Happy June Everyone,

I hope this newsletter finds each of you well this early summer! We actually had a spring season this year and did not go straight from winter to summer as we have in the recent past. The cooler than usual May weather conditions may have put a damper on certain outdoor activities but it seems to have done wonders for our cool season grasses that we use for hay and pasture. Many areas around the county I have seen thicker and greener stands of Tall Fescue, Orchardgrass, Timothy, Alfalfa and Clover. White clover seems to be everywhere this year including home lawns. Sometimes our weather conditions are just right for germination of “hard seed” that has laid in the ground for years and that seems to be the case with white clover this time. In prior seasons, I can remember red clover doing well. Even to the point of causing bloat issues.

Since our cool season forage species grow their best at 72 degrees F, this spring has been ideal. Its amazing how weather conditions can affect farming year to year. With the increased cost of fertilizer this spring, understandably, not as much has been applied to hay and pasture fields but Mother Nature has stepped in and helped us out to make up some of the difference, at least as this point. Here is hoping for more good weather this season.

With all the many challenges of this past year, we will certainly take good news when we can. Speaking of good news, here at the Madison County Extension Office, we are easing COVID-19 restrictions slowly as time goes along. Our office is open to the public for walk-ins and certain essential small groups currently but as conditions improve I expect restrictions to be further lifted. As of this writing on June 6, 2021, we do not have specific information about how our office will operate this summer but watch for upcoming details for any potential changes in this newsletter.

I wish everyone a safe and productive summer season on the farm and at home! As always, call me if you need anything and look forward to seeing you in person one of these days.

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Recent & Upcoming On-Line Beef Education Opportunities

Beef IRM Team, University of Kentucky

Beef Minutes - Options for Fly Control presented by Dr. Katie VanValin

To access this and other excellent beef educational content, visit our Facebook Page (facebook.com/KyBeefIRM) and/or on the Department of Animal & Food Science YouTube page (https://www.youtube.com/channel/UCu4t18Zo2E_4_DBBELPjPMg).

Subscribe to the AFS YouTube page and click the notifications bell to receive a notification whenever we publish new beef education content. Beef Bits can also be accessed on the podcast website called “Beef Bits Podcast”.

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**KEEP AN EYE ON THAT BULL**

*By Dr. Les Anderson, Extension Professor, University of Kentucky*

Many producers with spring calving herds just turned out their bulls. In the May Off the Hoof, we reminded everyone to subject their herd bulls to a breeding soundness exam (BSE). A BSE is the best insurance we available to ensure we don’t turn out a bull that is infertile or incapable of breeding cows.

However, the BSE does not indicate if the bull is willing to breed cows. I was reminded of this very recently in the herd that I used for the “I bought a farm” YouTube video series. To get these heifers bred, we synchronized them for AI and then turned out a mature bull that had passed a BSE. When I inseminated these heifers, the weather turned poor (middle of December) and estrus response rate in the heifers was low, so I wasn’t expecting high conception rates to AI.

Just to get an idea of how well we did, I spent some time in the pasture watching for return heats. As I expected, several heifers had return heats but what really stuck out was the bull was NOT breeding them. Some of the heifers were jumping on the bull and he seemed disinterested. I was concerned about the bull and told the owner that he needed to consider finding another bull. I could not assure him the bull was not getting the job done as research has shown that mature bulls will only breed a female in heat 1-3 times even though she is in heat for as long as 12 hours. This bull however showed absolutely no interest. For various reasons, the owner decided to not get another bull. Pregnancy rates were only 61% in this group of heifers. The decision may have cost this producer significantly.

Bottomline: keep an eye on your bull to make sure he is working. Multiple return heats indicate a bull that is not getting females pregnant. If possible, replace the lazy bull. It will cost some money to make a switch, but this cost is likely much lower than the cost of open females.

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**MADISON / ESTILL COUNTY PRODUCERS MAY BE ELIGIBLE FOR EMERGENCY CONSERVATION PROGRAM ASSISTANCE**

Flooding has caused severe damage in Madison/Estill Counties. Farms and ranches suffering severe damage may be eligible for assistance under the Emergency Conservation Program (ECP) administered by the Madison/Estill County Farm Service Agency (FSA)

For land to be eligible, the natural disaster must create new conservation problems that, if untreated, would:

- be so costly to rehabilitate that Federal assistance is or will be needed to return the land to productive agricultural use
- is unusual and is not the type that would recur frequently in the same area
- affect the productive capacity of the farmland
- impair or endanger the land

A producer qualifying for ECP assistance may receive cost-share levels not to exceed 75 percent of the eligible cost of restoration measures. Eligible socially disadvantaged, limited resource and beginning farmers and ranchers can receive up to 90 percent of the eligible cost of restoration. No producer is eligible for more than $500,000 cost sharing per natural disaster occurrence.

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The following types of measures may be eligible:

- removing debris from farmland
- grading, shaping, or releveling severely damaged farmland
- restoring permanent fences

Producers who have suffered a loss from a natural disaster may contact the local FSA County Office and request assistance from May 10, 2021-June 23, 2021.

To be eligible for assistance, practices must not be started until all of the following are met:

- an application for cost-share assistance has been filed
- the local FSA County Committee (COC) or its representative has conducted an onsite inspection of the damaged area
- the Agency responsible for technical assistance, such as the Natural Resource Conservation Service (NRCS), has made a needs determination, which may include cubic yards of earthmoving, etc., required for rehabilitation

*Note granting relief after starting practice may be accepted

For more information about ECP, please contact the Madison/Estill County FSA Office at 859-624-1980 or visit www.fsa.usda.gov/ky.

**MAKING AN OLD FENCE WORK!**

Good fences let you sleep at night! One of the biggest challenges when renting pastureland is marginal perimeter fencing. It is very hard to justify the investment in new fencing if you are on a short-term lease.

One option is to install an electrified offset on the interior of the perimeter fence (Figure 1). This works especially well with old woven wire fences. The electrified offset 1) helps to contain livestock, 2) extends the life of the existing fence by keeping animal pressure off of it, and 3) provides a source of electricity for further subdividing pastures with temporary fencing. Lastly, offsets can be easily removed and taken with you if the lease doesn’t work.

Since electric fencing is a psychological barrier (nothing likes to get shocked) it needs to be a strong jolt preferably to the moist nose of the animal. It is imperative that the animal’s first experience with electric fencing be an impactful one. For this to occur, offsets need to be installed correctly. If you take your time and install electric fencing correctly, it can be an extremely effective tool to control livestock. If you cut corners and use cheap materials or materials not designed for electric fencing, it can be an extremely frustrating experience. The objective of this article is to provide you with some practical tips for installing offsets that can effectively control livestock and extend the life of an old fence.

Use good quality offsets. Make sure that plastic components in the offsets that you use are UV stabilized. Saving a few pennies now can result in a real headache as plastic components start to breakdown in the sunlight.

Use 170,000 PSI high tensile wire with a Class III galvanization. This wire is corrosion resistant, able to be hand tied, and economical. A good quality high tensile wire will cost about 2.5 cents/ft. One installed, fence should be tensioned just tight enough to take the slack out.

Mount offsets at nose height of the livestock that you are trying to control. The height of the offset is important since your goal is to shock the animal in the face. For cattle this will be around 30 inches off the ground.

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Use twist on offsets for woven and barbed wire fences. The offsets consist of two galvanized legs that are twisted onto the existing fence holding the electrified offset approximately 10 inches from the existing fencing. One advantage of these offsets is that they move with the existing fencing reducing the chances of the electrified wire coming in contact with the old fence (Figure 2). They are easy to install and take off.

Use wood post offsets at beginning and end of runs and on problem posts. I like to use a more rigid wood post offset at the beginning and end of runs. This helps to get the offset wire away from the existing fencing (Figure 3). I also like to use these offsets on problem posts with in the run, like old railroad ties that have the existing fencing wrapped around them (Figure 4).

Start and end runs with an end strain or bullnose insulator designed for high tensile fencing. These insulators are designed for the tension exerted by high tensile fencing (Figure 5). They are constructed of either reinforced UV stabilized plastic or porcelain. If the electrified offset is close to the existing fence at the start and end of runs, install the bull nose insulator 4 to 6 ft from the end post.

Use a good quality double insulated cable designed for electric fencing for lead-out, jumping wires or going underneath gates. Never use residential wire for electric fencing. This wire is designed to carry 120 volts NOT 10,000.

Always place underground wires in protective tubing. Whenever a cable carrying current is run under the ground, always place it in some type pipe or conduit that will protect it from future damage. Wires going under gates should be buried to a depth of approximately 6 to 12 inches.

If not protected, breaks will occur in these wires and these shorts can be difficult to find and repair. I like to use pvc electrical conduit and secure it to post with a clamp (Figure 6). The larger the conduit, the easier it is to push the double insulated cable through it. I prefer to use ¾ or 1-inch piping in most situations. I also like to drill a hole in an end cap just large enough to slip the wire through and simply push the end cap onto the conduit with NO glue.

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Make all connections with clamps. Loose connections result in loss of voltage. Connections should NOT be wrapped, but rather clamped together with a high-quality clamp that is designed for high tensile fencing (Figure 7). Never use clamps that are constructed of dissimilar metals. Although economy clamps constructed of cast metal are sometimes available, they often fail upon tightening. Saving a few cents on clamps often leads to exponential headaches in the future.

Use a doughnut or bull nose insulator secured to a wood post to make gentle turns. Gentle turns where the offset wire pulls to the inside of the pasture can be make using a doughnut type or bull nose insulator secured to a stable post (Figure 8). NEVER use wrap around insulators. They almost always fail prematurely resulting in hard to find shorts.

Use heavy duty wood post insulators to make gentle turns. Gentle turns that pull toward to the outside of the pasture can be made by securing one or more heavy duty wood post insulators to a stable post. In cases where the offset wire is too close to the old fencing, a treated 2 x 4” can be secured to the post with deck screws and the insulators can then be screwed to the board (Figure 9).

Use a high-quality energizer. Energizers are the heart of electric fencing systems and are NOT a component that you should try to “save” money on. If electrical service is available, plug in energizers are considerably more powerful and offer the best value in terms of cost to power ratio. For remote areas, solar or battery powered energizers are viable alternatives for smaller acreages. Power comparisons of energizers should be done using “stored energy” which is measured in joules. One accessory that I cannot do without is an energizer that has a remote control that allows you to shut the fence off from anywhere. Once you have one, you will wonder how you ever got along without it!

Proper grounding is essential. For electric fencing to work properly, current from the fence must travel through the animal into the ground and back to the energizer. The grounding system on the energizer works as an “antenna” to collect this current and complete the circuit. Most of the problems associated with low voltage on an electric fence are caused by a poorly constructed grounding system. Grounding systems should have a minimum of 3 galvanized grounding rods, 10 ft apart, 6 ft in the ground, all connected with a single galvanized wire running from the energizer. For very large energizers or very dry conditions more grounding rods may be needed.

These tips will help you install offsets capable of controlling all classes of livestock. However, for these offsets to work properly they should be kept “hot” at all times and vegetation below them must be controlled. This means that someone, preferably not you, will be manning a string trimmer this summer!

~ Dr. Chris Teutsch, UK Extension Forage Specialist. Based on article in Cow Country News.
RED CLOVER, RED CLOVER - SEND YOUR ISOFLAVONES RIGHT OVER

By Georgia Jiang, ARS Office of Communications

While the four-leaf clover is a celebrated good luck charm in folk tradition, members of the genus Trifolium have long been a ‘holy grail’ for agronomists and farmers too. As natural nitrogen fixers, clovers help instill nitrogen in soil and lessen our reliance on chemical fertilizers to keep fields productive. Additionally, common species like red or white clover happen to be extremely palatable and can provide high quality protein to cattle at a low cost.

According to ARS microbiologist Michael Flythe, who worked with ARS plant physiologist Isabelle Kagan and ARS animal scientist Brittany Harlow to investigate potential plant-based antimicrobials, clovers are also an ideal alternative to synthetic bactericides used in cattle feed. They discovered that clover could effectively reduce hyper-ammonia-producing bacteria that live in cattle rumen (the first chamber of a ruminant animal’s digestive tract).

“Hyper-ammonia-producing bacteria decrease the amount of dietary protein that an animal can absorb through digestion,” said Flythe. “Decreased dietary protein causes loss in cattle growth and overall performance. When you add clover to cattle diets, special compounds in clover called isoflavones actually improve the quality and quantity of protein available to the animals.”

The magic of clover isoflavones, which are similar to estrogen in structure, doesn’t stop there; they also give cattle an additional defense against dangers like fescue toxicosis. Caused by the consumption of common endophyte infected tall fescue, a hardy grass, fescue toxicosis is a condition that results in tightened blood vessels, fertility problems, weight loss, and lowered milk production in livestock animals. It is estimated that fescue toxicosis costs the U.S. livestock industry $2 billion annually.

“One of the reasons that common tall fescue is so abundant and resilient is actually because it contains a natural chemical defense against herbivores, which acts as a toxin when ingested,” Flythe explained. “After it builds up in the cattle, the animals become ill because their blood vessels have constricted, impeding blood flow. But when cattle consume tall fescue with clover, the isoflavones open up their blood vessels and improve blood flow.

Find this Cook Wild Kentucky recipe and others for Fish, Venison, Rabbit, Dove, Frog Legs, and more at: https://www.planeatmove.com/recipes/, then Browse by Category, and choose Cook Wild Kentucky.