

# HIGHLANDS OF THE HEARTLAND

Fall Issue 2013  
Issue 13



Heartland Highland Cattle Association, 976 State Highway 65, Tunas, MO 65764

<http://www.heartlandhighlandcattleassociation.org/> 417.345.0575

## Hello from the HHCA President

By Greg Roberts

Hello from southwest Missouri. The arrival of fall, with its crisp mornings and cool days gives us a chance, to take a moment to reflect on the summer. We had several members displaying cattle throughout the region, and I have heard they all were a great success. Here in Missouri we had our annual fund raiser and our semi-annual board meeting.

This year fund raiser went off without a hitch. I would like to thank all the people that volunteered their time to help make this happen. I would also like to give a special thank you to Norm Eastman, and Gary Trevorror for building an electrical box that solved an ongoing problem. Not once did I hear that the breaker was out. I would also give a special thanks to Gary and Joyce Trevorror for building our mini-golf course. This gave us one more way to raise money.

At the board meeting the two main topics were the auction and the logo. For the auction we worked out some new guild lines, which I think will make it more balanced and successful in the coming years. As for the logo we had a long discussion on whom, when, and how the logo could be used. The only thing we were able to figure out was that we didn't know how the

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members wanted to use the logo. So, we decided to send out a survey to see what the membership wanted to use the logo for and how. I think the Heartland will benefit greatly from have a logo; we just need to work out some details. Please take the time to fill out the survey.

In closing I would like to remind everyone that Ozark Farm Fest is Oct. 4, 5, 6, and that it's a great opportunity to promote the Highland cattle. I am looking forward to seeing everyone in March.

**Ozark Farm Fest is on October 4<sup>th</sup>, 5<sup>th</sup>, & 6<sup>th</sup>!**

**Come on out and help Hairy Cow Farm and Cheek Farm promote Highland cattle. They will have some Highlands at Farm Fest on display.**

**The HHCA will have an informational booth there with flyers and pictures for anyone interested in Highlands. Help support the HHCA and stop by to help promote our wonderful breed.**

**You can find us in the goat barn at the Ozark Empire Fairgrounds located off Hwy. 13 (just north of 44) in Springfield, MO.**

## Thank You Volunteers

By Sybil Campbell-Roberts, Volunteer Coordinator

Hello Highland Breeders,

We had another good fund raiser this year at the Buffalo Celtic Festival. The weather was a little hot but some years it is a little rainy, but who can predict a year from now? We had lots of festival goers on Friday this year rather than on Saturday but we did fairly well for both days.

Every year we improve in some area and this year it was the electrical for the concession stand. For those of you who know and don't know we have always had problems keeping the electric going for the crock pots in the trailer. Well this year thanks to Gary Trevorrow and Norm Eastman who put together a breaker box for the Heartland we had no issues and it was wonderful. Everything was hot and ready all day long.

We had several new venues this year one of which was the putt putt golf that Gary and Joyce Trevorrow built for the Heartland. Gary did a great job building them and Joyce did a great job on the Celtic theme. Thank you, guys for donating your time and items. The materials to build the golf stands were paid for by Gloria Asmussen.

A big thank you! goes to little Abby Carpenter. She walked around gathering people like a natural born "town crier" bringing them to the putt putt to play. She was fabulous.

Gloria Asmussen put together the Tartan linen booth which did well for it being the first year. Also for donating all the Highland smoked brisket, beef and haggis for the concessions and baking and donating all the baked goods for the Celtic Sweet Stand.

Linda Say and her family took care of the Hatchet throwing all day and even added a few new additions and have plans for making more improvements for it next year. They did great as well.

The Trevorrow Smoker did great on Friday night and pretty decent on Saturday as well. Keep in mind all of you volunteers, we were in competition with several other festivals going on in the area and I say we held our own very well.

This is a big thank you to all the volunteers who donated their time to help the Heartland Highland Cattle Association Fund Raiser this year.

- For Janet, Jerry and Jerica Delcour and Tracy Riley who stayed at the concession all day, and for Tracy working all day Friday setting up.

- For Chris and Randy Batz along with their daughters Jacque, Allison and Sara who helped Friday, Saturday and Sunday. And a special thank you to the girls who helped me unload everything on Sunday.
- For Cindy Cheek, Phyllis Campbell and Sherril Young who took over the fish fryers and ran them like pros. Yes Glenn, I will not assume that just because a guy can grill steaks he can deep fry fish.
- For Kevin and Evia Carpenter and family for helping at the Celtic putt putt and Fish.
- For Billy and Kathy Bolch and Jan and Harold Ramey for being in and out and all around for anything and everything I needed.
- To Steve & Melissa Stewart for helping clean up and load the trailer.
- For Ron and Hilda Hertel who covered the Tartan Linen booth.
- For Tommy Thompson and Sherry Bakeman who ran the Heartland informational table.
- Dan and Kathleen Collins for working at the Celtic putt putt and Kathleen for showing how to use a spinning wheel.
- For Gary and Joyce Trevorrow and their son Paul for bringing and running the Trevorrow Smoker and for making and donating the Scotch Eggs and smoking the ribs.
- And thank you Gary Cheek and Keith Bakeman for bringing their Highland Cattle.



## Mark Your Calendars: HHCA 3<sup>rd</sup> Auction, April 17, 2014

By Jerry Delcour, HHCA Auction Chairman

Hello Highland Breeders,

The fall Board meeting is over and we had a very good discussion about the past auction. We made some changes which everyone will receive in the mail later this year. Hopefully the changes will make for a better auction. We learn as we go along and we really do listen to your suggestions and comments.

We have a problem that I want to address which concerns a growing list of complaints mainly happening with bred cows. I have been contacted about different events that have happened with cattle. I guess the problem I have had have not been the only ones.

*Please leave your problem cows at home or butcher them.* At a regular sale you are always taking a chance on bred cows, but I feel with a consignment auction, buyers should be able to buy a cow in good faith and not have to worry about the animal being in the auction because of past or current problems. Some of the problems that have cropped up are: no milk after calving, unable to calve without having to pull the calf, cows being represented as "vet confirmed" 3<sup>rd</sup> stage pregnant when they weren't even bred, and an animal that is just plain mean to others in the herd and/or dangerous to people.

At the next sale, all cattle will go through the vet chute unless you have the paperwork from your vet with you when you unload your animals and are presented to the person at the gate. Federal law requires I.D. tags or tattoos before coming in the ring (this goes for consignment auctions also). I might add

that Highland Breeders tattoos do not qualify anymore. By all animals going through the vet chute, we can be assured of pregnancies and what stage the pregnancy is. I had a comment made that this is an auction and you have to expect some of that. That is true at a regular sale, but I would like to think we're better than that.

This auction is provided as a **benefit** of the HHCA to everyone, whether member or non-member Highland breeders. If you have a problem cow or bull, there are plenty of people out there willing to buy them for the meat market. So if you can't stand the thought of butchering "Ol Bessie", don't let unsuspecting buyers pay good faith money for your problems.

Maybe it would be a good idea to talk to the owner of any cattle you are interested in before the sale. If you don't know who owns them, contact Gloria (HHCA Secretary) or myself at the auction and we will help you. Also check them out on the website beforehand and make inquiries.

So far we have had one buyer's sale and one seller's sale. We would love to see more registered Highlands there as the demand is there. I have at least a dozen calls a month from people wanting to sell and some wanting to purchase. Some of these calls are people asking when the next auction will occur. So start thinking now about which animals you would consign to the auction, and have them looking good as well.

If you have any questions or comments, just give me a call 417.369.0505. Hope to see you in April.

### Call for Nominations: Deadline is December 1, 2013

The HHCA Officers and Board of Directors are seeking members who would be willing to run for the Board of Directors seats. There are two seats open beginning at the 2014 annual meeting. The seats are for a three year term. If anyone is interested in running as a HHCA Board of Director, please contact President Greg Roberts at 417.379.3747.

Nominee has to be in good standing as a member of the HHCA and AHCA, they are required to have a Highland Field Day, and attend the annual HHCA meeting and semi-annual Board meeting and conference call meetings.

## Tall Fescue/Endophyte/Animal Relationships

**Gloria was approached by Keith & Sherri Bakeman of Laughing Sun Ranch asking questions about Fescue and the concerns they are having with their Highlands grazing on fescue. This is information for all who have pastures with predominant fescue grass. At the annual HHCA meeting next March, there will be a speaker on how to incorporate other grasses with fescue.**

### Grazing Time

Several studies have shown that animals on EI pastures spend less time grazing during the day and more time grazing at night. In Maryland, grazing time was reduced by approximately 20% as compared to steers grazing EF fescue. (EI-endophyte infected; EF-endophyte free)

In a Georgia study in which steers were switched from EI (>95% infected) to EF (<1% infected) fescue steers on EF fescue spent 60% of the time between noon and 6:00 p.m. grazing, as compared to only 4 to 6% by steers on EI fescue. Steers switched to EI fescue showed a reduction in grazing time within two days, and intake for this group was depressed within one week. Forage intake for the group switched to EF fescue remained lower for at least 10 days following the switch, but was normal after 28 days. However, grazing time for those switched to EF was still reduced one month later.

### Intake and Digestibility

Both on-farm observations and research have provided evidence that cattle prefer EF fescue. In Tennessee, steers had a preference for clover in EI pastures, but there were indications that they preferred fescue to clover in EF pastures. When heifers in Missouri were offered diets containing 60% fescue seed, either EF or 75% EI, 11 of 12 heifers avoided the EI diets. Much, but not all, of the reduction in livestock average daily gain (ADG) or gain per unit area of land on EI fescue is due to reduced intake.

Normally, physical factors such as high fiber content are associated with poor intake, but they do not explain intake differences between EI and EF fescue. Further, the toxicants do not appear to have a major effect on ruminal microbial digestion. Digestibility and crude protein content are small in EI and EF fescue.

### Effects on beef yearling gains

Since the early reports of the association of the endophyte with fescue toxicosis, many grazing and feeding trials with EI and EF fescue have been conducted. Decreased gains of steers grazing EI forage are widespread, quite uniform and not limited to certain geographic areas or management conditions.

Fescue toxicosis is commonly referred to as "summer syndrome" or "summer slump" because visible signs are most pronounced during hot weather. However, poor weight gains on EI pastures can occur throughout the grazing season. During November, December and March there was a 50% decrease in ADG of steers grazing EI fescue, as compared to EF fescue. During the warmer months of April, May and June, the decrease was 59%.

Though air temperature, humidity, presence of other forages and animal management are known to have an influence, steer ADG has been shown to decrease approximately 0.1 lb for each 10% increase in infection rate.

Increased nitrogen (N) fertilization increases the incidence of bovine fat necrosis, but investigations have revealed that N fertilization does not affect steer ADG on EI fescue. However, N fertilization of EI fescue can increase gain per acre because of higher stocking rates.

### Effects on Beef Cows and Calves

Most of the fescue in the United States is used in commercial beef cow-calf operations. In several studies cows grazing EI fescue lost weight and had lower pregnancy rates, and their nursing calves had slower gain, and reduced weaning weights compared to those grazing EF pastures.

It is known that a decline in body condition can affect reproduction, and cows that are thin before and at calving have a long interval between calving and first estrus. Therefore, cows entering the breeding season in a poor or negative gaining condition because of EI fescue probably will have a prolonged post-partum interval regardless of late, endophyte effects.

In Kentucky and Missouri, supplementary feed (in the form of either, clover or grain) for cattle on EI fescue improved pregnancy rates, but not up to economically acceptable levels. Thus, it appears that factors other than nutrition are involved in the reduced pregnancy rates associated with EI fescue.

### Effects on Beef Heifers

In an Alabama study, weaned beef heifers were assigned to pastures having low, medium or high

Please see *Fescue* on page 7

## Welcome New Members

### Kansas

Ron & Corinne Laveau, Larned, KS *sponsored by Gloria Asmussen, Buffalo, MO*

### Missouri

Zachary & Heather Ruble, Pleasant Hope, MO  
*sponsored by Janet Melton & Jerry Delcour, Crane, MO*  
Bill & Kelly Pohl, Foristell, MO

### Oklahoma

Mark & Cori Markarian, Wellston, OK

### Texas

Patrick Anchor & Christopher Jones, Grandview, TX

A sincere Thank You to all the HHCA members who sponsored some of these new members. When they sold their Highland cattle, they sponsored the buyer a HHCA membership. It is only \$15 to sponsor a new member. Sponsorship gives the new members information and networking within the Association as well as many other benefits. Think about sponsorship when you sell your Highlands.

Needing that perfect Christmas gift for the “hard to buy for”?  
Purchase your 2014 HHCA calendar or notepads for that person and  
show off the breed of cattle you own.

2014 HHCA Calendars can be purchased for \$18 includes shipping & handling.  
Notepads are \$4.50 each or a package of 4 for \$17.00 includes shipping and  
handling.

Email [heartlandhighlandcattle@gmail.com](mailto:heartlandhighlandcattle@gmail.com) or call 417.345.0575 to place  
your order. Send your check to HHCA 976 State Hwy. 64, Tunas, MO 65764

**HURRY, DON'T MISS OUT!  
WHEN THEY ARE GONE, THERE WILL BE NO MORE!!!**

## Thank You! to Sybil Campbell–Roberts

Sybil is the person who makes the Celtic Festival Fundraiser possible. If she didn't get the volunteers, make the brides, toads in the hole and the scones, and most of all CORDINATE all the things that go into running the concessions, this fundraiser wouldn't be possible.

**OUR THANKS AND HATS OFF TO YOU AND THE WONDERFUL JOB YOU DO;  
WE DO APPRECIATE YOU MORE THAN YOU KNOW.**

Because without you taking charge and doing this, it would not be...

## Board of Directors and Officers' Contact Information

### Board of Directors

| Year | Name           | Location      |
|------|----------------|---------------|
| 2014 | Blake Coble    | Henryetta, OK |
| 2014 | Jacque Hawkins | Deer, AR      |
| 2015 | Troy Schroeder | Albert, KS    |
| 2015 | Glenn Young    | Tyler, TX     |
| 2016 | Christine Batz | Sac City, IA  |

### Officers

President      Greg Roberts  
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[sybilcampbell-roberts@netzero.net](mailto:sybilcampbell-roberts@netzero.net)

Vice President      Jerry Delcour  
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Secretary/  
 Treasurer      Gloria Asmussen  
 976 State Hwy 64  
 Tunas, MO 65764  
 417.345.0575  
[heartlandhighlandcattle@gmail.com](mailto:heartlandhighlandcattle@gmail.com)

## Check out the HHCA website!

[www.heartlandhighlandcattleassociation.org](http://www.heartlandhighlandcattleassociation.org)

On the site you will find updated classified ads, membership page of new members, and the Events page with the Calendar of Events and pictures from the events.

The website receives over 182,000 hits during the month of March 2013! This is a great place to get and give information about your farm and Highland cattle.

Use your FREE ad and get exposure and results.

Cut along line

## Renewal or New Membership Application Heartland Highland Cattle Association

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone \_\_\_\_\_ Cell \_\_\_\_\_

E-mail Address \_\_\_\_\_

Please remit **\$25.00** yearly (12 month) membership dues to:

Heartland Highland Cattle Association

976 State Hwy. 64

Tunas, MO 65764

If you have any questions, comments or concerns, please contact the Secretary, Gloria Asmussen at 417.345.0575

*Fescue from page 4*

levels of infection and received hay of similar infection levels during winter. Heifer ADG decreased as infection level increased. However, the later ADG of cattle led hay was the opposite, with the high infection group having the fastest gains. All heifers were observed in estrus prior to their first breeding, but pregnancy rates decreased as infection level increased. Following first calf births, pregnancy rates were further reduced in heifers grazing pastures with medium and high infection level, but not in those grazing low-endophyte pastures. Initiation of the estrus cycle to heifers grazing EI fescue is not delayed, and cessation of the estrus cycle in animals already cycling does not occur. Research in Alabama indicates that conception is not affected by the endophyte. Reduced calving percentages of cattle on EI fescue appear to be due to early embryonic death. Experiments to date have not made clear whether the endophyte affects calf birth weights.

### Brahman vs British Breeds of Cattle

Brahman cattle are known for their heat tolerance and may be better adapted to resist or tolerate the hyperthermia (high body temperature) observed during hot weather. In breed comparison, Angus and Brahman-Angus cross steers have exhibited decreased gains when grazing EI fescue, but the magnitude of the decrease was less for the Brahman-cross steers. Brahma-cross animals frequently gain better due to greater heterosis, thus reduced endophyte effects, if any, are difficult to detect.

### Effects on Milk Production

Consumption of EI fescue reduced milk production to as much as 45% in beef cows and 50% in beef heifers in Alabama, and by 60% in dairy cows in Kentucky. Milk production of lactating dairy cows can be sharply reduced even when fescue has low infection levels, but EF provides excellent nutrition for lactating animals. Milk production by dairy cow, consuming EF fescue was similar to those grazing alfalfa-orchard grass in Kentucky, and annual ryegrass in Alabama. Differences in milk production appear to be primarily due to differences in intake.

### Effects on Thermoregulation

Cattle consuming EI fescue typically exhibit hyperthermia (abnormally high body temperature) as shown by increased rectal temperature. Studies in Kentucky have shown that EI fescue has the most detrimental effect on cattle when the ambient temperature exceeds 88F.



In Alabama, steers were fed non-infected or infected hay and seed in controlled environments at 70F (cool) and 90F (hot). Feed intake was reduced 36% by steers fed the EI diets in the cool environment, but rectal temperatures and respiration rates were not affected. In the hot environment feed intake was reduced 60% in steers fed the EI diet, and rectal temperatures and respiration rates increased.

In the cool environment steers fed the EI diet exhibited reduced temperatures at the extremities (ear tips, tail tip, hooves). This hypothermia (reduced temperature) in animals consuming EI fescue is most likely a result of vasoconstriction caused by the toxicants. The vasoconstriction (constriction of the blood vessels) would decrease the animals ability to dissipate this increased heat load, and is further confounded by high air temperature. Reduced blood flow in the extremities due to vasoconstriction caused by fungus toxins could also be associated with the fescue foot syndrome.

It now appears that the toxicants in EI fescue result in abnormal function of the thermoregulatory center many animals. This, coupled with high environmental temperature, could lead to the hyperthermia observed in cattle consuming infected fescue. Increased respiration rates (often evidenced by panting) probably helps animals to cool themselves and dissipate the increased heat load. Excessive salivation, also a sign of fescue toxicosis, may be due to the panting.

## The Fescue Endophyte

**Gloria was approached by Keith & Sherri Bakeman of Laughing Sun Ranch asking questions about Fescue and the concerns they are having with their Highlands grazing on fescue. This is information for all who have pastures with predominant fescue grass. At the annual HHCA meeting next March, there will be a speaker on how to incorporate other grasses with fescue.**

It is important to understand the relationship between the endophyte and the tall fescue plant. The endophyte is present within the plant starting with the seed. The endophyte can survive in seeds for up to a year. When the seed germinates, the endophyte grows too and infects the seedling at the base of the leaf.

Once the plant enters its reproductive stage, the endophyte moves into the stem. As the stem elongates and eventually forms a seed head, the endophyte moves up the stem and into the seeds. **Endophyte infected** plants cannot infect non-infected plants. Endophyte-infected fescue can take over a stand when non-infected plants thin giving the endophyte-infected plants a chance to establish. Superior adaptability will often allow the endophyte-infected fescue to out-perform non-infected fescue. It is impossible to visually identify which plants contain the endophyte. However, there are several laboratories across the country that will test for the presence of endophyte. Contact your local Cooperative Extension office or local Sweetlix® dealer for more information on having this analysis performed

With this in mind, you might ask yourself, why not just grow endophyte-free or low-endophyte fescue? There are certainly endophyte-free and low-endophyte varieties of fescue available. However, it is not an easy decision to switch from endophyte-infected fescue. The presence of the endophyte gives the fescue plant a significant competitive growth advantage. As a result, endophyte-infected fescue out-survives endophyte-free or low-endophyte fescue varieties in most situations. Because endophyte-infected fescue is quite hearty and tolerant to drought, overgrazing, insects and diseases, it is still abundant in many areas.

As a result, fescue toxicity symptoms are still a very real concern for livestock producers in areas where fescue is abundant.

### Dealing with Fescue Toxicity

As mentioned above, the alkaloids produced by the endophyte cause several problems for grazing livestock. There are several management options available to cattle producers that graze cattle on fescue pastures to help lessen or alleviate the symptoms of fescue toxicity. These include, replacement of infected

fescue pastures, pasture rotation, dilution, and supplementation.

### Replacement

Total replacement of infected-fescue pastures can be difficult as well as expensive. When attempting replacement, take a "spray-and smother" approach. First spray the infected field with an effective herbicide, second seed a cover crop to smother the field, then reseed with the desired new forage crop. The smother crop should be a fast growing annual forage (millet or Sudan grass in the summer, or wheat, rye or oats for fall planting). It is usually a good idea to renovate small portions of the farm at a time.

### Rotation

**Rotating cattle off of fescue pastures during hot summer months increases animal performance for several reasons.** First, because fescue is a cool-season forage it stops growing during hot summer months. Rotating cattle off fescue onto growing, warm-season pastures simply gives them more to eat. Secondly, high temperatures seem to intensify the negative effects of the endophyte toxins. Moving cattle to non-infected pastures eliminates this interaction. Cattle need to stay off infected-fescue pastures for the entire summer to gain benefits. Taking cattle off for only a few weeks at a time will not greatly reduce summer slump symptoms.

### Dilution

**Interseeding infected fescue pastures with legumes helps to dilute the total amount of toxins ingested as well as increasing the overall nutritional content of the pasture.** These legumes must be managed to allow reseeding each year. And even with special management, many need to be manually reseeded periodically. It is also important to fertilize for the legume (limiting the amount of nitrogen) in order to allow the legumes to thrive. Supplementation Research has shown that copper levels are lower in endophyte-infected fescue vs. endophyte-free fescue when grown under identical conditions. These differences are most pronounced late in the growing season. These findings support observations of decreased copper status in

*Endophyte from page 8*

cattle grazing infected fescue. In research conducted in Virginia, cattle grazing endophyte-infected fescue exhibited decreased copper status as opposed to cattle grazing endophyte-free fescue. However, the magnitude of this decrease was greater than the difference between the forages. This demonstrates that the endophyte not only decreases the total amount of copper present in the fescue, but also, negatively affects bioavailability of copper for the animal. This makes sense when you consider that the typical symptoms for fescue toxicosis closely resemble those for copper deficiency. These symptoms include rough, discolored hair coats; winter coats that are slow to shed out; decreased conception rates; increased days open; hoof problems; and depressed immunity. For all of these reasons, lowered copper status plays a large part in the fescue toxicosis syndrome. Proper supplementation with a high copper supplement can help alleviate some of the fescue toxicity symptoms.

**Why is Copper so Important?**

**Proper copper nutrition is essential for a healthy immune system in cattle.** Copper is needed for proper development of antibodies and white blood cells in addition to antioxidant enzyme production. Copper deficient cattle are more susceptible to infections and do not respond as well to vaccinations. In addition, they tend to be less resistant to parasitic challenge. Studies have shown that cattle receiving proper copper nutrition tend to be less susceptible to infections and have less severe infections when disease does occur. Reproductive problems cost beef producers about \$15.00 per cow per year. This translates into \$750 per year for a 50-cow herd. It is widely known that copper deficiency in cattle results in reduced reproductive efficiency and performance. Typical copper deficiency symptoms include decreased conception rates, increased days open, increased cases of retained placenta, delayed puberty, and increased repeat breeders in cows and decreased libido and semen quality in bulls.

Proper copper nutrition in pregnant females is critical to the health of newborn calves. Newborns are very dependent on copper acquired during the prenatal period since milk is a relatively poor source of copper. Calves use the copper acquired during the prenatal period to meet their elevated copper demands during the first few months of life. Additionally, copper status in the dam is critical to the production of high quality

colostrum. Colostrum provides passive immunity for the calf until its own immune system develops fully. Also, copper nutrition has been shown to be an important component in a newborn's ability to withstand cold stress. Calves born to copper deficient cows experience increased death losses, reduced growth, reduced immunity and poor production efficiency.

Stress increases an animal's mineral needs and tends to exacerbate existing mineral deficiencies. This is especially important with weaned calves. Studies have shown that copper deficient calves have more health problems, gain weight less efficiently and have lower net returns. For this reason it is vital that calves receive adequate mineral nutrition BEFORE weaning because even a proper mineral program cannot overcome existing mineral deficiencies once stress sets in. Calves going into stocker or feedlot situations will perform better when they have received adequate copper nutrition prior to weaning.

**How Can I Help My Cattle Avoid Fescue Toxicity Symptoms?**

Unfortunately, there is no silver bullet that will allow you to avoid the negative effects of the fescue endophyte in all situations. However, by using a combination of the management techniques mentioned above in conjunction with a good mineral/vitamin supplementation program you can reduce the negative impacts of fescue toxicity on your cattle herd.

**Sweetlix® CopperHead® Fescue Max with RainBloc®** is a high quality mineral and vitamins supplement scientifically formulated specifically for cattle on fescue forages.

**Copper and Zinc**

Research has shown that the body utilizes copper better in the presence of zinc. Zinc and copper interact within the body much as calcium and phosphorus interact. Similarly, the ratio of zinc to copper is as important as the absolute levels of either copper or zinc. Ideally the proper ratio of zinc to copper is from 3:1 to 5:1 to maintain optimum mineral absorption of both minerals. **Sweetlix® CopperHead® Fescue Max with RainBloc®** delivers a 3:1 zinc to copper ratio for optimum copper utilization.

**Antagonists**

Most fescue is grown in areas that contain antagonistically high levels of sulfur, molybdenum or

*Endophyte from page 9*

iron. Sulfur, molybdenum and iron bind up copper making it unavailable to the animal. Also, excessive use of sulfur fertilizer can contribute to lowering copper availability for livestock. Contact your local NRCS agent to obtain soil surveys to learn of predominant mineral compositions in your soils. For example, forage surveys in Tennessee have consistently shown elevated sulfur levels in fescue hay, with sulfur levels higher in fescue harvested in the fall vs. the spring.

**Bioavailability**

Supplement bioavailability is crucial for cattle consuming fescue forages, especially those in areas with high antagonistic mineral levels in soils. Research has shown that a combination of organic and inorganic copper was as effective at maintaining liver copper levels during antagonism as feeding five times the NRC requirement from copper sulfate. For this reason, **Sweetlix® CopperHead® Fescue Max with RainBloc®** contains two different organic sources of copper, zinc, manganese and cobalt as well as inorganic sources for optimum bioavailability. The organic trace minerals are chemically bonded to amino acids to create an extremely stable complex that is not degraded in the

rumen. Therefore these minerals pass undisturbed to the intestine where they can be readily utilized by the cow for maximum efficiency. Use of two alternate organic mineral sources in addition to inorganic mineral sources maximizes mineral absorption and utilization by cattle consuming fescue forages.

Cattle producers that utilize fescue pastures who also observe rough, discolored hair coats (red tinge on black hair or loss of pigment around the eyes); winter coats that are slow to shed; decreased conception rates; increased days open; hoof problems and/or depressed immunity should consider use of **Sweetlix® CopperHead® Fescue Max with RainBloc®**. Ask for the **Sweetlix® CopperHead®** line of minerals by name at your local feed store or call 1-875WEETLIX (1-877-933-8549) to learn more about this and other Sweetlix® supplement products for cattle.

*References available upon request.*

*Jackie Nix is a nutritionist with Sweetlix*

*(<http://www.sweetlix.com>). You can contact her at [jnix@sweetlix.com](mailto:jnix@sweetlix.com) or 1-800-325-1486 for questions or to learn more about the Sweetlix line of mineral and protein supplements for cattle, goats, horses, sheep and wildlife.*

## Celtic Festival 2013

By Kathleen Collins

The Celtic Festival this year was a lot of fun for us and we were super busy, as were all the volunteers and coordinators. Dan and I worked the Pasture Putt for the morning and I spun with a couple of members from my Guild in the afternoon.

It was hot, but we had a breeze for most of the day. The music was great, the food was fantastic, and the kids seemed to have a good time on the Pasture Putt. It was great when Kevin's daughter Abby began rounding up others to come play the Pasture Putt (afternoon hours).

My Guild members and I had a lot of folks come by to watch us spin, take guesses at the different fibers we had on display, and we got to answer a lot of great questions. We had a great spot near the Wolfhounds, Shetlands and Highlands. We had a lot of fun!

It is great when everything stops at noon as the bag pipes start --we know the clan march and the Kilties are about to parade by. Love the pipes...and guys in kilts!



## We Have Electricity!

By Gary and Joyce Trevorrow

The HHCA along with Trevorrow's Highland Keep would like to thank Norm Eastman, a Highland member, for the portable electrical box with a 100 AMP breaker used during the Celtic Festival at the Buffalo Fair Grounds...again thank you Norm!

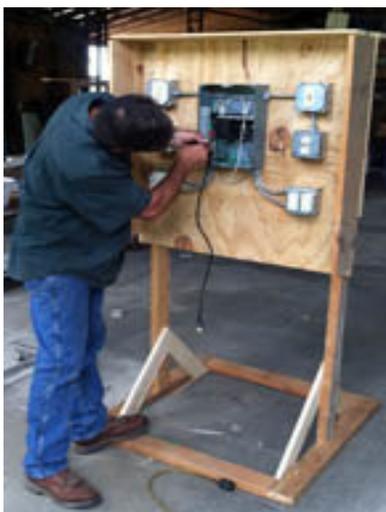
Another Big thanks to Hatfield Electric Co. of Branson for donating 125 ft. of electrical wire for this project. Thank you Neal Hatfield!

Also we would like to thank Locke Supply Co. of

Branson for the use of 120 ft. of PVC pipe to run the wire in from box to the pole. Thank you Josh! The HHCA was able to go ahead and buy this PVC at a very good price.

The pictures below also show one of the 6-hole putt golf course with Greg Roberts worked on.

This Celtic Fest we did not have one power outage and that made the weekend go very well!!!



## Visiting with North Central Highland Cattle Members

On my trip to Wisconsin in August, I was able to attend the NCHCA summer picnic. I was invited by NCHCA members Rich & Jean Gruenert from Four T Acres in Burlington, WI, who are also members of the HHCA. The Gruenert's and their daughter and son-in-law David & Janet Larson hosted the picnic at the home farm. I really had a very enjoyable time meeting and visiting with some Highland breeders I have known from WI for many years and meeting new Highland breeders as well. They were telling me that they were in a drought situation, but they still had

some decent pasture, but were already feeding hay. The hay ride around the pastures to see the Highlands was very interesting and informative. The Highlands all looked bigger than most of my Highlands, but I also attribute that to the better grasses and feed they receive. Our pastures in the Ozarks are much more native grasses and fescue. It was very nice talking to everyone and hearing their stories about their Highlands and some of the funny occurrences that go on with them. I very much appreciated being invited.

**HIGHLAND FIELD DAY October 12, Alva OK!**

Being held at The Menagerie, Mammals & More! (Jerad and JoDe Bradt's)  
For info email Jerad at [jeradbradt@yahoo.com](mailto:jeradbradt@yahoo.com); 580.430.1269

## HHCA New Logo Use Survey

By Glenn Young

We have recently completed the new Logo for our HHCA and wanted to ask members for their input on how it is to be used. The new Logo will be copyrighted, so the board and our members will have control of how to use it and who uses it. We are asking you, in this survey, how you as members would like to use it. Please understand that selling merchandise is one of the ways we raise money to help run our Association, as it takes much more than Membership Dues to pay the bills.

### 1) Let us know Your Ideas

We have thought of using it on merchandise like T-Shirts, Caps & coffee mugs. But there may be other items you use that you would like to see the Logo on, items you are willing to buy. Please let us know your ideas of merchandise you would like to buy.

### 2) What size T-Shirt would you buy?

This information will tell us more about how to order blocks of t-shirts to sell online or at association gatherings.

### 3) Would you be interested in ordering a block of T-Shirts with Your Farm Name and Logo on the back?

We plan to order T-Shirts with our Logo on the Front, using the colorized version. Most likely with nothing on the back because the shirt is cheaper this way. We are interested in your thoughts on sizes needed and what should be on the back, if anything. Some have mentioned that they might like their own Farm Name or/and Logo on the back. When we are ordering shirts, we can add your farm name to the shirts at a small cost, cheaper than you could have printed. But we would need a minimum order of  $x$  shirts as required by the printer.

### 4) Would you purchase a CD with Logos for your use?

The idea has been floated around that a Farm Member may like to use the Logo for his own use on



his Farm stationary, business cards or to add the Logo to his Farm T-Shirts he orders through his own printer. In buying the CD, you would be purchasing the legal right of "Limited Use" of the Logo. But we also need ideas of how you would want to use it.

### 5) How would you like to use Logo to benefit your Farm?

We also are asking how you, as a member, would like to use it personally on your farm. We have thought of getting Logo stick-on signs for your truck and trailer and thought you might want to place a Logo on your farm cards or have a Link on your web site showing you are a member of HHCA and if clicked on, it would take the viewer to the HHCA web site. But you may have personal uses we have not thought of.

### 6) Please respond to this survey in next 30 days!

Please let us know other applications you might want to use the Logo for or on, in the next 30 days as we plan on ordering soon. Of course, contact us anytime with an idea, but it would not be included in this order. We need ideas of how our membership would like to use this wonderful new Logo. Please email me at [YoungSproutFarms@gmail.com](mailto:YoungSproutFarms@gmail.com). I hope to get at least 200 emails with your ideas, so I need everyone of you to please put on your thinking caps and give us your thoughts, all are appreciated.

## HHCA Classifieds

CHECK OUT ALL THE ADS ON THE HHCA WEBSITE AT [www.heartlandhighlandcattleassociation.org](http://www.heartlandhighlandcattleassociation.org)

Use your FREE membership ad on the website classified section and in the newsletter, your ad will pay off.

There are always SOLD signs being placed on ads.

### Alabama:

2012-2013 Reg. Highland heifers and bulls nice assortment, colors/ages

[donderivaux@com.cast.net](mailto:donderivaux@com.cast.net) 256.603.5995

Glenn Brooks Acres

[info@gb3highlandcattle.com](mailto:info@gb3highlandcattle.com)

205.432.9531

Scottish Highland Cattle

[www.visitkatiefarms.com](http://www.visitkatiefarms.com)

### Iowa:

Reg. Highland heifers New Providence, IA 641.497.5499

[honeycreekhighlands@yahoo.com](mailto:honeycreekhighlands@yahoo.com)

### Kansas:

Reg. cows, bulls, heifers and steers Flashing Thunder Farm 785.871.0213

[quinson@ruraltel.net](mailto:quinson@ruraltel.net)

OzHighland Farm Reg. & unreg. Highland cattle

[www.ozhighlandfarm.com](http://www.ozhighlandfarm.com)

785.256.7920

### Louisiana:

Scotland Farms of Louisiana

[alancamvet@alo.com](mailto:alancamvet@alo.com) 318.371.1781

[www.scotlandfarms.com](http://www.scotlandfarms.com)

Gentle Breeze Farms, Athens, LA

[gentlebreezefarms@gmail.com](mailto:gentlebreezefarms@gmail.com)

### Mississippi:

Valley Farms Oxford, MS email

[valleyfarmshoney@gmail.com](mailto:valleyfarmshoney@gmail.com)

### Missouri:

2 yr. old unreg. bull trade for new bloodline Bruner, MO

[lairdelmfarm@gmail.com](mailto:lairdelmfarm@gmail.com) 417.634.3134

417.300.1462

White Highland weanling bull calf & dun bull Lebanon, MO Margaret Wilson 417.588.9116

2 Reg. Highland breeding bulls Lone Jack, MO 816.697.8810

[khattey@gmail.com](mailto:khattey@gmail.com)

Cheek's Smokey Sunset reg. bull

dob2/25/13 Fair Grove, MO

417.818.2255

Wanted Highland cattle ready to process for beef contact

[cchighlandranch@yahoo.com](mailto:cchighlandranch@yahoo.com)

573.528.5129

Cheek's Sunset Sambo Fair Grove, MO

[gary@williamsconst.com](mailto:gary@williamsconst.com) 417.818.1515

Reg. & unregistered Highland bulls, different ages and colors

[cchighlandranch@yahoo.com](mailto:cchighlandranch@yahoo.com)

573.528.5129

Going to Ozark Farm Fest, Springfield, MO unreg. heifers and bull

[hairycows@centurytel.net](mailto:hairycows@centurytel.net) 417.369.0505

Reg. Highland bull and cows Potosi, MO 573.244.3242

[hilltophighlandfarm@gmail.com](mailto:hilltophighlandfarm@gmail.com)

Red Willow Ranch Reg. Highland

Cattle and beef for sale Buffalo,

[gwolfgang2005@yahoo.com](mailto:gwolfgang2005@yahoo.com)

417.345.0575

Black Bell Acres Highland cattle

[www.blackbellacres.com](http://www.blackbellacres.com) 417.778.6009

C&C Highland Ranch, Reg., unreg

Highlands and processed beef

573.528.5129

[www.cchighlandranch.com](http://www.cchighlandranch.com)

Jack's Cattle Co. Reg. Highland Cattle

[www.jackscattle.com](http://www.jackscattle.com) 816.697.8810

Vintage Hill Reg. Highland Cattle

[www.vintagehill.com](http://www.vintagehill.com) 660.537.3906

High-Land Farm Reg. Highland Cattle

Alton, MO 309.251.5832

[jannlr51@gmail.com](mailto:jannlr51@gmail.com)

### Kentucky:

Registered bull & heifer for sale;

Glencoe, KY 659.802.5875

[prmlies@twc.com](mailto:prmlies@twc.com)

### Oklahoma:

Coble Highland Ranch

[www.coblehighlandranch.com](http://www.coblehighlandranch.com)

918.652.1411

5 yr. old reg. Brindle Highland bull

Choctaw, OK 405.391.5655

[cbetterton@cox.net](mailto:cbetterton@cox.net)

Reg. Highland bull & heifers, all

naturally raised; Red Rock, OK

580.723.4304

[vivianandrews@gmail.com](mailto:vivianandrews@gmail.com)

### Texas:

Bannockburn Highland Ranch Reg. & unreg. Highlands 409.837.9707

[blanxlex@earthlink.net](mailto:blanxlex@earthlink.net)

Young Sprout Farms Reg. Scottish

Highland cattle 903.571.4425

[glennyoung@hughes.net](mailto:glennyoung@hughes.net)

### Wisconsin:

Four T Acres Reg. Highland Cattle

good bloodlines 262.539.2725

[ftacres@tds.net](mailto:ftacres@tds.net)

## NEW: PAYPAL ON THE HHCA WEBSITE!

The HHCA has a payment button on our Home page for payment of membership dues and for purchasing an additional 3 months of ad space for the Classifieds page. There is also a Paypal button on the Merchandise page for purchasing Highland calendars, notepads, Highland-themed gear.

This is another convenience and benefit of the HHCA! Spread the word!

**Heartland Highland Cattle  
Association**

976 State Hwy 64  
Tunas, MO 65764

**Phone:**

417.345.0575

**E-Mail:**

[heartlandhighlandcattle@  
gmail.com](mailto:heartlandhighlandcattle@gmail.com)

**Hairy cows are the way  
to go!**

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*We're on the Web!*

*Visit us at:*

[www.heartlandhighlandcattleassociation.org](http://www.heartlandhighlandcattleassociation.org)

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Heartland Highland Cattle Assn.

976 State Hwy 64  
Tunas, MO 65764



**Customer Name**

**Street Address**

**City, ST ZIP Code**