. Spots or irregular lesions form on the leaves. These spots have concentric rings surrounded by a yellow area. The entire leaf may

be killed and drop off the plant. Early Blight can result in defoliation, exposing fruit to sunscald and reducing yields. Preventative measures and control include staking or caging tomato plants, placing straw mulch under plants to keep soil and water from splashing onto the leaves, and remove any leaves that touch the ground. A fungicide containing the active ingredient chlorothalonil may be used.

Black Rot has been a problem in grapes this summer due to plentiful rainfall in June. All green tissues of the vine are susceptible. Brown, circular lesions appear on the leaves and stems. Infection of the fruit is the most serious phase of the disease. Black spots appear on the clusters of grapes. Infected grapes shrivel and turn into hard, raisin like structures called “mummies”. (*Note: All mummified fruit should be removed when pruning.*) Good air circulation is important to allow for drying of the leaves and fruit after each rain. Use a product containing the active ingredient myclobutanil for control.

Other fruit diseases making an appearance this summer include Fireblight on apples, crabapples, pears and ornamental pears. Fireblight is caused by a bacteria and affects young shoots and leaves of trees giving them a blighted appearance, as if they have been scorched by fire. The best control is to avoid highly susceptible cultivars. Some apple cultivars that are highly susceptible include Gala, Fuji and Jonathon. Cedar-Apple Rust and Apple Scab are fungal diseases of apple trees and are common in years with plentiful rainfall. Symptoms are yellow or brown spots on the leaves of apple or crabapple trees. These fungal diseases can be controlled with timed sprays. **Source:** *Jennifer Schutter, Horticulture Specialist*