



We offer coverage that includes coverage for buildings, equipment and liability—all at competitive rates.

Call today to get a quote to protect you and your farm.

Your dream is out there. Go get it. We'll protect it.



Mary Fry Agency 1135 E. Broadway St Bolivar, MO 65613 (417) 326-2454



J Probert Agency 504 Main St Golden City, MO 64748 (417) 537-8629 jprobert@amfam.com



Steven Haskins Agency 1901 E. 32nd St Ste 16 Joplin, M0 64804 (417) 624-6200



Jeff Hodkin Agency 2417 Fairlawn Dr Carthage, MO 64836 (417) 359-3399 ihodkin@amfam.com



Andrew Golian Agency 5898 N Main St Ste 107 Joplin, MO 64801 (417) 781-5533 dqolian@amfam.com



Edmund Leahy Agency 821 S Elliott Ave Ste A Aurora, M0 65605 (417) 678-2244 eleahy@amfam.com



Pamela Greninger Agency 2020 E 7th St Joplin, M0 64801 (417) 623-6363 pgrening@amfam.com



Jan Tate Agency 906 N Osage Blvd Nevada, MO 64772 (417) 667-2035 jtate@amfam.com



Chris Smith Agency 493 East Hwy 76, Ste G Anderson, M0 64831 (417) 845-7060 csmit4@amfam.com



Benjamin Roberts Agency 141 Main St Forsyth, M0 65653 (417) 546-5910 broberts@amfam.com



VIEW FROM THE BLOCK

Slaughter cattle traded for \$165 the last full week of March and there seems to be a little momentum back in the market. Talk has been circulating that there is too much protein available. Yet, no one seems to remember that we are harvesting from 40,000 to 90,000 fewer cattle each week than we did a year ago. That tends to make a person a little nervous, but the fact remains that the cattle just aren't there.

If you have some cattle that weigh less than 750 lbs., you're going to get along great. Everybody is buying those cattle to go to grass, so there's a lot of optimism there. The heavier cattle are a little higher than they were, but they are still dragging a bit. It's just a heck of a market right now.

Calves may look high, but when you can gain one this time of year on grass and a good value feed, I think there's some money to be made between now and July. The video auction is a great way to protect some of

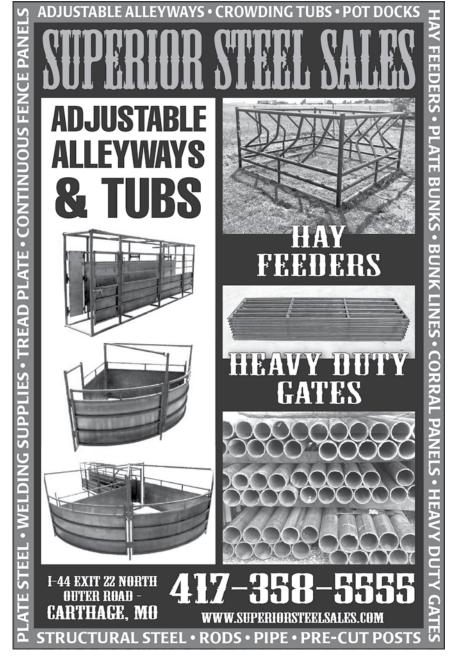
your investment and manage your risk. Mark your calendar for our April 16 special video sale. When you can get \$2 for the gain, pretty much

any cattle will make some money. If you put the pencil to 'em, they are a pretty good bet.

Slaughter cows and bulls will continue to be worth a big price as long as it continues to rain because of the shortage of ground beef on the market. From here on, it's all about whether or not it rains and whether or not we have a corn crop.

For now, the grass is green and the birds are chirpin'. Spring is here and it just doesn't get any better than this. $q_{ac}h_{cc}$

Special Video Sale
1 p.m., April 16, 2015
Special Value-Added Sale
June 25, 2015 | Wean Date May 11





Bailey Moore: Granby, MO M(417)540-4343

ARKANSAS

Dolf Marrs: Hindsville, AR H(479)789-2798, M(479)790-2697

Billy Ray Mainer: Branch, AR M(479)518-6931

Kent Swinney: Gentry, AR H(479)736-4621, M(479)524-7024

KANSAS

Pat Farrell: Fort Scott, KS M(417)850-1652

Chris Martin (Video Rep): Alma, KS M(785)499-3011

Alice Myrick: Mapleton, KS H(620)743-3681, M(620)363-0740

Bob Shanks: Columbus, KS H(620)674-3259, M(620)674-1675

LOUISIANA

James Kennedy: DeRidder, LA M(337)274-7406 CATTLE RECEIVING STATION

OKLAHOMA

Perry L. Adams: Custer City, OK M(580)309-0264

Russell Boles: Watson, OK (H)580-244-3071, M(903)276-1544

Casey Nail: Vinita, OK M(918)244-6232

Chester Palmer: Miami, OK H(918)542-6801, M(918)540-4929

John Simmons: Westville, OK M(918)519-9129, M(417)310-6348

Shane Stierwalt: Shidler, OK M(918)688-5774

MISSOURI

Rick Aspegren: Mountain Grove, MO M(417)547-2098

Clay Barnhouse: Bolivar, MO M(417)777-1855

Sherman Brown: Marionville, MO H(417)723-0245, M(417)693-1701

Chris Byerly: Carthage, MO M(417)850-3813

Joel Chaffin: Ozark, MO M(417)299-4727

Rick Chaffin: Ozark, MO H(417)485-7055, M(417)849-1230

Jack Chastain: Bois D'Arc, MO H(417)751-9580, M(417)849-5748

Ted Dahlstrom, DVM: Staff Vet Stockyards (417)548-3074 Office (417)235-4088

Tim Durman: Seneca, MO H(417) 776-2906, M(417)438-3541

Jerome Falls: Sarcoxie, MO H(417)548-2233, M(417)793-5752

Skyler Fisher: Collins, MO M(417) 298-9051

Nick Flannigan: Fair Grove, MO M(417)316-0048

Kenneth & Mary Ann Friese: Friedheim, MO H(573)788-2143, M(573)225-7932 CATTLE RECEIVING STATION

Fred Gates: Seneca, MO H(417)776-3412, M(417)437-5055

Field Representatives

Skyler Moore: Mount Vernon, MO M(417)737-2615

Brent Gundy: Walker, MO H(417)465-2246, M(417)321-0958

MISSOUR

Dan Haase: Pierce City, MO M(417)476-2132

Jim Hacker: Bolivar, MO H(417)326-2905, M(417)328-8905

Bruce Hall: Mount Vernon, MO H(417)466-7334, M(417)466-5170

Mark Harmon: Mount Vernon, MO M(417)316-0101

Bryon Haskins: Lamar, MO H(417)398-0012, M(417)850-4382

Doc Haskins: Diamond, MO

H(417)325-4136, M(417)437-2191 Mark Henry: Hurley, MO H(417)369-6171, M(417)464-3806

J.W. Henson: Conway, MO H(417)589-2586, M(417)343-9488

Joe David Hudson: Jenkins, MO H(417)574-6944, M(417)-342-4916

CATTLE RECEIVING STATION

Steve Hunter: Jasper, MO H(417)525-4405, M(417)439-1168

Larry Jackson: Carthage, MO H(417)358-7931, M(417)850-3492

Jim Jones: Crane, MO H(417)723-8856, M(417)844-9225

Chris Keeling: Purdy, MO

H(417)442-4975, M(417)860-8941 Kelly Kissire: Anderson, MO H(417)845-3777, M(417)437-7622

Larry Mallory: Miller, MO H(417)452-2660, M(417)461-2275

Cody Misemer: Mount Vernon, MO M(417)489-2426

Kenny Ogden: Lockwood, MO H(417)537-4777, M(417)466-8176

Jason Pendleton: Stotts City, MO H(417)285-3666, M(417)437-4552

Charlie Prough: El Dorado Springs, MO H(417)876-4189, M(417)876-7765

Russ Ritchart: Jasper, MO H(417)394-2020

Lonnie Robertson: Galena, MO M(417)844-1138

Justin Ruddick: Anderson, MO M(417)737-2270

Alvie Sartin: Seymour, MO M(417)840-3272 CATTLE RECEIVING STATION

Jim Schiltz: Lamar, MO H(417)884-5229, M(417)850-7850

David Stump: Jasper, MO H(417)537-4358, M(417)434-5420

Matt Sukovaty: Bolivar, MO

H(417)326-4618, M(417)399-3600 Mike Theurer: Lockwood, MO

H(417)232-4358, M(417)827-3117 Tim Varner: Washburn, MO H(417)826-5645, M(417)847-7831

Troy Watson: Bolivar, MO M(417)327-3145

<u>OFFICE:</u> (417)548-2333 Sara Engler

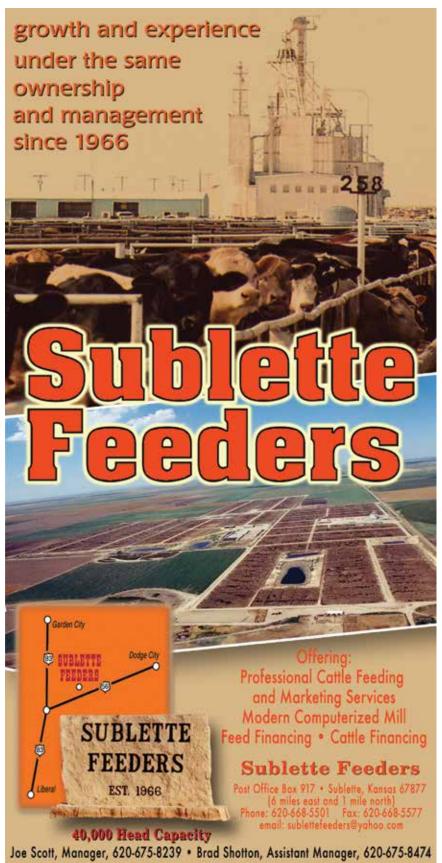
Alex Owens



Missouri Farmers Care

www.MoFarmersCare.com





INSIDE THIS ISSUE

About the Cover

Best of the Best Calf Roping returns to the region May 24-25 at the Risen Ranch Cowboy Church Arena in Carthage.

—Cover photo courtesy Miller International, Inc.

Features

- 12 Grass Grows Grass
- 16 Healthy=Happy
- 18 Get a Handle on Johnsongrass
- 20 Put Your Best Foot Forward
- 22 Friend Not Foe
- 26 Forage Queen
- 35 Money in the Bank

In Every Issue

- 3 View from the Block
- 5 Beef in Brief
- 6 Nutrition Know-How with MU's Dr. Justin Sexten
- 8 Health Watch with Beef Cattle Institute's Dr. Dave Rethorst
- 10 Next Generation with Darren Frye
- 44 Market Watch
- 45 Event Roundup



Contact Us

Publisher/Advertising:

Mark Harmon | Email: markh@joplinstockyards.com Phone: 417-548-2333 | Mobile: 417-316-0101 Fax: 417-548-2370

Editor/Design/Layout:

Joann Pipkin | Email: editor@joplinstockyards.com Ad Deadline 2nd Monday of Each Month for Next Month's Issue Cattlemen's News, PO Box 634, Carthage, MO 64836

www.joplinstockyards.com

Subcription questions can be answered by calling 417-548-2333

Although we strive to maintain the highest journalistic ethics, Joplin Regional Stockyards limits its responsibilities for any errors, inaccuracies or misprints in advertisements or editorial copy. Advertisers and advertising agencies assume liability for all content of advertisements printed, and also assume responsibility for any claims arising from such advertisement made against the Stockyards and/or its publication.

If you wish to discontinue a subscription to Cattlemen's News, please send request or address label to:

Cattlemen's News - PÔ Box 634, Carthage, MO 64836



Cattlemen's News, published by Joplin Regional Stockyards, is a nuts and bolts news magazine dedicated to helping cattle producers add value to their operations. From "how-to" articles to economics and industry trends, our mission is to put today's producers in touch with the information and products that will make them profitable for tomorrow. Published monthly. Circulation 10,000.



Scan Me or Visit joplinstockyards.com



Joplin Regional Stockyards

BEEF IN BRIEF

House Renews Efforts to Repeal the Death Tax

The House Committee on Ways and Means Subcommittee hosted a hearing March 18 on the Burden of the Estate Tax on Family Businesses and Farms. National Cattlemen's Beef Association (NCBA) member and seventh-generation cattleman from Fort Davis, Texas, Bobby McKnight testified before the subcommittee on how the death tax affects cattle producers.

"When times have been lean, I have had to make sacrifices to keep my business above water, but sometimes you run out of places to cut," said McKnight.

NCBA calls for the immediate repeal of the death tax.

— Adapted from a release by the National Cattlemen's Beef Association

Emergency Watershed Protection Funding Available

The USDA's Natural Resources Conservation Service (NRCS) has \$1.8 million to address damages to roads, bridges and streams caused by major storms in northwestern and southwestern Missouri.

State Conservationist J.R. Flores said the funding is part of \$84 million available nationally through the Emergency Watershed Protection Program (EWP) to help disaster recovery efforts in Missouri and 12 other states.

EWP provides critical resources to local sponsors to help communities eliminate imminent hazards to life and property caused by floods, fires, windstorms and other natural occurrences. The funds support a variety of recovery projects, including clearing debris-clogged waterways, stabilizing stream banks, fixing jeopardized water control structures and stabilizing soils after wildfires.

Flores said Missouri's portion of the funding will be used for stream bank stabilization, and to remove log jams at road bridges in Nodaway County in northwestern Missouri, and to stabilize stream banks in McDonald, Webster, Dallas, Cedar and Barry counties in southwestern Missouri. Heavy rains in May 2013 in southwestern Missouri and September 2014 in northwestern Missouri caused the damage.

—Source: Release from USDA Natural Resources Conservation Service.

Secretaries Urged to Reconsider Diet Recommendations

The Departments of Health and Human Services and Agriculture hosted a meeting for public comments on the Dietary Guidelines Advisory Committee's report released in February. The recommendations in the report, made by government-appointed nutrition scientists, fail to fully recognize the nutritional benefits of lean beef and conclude by advising Americans to eat less meat.

Shalene McNeill, a nutrition scientist and National Cattlemen's Beef Association's registered dietician, said the Advisory Committee's recommendation to exclude lean meat from a healthy dietary pattern is a historic move that ignores decades of nutrition science and all previous editions of the Dietary Guidelines. While the Committee defends the report saying lean beef is mentioned in a footnote, the recommendations are contradictory.

While the recommendations in the report are influential in the development of the 2015 Dietary Guidelines for Americans, Secretaries Burwell and Vilsack have the responsibility to review all the scientific evidence in tandem with the recommendations before developing the guidelines. The public comment period for the report is open now until May 8, 2015.

Significant scientific evidence supports lean red meat, like nutrient-rich beef, as part of a healthy diet. NCBA encourages the Secretaries to finish the scientific review of red meat's role in a healthy diet and reinstate the 2010 Dietary Guidelines recommendation on lean meat.

—Source: National Cattlemen's Beef Association release

Get THE BEST ON

Antibiotics
Dewormers
Implants
Pinkeye
Fly Tags

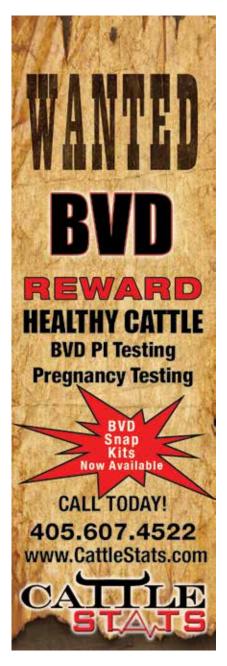
Shop here before you buy!

Animal Clinic of Monett

Mon. - Sat. 417.235.4088

Joplin Regional Stockyards
Veterinary Office







NUTRITION KNOW-HOW

Trace Mineral Needs for the Cow Herd

More is not always better when it comes to supplements

Story By Justin Sexten for Cattlemen's News

ast month's article dis-**⊿**cussed macromineral requirements, and this month we will focus on trace mineral requirements. The difference between macro and trace mineral requirements is the amount required; macrominerals are required in grams per day while trace minerals are required in milligrams per day. Many essential trace minerals are available, however this article will focus on those most commonly supplemented — copper, zinc, manganese and selenium.

Copper is involved with reproduction and immune function. Copper deficiency is expressed as poor reproductive rates, reduced growth, weak calves and light hair color. Continen-

tal breeds such as Simmental, Charolais and Limousin have greater copper requirements than Angus.

Copper is antagonized by iron, molybdenum and sulfur. The presence of excessive antagonist minerals can greatly increase copper requirements due to reduced absorption. Under normal conditions, copper supplied in a mineral labeled for 4 ounces of intake should contain 1,000 to 1,500 ppm copper to meet requirements.

Zinc and copper are often considered together because they are involved in reproduction and immune function. Additionally, absorption occurs by similar pathways in the stomach and small intestine. Zinc



deficiency is exhibited by reduced growth, lower feed intake, sub-optimal reproduction and, in severe cases, skin lesions. Unlike copper, zinc does not have a well-defined antagonist, however during periods of stress, like many other minerals, zinc availability is impaired.

Mineral supplements should contain a copper-to-zinc ratio of 1:2 or 1:3 due to competition for absorption with copper. Under normal conditions, a 4-ounce mineral should contain 3,000 to 3,500 ppm zinc to provide adequate zinc to the gestating or lactating beef cow.

Manganese is required for normal reproduction and growth, however forages generally contain adequate

manganese assuming no antagonists within the forage. Manganese deficiency is observed as bone and joint problems in growing cattle with reduced reproductive rates more common in older cattle. High calcium and phosphorus can reduce manganese absorption. Under a balanced nutritional program, a 4-ounce mineral supplement should contain 2,000 to 3,000 ppm manganese to meet the cow's requirement in addition to forage.

Selenium is required to maintain healthy immune status in addition to normal growth. The most common deficiency symptom is white muscle disease in young animals. In older animals reduced growth and poor immune response is a more common deficiency sign. Selenium requirements can vary with location, soil type and pasture composition. Much of the eastern and western U.S. has low to marginal soil and forage selenium while the central part of the country is adequate in selenium.

CONTINUED ON NEXT PAGE



TRACE MINERALS • FROM PREVIOUS PAGE

Selenium and vitamin E requirements are interrelated; low vitamin E diets can increase selenium requirements. Selenium feed and mineral inclusion rates are limited by law to 3 mg/day due to the potential for selenium toxicity. A 4-ounce mineral supplement with 12 to 15 ppm selenium should meet the daily needs of a beef cow.

Iodine and cobalt are two other trace minerals required by beef cattle commonly provided in mineral supplements. Iodine is necessary to prevent goiter in calves and maintain reproduction in adult animals. Cobalt is used by rumen microbes to form vitamin B12 in cattle of all ages. While both trace minerals are required, the level within mineral supplements are often not listed on the feed tag.

The most common deficiency observed in many operations is related more to failure to maintain a full mineral feeder rather

than selecting the wrong mineral. The recommendations above are based on a consistent supply of a mineral with 4-ounce labeled intake. When selecting or comparing mineral supplements, producers should first consider the labeled intake. The required mineral concentration will double in a 2-ounce mineral and be reduced by half in an 8-ounce mineral when compared to a 4-ounce mineral.

In the case of mineral supplements, more is not always better. Mineral concentration in excess of requirements might not improve performance, but can increase costs. Balancing requirements and interactions with other trace and macro minerals can be challenging. This short review should provide a starting point to begin your discussion with a nutritionist and feed suppler to develop a trace mineral supplementation program to economically meet requirements while accounting for feed, forage and water mineral sources and their antagonisms.

—Justin Sexten is state extension specialist, beef nutrition, with the University of Missouri.

NEWS TO USE

Agriculture Census Data Focuses on Family Farms

97 Percent of All U.S. Farms are Family-Owned, USDA Reports

The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) reports that family-owned farms remain the backbone of the agriculture industry. The latest data come from the Census of Agriculture farm typology report and help shine light on the question, "What is a family farm?"

The 2012 Census of Agriculture Farm Typology report is a special data series that primarily focuses on the "family farm." By definition, a family farm is any farm where the majority of the business is owned by the operator and individuals related to the operator, including through blood, marriage or adoption. Key highlights from the report include the following five facts about family farms in the United States:

Five Facts to Know about Family Farms

- 1. Food equals family 97 percent of the 2.1 million farms in the United States are family-owned operations.
- 2. Small business matters 88 percent of all U.S. farms are small family farms.
- 3. Local connections come in small packages 58 percent of all direct farm sales to consumers come from small family farms.
- 4. Big business matters, too 64 percent of all vegetable sales and 66 percent of all dairy sales come from the 3 percent of farms that are large or very large family farms.
- 5. Farming provides new beginnings 18 percent of principal operators on family farms in the U.S. started within the last 10 years.
- —Source: USDA release.



HEALTH WATCH

Do You Practice Sustainable Pasture Management?

Properly managed pastures protect resources

Story By Dr. Dave Rethorst for Cattlemen's News

tainability came up as we were harvested in order to become observing cows and pasture conditions. The assistant cattle manager commented, "The first question we must ask ourselves on sustainability is, are we, over time, maintaining and improving the environment in which we ranch?" He went on to say, "If our answer to that question is 'no', then we should not have any more sustainability conversations until we can answer that question, 'yes'."

This reminded me of a presentation I heard last fall on sustainability in the timber industry. When the timber industry in this country was in its infancy, it was on the East Coast. The timber was clear-cut until there was no more timber, and the industry moved to Michigan where the same thing occurred. This time, the industry moved to Minnesota where once again the timber was clear-cut until there was no more timber to harvest. Next, they moved to Montana. By the time they got to Montana, it was decided that the "harvest and move" model was not sustain-

n a recent ranch consult- able. They developed a plan Jing visit, the topic of sust to plant more trees than they sustainable.

> With the theme for this month's issue is "Pasture and Hay," I tell these two stories so I can ask, "What is the sustainability of your cattle operation?" When used as a buzzword as it often is today, sustainability is hard to define. There is very little consensus as to what it means. However, for the purposes of our conversation, the question is relatively straight forward. Can you keep doing what you are doing in regard to grazing management and remain in business long term? Will you have a business to pass down to the next generation that is profitable?

> As I travel the Great Plains, I also see pastures that are well managed where there is grass left at the end of the grazing season and the riparian areas are fenced off to control the cattle's access to water, thus controlling runoff. I also see pastures that are overgrazed. The riparian areas in these pastures have also been neglected. Cedar tree and brush management are part of this



some significant intervention.

Spring in the Flint Hills means fire. While fire is a necessity in the management of Flint Hills pasture, it creates air quality issues in metropolitan areas such as Wichita and Kansas City. In order to avoid further regulation and restriction, it is imperative that burning be managed in such a way to minimize the air quality issues. There are phone apps are available at www.ksburn. org that will assist in burning management.

Holistic range management is an intriguing topic. High-density rotational grazing is at the heart of this practice that can improve pasture quality and increase stocking rate. Producers who use this practice talk about the hoof action of cattle improving both grass and soil quality. They also

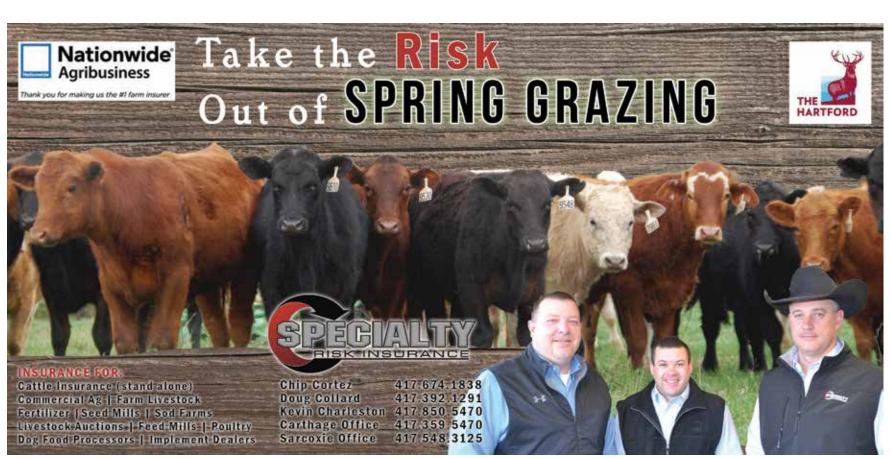
talk about the effect soil microbes and dung beetles have on soil health and productivity. I want to learn more about this area and how it relates to environmental quality.

Grass is becoming a more precious commodity each year due to grain prices as well as urban sprawl. If grazing of cattle on grass is going to be a sustainable practice, we must properly manage the resources that have been entrusted to our care. The management strategies that are utilized vary between operations. Some need cedar tree management, some need to avoid overgrazing, others need to burn to improve grass quality and still others need to develop watering systems to improve grazing distribution. Apps are available to assist with grazing management.

Is your grazing operation sustainable long term? What are you doing to maintain or improve the environment in which you raise cattle? This is just a little food for thought.

Editor's Note: If you are interested in learning more about smart phone apps to assist with grazing management, contact Dr. David Rethorst at drethorst@vet.k-state.edu.

—Dr. David Rethorst is director of outreach for The Beef Cattle Institute, Kansas State University.





Story By Linda Geist

Photo From University of Missouri

More farmers are looking at a practice long frowned upon: planting back-to-back soybeans.

Don't do it, says University of Missouri Extension soybean specialist Bill Wiebold. Expect lower yields and higher erosion if you don't rotate soybean with corn. Risk of disease, insects and nematodes also increases.

Falling corn prices and steady production costs tempt some farmers to choose continuous bean over a soybean-corn rotation to boost earnings.

The Food and Agricultural Policy Research Institute (FAPRI) at MU says corn prices will continue to drop this crop season. FAPRI economists predict soybean prices at \$9.29 and corn prices at \$3.89 for the 2015 crop.

Wiebold's 24-year crop rotation study shows that beans produce 12 percent less in secondyear plantings. "A single year of corn can erase this yield problem," he says.

Worse than yield loss is erosion. A second study, now in its 13th year, says soybean leaves

less residue than corn. Remaining stalks and roots protect soil from erosion. The difference in erosion from corn and soybean residue is "night and day," Wiebold says. This makes rotation critical on sloped land.

Soil fertility also suffers on second-year bean planting. Wiebold's studies show that adding 20-30 pounds of nitrogen doesn't improve soybean yields. Check potassium levels, as soybean uses more than corn.

Reduced vigor of second-year soybeans makes the plants more vulnerable to severe weather and disease, especially soybean cyst nematode (SCN).

Missouri farmers are no strangers to back-to-back soybeans. The state's producers plant 1.7 acres of soybean to corn. This is the highest ratio of any Midwestern state; 25-30 percent of the state's 5 million soybean acres are planted in continuous soybeans.

The right combination of claypan soil and weather in northeastern Missouri make the continuous option more widespread there. "Obviously, farmers have to make money," Wiebold says. "But they need to calculate how having corn in their rotation increases yield."

Wiebold offers the following advice for producers who choose the bean-after-bean option:

Select varieties with the best disease-resistance package.

Mix varieties and maturity when planting continuous soybean.

Use cover crops to prevent erosion and add to the soil's diversity.

Scout often for diseases such as SCN, seedling blights and several foliar diseases, including frogeye leaf spot.

Consider erosion, and don't do second-year soybean on sloped land.

—Source: Linda Geist is senior information specialist with University of Missouri Cooperative Media Group.



NEXT GENERATION

Identify Challenges, Opportunities in Your Operation

Get answers in the questions you ask

Story By Darren Frye for Cattlemen's News

When you take some time to evaluate and think about your farm operation, you might find yourself coming up with more questions than answers. Or, it might seem like those questions just seem to generate additional ones in your mind.

Many farms find they have a lot of questions as the farm's leaders start to pinpoint where the biggest challenges lie for the opera-

tion – and that's all right. It's important to first locate the challenges so the opportunities within the challenges can emerge.

The biggest challenge for the operation might be making sure that the transition to the next generation is smooth and effective. Or, it could be the fact that no one from the next generation is coming back to the farm. Every farm has unique challenges, and setting up a creative plan to address those challenges starts with asking the right questions.



The best solutions and innovative thinking for the operation usually happen when the farm's leaders take a close look at the business, find areas that need improvement and then ask themselves: How can we take our farm to the next level? How can we solve

the challenges we're facing? That's how a farm business can really move forward.

Taking action

Farmers that are asking questions about their future are making time to focus on the business side of their operations – creating business plans and then putting processes in place to make those plans happen.

They're meeting together with the main stakeholders in the operation – including the next generation – and asking: What areas in our operation could be improved? What new processes or ideas could we put in place to get better results on our farm? How will we think intentionally about the future of our farm together?

One family decided to meet together for a couple days this winter to have these discussions. Over the past couple years, their cattle operation has rapidly expanded, and they're hoping to expand again in the near future.

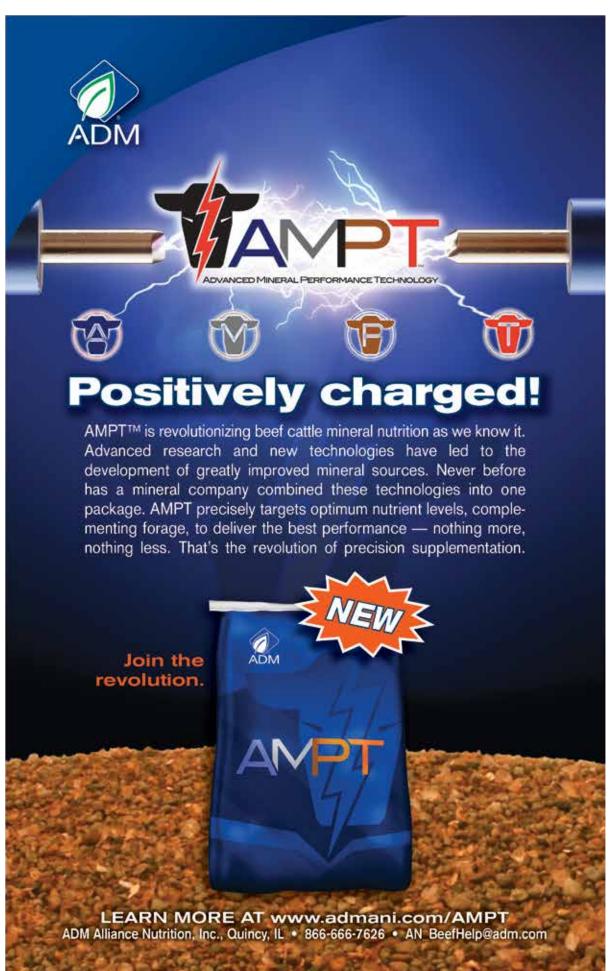
They had been thinking about doing a business planning process and decided that this was the right time – especially because the older generation is hoping to retire within the next 10 years or so. They want to have a long-term business plan in place first, before they start creating a legacy plan for how the operation will be transitioned.

Creating a plan

The current owners decided to include a couple key employees in the meeting, and they brought in an outside coach to facilitate the meeting and guide them as they created their future plans. During the two-day meeting, the family made a lot of progress together. They created a vision and mission together, which gave them a clear outlook of the future of the farm.

Then, they put together a long-term plan for the operation. Both the older and younger generations felt that a business plan would be the first step toward a transition strategy for how the older generation would be exiting the business.

CONTINUED ON NEXT PAGE



CHALLENGES, OPPORTUNITIES FROM PREVIOUS PAGE

Without having that vision together, they said they would have had a tough time figuring out a transition strategy for the operation and an exit strategy for the older generation. It would have been tougher to think about the future of the farm without a a shared vision that had been developed by both generations, together.

Here's a question for you. What challenges and opportunities is your operation facing in the next few years – and the next 10? Take some time to ask yourself – and others in your operation – that question, and create a plan for how you'll address what you find.

Is your operation approaching a transition to the next generation? Getting a forward-looking business plan in place builds the foundation for the next generation of leaders. That plan sets them up to be successful once they transition into leading and managing on their own – and the farm's transition plan and strategy is the bridge they travel over to get there.

Read more – including the story of one farm family's transition planning journey – in our quarterly publication, Smart Series, bringing business ideas for today's farm leader, at waterstreet. org/smartseries.

—Darren Frye is President and CEO of Water Street Solutions, a farm consulting firm that helps farmers with the challenges they face in growing and improving their farms – including the challenge of transitioning the farming operation to the next generation. Contact Darren at waterstreet@waterstreet.org or call (866) 249-2528.

Special Video Sale | 1 p.m., April 16, 2015

TRENDING NOW

Department Gets New Website for Market News

The Missouri Department of Agriculture today launched a brand new website for the department's Missouri Market News Program, featuring the most up-to-date market information for Missouri agriculture. The site, Ag-MarketNews.mo.gov, is updated daily and provides producers with price information for Missouri's agriculture commodities, including cattle, sheep, goats, swine, grain, hay and forages.

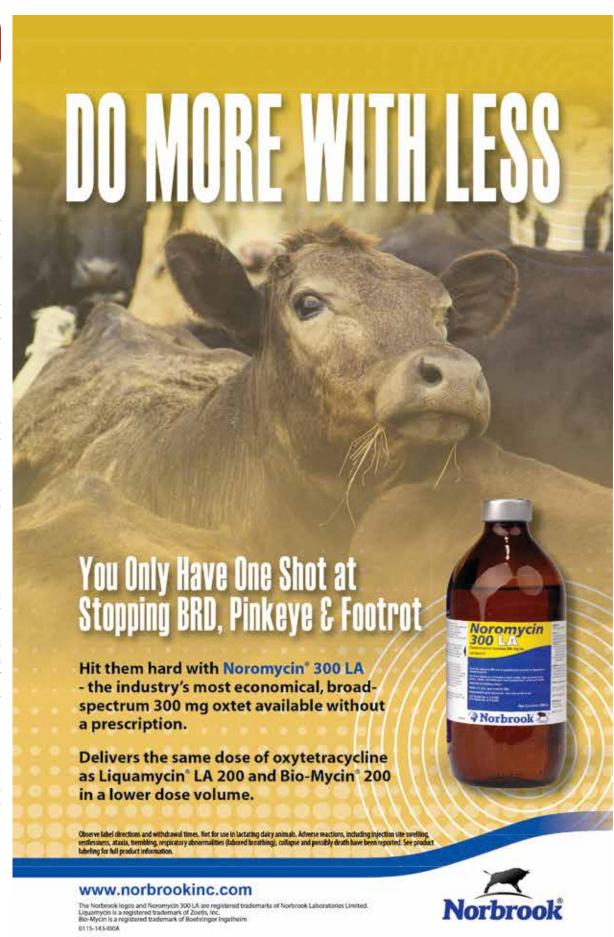
Today, producers and consumers, regardless of their operation size, require immediate access to current market data. This new site provides the necessary information in an easily navigable, user-friendly way. Individuals now have huge volumes of market data at their fingertips.

Daily and weekly updates are available in both audio and video formats, and weekly reports remain available in traditional text format. In addition, the site houses more than 10 years of historical data. Graphs of seasonal and historical price data, which can be customized by the user, are also available. Users will find vital data and commentary from the CME group in relation to futures markets and industry news.

All features of the website are compatible with mobile devices, so users can instantly access data, whether they are in a tractor planting crops, feeding livestock or flying across the country to an important meeting.

For more information regarding the Missouri Department of Agriculture, visit agriculture.mo.gov.

—Source: Mo. Dept. of Agriculture release.



PASTURE PROFITS

'Grass Grows Grass'

Managing stocking rate to forage growth changes

Story By Brittni Drennan for Cattlemen's News

As a cattleman, you've been given titles like physician, marketing expert, nutritionist and mechanic, but agronomist also ranks among the top of the list.

As fellow producer Bob Salmon pointed out at the Southwest Missouri Spring Forage Conference, taking a little time to implement grazing management practices you can make better use of pastures and increase stocking rate, ultimately increasing the bottom line.

Salmon has a diversified grazing operation near Appleton City, Missouri, and often offers advice and educational presentations to the public on stocking rates as it relates to grazing management. On his operation, Salmon has a heifer and yearling development program as well as a cow-calf operation. He claims he is not an expert on grazing management; he simply aims to spark result in increased efficiency

Your plate is already full. ideas and share with others You are a jack-of-all-trades. what has proven to be successful for his operation.

> "What I do may not be a fit for everyone," Salmon said, "but I operate under the philosophy of remaining flexible in my thinking. I don't do anything without having a reason for doing it."

> The first step to better grazing management is subdividing pastures. For example, in an extensive system, if a producer is turning out cows onto 100 acres of pasture and never rotating his herd, he will not get the desirable utilization out of the grass. According to Salmon, cows in this scenario are more selective about what they eat instead of utilizing the whole pasture. When they are able to select only what they want to eat, cows will focus more on their favorite spots which depletes more desirable grass species and allows undesirable plants to take over. Better utilization of pasture will



Giving pastures a rest period between grazing helps prevent root damage. —Photo by Joann Pipkin

and usage of grass already available.

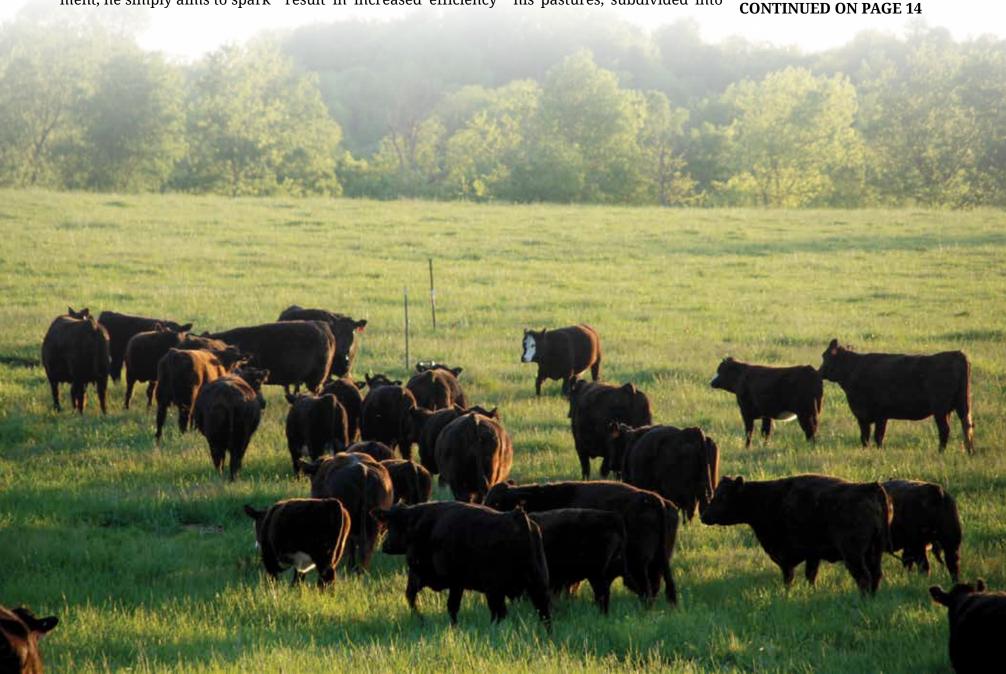
"Getting started is simple because doing something is better than doing nothing," Salmon said. "The idea of subdividing your pastures prevents damaging your grass before it has time to recover properly. Having smaller paddocks allows you to skip over slow growth areas and provides more options and more versatility in the end."

Salmon suggested giving that grass 30 to 40 days to rest between grazing periods, depending on the amount of rainfall. In a particularly dry season, a rest period of 50 to 60 days could be required. The goal is to prevent the grass from being bitten off too short which weakens the grass and damages the roots. To provide an example, Salmon said his pastures, subdivided into

paddocks by single hotwire fences, are laid out in squares of roughly 10 acres. He is able to put 400 head on one 10-acre paddock to graze for one day and, during a rapid growth period, rotates his group once per day.

"You don't change the size of your group," Salmon said, "you adjust the size of your paddock or you change the number of times you move your herd — either more or less often — depending on the condition of the grass.'

To know when to move the herd, you have to observe the grass frequently. Before turning out cows onto a paddock, Salmon recommends the ideal grass height be 6 to 8 inches tall, allowing cows enough length to get a good bite, and moving the herd before the grass gets below 3 inches.



PREVENING PINEXE

IS AS EASY AS



Vaccinate with **Piliguard® Pinkeye TriView®** to stimulate the production of pinkeye-fighting antibodies in the tears that bathe the eye.

VACCINATE

This cell-free bacterin cross-reacts with 103 different strains of pinkeye-causing bacteria for broad-spectrum cross-reactivity with field strains.

2

STOP THE FLIES

Flies can rapidly spread pinkeye bacteria throughout your clients' herd. Tag and pour with **Double Barrel™ VP ear tags** and **Ultra Boss® pour-on** to provide up to five months of face fly and horn fly control.

MANAGE THE ENVIRONMENT

Flies are attracted to damaged and watery eyes. So reduce irritants like seed heads, pollen and UV light by mowing tall pastures and adding shade where needed.

Help your clients manage pinkeye from every angle. Recommend the Merck Animal Health 1-2-3 Pinkeye control program and visit stopcattlepinkeye.com today.

2 Giralda Farms • Madison, NJ 07940 • merck-animal-health-usa.com • 800-521-5767 Copyright © 2015 Intervet Inc., doing business as Merck Animal Health, a subsidiary of Merck & Co., Inc. All rights reserved. 3/15 BV-PinkBeef 53169



GRASS GROWS GRASS • FROM PAGE 12

"Grass grows grass," Salmon said. "I don't want to get much lower than about 3 inches because when you get lower than that you slow the regrowth of the grass. It has to be able to get sunshine and regrowth without taking too much out of the roots. On the other side, if it's too tall, you begin to sacrifice nutrition."

After subdividing pastures, the second step is improving nutrition. Salmon said it is critical to know what nutrients are required for your cowherd, pointing out that a cow's nutrition requirements will change throughout her production year. It is equally as important to understand the quality and quantity of nutrients offered in the pasture. Simply put, the goal of this phase is to grow more vegetative grass.

"A cow will only take so many bites a day, and you want every bite to be full and nutritious," Salmon said.

Typically grass starts growing in March, Salmon explained, and if it is unkempt and allowed to grow until the middle of the summer, that grass will not be as nutritious if it had been grazed down and remained vegetative. The more mature a plant gets, the more fiber it has and the less energy and protein it retains. And, the more fiber there is in the grass, the less grass cows eat. If a pasture is skipped over and does become overgrown, Salmon said only then would he bale it and feed it as hay.

"Everything I have is a pasture and under a grazing system," Salmon said. "If we have a paddock that got too mature because we skipped it or didn't have enough cattle to put on it in a timely matter, then we will hay it, but we don't have a designated hay pasture. The only time we hay is to get the paddock back in condition to graze. That's the hardest thing for a producer to do is to negate his hay. As you improve your grazing management system, you'll find that you'll have to feed less and less hay."

As far as applications such as fertilizer and herbicides, Salm-

on again emphasizes having a flexible mindset and refraining from unnecessary practices just because they are routine. Most of his pastures are fescuebased with some legumes and mixed grasses. He only uses herbicides to spot spray with a handgun along fence lines and small, secluded areas, and he applies fertilizer only when it is necessary and the conditions are right. The only input he applies regularly is lime.

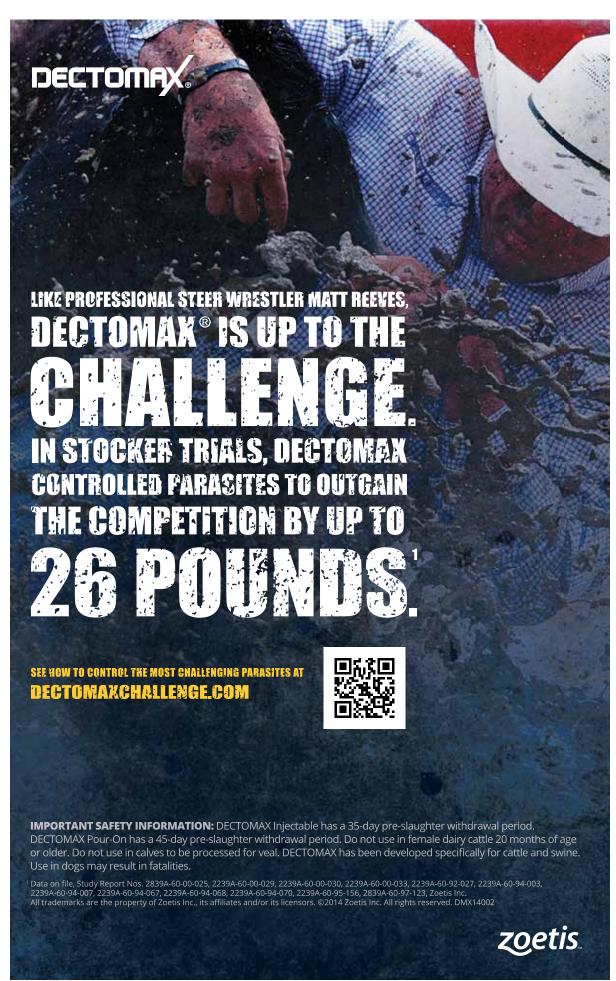
"In 2012 we fertilized in the fall of the year because it was a necessity, and it worked," Salmon said. "We had been in an extremely dry year, and because of the hurricane we were expecting a larger amount of rainfall. If you have to fertilize, you need to do it in the fall of the year to grow more winter grass."

The final step in better grazing management is stocking rate, which is different than stocking density. Stocking rate refers to the entire operation while stocking density relates to how cattle are contained and how many pounds are put on one particular paddock on one particular day.

"After a producer subdivides his pastures and starts improving his grazing management," Salmon explained, "he will find that he is able to grow more grass and will be able to increase his stocking density and, therefore, his stocking rate as a result of better management."

A producer is able to increase stocking density with better utilization of the grass. As Salmon pointed out, maintaining a proper balance is important. If production per head increases, the production per acre decreases. To maintain optimal production per head, more grass has to be left out in the paddock, allowing cattle to be more selective. On the other hand, if too little grass is available, the cattle will experience reduced levels of dry matter intake.

"It is definitely a learning process, but you get better and learn more as you go along," Salmon said. "Sometimes it is easier to understand when you can see a grazing management operation for yourself."



14

TRENDING NOW

Out with the Old

New animal identification requirements now in effect

From Our Staff

Now that the two-year grace period is over, livestock owners must now heed a new animal identification numbering sys-

The National Animal Disease Traceability Program went into effect March 2013, but many producers still had ID tags based on the former system on hand. The U.S. Department of Agriculture then established a two-year grace period to allow producers to use the old 900 or USA tags until March 11, 2015.

"Now, those producers who were using the old tags should only tag animals with the new 840 tags," explained David Fernandez, livestock specialist with University of Arkansas Cooperative Extension. "Animals tagged before March 11, 2015, do not need to be tagged with the new 840 tag. The old tag will be recognized as official for the life of the animal."

Animals already enrolled in a national health program, such as the brucellosis program for cattle or scrapie program for sheep and goats, do not need an additional tag, Fernandez said. Also, breed registry identification tattoos and stateregistered brands will be accepted.

The identification system does not apply to feeder calves unless they are being used temporarily as rodeo stock. Feeder calf rules are being formulated and will be released for public comment before they go into effect, he says. Rodeo stock must be identified under the rules of the Traceability Program.

Fernandez reminds producers that the rules only apply to animals moving across state or tribal boundaries. As long as producers' animals remain within the state, they need only comply with the rules set by the Arkansas Livestock and Poultry Commission (http://alpc.arkansas.gov/ regulations/Documents/EntryRegs.pdf) which primarily involve animals entering the state. The ALPC has created a voluntary premise ID system that will allow producers to comply with the national ID system (http://alpc.arkansas.gov/programs/Pages/VolunteerID.aspx).

"If shipping animals out of state, be sure to check with the governing body of the state(s) across which or into which you are shipping animals," he advises.

For more information about the National Animal Disease Traceability Program, go to www.aphis.usda.gov and click on the Animal Health link. Then, click on the Traceability link.

EDITOR'S NOTE: See related article on page 17 of this issue.

—Source: University of Arkansas Cooperative Extension

PENNIES FOR PROFIT

5 Forage Tips for April

- 1. Move cattle to newly seeded pastures with legumes to reduce competition from grasses.
- **2.** Feed supplemental energy, like corn silage, hay or corn, if animals are thin or if pasture quality is low.
- **3.** Begin scouting for alfalfa weevil early in the month.
- **4.** Seed warm-season perennial grasses.
- **5.** Apply spring fertilizer to pastures according to soil tests.
- —Source: University of Missouri Extension



1:00 PM (CT) • OSCEOLA, MISSOURI

Wheeler & Sons Livestock Auction 18 month-old Simmental, SimAngus™, Balancer® and Angus Bulls



Black Polled 1/2 SM 1/2 AN son of PF Viking 001



Black Polled 1/2 SM 1/2 AN son of GW Paramount 718Y

Marb

TEXT, call or email anytime about the bulls or to request a sale book.

DREW MORAN 660-351-2825 • admoran3@hotmail.com Chuck Miller 573-881-3589

www.NewDayGenetics.com



Jared Wareham 660-492-2777 Marty Ropp 406-581-7835 Garrett Thomas 936-714-4591 Clint Berry 417-844-1009 www.alliedgeneticresources.com

BROADCAST LIVE ONLINE Powered by DVAuction

MANAGEMENT MATTERS

Healthy=Happy

Keeping soil, plants, animals in top shape makes for joyful producer

Story By Elizabeth Walker for Cattlemen's News

Pasture management varies throughout cattle-producing states. When I was living in Texas and New Mexico, I learned about a simple rotational grazing method in which ranchers would rotate cattle or even sheep into a new pasture every 4 months and try not to graze pastures for a year if they could, to allow flora and fauna in the entire

That might seem extreme to people in Southwest Missouri, but keep in mind, that part of the West receives about 10-14 inches of rain per year and recovery can take a long time. The desert Southwest is a land comprised of a frail ecosystem combined with the toughest and roughest topography, for maximum plant recovery. U.S., at least in my opinion.



Extended-Release Injectable Parasiticide

5% Sterile Solution

NADA 141-327, Approved by FDA for subcutaneous injection For the Treatment and Control of Internal and External Parasites of Cattle on Pasture with Persistent Effectiveness

CAUTION: Federal law restricts this drug to use by or on the order of a icensed veterinarian.

INDICATIONS FOR LISE

LONGRANGE, when administered at the recommended dose volume of 1 mL per 110 lb (50 kg) body weight, is effective in the treatment and control of 20 species and stages of internal and external parasites of cattle:

Gastrointestinal Roundworms	Lungworms
Bunostomum phlebotomum — Adults and L ₄	Dictyocaulus viviparus – Adults
Cooperia oncophora — Adults and L ₄	
Cooperia punctata — Adults and L ₄	1
Cooperia surnabada — Adults and L ₄	1
Haemonchus placei — Adults	Grubs
Oesophagostomum radiatum — Adults	Hypoderma bovis
Ostertagia lyrata – Adults	
<i>Ostertagia ostertagi</i> − Adults, L₄, and inhibited L₄	
Trichostrongylus axei — Adults and L ₄	Mites
Trichostrongylus colubriformis – Adults	Sarcoptes scabiei var. bovis

Parasites	Durations of Persistent Effectiveness
Gastrointestinal Roundworms	
Bunostomum phlebotomum	150 days
Cooperia oncophora	100 days
Cooperia punctata	100 days
Haemonchus placei	120 days
Oesophagostomum radiatum	120 days
Ostertagia lyrata	120 days
Ostertagia ostertagi	120 days
Trichostrongylus axei	100 days
Lungworms	
Dictyocaulus viviparus	150 days

DOSAGE AND ADMINISTRATION

LONGRANGE® (eprinomectin) should be given only by subcutaneous injection in front of the shoulder at the recommended dosage level of 1 ng eprinomectin per kg body weight (1 mL per 110 lb body weight).

WARNINGS AND PRECAUTIONS

Withdrawal Periods and Residue Warnings Animals intended for human consumption must not be

slaughtered within 48 days of the last treatment This drug product is not approved for use in female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to

A withdrawal period has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

Animal Safety Warnings and PrecautionsThe product is likely to cause tissue damage at the site of injection, including possible granulomas and necrosis. These reactions have disappeared without treatment. Local tissue reaction may result in trim loss of edible tissue at slaughter.

Observe cattle for injection site reactions. If injection site reactions are suspected, consult your veterinarian. This product is not for intravenous or intramuscular use. Protect product from light. LONGRANGE $\!\!\!^\circ$ (eprinomectin) has been developed specifically for use in cattle only. This product should not be used in other animal species.

When to Treat Cattle with Grubs

 ${\it LONGRANGE}\ effectively\ controls\ all\ stages\ of\ cattle\ grubs.\ However,\ propential and the property of the property$ timing of treatment is important. For the most effective results, cattle should be treated as soon as possible after the end of the heel fly (warble fly) season.

Environmental Hazards

Not for use in cattle managed in feedlots or under intensive rotational grazing because the environmental impact has not been evaluated for

Other Warnings: Underdosing and/or subtherapeutic concentrations of extended-release anthelmintic products may encourage the development of parasite resistance. It is recommended that parasite resistance b monitored following the use of any anthelmintic with the use of a fecal

TARGET ANIMAL SAFETY

Clinical studies have demonstrated the wide margin of safety of LONGRANGE® (eprinomectin). Overdosing at 3 to 5 times the recommended dose resulted in a statistically significant reduction in average weight gain when compared to the group tested at label dose. Treatment-related lesions observed in most cattle administered the product included swelling, hyperemia, or necrosis in the subcutaneous tissue of the skin. The administration of LONGRANGE at 3 times the recommended therapeutic dose had no adverse reproductive effects on beef cows at all stages of breeding or pregnancy or on their calves. Not for use in bulls, as reproductive safety testing has not been conducted in males intended for breeding or actively breeding. Not for use in calves less than 3 months of age because safety testing has not been conducted in calves less than 3 months of age.

Store at 77° F (25° C) with excursions between 59° and 86° F (15° and 30° C). Protect from light

Made in Canada.

Manufactured for Merial Limited, Duluth, GA, USA. ©LONGRANGE and the Cattle Head Logo are registered trademarks of

©2013 Merial. All rights reserved.



In the Midwest and other more temperate areas, rograzing tational can be performed more rapidly than what some do in the West. As an NRCS friend of mine from Texas told me. "Nature doesn't like bare ground." Anytime we lose grass and have bare soil, Mother Nature covers it — usually with some type of plant we could live without. Soil health is critical to managing our pastures. Protecting the soil, alive with billions of organisms, is the first step toward having healthy plants.

Grazing management is a critical tool that can be used to protect our soil. In a recent study, soil samples were obtained from three different farms in the Southeastern part of the United States. Each farm had a different livestock management style. One farm practiced adaptive high stock density grazing in which stock density varied from between 100,000 lbs/acre to 500,000 lbs per acre with cattle moved to fresh forage on a daily basis. The second operation practiced rotational grazing in which the animals were moved every 2 to 4 weeks. The last farm practiced continuous grazing.

Scientists dug pits 3 feet deep and took note of soil structure, root development and presence of soil organisms. The farm in which high stock density grazing was used had greater root development with some roots reaching 3 feet in length, and a greater quantity of earthworms. In addition, this farm had greater soil organic matter. Soil is healthiest when microbes have access to living plant material.

Organic matter helps to cool the soil and helps the soil retain moisture. The concept is similar to mulching a garden or mulching around trees. Or-

ganic matter prevents water from evaporating and prevents unwanted plants from growing. Strategic grazing of forages keeps those plants in a vegetative state. The proper grazing, and subsequent trampling of forages, forms a thatch that acts like mulch. In addition, manure and urine produced from the grazing animals is more evenly distributed and beneficial for the soil, the soil microorganisms and the desired forages.

Proper and strategic grazing of forages actually promotes root growth. Plants with greater root growth are able to not only reach deeper soil moisture, but also are able to mine minerals deep in the soil and make them available to grazing livestock or for younger plants with lesser roots. As soils improve, and more forage is produced, a greater stocking density can be obtained.

All this may be fine and good, but high density rotational grazing can be labor-intensive. Adaptive grazing management is a strategy that helps a producer to use his or her livestock more efficiently to manage and improve the land. The animals' production status, human labor inputs, as well as climate and ecological considerations, are used to establish a grazing plan. As pasture health improves, fewer inputs are needed in terms of chemical fertilizers, more forage is produced, and thus less hay is required. As pasture health improves, animal health subsequently improves. Time equals money. Producers will either spend their time managing their forages for optimum growth while increasing their stocking rate, or pay for inputs to supplement a constant stocking rate.

Rotational grazing has a place in Southwest Missouri and implementing a rotational grazing program, even a simple one, is a valuable first step to improving soil health, improving plant health and improving animal health.

-Elizabeth Walker is associate professor of animal science at Missouri State University.

TRENDING NOW

Disease Traceability Compliance

Requirements for cattle moving interstate

A final phase of the national animal disease traceability rules is underway, and with it, a change in the type of identification methods meeting the requirements.

Effective March 11, all official ear tags noted under the animal disease traceability requirements must be tamper-evident, approved by USDA, contain an official animal ID numbering system and an official ear-tag shield.

The recognition of manufacturer-coded numbers with the 900 series and "USA" prefix will be discontinued and producers can consider changing to 840 tags.

Accepted identification varies, depending on location, and could include brands, tattoos, ear tags, registration papers, certificates, owner-shipper statements or a combination of identification systems. For detailed information on acceptable identification, visit the USDA's traceability website.

USDA first announced new rules for animal disease traceability in March 2013, which included a two-year transition period to adopt official ear-tag criteria. Each state was charged with reviewing policies and, if necessary, revising them to meet national standards.

"Cattle producers who are moving cattle interstate this spring are encouraged to check with both the shipping and receiving states to make sure they are complying with the change in USDA regulations," says Ginette Kurtz, American Angus Association® director of commercial programs.

The American Angus Association offers several programs and services that comply with the current USDA rules for animal disease traceability, including the age-and-source verification program, AngusSource®.

- AngusSource is a USDA process-verified program that documents group age, source and a minimum 50 percent Angus genetics, while incorporating valuable information from the Association database. Calves are identified using an official AngusSource ear tag that meets USDA regulations for traceability.
- AngusSource Genetic is an additional choice for cattle producers to verify Angus-sired genetics, source and group age through the Association's database. The neon green AngusSource Genetic tag is available in three options: visual, RFID or ChoiceSet.
- CustomCattleTags.com offers traceability-compliant ear tags from Destron Fearing, as well as EID readers, syringes and other accessories that are cost-effective for any cattle producer. The interactive website allows you to build custom cattle tags, step-by-step, and preview a mockup before ordering.

According to Glenn Fischer, a senior vice president for Allflex, the new identification requirements give the industry a window of understanding about animals moving throughout different regions of the country. That's important when it comes to tracing animal disease, but the data doesn't end there, Fischer says.

"It's not only something where we want to know where the diseased animals come from, but also where the good animals come from, and how we can optimize things that are successful when they move from the cow-calf level to the stocker, feeder and ultimately the packer," Fischer says.

USDA recommends cattle producers contact their State Animal Health Official for more details on each state's traceability activities and requirements. For more information on how the Association can assist in traceability compliance, contact the commercial programs department at 816-383-5100 or visit www.angus.org.

—Source: American Angus Association release



Get a Handle on Johnsongrass

A look at the good, bad and ugly on this pesky weed

Story By Alison Bos for Cattlemen's News

 ${f H}$ aving a complete understanding of Johnsongrass – its life cycle, benefits, risks and management considerations - is important, especially for cattlemen.

Dr. Will McClain, University of Missouri Extension agronomy specialist, and Dr. Mike Burton, Missouri State University professor of agronomy and ecology, both provide insight of just exactly what Johnsongrass is and the risks that come with utilizing it as a source of

Both McClain and Burton agree that a love/hate relationship exists for Johnsongrass because it does have several desirable traits. However, the risks and problems that can potentially accompany Johnsongrass make many producers want to eliminate the grass from their pastures.

"Johnsongrass can produce forage of high quality, but comes with the risk of poisoning from nitrates and/or prussic acid when under stress," Burton said.

"If you understand how Johnsongrass grows and what it wants, controlling it is easy, as well as taking care of it and keeping it around," McClain explained.

While speaking at the Spring Forage Conference in Springfield in early March, McClain explained that Johnsongrass is considered high-quality forage. According to McClain, it can produce up to five tons of good quality forage per acre. It grows in the summer, so its growing season lasts approximately 3.5 months. Johnsongrass is very drought-tolerant and persistent. It will also provide growers a lot of tonnage. Johnsongrass contains high crude protein (10-14 percent) up right, it is a good quality forage, especially when compared to other forages.

can potentially be good-quality forage, it is important to un-

drought, frost, herbicide injury or high winds that result in leaf injury. According to McClain, when high levels of prussic acid build up inside an animal, its blood cannot hold oxygen causing it to suffocate. Prussic acid is typically found

plant. The plant will hold on to these unused nitrates forever whether it is grazed or cut for hay. The only way to reduce accumulated nitrates is for the plants to grow out of the problem.

Both Burton and McClain rec-



Johnsongrass can be a valuable forage for livestock owners, but utilizing it comes with risk of nitrate poisoning if it isn't managed properly. —Photo courtesy Eldon Cole, University of Missouri Extension.

derstand the risks and problems that are associated with it. McClain stated that Johnsongrass is very invasive. It can quickly take over an area and reproduces from both the seed and rhizome. An average plant can produce up to 80,000 seeds per plant and up to 275 feet of rhizomes. Within 19 days of seedlings emerging, rhizomes are already developing. It should also be noted that seeds can remain viable in the soil for up to ten years. In fact, in some states, including Missouri, Johnsongrass is considered a noxious weed.

"Johnsongrass can be valuable forage, but it comes as a package that includes some significant risks," Burton said.

One of the most dangerous aslevels and TDN (55-65 per- pects of Johnsongrass is that cent) content meaning if put it can build up toxic levels of prussic acid and can accumulate nitrates, which can kill cattle.

Even though Johnsongrass Burton says prussic acid levels are also elevated after the plant endures stress such as in younger plants, and is located more in the higher parts of the plant. High rates of nitrogen applied to soils low in available phosphorus can also elevate potential for increased prussic acid levels.

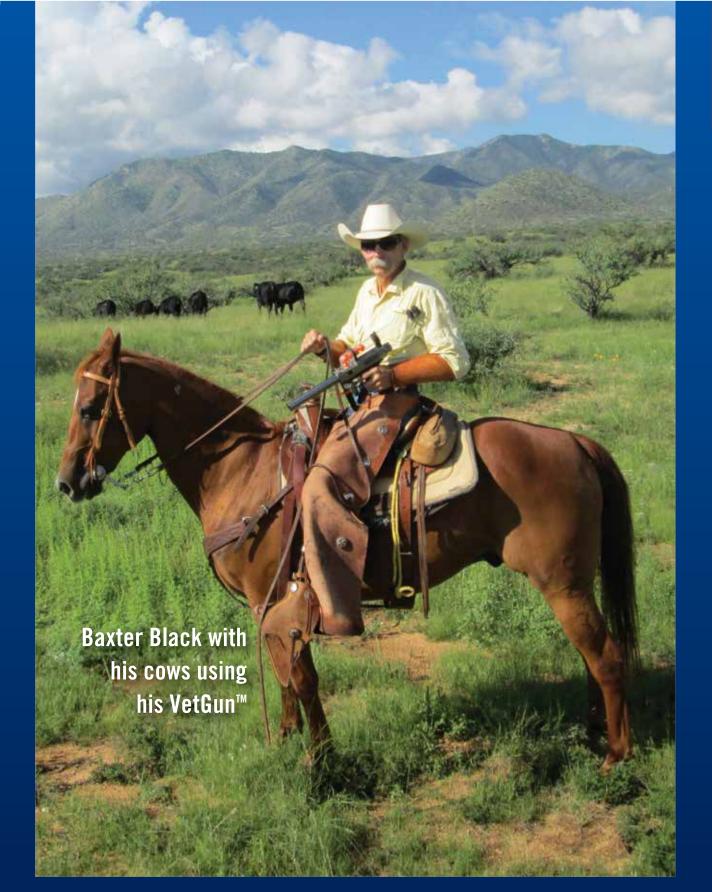
It is crucial for producers to know to avoid grazing Johnsongrass at times when prussic acid levels are high. Fortunately, McClain explains that prussic acid does dissipate fairly quickly. It is not stable, therefore, it will not cause major problems if Johnsongrass is used for hay.

Nitrates can also interfere with the blood's ability to carry oxygen when consumed by cattle. Nitrates are accumulated by sorghum-type grasses especially during a drought. They also accumulate when nitrogen is applied to areas where Johnsongrass is present. McClain said that anything that inhibits photosynthesis can cause an increase in nitrates which are generally found lower in the plant instead of higher in the

ommend conducting forage tests for prussic acid and nitrate levels any time a producer is concerned. University of Missouri county extension offices can help producers with this.

Johnsongrass can be controlled in several ways. McClain explains that understanding its life cycle is crucial. This allows a producer to develop a plan, whether it is mowing, grazing or applying chemicals. He also recommends using more than one of these practices.

"If you knock something down enough times, it will not get back up; Johnsongrass is the same way," McClain said. "You need to keep it under control and it will not become an invasive problem."





CONFINING HANDLING **STRESS**

VetGun @.«

www.agrilabs.com

www.smartvet.com

VetGun delivers effective horn fly control in your herd with no handling, no confinement and no stress to you or your cattle. A precise dose of AiM-L topical insecticide can be applied from a safe distance minimizing handling time and labor. Call us today to request a demo or watch our video online at www.AgriLabs.com/VetGun.



Put Your Best Foot Forward

Simplifying is the first step toward a positive margin

Story By Brittni Drennan for Cattlemen's News

Tmplementing better manage-**⊥**ment practices does not have to be difficult, according to Hugh Aljoe, consultation program manager and pasture and range consultant at The Samuel Roberts Noble Foundation. Aljoe was a featured speaker at the Southwest Missouri Spring Forage Conference March 3 in Springfield.

"In fact," Aljoe said, "simplifying is often the first step to moving toward a positive margin, at least a return to capital, land and labor. Simplifying includes strategically implementing best management practices to address the underlying issues in the operation."

These best management strategies are practices both small and large operations should take into consideration. Aljoe emphasized the key factor is for producers to identify underlying issues in each step, and the only way to do that is to keep

thorough production and financial records, allowing producers to easily assess areas of improvement and make yearto-year comparisons.

To begin implementing better management practices, producers need to understand their stocking rate relative to their carrying capacity. From what Aljoe has seen, many of the most successful producers are those who are conservatively stocked, providing the possibility of additional opportunities during more productive years and allowing for periods of decreased production.

"If you're stocked at 80 percent for what you would expect for an average rainfall year, you'll typically find yourself with pasture issues only one out of

seven years," Aljoe said. "Destocking just a little bit allows for flexibility in good years to retain extra heifers, precondition the calf crop, or add some to weaning weights by weaning later. So, there's a benefit if you can graze as long as possible during the year, rely less on hay, and part of that includes stocking at a slightly lower rate."

To assist in the area of pasture management and stocking rate, it is important to develop a management plan and accurate records, taking note of applications, rainfall, inputs and observations in order to analyze data to make better, more informed decisions. Detailed records not only help demonstrate what works, but also document what does not work which is just as important. Analyzing data allows producers to see their progress as well as determine where their focus needs to be.

"Soil tests and forage tests can be very helpful in order to get optimal production," Aljoe said. "In the case of pastures, you want to apply focus and inputs to your most productive land because it's going to have a better return on your investment."

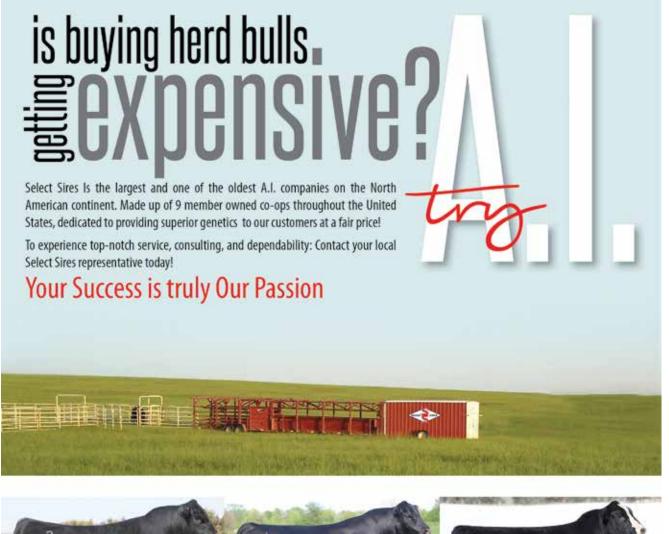
Aljoe added, "You also want to know what nutrients are needed to obtain optimal production. Soil testing allows a producer to do both. The same is true with feeding cattle."

Forage testing allows the producer to identify the quality of hay and determine what nutrients are needed to meet the requirements for each class of cattle on the farm. A producer can then strategically feed the hay with minimum feed without guessing at the amount. "You need to know where your worthwhile investments lie," he explained.

Aljoe suggested producers review where expenses can be reduced, beginning with their largest accounts. Feed and forage are typically one of the largest expense categories. The goal with forages is to keep pastures properly managed in order to graze cattle as long as possible, reducing the amount of hay one has to feed, which again, is a function of stocking rate.

"We need to make sure we know the nutrient requirements of the animal, and we need to know the quality of

CONTINUED ON NEXT PAGE





7AN384 COURAGE

7AN368 COMRADE

Conception. Calving Ease. Carcass. Cows. To experience the finest in customer service, turn-key Al programs and YEARS cutting-edge genetics, Contact Select Sires MidAmerica, Inc YOUR SUCCESSOUR Passion Southwest Missouri sales manager: Kent Daniels SW MO 417.343.6157 Area Sales Managers: Independent sales representatives: Cliff Strieker SE MO 502.905.2513 **Brad Cromer** Marshfield, MO 417-689-2119 Dan Busch NE MO 573.289.2058 Mountain Grove, MO Chris Logan 417-259-2106 Matt Drake Mount Vernon/Springfield, MO NW MO 816.738.1825 Rebekah Callison 417-310-2322 NW MO/SE NE 502-724-4778 David Wormington Monett, MO Victoria Drost 417-236-3835

BEST FOOT FORWARD FROM PREVIOUS PAGE

feed, which includes hay, the cattle are getting," Aljoe said. "If you have hay that's over 10 percent crude protein you may not have to feed any feed at all, and 8 to 10 percent is more than adequate for a dry cow. By producing or purchasing hay of the quality to meet the nutrient needs of your livestock, you've just reduced one of your major expenses – feed, just by testing the hay and knowing the quality of feed you're providing."

Another major expense category Aljoe sees as an opportunity to reduce is equipment. Fuel, depreciation, repair and maintenance all factor into costs. Aljoe suggested producers streamline their operations to become more cost-effective by investing in cost-saving equipment while reducing the amount of unessential equipment. Buying commercial feed in bulk rather than in sacks and using by-product feeds in a mixture can potentially save \$20 to \$60 per ton or more, but Aljoe recommended producers consult with a livestock specialist or nutritionist to determine what is best for the operation. A smaller producer should consider purchasing hay instead of producing it himself. Eliminating hay equipment and related expenses also provides access to additional land to support more grazing pasture.

Next, producers can focus on increasing returns as a best management strategy, and the first thing to do is to visit with a veterinarian to develop a herd health plan. Whether a producer chooses to precondition his calves or sell them at weaning, it is about protecting investments.

Additional common practices to increase revenue include dehorning or utilizing naturally polled genetics as well as castrating bull calves. Culling unproductive cows is perhaps one of the most effective ways to increase revenue in your operation. Also, Aljoe recommended breeding cows to bulls that will compliment the cowherd. He noted that research has shown having a phenotypically uniform calf crop has proven to bring additional profits to the bottom line. Expected Progeny Differences (EPDs) can help cattlemen utilize desirable genetics when selecting bulls. EPDs provide a level of assurance in

the traits producers are seeking and result in more accurate mating projections. Aljoe suggested using an industry expert such as a livestock specialist to assist in understanding EPDs and how to select for traits of economic importance to the operation.

Aljoe said he is often asked when calving should occur. "You want to breed your cows so that you're calving at or just prior to the period of your peak forage quality and/or production," he explained. "In areas where you have quite a bit of fescue you have the opportunity to calve in the fall, which has advantages when it comes to marketing."

Marketing is the final stage of Aljoe's best management strategies. Foremost, producers need to manage shrink whether selling backgrounded stock or weaned calves.

"When you get ready to market, it usually pays to background or precondition," Aljoe said. "You can potentially get \$10 to \$15 per hundred-weight more for VAC-45 calves than those fresh weaned calves. If you have good cows, have invested into performance bulls, have a good herd health program and are following the best production practices of the herd, preconditioning and marketing VAC-45 type calves it is almost a no-brainer. It pays the producer to do it."

In addition, producers should select a marketing venue, particularly one like Joplin Regional Stockyards, where sellers have access to the most buyers. True market discovery can be found where the largest concentration of buyers is present. Then, market calves during an advantageous time when the market is on the rise, avoiding seasonal slumps typically observed from mid-September through October and early November.

"It's not all about the revenues and the number of animals you sell; it's about the costs attributed against the revenues that make the difference," Aljoe said. "They either add to the margin or eat up the margin. With good records, a producer can determine the difference."



Friend Not Foe

Put beneficial insects on your side

Story By Rebecca Mettler for Cattlemen's News

Missouri pasture or hay field in the summer months and you are likely to find a variety of insects. And, not all of those insects are harmful to the forage present. In fact, a larger number of species are considered beneficial insects compared to pest species.

"The richness of the environment determines how many insects are going to be there," explained Wayne Bailey, University of Missouri Extension entomologist, at the annual Southwest Missouri Spring Forage Conference held in March in Springfield, Missouri.

"Alfalfa being one of the premier forages with high protein content is one that attracts a lot of insects," Bailey said. "We don't have a lot of pest insects in it but the ones that are there can be severe."

A typical Missouri alfalfa field can be home to anywhere from 500 to 1,000 different kinds of insects throughout the summer growing period.

"Of those, less than one percent is a pest insect. Five to 20 percent are beneficial insects and 80 to 90 percent are transients that don't cause much feeding damage," Bailey said.

The transient insects act as a food source for quail and other birds as well as the beneficial insect population.

Bailey pointed out that most of the pest insects are exotic. The pest insect that gets imported into Missouri does not have the beneficial insects species present to control the pest population like it does in its native environment.

There are three types of biological control agents from the insect world that can act as defense against pest insect populations. Those types are predator insects, parasitoids and microorganisms.

"The predator insects typically feed on other insects, going out and consuming them," Bailey explained. "We have parasit-

alk through a Southwest oids where the female lays eggs on the body of the host either on it or inside. The larvae get inside and will feed on the pest insect and eventually kill it. Then, there are microorganisms, bacteria fungi and viruses that are out there in the field."

> Bailey credits the ladybird, or more commonly referred to as the ladybug, as the number one predator in all Missouri crops. The species will feed on aphids in the spring alfalfa and is one of the first emerging beneficial insects.

> "Most insects come out after 60 degrees but the pink ladybug becomes active around 40 degrees and can be the first one out in the spring eating aphids," Bailey said.

> Though ladybugs are active in the spring and fall they will take a summer estivation, or summer sleep, once the temperatures get too hot.

> There are three species of beneficial insets that fall into the parasitoid insect category to combat the alfalfa weevil, which is the most disastrous pest insect in Missouri's alfalfa fields. The two types of bathyplectis attack the worm stage of the alfalfa weevil and stop the insect from feeding. But, they can take awhile to kill the insect. Sometimes instead of controlling this year's alfalfa weevil population, they are reducing the numbers next year by taking out the larvae so they can't go into the adult stages, Bailey explained.

> He shoots for getting 12 percent parasitization in alfalfa to control the population of alfalfa weevil, which is no easy

> Insecticides can knock the population of beneficial insects down to a bare minimum and require the population to build back slowly. Bailey suggests producers leave a very small area in the field unsprayed as a reservoir site.

> "Now your population doesn't have to start from zero, it can



The ladybug is credited as being the number one predator in all Missouri crops. —Photo courtesy USDA Agricultural Research Service.

start at 40 percent," Bailey said.

Dung Beetle

Establishing and maintaining dung beetle populations in Missouri is one of Bailey's research focus areas. It's his and other researchers' goal to facilitate a complex of dung beetle species.

"Different species remove dung a different way and rate. That's why we want a complex of several different species working together within the cow pies.

Dung beetles are very efficient at their job. Research at the University of Missouri Southwest Center in Mount Vernon has clocked taurus dung beetles disposing of a cow pie within 24 to 48 hours, according to Bailey.

Dung beetle populations offer many benefits to the cattle operation. Dung beetles dispose of cow manure before it volatilizes and looses nitrogen and bring nitrogen into the soil when they burrow and bury it in the soil. They can also break the lifecycle of certain flies that have to be in the manure for a certain amount of time.

"If we can get rid of the manure quickly we can reduce the horn flies, tape worms and liver worms," Bailey said. "We have seen a 95 percent reduction in horn flies."

However, keeping a dung beetle population can be tricky. The reason Missouri doesn't have very many dung beetles is because Ivermectin is a very efficient dewormer and takes out dung beetles, according to Bailey.

Bailey suggests that cattle producers deworm cattle in the fall or winter when dung beetles aren't as active. There are also dung-beetle-friendly dewormers available. Two examples are Cydectin and Moxidectin.

Keeping a healthy population of beneficial insects is something cattle producers should think about more regularly. From ladybugs to dung beetles, beneficial insects can be an onthe-farm work force improving the forage and land.

THE TRUE VALUE OF IMPLANTING

With cattle prices at record highs, protecting your profit is more important than ever. Grazing phase implants continue to be one of the most profitable management tools available, consistently improving weight gain by 15 to 40 lbs over non-implanted controls.1

"Implants are one of the oldest technologies used in beef cattle, but certainly one of the most profitable management tools we have available today," says Casey McMurphy, Ph.D., technical consultant for Elanco. "It's one of those technologies we researched very heavily in the 1990's, but it's gone by the wayside a little. Producers often see implants as an extra cost — but an additional 15 to 40 lbs in today's market is definitely very profitable and easily makes up for the cost."

In each phase of beef production, implants have been shown to increase rate of gain, live weight and value.2 With these improvements in production, implants increase value by an average of \$15.45 to \$41.20 per head when used in calves and stocker cattle, respectively.3,4*

Common implant misconceptions

Knowing the proven value of implants, why are only 30 percent of operations implanting? One of the most common reasons for non-use is perceived premiums at the sale barn for non-implanted or NHTC cattle.

Superior Livestock data from 2011 to 2013 indicates that the sale price for implanted calves is not statistically different than non-implanted calves.⁶ Additionally, the data indicates that there is only a \$1.13/cwt premium for NHTC cattle.6 Evaluating the total potential gain with implants and other technologies is crucial to managing your bottom line.

"A common question that I get is, 'if I implant suckling calves, am I going to get discounted at the sale barn?" says McMurphy. "There may be times where that has been advertised — but you have to make sure that you get paid for those pounds that you're giving up. So, if you're getting a premium on a \$1/lb basis, that may not actually be a total dollar return if you consider the potential to have an additional 15 to 40 lbs of total gain."

Some producers also believe there is a negative impact of calf implants on feedyard production.⁵ However, multiple studies have demonstrated that implanting steers with Component® TE-G with Tylan® significantly improved grazing performance without negatively impacting feedlot performance or carcass yield and quality.^{7,8,9}

Choosing an implant to fit your operation

"One of the challenges is confusion about the products available — there are products available for suckling calves all the way to finishing cattle, so trying to figure out which one fits their operation may keep producers from using them," says McMurphy.

McMurphy suggests following this simple approach to choosing an implant:

- Cow/calf producers should use a calf implant Component E-C with Tylan, the "C" representing calf
- Stocker/backgrounder operators should use a grazing implant — Component TE-G with Tylan, the "G" representing grazing

Protecting implant value

Once a producer has chosen an implant, it's important to ensure that he/she gets the most potential profit from that implant.

"Anytime you have an open wound — on the ear, for instance, where the implant is inserted — that allows an opportunity for infection," says McMurphy. "Infected implant sites can rupture or abscess and producers would see less gain. That's why using localized antibacterial protection is so critical when implanting, especially in dirty and/or wet conditions."

Component with Tylan implants reduce implant defects because every implant includes a blue Tylan pellet, which dissolves and spreads throughout the implant site to minimize abscesses and ruptures.¹⁰ When there are no implant defects, the implant can provide maximum performance improvements.11

"The value of using implants today is as great as it's ever been," says McMurphy. "Protect your ROI by choosing an implant with localized antibacterial protection."

The label contains complete use information, including cautions and warnings. Always read, understand and follow label and use directions.

Administer one dose in the ear subcutaneously according to label directions.

Based on grazing implant data presented by Kuhl1 and the calculated value of gain described by Peel3 using current economic data

Fixuals. (Ykulh, G. L. 1997. Abstract: stocker cattle responses to Implants. Oklahoma State University Symposium: Impact of Implants on Performance

and Carcass Value of Beef Cattle, 51-62.

*Touchett, S. K. and J. G. Andrae. 2001. Implant strategies in an integrated beef production system. J. Anim. Sci. 79:E110.

*Peel, D. Plains Nutrition Couroil 2012.

*Oklahoma Farm Report. 2014. http://oklahomafarmreport.com/wire/news/2014/08/00426_PeelAnalysis08182014_100628.php

Lalman, D. L., et al. 2015. Cow/calf and stocker implant update.

stock Auction data 2011-2013. Data on file

"Sharman, E. D., P. A. Lancaster, G. W. Horn, and G. D. Hufstedler. Effects of energy supplements and a combination grazing implant to performance and carcass characteristics of growing cattle on wheat pasture. Plains Nutrition Council 2011.

"Sharman et al. (2012). Anim. Sci. Vol. 90 (Suppl. 3): 669.

"McMurphy et al. (2013) Prof. Anim. Sci. 29:27

10 Elanco Study No. T1 EUS 090001. Data on file

Loughin, M. 2004. Evaluation of implant site characteristics. Elanco Reference No. 1948. Data on file



Tylan is a trademark for Elanco's brand of tylosin. Elanco, Component®, Tylan® and the diagonal bar are trademarks owned or licensed by Eli Lilly and Company, its subsidiaries or affiliates. © 2015 Elanco Animal Health. NCFD 34417-1

USBBUMUL01123



Which Side of the Fence?

Missouri fence laws depend on interpretation, need

Story By Joann Pipkin, Editor

One issue. Two laws. The result is often a complicated outcome.

According to University of Missouri Extension Agricultural Business Specialist Joe Koenen, Missouri's fence law is very complicated because two separate laws govern the state depending on the county in which the land is located.

Most of Missouri currently falls under the updated general law, Koenen says. However, 18 counties — including Bates, Newton and Saint Clair — are governed under the local option law.

Under general law, if both landowners have livestock, Koenen says they are to meet and within a "reasonable" time build or repair the boundary fence.

Under the Optional Fence and Enclosure Act, both landowners can be required to pay half the cost of a fence if one owner has a "need" for a boundary fence.

Words like "reasonable " and "need" are subject to interpretation and make it important for landowners to have an understanding of the laws, Koenen says.

"Your definition of reasonable and my definition of reasonable might be completely different," he explains.

Under the general law, there is no legal recourse if one landowner refuses to build his or her portion of the fence. Under the option law, the judge decides how to enforce the law. And it's not uncommon, he says, for a judge to lack agricultural knowledge when it comes to fencing issues.

Laws differ in many ways, including type of fencing materials and spacing. For example, under the general law, the definition of a legal fence is now referred to as "wire or wood at least 4 feet high with posts no more than 12 feet apart." Other types of fences can and must be approved by the Associate Circuit judge.

In comparison, under the optional law, a legal fence is "4 barbed wires or the equivalent with posts no farther than 12 feet apart with no stays and 15 feet apart with one stay."

Koenen notes that under both laws, you do not have the legal right to remove a fence without your neighbor's okay. "You can remove brush or trees that are obstructing the fence," he says.

"Many people run into adverse possession issues on a fence line," Koenen notes. Adverse possession is a le-

gal term that essentially says if a fence has been in a location for more than 10 years, a new owner may not be able to move it if the neighbor refuses.

Evidence to argue adverse possession includes a survey, photos and witnesses, Koenen says. Use of the land during the time period also is taken into account.

According to Koenen, fence cases less than \$3,000 can be heard in small claims court. This can even be done without an attorney.

"You can also file a suit against a neighbor over a fence issue if it's higher than that," he says.

The bottom line on Missouri fence laws, Koenen maintains is summed up in one word — interpretation.

A guide to "Missouri Fencing and Boundary Laws" is available for free download at http://extension.missouri. edu/p/G810 or contact your local extension center.



BEST OF THE BEST ALF ROPING 2015

PRESENTED BY











May 24-25, 2015

RISEN RANCH COWBOY CHURCH ARENA | CARTHAGE, MISSOURI I-44 & Exit 22 (just west of Joplin Regional Stockyards)

Top 15 Calf Ropers in the World & 15 Invited Guests rope for



May 24 3:00 p.m. First and Second Rounds — Risen Ranch Arena May 25

Presentation of Cowboys—at JRS 9:00 a.m. Third Round—Risen Ranch Arena 10:45 a.m. 12:00 p.m.

Cowboy Meet & Greet / Visit Sponsor Booths **Shootout Round**

Calf Ropers

Shane Hanchey | Tuf Cooper | Tyson Durfey | Clint Cooper | Timber Moore | Caleb Smidt | Adam Gray Marty Yates | Ryan Jarret | Justin Maass | Cimarron Boardman | Cooper Martin | Fred Whitfield Cade Swor | Trevor Brazile | Ryan Watkins | Hunter Herrin| Matt Shiozawa | Clint Robinson Blair Burk | Reese Riemer | Stran Smith | Jerome Schneeberger | Houston Hutto | Bradley Bynum Cory Solomon | Bailey Moore | Skyler Moore

More Details on www.joplinstockyards.com or call 417-548-2333

Proceeds Benefit RISEN RANCH COWBOY CHURCH www.risenranchcowboychurch.com



Get a Chance to Win a John Deere Gator & Flat Bed Trailer

2 Day Pass

10 & Under

SCHUCHMANN TRUCKING







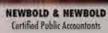
2:00 p.m.



































(E

embassy







Construction



Forage Queen

Alfalfa reins in beef cattle operations

Story By Rebecca Mettler for Cattlemen's News

Missouri only ranks 21st in tions, but he urges producers to put the pencil to it. falfa produced, however, it's an important crop traditionally for Southwest Missouri's dairy industry and also has validity as a forage option for beef cattle.

"Besides alfalfa being a good forage, we have to think about alfalfa being an awfully good companion to fescue, Eldon Cole, Southwest region livestock specialist with the University of Missouri Extension. Cole was a presenter at the 31st Annual Southwest Missouri Spring Forage Conference held in March in Springfield, Missouri.

When used as supplemental forage, Cole points to the role alfalfa can play in meeting the nutritional requirements of a beef cow. He figures that five to eight pounds of alfalfa per day is a good mate to the fescue or other grass hay that producers are feeding their cowherd.

"Feed prices have fluctuated quite a bit over the years, and start looking at the value of alfalfa protein and energy, there is some value there and a place for it," said Tim Schnakenberg, regional agronomy specialist with the University of Missouri Extension.

Cole sees alfalfa prices competitive to other supplemental op-

Feeding options go far beyond strictly feeding to mature cows. When wintering calves, Cole suggest feeding three to five pounds of alfalfa, or a little bit more if you want to spark more gain.

"If you are running a stocker program and are putting a few pounds on the calf, say two pounds a day, if you have straight fescue that's virtually impossible," Cole said.

Options in feeding alfalfa are as broad as the producer's creativity. Cole has seen producers fashion alfalfa creep feeders for calves. He also has spoken with those who are experimenting with alternate supplement feeding where alfalfa is fed every other day or every third day by multiplying the pounds per cow by the number of days. Alfalfa fed every other day would equate five pounds for each day in the two-day cycle, or 10 pounds to-

Harvested at one-tenth bloom. producers will get good quality alfalfa with 58 percent Total Digestible Nutrients (TDN) and between 17 to 20 percent protein.

"Stop and think where you can buy a supplement that is going

to have those types of ratings," Cole said.

Producing alfalfa comes with it's own set of growing guidelines and procedures. Schnakenberg cites fertility as the number one factor when considering alfalfa establishment.

"To me, alfalfa is probably more dependent on good fertility than any other crop that I know of, more than corn and beans," Schnakenberg said. "Especially if you want to get the full lifespan of the stand and good in-season management, you have to stay on top of fertility."

Schnakenberg noted potash requirements of 240 pounds is typically needed for a four ton yield and cautioned producers to keep up on the boron levels in the soil. Typically, he recommends one pound of boron per acre applied, but not during the first year of establishment as it is toxic to seedlings.

Achieving a soil pH of 6.5 is another important key factor, Schnakenbergy said.

"That takes some time to get the lime to start reacting in the ground," Schnakenberg said.

Selecting a good alfalfa variety is very important and not as simple as it used to be. University variety trials have become less of a commonplace due to expense and the fast-paced atmosphere where companies are continually releasing new product. Schnakenberg urges producers to do their own research, talk to the dealers and look at data from trials before making a decision.

Considerations to deliberate over include pest resistance to potato leafhopper, aphids, wilt, as well as the option of Roundup Ready varieties, according to Schnakenberg.

"To me the number one benefit of having Roundup Ready is having the weed control the first and second year," Schnakenberg said. "If you can get the weed control taken care of in the first couple of years, that's key to the longevity of the stand."

One downside to Roundup ready is that producers aren't able to interseed grasses into the alfalfa stand and utilize the trait to it's full potential.

Alfalfa also requires a welldrained soil.

"You might have a nice piece of ground in the creek bottom, but if you don't have drainage, don't plan to put alfalfa in there," Schnakenberg said.

Attention must be placed on planting the seed at the right time, the right depth and at a good seeding rate. Also important is the management of pests. For increased longevity of the stand, do not harvest past mid-September in the Southwest Missouri region.

As Cole pointed out, the old adage that alfalfa is the queen of forages still holds true. Often producers are hard-pressed to find supplements that match the quality of alfalfa. Although producing alfalfa isn't for everyone, its importance is becoming more known to the beef industry.



Understanding Alfalfa Pests

Keep an eye out for these four pests

Story By Rebecca Mettler for Cattlemen's News

Avigorous stand of alfalfa has the potential to produce many tons of high quality forage for up to 10 years or longer. Protecting that stand from pests should be top of mind for producers throughout the growing season.

Below is an in-depth look at four of the main insects that University of Missouri Extension Entomologist Wayne Bailey sees inflicting the most damage on alfalfa stands from year to year.

Alfalfa Weevil

The alfalfa weevil tops Bailey's list as the most important to control insect in alfalfa stands. Often, infestations can be more severe in southern Missouri where temperatures can rise above 60 degrees for several consecutive days during the fall, winter and spring.

"The adults can lay fall, winter and spring eggs," Bailey said. "There are longer infestations because of many hatches compared to one big peak of larvae often experienced in more northern regions of state."

Luckily, the alfalfa weevil provides producers with plenty of options for control. Primary methods of control include insecticide application, early harvest and mob grazing with livestock. Other options include the inclusion of grasses into alfalfa stands and the presence of beneficial insects and pathogens.

A majority of the time, alfalfa weevil is in the larvae stage if the plant is harvested a few days ahead of one-tenth bloom. The mechanical process of cutting and crushing the alfalfa stems and foliage can kill developing eggs and larvae. Mechanical harvest studies in Missouri have shown a 95+ percent reduction in alfalfa weevil larval numbers, according to Bailey.

Grazing cattle on alfalfa with a management-intensive grazing system can often reduce the larval load by 90 percent or more. Producers should be aware that bloat could result from the grazing of alfalfa and take appropriate precautions.

Producers can find relief from alfalfa weevil infestations by interseeding grasses into alfalfa. Adding two pounds of orchardgrass seed per acre when seeding alfalfa or when an established stand thins, often reducing the number of overwintering adults moving in during fall to begin egg-laying.

Scouting for alfalfa weevils is very important in order to keep the pest population below the economic threshold. Bailey recommends starting the scouting process in early March when daytime temperatures warm up to 55 to 60 degrees. South-facing slopes are generally the first areas of a field to support larval infestations and damage in early spring.

"As alfalfa plants begin to grow in the spring, you may see the adults first but the eggs are there to hatch," Bailey said. "Go to the newest buds, break those open and you can see the first instar worm if they are present."

The eggs are laid in stems and once hatched, crawl up the buds and start feeding. Effectively scout for alfalfa weevils by selecting 10 stems from each of five locations. It's important to cut the stem and hold it upright and carefully cup the top of the stem while cutting to prevent loss of larvae from the stem. Move the stem into a white bucket and tap the stem to dislodge the larvae.

"If an average of one or more larvae per stem is found and 30 percent of plants exhibit larval damage, then the economic threshold has been reached and control is justified," Bailey said.

Potato Leafhopper

"Usually the potato leafhopper is a second or third cutting pest," Bailey said.

The insects travel on low-level jet streams and often arrive to the state during spring storms commonly accompanied by hail. Southern Missouri can



Blister beetles are a common alfalfa pest. Missouri is expected to see more of the insect this year because of higher grasshopper numbers in many areas in 2014. —Photo from Southwest Region University of Missouri Extension

expect potato leafhoppers to arrive around May 10 in most years, however some years the insects arrive a week earlier or later depending on storm movements, according to Bailey.

The insect feeds by a piercing and sucking method, which removes plant juices. The plant responds by yellowing, which is also known as "hopper burn." During the yellowing process, the plant starts breaking down. The potato leafhopper feeding reduces protein content and plant growth resulting in reduced quality and quantity of available forage.

Potato leafhopper scouting should begin during early May and end after harvest of third cutting.

Blister Beetle

Missouri alfalfa is home to seven species of blister beetles, but it's the striped blister beetle that is most common and causes problems for alfalfa producers marketing hay to horse owners. A horse that ingests 100 or more striped blister beetles in a 24-hour period has ingested a lethal dose.

The immature stage feeds on grasshopper egg pods present in the soil during fall and winter months. Bailey predicts that Missouri will see more blister beetles this year because of higher numbers of grasshoppers in many areas of the state in 2014.

The adults can be tricky to scout, they often move as groups quickly through an alfalfa field.

First-cutting alfalfa is best used for horses to better avoid blister beetles. Bailey also recommends reduction of flowering weeds in the field and visually inspecting hay for presence of dead beetles before feeding to horses.

Fall armyworm

Fall armyworms often affect alfalfa in the late summer and fall and are more prominent in the southern portions of Missouri. The species has a tendency to attach to newly seeded alfalfa fields and can inflict major damage in a short period of time, often resulting in complete loss of new stands.

"Fall armyworm larval infestations typically destroy a fall seeding of alfalfa in two or three days," Bailey said. "Look at it every couple of days. The costs associated with 15 pounds of alfalfa seed per acre can be substantial, so loss of stand to fall armyworm larvae should be avoided if possible."

Without argument, an alfalfa field is an important, high-quality forage source for the beef producers in southwest Missouri and surrounding areas. Keeping pest populations tightly under control is one strategy that allows producers to get the most out of their alfalfa stands.

More than a 'Novel' Idea

Why you should consider converting fescue pastures

Story By Joann Pipkin, Editor

Drive down any highway in the state of Missouri, and it's conceivable for every blade of grass you see to be endophyte-infected Kentucky 31 tall fescue.

But, it doesn't have to be that way.

According to David Davis, superintendant at the University of Missouri's Forage Systems Research Center, the Alliance for Grassland Renewal aims to help landowners replace toxic fescue pastures with novel endophyte fescue for better livestock performance.

Formed in 2012, the Alliance for Grassland Renewal brings together university, government, producers, seed companies, testing labs and nonprofit groups. The organization's goal of replacing toxic tall fescue with nontoxic endophyte

is being pursued through education, seed quality, incentives and promotion.

"Working together, we can accomplish more than we can working apart," explains Davis. "We all have the same goal in mind."

Cattlemen like Mount Vernon's Darrel Franson know firsthand the benefits of converting fescue pastures from toxic tall fescue to the novel variety.

"The program offers producers a chance to fully understand the technology of the novel endophyte and why Kentucky 31 so often costs us gain, reproductive performance and herd health," Franson says.

Franson has 23 years worth of pasture and cow/calf perfor-

mance records to back up his beliefs in the novel endophyte tall fescue. "These are real results on a real farm," he says.

"My records show that I get my money back in less than two years on the \$150-\$200 per acre conversion," he continues. That takes into account extra income Franson gets from improved reproductive performance, higher weaning weights and improved gain in stocker calves and replacement heifers.

Franson estimates additional income of \$120 per cow per year on his 70-cow herd, derived solely from increased weaning percentage and reproductive performance.

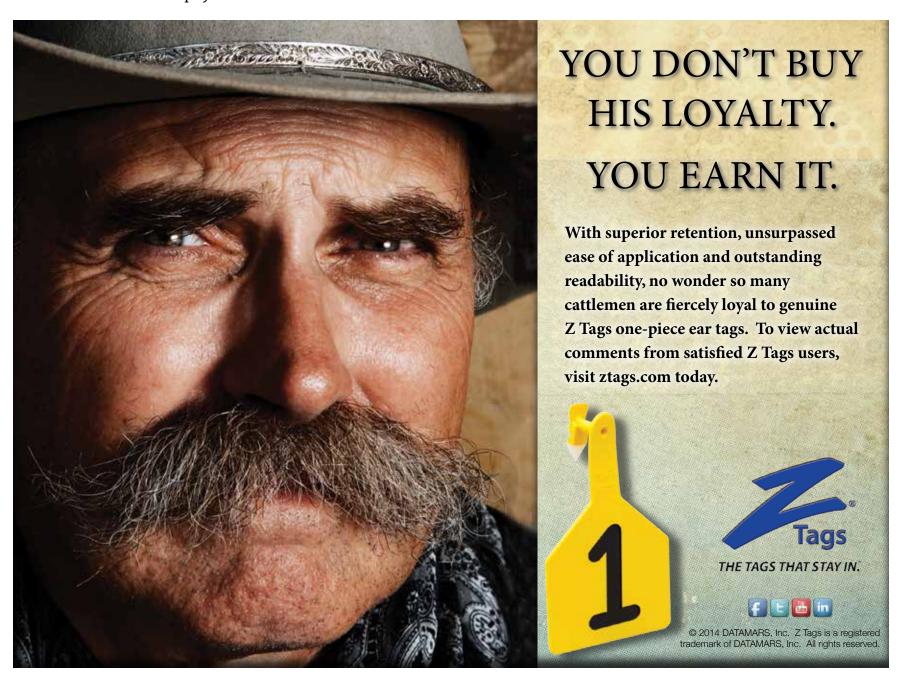
"We've been talking about toxic fescue for years," Davis says. "I think what folks don't understand is the economic impact of it on their own production and bottom line."

He goes on to note that it's not uncommon to see gains increase on a steer calf by half a pound per day just by removing him from the infected fescue. "You can do the math," Davis says. "At current beef prices, that's quite a bit of money over the season. There is a huge economic component to this, and we want producers in our state and others to take advantage of it."

Franson notes that before he converted his pastures, his weaning percentage was about 80 percent. Today, it's approaching 90. He's also getting higher conception rates in his cowherd, along with fewer abortions and stillborn calves, and overall better calf performance.

The Alliance provides educational schools to help producers successfully convert Kentucky 31 tall fescue to novel endophyte varieties. Schools are held in early spring each year at four locations across the state. While this year's sessions have concluded, the programs reviewed understanding fescue toxicosis as well as a walk-through of the conversion process. Conversion topics addressed establish-

CONTINUED ON NEXT PAGE



NOVEL IDEA FROM PREVIOUS PAGE

ment practices, fertility needs, smother crops, weed control, stand maintenance and variety selection.

"The schools hope to make producers aware of the economic impact of toxic-infected tall fescue on the economy and to give them the tools necessary to do a successful renovation," Davis says.

He adds that when doing pasture renovation, a lot of producers worry about having their grassland out of production for a set period of time.

While the spray, smother, spray technique used in the conversion process takes a little bit of time, Davis says it isn't a necessity to lose production. "Cover crops like winter or summer annuals help provide forage production during the conversion time."

Franson adds, "Renovation is an expensive process. You

wrong way. The workshop gives the whole picture of how and why to do the conversion to the novel endophyte."

Cost-share opportunities, like the Environmental Quality Incentives Program available through the Natural Resources Conservation Service, can assist producers with pasture conversion. Producers should check with their local NRCS office for program availability and full details.

Franson notes that converting pastures to the novel endophyte takes some management. Novel fescue varieties don't fare as well with KY31 in continuous grazing situations, he says.

"You have to manage your grazing," Franson stresses. "When the cattle get the grass eaten down to 3-4 inches above the ground, get 'em out of there. Let it recover."

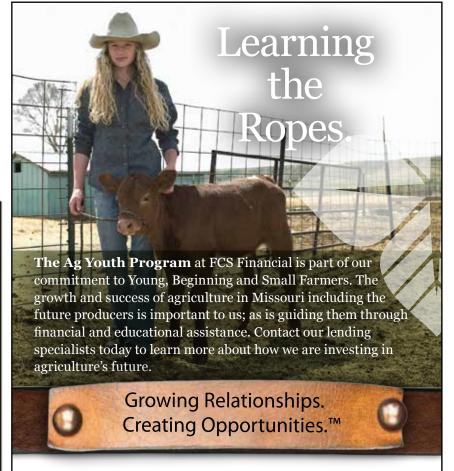
Editor's Note: Visit the Alliance for Grassland Renewal on the web

at www.grasslandrenewal.org. don't want to go about it the Specializing In SW Mo. Farms & Ranches! 'A Cattleman Who Knows Real Estate" BOLIVAR - 157 Ac., Hwy. 32, excellent grass, corrals, working pens, highly improved pasture \$549,500 LOUISBURG - 53 Ac., Hwy. 65, all open in grass, 3 ponds, 24x30 shop, barn, several buildings, kennel, 3 bed home\$225,000 EBENEZER - 145 Ac., off Hwy. 13, great location, private, 1/2 open, yesquip d creek, exc. hunting, totally updated corrage home \$628,400 REPUBLIC - 40 Ac., Hwy. P. gently rolling, fenced, cross fence SOLD , pond, waterers, barn, great location \$230,000 TUNAS - 310 Ac., off Hwy. 64 & T, private horse-man's paradise, rustic walk-out, indoor arena, stalls, tack room, great hunting \$790,000 DADEVILLE - 92 Ac., Dade 193 off Hwy. W, hunter's paradise, beautiful pipe fence entrance & gate, 40x100 state of the art barn, 1/2 open, creek, pond, great hunting.... \$235,000 ASH GROVE - 80 Ac., Hwy. F. mostly open fenced pasynder Contract oad forontage \$240,000 REPUBLIC - 157 Ac., FR 174, mostly open, in grass, new fence, 3 ponds, pole barn, exc. location, road on 2 sides.......\$786,500 LOUISBURG - 40 Ac., Hwy. 65, nice horse prop-erty, 3 bedroom home, 60'x120' indoor arena, 90'x200' outdoor arena, 30'x32' shop \$259,900 HALLTOWN - 356 Ac., Just off I-44, excellent improved pastures & fencing, 4 barns, 4 ponds, house, shop, good hwy frontage\$1,408,333 BRIGHTON - 585 Ac., 559th Rd., beautiful Sac River bottom, 1 1/4<mark>SQLD</mark> ong, irrigation pivot, deep black dirt, exc. crop farm\$1,800,000 ALDRICH - 540 Ac., Hwy. T, one of Polk County's best! Excellent improved pastures & fencing, pipe corrals, hwy. frontage\$1,701,000 AVA - 1,961 m/l Ac., off Hwy 14, exc. cattle ranch, mostly open, 90 pastures, exc. fencing, 40 ponds, springs & creeks, barns .\$4,412,250 BOLIVAR - 164 Ac., Hwy WW, fenced & cross-fenced, 2 ponds, 2 wells, corral, barn, 3 bedroom home\$533,000 LEBANON - 2,750 m/l Ac., Hwy. NN, state of the art horse facility, 47 indoor stalls, 25,000 sq. ft. indoor arena w/apartments, lodge on Niangua River, huge spring \$7,300,000 tomkisseerealestate.com

Reach 10,000+ Cattlemen in 8 States ADVERTISE in CATTLEMEN'S NEWS!

Call **417.548.2333** to place your ad





- Open to all Missouri 4-H and FFA members in counties served by FCS Financial.
- Funds available for qualifying 4-H and FFA projects
- Repayable within one year, interest free
- Learn how to keep good, accurate and complete project records





Find an FCS Financial office near you: 1.800.444.3276 WWW.MYFCSFINANCIAL.COM

Growing Relationships. Creating Opportunities. is a trademark of FCS Financial, ACA.



MANAGEMENT MATTERS

Genomic Gains: Bringing Value to Seedstock, Commercial Herds

Using genomics technologies can help guide a balanced genetic game plan

Story By Mary Soukup

You look across the way, and she catches your eye immediately. You've had your eye on her for a while now, but with the decision imminent, you can't help but notice – she's got "that look." She's structurally sound. She's calm in the pen and pasture. She's grown rapidly and early and has the body type you like in a cow. Decision made – she made the cut and is headed to the pen of replacements instead of the feedyard with the steers.

While the use of "eyeball selection" for replacement females has worked for generations and continues to be used on a majority of cow-calf operations across the country, the advancement of genomics technology is offering both seedstock and commercial producers new options when it comes to replacement heifer selection. New options that, according to Dr. Jared Decker, assistant professor and beef genetics extension specialist at the University of Missouri, allow commercial cattlemen to take less risk when making purchasing, selection and breeding decisions and have more confidence in that purchase. These technologies allow producers to put selection pressure on both the female and sire side of the pedigree as they strive to improve economically important

Here's a look at how these tools can help guide selection strategies, improve cattle herds and ultimately, enhance profitability.

It starts with the seedstock

Our first story begins near Kimball, Minnesota, at Schiefelbein Farms, a seedstock operation that not only sells bulls each year, but also purchases approximately 25,000 head of their customers' calves annually to feed in their feedyard.

"When genomics came along, we said we can't afford not to make the investment," Don Schiefelbein explains. "If we can get the improvement of

genetic predictions by making animals with accuracy levels of having 10, 15 or even 20 calves, we've got to do that service for our customers and for ourselves."

Beginning with replacement heifer candidates, Schiefelbein says their first goal was to make sure every mating counted. The Schiefelbeins used HD 50K, offered by Zoetis and Angus Genetics, Inc., to test all of the replacement females, which enabled them to zero in on the true genetic merit of their females and make informed breeding decisions for that female's entire lifetime.

The next step for Schiefelbeins was to use the HD 50K test on their bulls – a step that not only help them decide which bulls would go to their annual bull sale or to the feedyard, but also provides additional assurances to their customers. "As we saw how powerful the genomic prediction was, we decided it made a lot of sense for our customers to have the best prediction possible for the bulls they're buying to ensure that when they decide they're going to buy a heifer bull, a cow bull or some categorical bull for some value proposal, that they've picked the right bull," Schiefelbein says.

While it takes years, hundreds of offspring and an enormous amount of data to generate a traditional high accuracy EPD, DNA testing allows genomically enhanced EPD's to be calculated more accurately for young, unproven sires. The genomic-enhanced EPD will move higher or lower. At the same time, genomics always improves the reliability of the EPD and can be used as a risk management tool for commercial producers when making bull or replacement female purchase decisions.

"On the bull side, commercial producers like the idea of buying a bull with the rough equivalent of 14 daughters with information contributing to maternal traits, with 17 offspring

with growth and feed efficiency data contributing to all the feedyard performance and mature size traits, and having roughly 10 offspring that already have carcass data," explains Kent Andersen, Zoetis associate director of animal genetics. "HD 50K enables seedstock producers to more dependably characterize their bulls." Some may call the \$75 investment in the HD 50K test a leap of faith for seedstock producers since it's ultimately their customers who will benefit from the high-accuracy genomic information, but Schiefelbein says it's the opposite. "We have some of the best commercial cattlemen in the world who come to our place and purchase our genetics. If I can do anything to help them get a better prediction for that genetics package they're buying in our seedstock, that's a trade-off we'd make every day."

Commercial tools

The next chapter takes us to South Dakota and the ranch of Kevin Keckler, a commercial producer with about 325 Angus cows who has purchased bulls from Schiefelbein Farms since 2008. In 2014, Keckler decided to make use of a new strategy to assist his replacement heifer selection decisions and help determine future bull needs.

Enter GeneMax Advantage, a new DNA test created by Angus Genetics Inc., Certified Angus Beef and Zoetis, for commercial Angus replacement females (75 percent and higher). Introduced to the market in 2014, the \$44 per head GeneMax Advantage test was designed to provide commercial producers with an easy-to-use tool based on three comprehensive economic index scores, including Cow Advantage (based on heifer pregnancy, calving ease, weaning weight, milk, and cow size), Feeder Advantage (based on post-weaning gain, dry matter intake, carcass weight, yield grade and quality grade), and Total Advantage (a conception to CAB carcass value). The index scores range from 1 to 100, based on the economic impact of the underlying genetic predictions.

"We married up genomic predictions for individual traits with their economic impact to produce the index scores," Andersen explains. "Rather than bombard a commercial producer with information on 18 different traits and require a whole lot of work to figure out

which animals were most likely to deliver the most net return, GeneMax Advantage can boil it down to just a few numbers that predict differences in profit due to genetic merit."

In addition to the index scores, the test also provides commercial producers with "SMART Outliers" that identify heifers with genetic merit to be high cost (with regard to size and milk potential), to be difficult to handle relative to temperament and docility, and/or predisposed to tenderness or marbling issues. When producers receive the GeneMax Advantage results via a link to the AGI customer website, they can use a dropdown menu to flag the outliers at varying levels to help further customize and guide their replacement selection decisions.

When Keckler pregnancy checked heifers, he also took tissue samples of 128 replacement candidates with a goal of keeping 50 to 55 of the top heifers. His goal was to keep heifers with a Total Advantage score of 65 and above.

"The results came back very good," Keckler explains. "The heifers were very good in the cow traits and better in the feeder traits than I expected. In selecting bulls, I thought I was picking an 'all-around bull,' and upon testing the heifers, it looked like everything was very good in the areas I was concentrating. It was a confirmation of the decisions I've been making for years."While the results were good and helped him better understand the quality of his cattle, they also provided him information about how to continually improve his herd.

"The other thing the test did was show some of the cows that I thought would be the best, based on looks, were actually really low. Some that I kept were really high in the Cow Advantage but a little lower in the Feeder Advantage, but I can fix that with future bull selection decisions. There were probably 20 based on eye appeal and looks that I thought I would keep, but I've sold them because their numbers showed they're low in the traits I want to focus," he says.

Keckler will be DNA testing heifer replacements when he vaccinates them this year and says he intends to continue using the technology on his operation.

CONTINUED ON PAGE 32

ECONOMIC INDICATORS

Lower Farm Income Ahead

FAPRI: Risk management is more important than ever

Story By Jason Vance

There will be a significant drop in net farm income this year.

The Food and Policy Research Institute (FAPRI) at the University of Missouri delivered the message to Congress on March 9 in its 2015 annual agricultural baseline.

"Farm income in 2015 is expected to go down by about 27 percent from the 2014 level," says Pat Westhoff, FAPRI director. "Costs of production have maybe moderated a little bit, but we've seen a big drop in receipts for both livestock and crops."

Westhoff says good prices for agricultural commodities will be more of a challenge in the next few years. He says it will be more important for producers to think about ways to keep down costs and maintain returns.

"Risk management will be more important than it has ever been before because of that," Westhoff says.

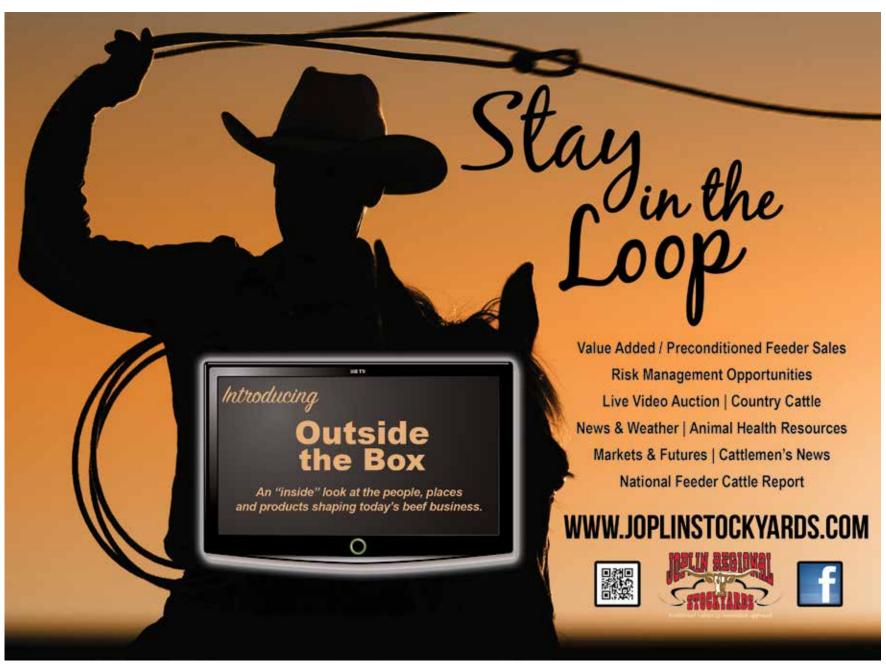
Westhoff also pointed to the need to make the right choice for your operation under the 2014 farm bill. Unlike the former farm bill program, where the payments were more or less fixed each year, the new programs are very sensitive to market conditions.

The baseline does have some good news for consumers.

For the past several years, food price inflation has been faster than overall inflation in the U.S. economy. "Food price inflation should be less this year and in 2016 could be even less than the overall rate of inflation," Westhoff says.

—Source: Jason Vance is with Univ. of Missouri Cooperative Media.





GENOMIC • FROM PAGE 30

Bringing it full circle

This story ends where it started. As previously mentioned, Schiefelbein Farms buys back more than 25,000 calves from their customers each year. Genomics have not only driven the seedstock side of the operation, but also now genomics are playing a bigger role in the cattle feeding operation. Not only can they help guide bull-buying decisions based on the needs of their customers (who have DNA-tested their females), but the genomics information also informs Schiefelbeins about the calves; then they buy them back in terms of feedyard and carcass performance predictions.

"Every bull we sell, we buy back those genetics times 20 or 25," Schiefelbein explains. "It's incumbent upon us to make sure we do everything possible to make sure the genetics we're selling to our customers are packaged the right way because eventually those genetics come full circle back to us. And they've got to perform for us at

a premium level." He says the one-two punch of using genomics information to guide both seedstock selection and heifer retention decision-making allows their customers to compete in the top of the industry.

Genomics today and beyond

While the Schiefelbein tale focuses on Angus-specific commercial DNA testing products, the use of genomics reaches far beyond the Angus herd (see sidebar). Decker says the price points for DNA tests, which range from about \$17 to \$85 based on the depth of the data, are getting to a point that commercial cattlemen can rapidly change the genetics of their operation or keep their genetics at an optimum level of production for their environment.

And with any new technology, as additional research is completed, new capabilities are made possible. For example, Decker says in the next year or two, we'll have genomic predictions for feed efficiency and tenderness. A little further down the road, he says predictions

Show-Me-Plus Story By Mary Soukup Since 1996, the Missouri Show-Me-Select Replacement Heif-

er Program has worked to improve reproductive efficiency and herd productivity and has provided commercial cattlemen with replacement heifers that have been managed according to best practices, says Jared Decker, assistant profes-

sor and Beef Genetics Specialist

at the University of Missouri.

In February, the program went to the next level, a new tier for heifers in the program called Show-Me-Plus. Decker says this designation will be achieved by having a genomic-enhanced EPD for registered heifers as well as commercial Gelbvieh heifers with the Gelbvieh Maternal Edge panel and commercial Angus heifers that have GeneMax Advantage information. Decker says as other breeds, such as Simmental and Hereford, develop commercial heifer panels, they will also be added to the Show-Me-Plus program.

Originally, the program had requirements related to reproductive practices and EPDs. Next, the program added a Tier Two designation for heifers sired from high-accuracy AI bulls.

Decker says Tier Two heifers regularly receive a premium on the sale date. "This next step is providing more information to the customers about the genetics of the heifer. The savvy commercial producers are realizing the value of those genetics and they're paying more for them."

In late December, one of the program's heifer sales averaged \$3,208, with some bred heifers topping \$4,000. While the sale premiums are an incentive to the program, it is also about improving production practices, especially related to health, nutrition and reproduction.

Overall, the Show-Me-Select program, Decker says, is a good example of how technology can help improve the herd. He says the program helps producers who were willing to learn and adopt AI programs in their herds. "Just by using those reproductive technologies, the genetics of the sires has improved, and when that happens, you get better replacement females retained and the overall quality of the herd improves."

-Mary Soukup is editor, Drovers. These articles are reprinted with permission from DroversCattleNetwill be made available for pregnancy and embryonic loss and possibly for disease resistance.

Decker says he's watching for predictions that would work in multiple breeds or crossbred animals. Current commercially available tests require the breed to be included in the design, and Decker says it's difficult to tell breeds apart at specific marker effects. He says as the technology advances it could be done so to better tell breeds apart at each of the individual gene effects.

Finally, regardless of the genetic merit, genetics are only half the equation, and cow-calf producers, regardless of size or type of operation, have to take care of the basics. Schiefelbein says the fastest way to destroy

genetic value is to mismanage the animals. Schiefelbeins have specific animal health protocols customers in the buy-back program must follow. Decker agrees, and says producers in Missouri's Show-Me-Select Replacement Heifer program focus on keeping traits balanced, and getting the basics right as they adopt new technologies.

At the end of the day, genomic technologies are providing the beef industry with new tools to manage risk and ensure genetic merit of the animals in their herds. Keckler says the technology can enable commercial producers to better position themselves for the future in terms of what cattle buyers want. "I wouldn't hesitate to do it, and I'm not. I'm going to do it every year."

Brief Summary of Full **Prescribing Information**



Antibiotic

100 mg of tulathromycin/mL

For subcutaneous injection in beef and non-lactating dairy cattle and intramuscular injection in swine only. Not for use in female dairy cattle 20 months of age or older or in calves to be processed for veal.

CAUTIONFederal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

INDICATIONS

INDICATIONS
Beef and Non-lactating Dairy Cattle
BRD – DRAXXIN Injectable Solution is indicated for the treatment of bovine respiratory disease (BRD)
associated with Mannheimia haemolytica, Pasteurella multocida, Histophilus somni, and Mycoplasma
bovis; and for the control of respiratory disease in cattle at high risk of developing BRD associated with
Mannheimia haemolytica, Pasteurella multocida, Histophilus somni, and Mycoplasma bovis.

IBK – DRAXXIN Injectable Solution is indicated for the treatment of infectious bovine keratoconjunctivitis (IBK) associated with *Moraxella bovis*.

Foot Rot - DRAXXIN Injectable Solution is indicated for the treatment of bovine foot rot (interdigital necrobacillosis) associated with Fusobacterium necrophorum and Porphyromonas levii.

DRAXXIN Injectable Solution is indicated for the treatment of swine respiratory disease (SRD) associated with Actinobacillus pleuropneumoniae, Pasteurella multocida, Bordetella bronchiseptica, Haemophilus parasuis, and Mycoplasma hyopneumoniae; and for the control of SRD associated with Actinobacillus pleuropneumoniae, Pasteurella multocida, and Mycoplasma hyopneumoniae in groups of pigs where SRD has been diagnosed.

DOSAGE AND ADMINISTRATION

Inject subcutaneously as a single dose in the neck at a dosage of 2.5 mg/kg (1.1 mL/100 lb) body weight (BW). Do not inject more than 10 mL per injection site.

Inject intramuscularly as a single dose in the neck at a dosage of 2.5 mg/kg (0.25 mL/22 lb) BW. Do not inject more than 2.5 mL per injection site.

CONTRAINDICATIONS

Injectable Solution is contraindicated in animals previously found to be The use of DRAXXIN In hypersensitive to the drug.

WARNINGS
FOR USE IN ANIMALS ONLY.
NOT FOR HUMAN USE.
KEEP OUT OF REACH OF CHILDREN.
NOT FOR USE IN CHICKENS OR TURKEYS.

RESIDUE WARNINGS

Cattle intended for human consumption must not be slaughtered within 18 days from the last treatment. Do not use in female dairy cattle 20 months of age or older. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

SwineSwine intended for human consumption must not be slaughtered within 5 days from the last treatment

PRECAUTIONS Cattle

The effects of DRAXXIN on bovine reproductive performance, pregnancy, and lactation have not been determined. Subcutaneous injection can cause a transient local tissue reaction that may result in trim loss of edible tissue at slaughter.

Swine
The effects of DRAXXIN on porcine reproductive performance, pregnancy, and lactation have not been determined. Intramuscular injection can cause a transient local tissue reaction that may result in trim loss of edible tissue at slaughter.

ADVERSE REACTIONS
Cattle
In one BRD field study, two calves treated with DRAXXIN at 2.5 mg/kg BW exhibited transient hypersalivation.
One of these calves also exhibited transient dyspnea, which may have been related to pneumonia.

In one field study, one out of 40 pigs treated with DRAXXIN at 2.5 mg/kg BW exhibited mild salivation that

STORAGE CONDITIONS

DRAXXIN Injectable Solution is available in the following package sizes: 50 mL vial, 100 mL vial, 250 mL vial, 500 mL vial

NADA 141-244. Approved by FDA



Distributed by:

Pfizer Animal Health
Division of Pfizer Inc, NY, NY 10017

To report a suspected adverse reaction call 1-800-366-5288. To request a material safety data sheet call 1-800-733-5500.

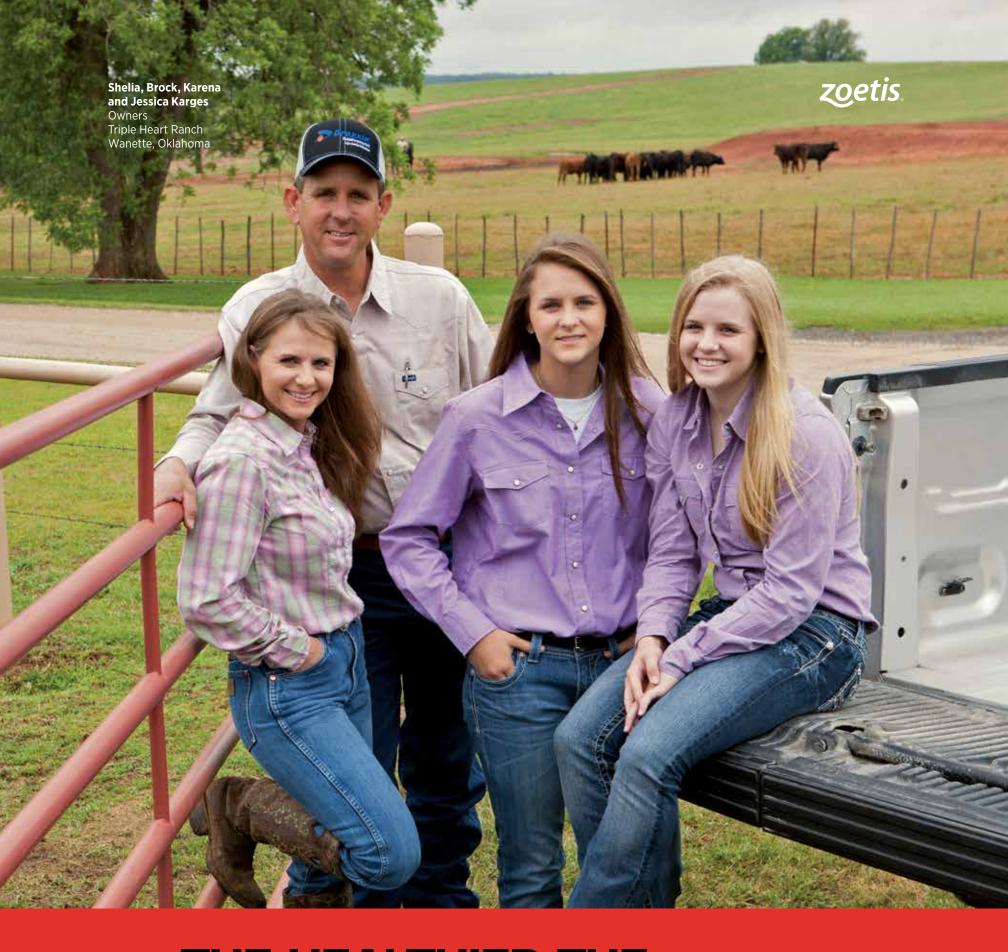
For additional DRAXXIN product information call **1-888-DRAXXIN** or go to **www.DRAXXIN.com**

TAKE OBSERVE LABEL DIRECTIONS

Made in Brazil

DRX12019 Revised: May 2011

www.joplinstockyards.com



THE HEALTHIER THE CALVES, THE HAPPIER THE FAMILY.

Each year, the Karges family runs thousands of cattle through their stocker operation. Using DRAXXIN® (tulathromycin) Injectable Solution has helped deliver fewer re-pulls, re-treats, chronics and mortalities by providing long-lasting treatment and control of bovine respiratory disease (BRD). Brock Karges says DRAXXIN has completely changed how he manages the cattle. "We've never seen the response due to metaphylaxis like we have with DRAXXIN," he says. Shelia Karges adds, "DRAXXIN gives us peace of mind. And you can't quantify the value of that." Talk to your veterinarian or visit draxxin.com/KargesFamily.



On your phone, use the bar code scanner app to scan this code and watch a video about the Karges family operation.

Important Safety Information: DRAXXIN has a pre-slaughter withdrawal time of 18 days. Do not use in dairy cattle 20 months of age or older. Effects on reproductive performance, pregnancy and lactation have not been determined.

For more details, please see full prescribing information.

All trademarks are the property of Zoetis Inc., its affiliates and/or its licensors. ©2013 Zoetis Inc. All rights reserved. DRX13066

Ready, Set, Bale Hay!

Harvest, fertility costs can add up

Story By Lisa Henderson for Cattlemen's News

Are you ready for hay season? Feed represents the largest annual expense for your operation, and harvested forage accounts for 25 – 30 percent of those annual costs. That's why attention to your haying operation is so critical. Maximizing forage yields and minimizing storage losses will reduce your costs and increase your profits. Forage experts urge you to consider a number of factors as you seek to obtain the greatest yield from hay harvest this year.

Among the most important contributing environmental factors in maximizing hay yield are moisture, temperature and sunshine. Cultural factors are adequate fertility, weed control and harvesting at the proper stage of forage maturity.

"Forage maturity at harvest is the number one factor that influences hay quality," explains John Jennings, professor of animal science and cooperative extension at the University of Arkansas.

When it comes to timing of harvest, Jennings says maximizing

hay yield might often come at the cost of lower forage quality.

"Hay yields increase up to a point as the forage matures, but forage quality declines as well," he says. "Forage should be harvested at a maturity stage that optimizes hay quality and produces an acceptable yield."

Joseph Moyer, forage crops research specialist with Kansas State University, says producers trying to maximize hay yield should consider whether they will sell the hay or feed it to their own stock.

"If you are feeding, it depends on the class of livestock," he explains. "For example, if they're dry cows or older cows, you can get away with a more mature harvest date, but with any other type of animal you can lose condition. If you are selling to a premium customer like a dairy, you will get a better return with harvesting at a more mature date. If you're selling as a premium product, then you need to gear towards that market."

Examining different species of forages also reveals differences in optimal harvest dates.

"For alfalfa, harvest at early bloom," Jennings says. "When the first cutting is made in spring, each successive cutting will come at approximately 30day intervals."

Unusually cold or wet weather might disrupt the normal alfalfa bloom pattern on first cutting. When that occurs, Jennings says it is "best to watch not only for bloom development, but also for initiation of new shoots from the crown. When new shoots begin forming, which will become the second cutting, it is time to cut even if the crop hasn't bloomed normally."

For most varieties of bermudagrass, first cutting should be made when the crop reaches 16-18 inches tall. Jennings says for fescue, orchardgrass and ryegrass, the recommended harvest stage for hay is at late boot to early heading.

Many producers harvest fescue in the spring, and Moyer urges producers to scout those pastures to determine harvest time. Harvest of fescue to maximize yield should be near bloom date, but scouting is necessary because bloom dates can vary up to a week or more. Heading date for Kentucky 31 tall fescue ranges from May 2 to May 10, averaging May 6, he says. But during the warm spring of 2012, the heading date was April 23. Bloom should occur 5 – 7 days after heading. If temperatures continue below normal as this year suggests, fescue bloom could be later than average.

"The best time to check is in the afternoon when sun is out and the warmth helps the anthers pop out," Moyer says. "Check for yellow anthers, which will indicate the bloom stage, when the majority of the plants have bloomed. You should be looking after the boot stage, before seed head starts to emerge."

Both Jennings and Moyer agree that baler type doesn't affect yield when comparing squares to round bales. Hay loss is more dependent on how the equipment performs. Bale quality can affect hauling, storage and feeding efforts, so the bale type should be chosen based on the most beneficial form for your purpose.

"Storage is most important," says Moyer. "With squares, moisture is more critical because they are packed tighter and do not have as much opportunity to dry out, which can cause mold. Round bales can be baled at a higher moisture rate around 15 percent, while square bales should be down around 12 percent."

Jennings says when all hay was baled in small squares they were all stored in a barn. If protecting the hay quality and quantity is important for small square bales, then it should be no different for the large bales, he says. Covered storage is best.

"We have measured hay waste during storage at 25 percent," Jennings explains. "That means 25 out of every 100 bales becomes mulch. Hay harvest and fertility costs are about \$28 per bale. So losses from improper storage cost as much as \$700 for every 100 bales."





Story by Lisa Henderson for Cattlemen's News

With prices for large round bales of prairie hay quoted at \$55 to \$65 each this spring, minimizing storage losses offers cattlemen a significant financial opportunity. University research finds storage waste is commonly 25 percent, which, at today's prices, translates into \$13.75 to \$16.25 per bale. On a national scale, it is estimated that the total value of hay storage and feeding losses exceeds \$3 billion annually.

That's a financial loss that should make hay storage considerations a priority. As hay season nears, storing hay in a barn significantly reduces losses compared to outside storage, but when that is the only option, producers should make every effort to minimize hay losses.

Dale Blasi, professor of animal science and extension beef specialist at Kansas State University, says indoor storage is always ideal, if available.

"With outdoor storage, the loss in DM [dry matter] and crude protein value, as well as the amount of corresponding feed refusals (waste), could approximately equate to \$25 to \$40 per ton," says Blasi.

According to the USDA, 55 million acres of hay are harvested in the U.S., which produces more than 119 million tons per year worth around \$6.7 billion in 2011. With the cost for feed inputs rising, cattle operators should be mindful of potential costs of storage losses. On some farms and ranches, such losses account for more than 10 per-

Hay storage losses account for more than 10 percent of the cost of livestock production. — *Photo courtesy Eldon Cole, University of Missouri Extension*

cent of the cost of livestock production.

"Feed inputs are a major expense item for annual cow-carrying costs. Any attempt to preserve the quality of harvested hay is a step in the right direction when striving to minimize feed expenses," says Blasi.

Moisture levels are critical to the storage of hay. Some loss is unavoidable due to respiration, microbial activity and weather degradation.

"Moisture content at baling also plays an important role. If hay is too wet, quality could decrease due to heating. However, baling too dry could cause baler losses to increase dramatically. Round bales should be baled at moisture contents ranging from 15 to 20 percent. The ideal moisture content for large round bales is about 17 percent," according to a forage fact sheet from Kansas State Research and Extension.

Dirk Philipp, assistant professor in the Department of Animal Science at the University of Arkansas, says it is difficult to put a general number to financial losses due to outside storage, but inside storage is optimal for retaining hay quality.

"Bales stored outside may lose anywhere from 5 to even 40 percent of their dry matter if stored just outside without tarps, etc. So, you basically lose

CONTINUED ON NEXT PAGE



SAVE THE DATE



Special Video Sale 1 p.m., April 16, 2015



Special Value-Added Sale June 25, 2015 Wean Date May 11

HAY STORAGE • FROM PREVIOUS PAGE

already one third of your feed quantity in addition to a huge drop in forage quality, resulting in lower animal performance."

One factor that producers must recognize is that they cannot see the decline in hay quality in outside stored bales because the drop in quality and dry matter loss is gradual.

University research studies show hay must be properly cured before storing, ideally at 18 percent moisture to prevent heating. Producers should monitor bale temperatures during the first two weeks of storage to make sure none of the bales heat up, which might cause a fire. Barns, and even outside storage areas, need adequate ventilation.

When storing hay outside, it is ideal to stack hay on palettes to avoid moisture penetration from below. Even stacking hay on concrete allows moisture to penetrate the bales. Covering with a tarp is essential, and tarps should also cover lower-row bales to prevent rain damage. Also, tarps should be placed in a manner so

the water can drain away from the bales and the storage area.

Philipp says it is important for producers to consider how they will access the bales after they are stored.

"Place them strategically for your specific kind of animals," Philipp says. "Producers may have lactating cows with calves, so they need better hay than dry cows, so the hay for each class should be kept separate. Hay loses value over time, anyway, so don't put the very best hay in a corner where it rots away."

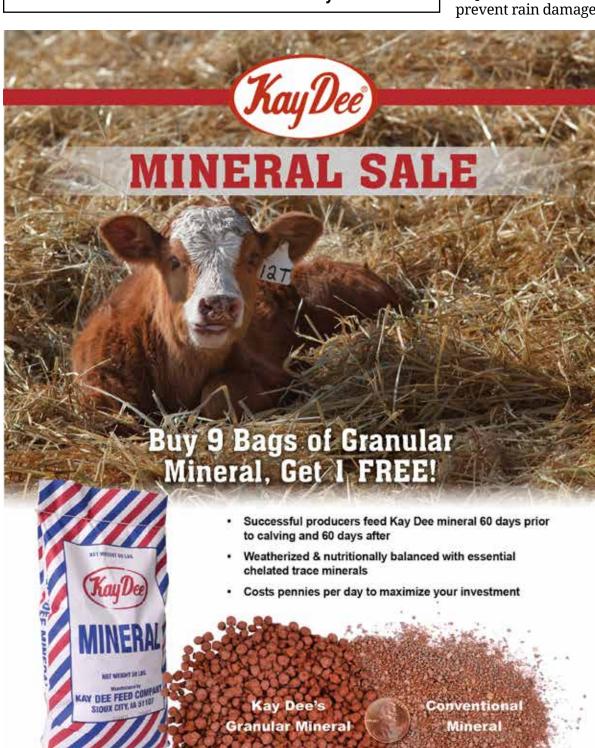
To simplify here is a list of do's and don'ts for storing hay.

DO:

- 1. Store in a sunny area with nothing to inhibit the bale from drying after rain.
- 2. Store on a gently sloping well-drained site.
- **3.** Avoid ground contact by placing bales on rock, wooden pallets, etc.
- **4.** Protect tops and sides of bales with covers.
- 5. Use net wrap instead of twine for round bales.
- **6.** Store bales with a North/South orientation; a southern exposure is best.
- 7. Store flat ends of round bales tightly together.

DON'T:

- **1.** Bales should not be allowed to be in standing water, even on a temporary basis.
- **2.** The rounded sides of bales should not touch.
- **3.** Hay should not be placed under trees.
- **4.** No objects near hay storage that are likely to attract lightning.



Available at:

Barn Yard Feed & Supply Climax Springs, MO 573-347-2251

Brandon Johnson Evening Shade, AR 870-291-2312

Carroll Supplement & Mineral Nevada, MO 417-321-6172 Elite Equine & Animal Health Joplin, MO 417-316-0048

H & G Farmers Feed Mt View, MO 417-934-2576

J & J Cattle Ranch Halfway, MO 417-777-0676 Midwest Agri Service Archie, MO 816-225-1184

Pay Way Feed Jefferson City, MO 573-636-7339

Rock' N P's Farm & Feed Granby, MO 417-472-3276

www.kaydeefeed.com • 800-831-4815

ECONOMIC INDICATORS

More Meat for Consumers

Consumers get more on plates when farmers respond to good prices

Consumers see more meat on their plates when farmers respond to higher livestock prices.

But with lower prices, meat supplies fell 9 percent from 2007 to 2012. With recent higher prices, farmers bred more animals. The resulting expansion in meat is expecting to reach a peak by 2018, says Scott Brown, University of Missouri economist.

Farmers are driven by the laws of economics and restrained by laws of livestock reproduction cycles.

With favorable prices—even record prices—farmers bred more animals the last couple of years. That brings more food for consumers. The laws work in reverse, as well. As meat supply rises, prices fall.

"Domestic demand strength will be crucial to future prices," Brown says.

Brown and his associate, Daniel Madison, cover livestock in MU Agricultural Markets and Policy (AMAP). Their reports are in the 2015 briefing book from AMAP and the MU Food and Agricultural Policy Research Institute (FAPRI).

Consumers benefit from more meat supply. However, that brings lower prices to farmers.

For example in 2014, wholesale pork peaked at \$110 per hundred. By 2018, the projected price is \$81. During the same period, wholesale boxed beef goes from \$239 to \$204.

In 2014, declining meat supply led to a per capita meat consumption of 200 pounds. That includes beef, pork, broilers and turkey. By 2018, consumption should reach 212 pounds before starting another drop.

Meat prices drive livestock cycles, and vice versa. As prices rise, farmers market more animals. While 2015 growth in meat supply is projected to be the fastest since 2002, Brown says, all growth will be in pork and poultry.

Poultry has the shortest reproduction cycles, measured in weeks. Beef cows, with gestation periods of nine months, are slowest, taking years to change.

Beef supply will drop over a half million pounds in 2015, in spite of current high prices. When herd owners hold back more young females, fewer calves go to feedlots. That cuts beef supplies in the short term

On dairy farms, record high prices also brought more milk. Producers rushed to add 100,000 cows to their milking herds in 2014. At the same time, low-cost grains allowed them to boost milk yield per cow.

"Milk production growth was the highest since 2005," Brown says.

That is causing a sharp drop in milk prices in 2015. While milk prices reached \$24 per hundredweight in 2014, price projections for this year fall below \$18. More cows are still entering milking herds

The baseline shows grocery buyers will see lower prices. The consumer price index (CPI) increased by 2.1 percent in 2014. For meat, that increase was 7.2 percent.

With more meat arriving, the food CPI for 2015 is expected to grow only 1.6 percent. Those prices can fall more, as there is a time lag in low commodity prices reaching retail levels.

The MU FAPRI annual baseline projections guide farmers in production plans. It also serves legislators and government policymakers.

—Source: Release from University of Missouri Cooperative Media.

EPRINEX® (eprinomectin)

What doesn't kill parasites makes them stronger.

So choose EPRINEX.



EPRINEX kills more species and stages than any other brand! Period.

Did you know moxidectin is believed to be a driver of resistance in some species?² EPRINEX contains eprinomectin. What's the difference? More parasite species and stages.¹ More weight gain.³ More profitability. Get the most out of your dewormer. Choose eprinomectin. Choose EPRINEX.

Get the facts at EPRINEXKillsIt.com

³ Beckett J. Efficacy of pour-on dewormers differing in active ingredient and carrier on weight gain and fecal egg count in stocker beef cattle. College of Agriculture, Cal Poly State University.



IMPORTANT SAFETY INFORMATION: No meat or milk withdrawal is required when used according to label. Do not use in calves intended for veal or unapproved animal species as severe adverse reaction, including fatalities in dogs, may result.

@EPRINEX and the Cattle Head Logo are registered trademarks of Merial. @2015 Merial, Inc., Duluth, GA. All rights reserved. RUMIEEP1502 (01/15)

www.joplinstockyards.com APRIL 2015 **37**

¹ Based on FOI summaries and label claims

² Rendell D, et al. Anthelmintic resistance in cattle nematodes on thirty-six Victorian properties. *Proceedings XXVIII World Buiatrics Congress*. 2014;231-244.

MANAGEMENT MATTERS

Max Out on Forage Yield

Choose the right grazing method to get more

From Our Staff

With the grazing season almost in full swing, University of Arkansas forage experts are reminding growers to consider which grazing methods will best help them get the most out of their forage stands and pastures.

Dirk Philipp, assistant professor of forages for the University of Arkansas System Division of Agriculture, said grazing methods are tools growers use to determine and manage how, when, and how much of the available forage is grazed.

Did You Know?

- Selection of grazing method is key to maximizing forage use.
- Continuous stocking versus rotational stocking depends on individual farm situation.
- Creep feeding is a good choice for calving operations.

"Producers use methods ranging from 'low-input' management such as continuous stocking, to more sophisticated techniques such as rotational stocking, and 'first-last' grazing or 'creep' grazing," Philipp said.

He said that when deciding whether to use continuous or rotational stocking (grazing), each grower should consider his or her unique situation.

"For continuous stocking, individual animal performance may be

higher than in rotational stocking, as animals can more selectively graze," Philipp said. "Time and material inputs are relatively low, and some forages, such as Bermudagrass, are resilient and forgiving enough to persist under continuous grazing."

Rotational stocking requires more material and time, Philipp said. Additionally, growers should consider how they will divide their pastures, where they will install watering access points, and whether their forage base actually justifies these investments.

"When considering which grazing methods to choose, keep in mind that the overall setup of your livestock operation depends on the class of livestock, soil productivity, possible impacts on the natural resource base, and — most importantly — the projected economic return," he said.

"Many times, a setup with continuous stocking is so badly managed that a switch to rotational stocking will invariably improve animal performance," he said.

Philipp said that growers should keep their entire grazing system in mind when considering grazing methods.

"If necessary, and if possible, grazing methods should be adjusted in the spring, when growth is rapid and vigorous," he said. "When using rotational stocking, forage use might be as high as 80 percent, but be prepared to harvest excess forage for hay if the stocking rates cannot easily be increased."

Philipp warned that forage grasses will switch to reproductive growth quickly if they're not grazed, so growers should stock their pastures as early as possible to avoid the grass "getting away" from them too quickly.

Philipp added that in cow- and calf-centered operations, creep feeding is a good option because it provides high-quality forage for calves. Producers growing legumes in their fields in substantial quantities should use rotational stocking, in order to maintain plant persistence.

—Source: University of Arkansas Cooperative Extension



38 APRIL 2015 www.joplinstockyards.com

TRENDING NOW

JRS Adds New Field Reps

Aspegren, Fisher join team

Joplin Regional Stockyards welcomes Rick Aspegren, Mountain Grove, Missouri, to its team of field representatives. Aspegren will help manage the Conway, Missouri, receiving station with J.W. Henson.

A life-long cattleman, Aspegren moved in 1998 to southern Missouri from Nebraska with his family. He's a graduate of Northwest Missouri State University with a degree

in agronomy and agricultural business. Prior to working with JRS, Aspegren operated a Pioneer Seed Corn Dealership in Lafayette County, Missouri.

For your marketing needs, contact JW Henson at 417-343-9488 or Rick Aspegren at 417-547-2098.

Skyler Fisher, Collins, Missouri, has joined Joplin Regional Stockyards as a field representative.



Rick Aspegren

A native of Cross Timbers, Missouri, Fisher was raised in the cattle business. Prior to working for JRS, Fisher managed a large cow-calf operation.



Skyler Fisher

Located about two miles north of Collins, north of highway 54, Fisher has pens set up to receive customer cattle. Give him a call at 417-298-9051 for your marketing needs.

PRODUCT INFORMATION

NADA 141-334, Approved by FD

ZUPREVO™ 18% (tildipirosin)

048539 R10

Injectable Solution for Cattle

ANTIMICROBIAL DRUG

180 mg of tildipirosin/mL For subcutaneous injection in beef and non-lactating dairy cattle only.

Not for use in female dairy cattle 20 months of age or older or in calves to be processed for veal.

CAUTION: Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

BRIEF SUMMARY: for full prescribing

INDICATIONS: Zuprevo" 18% is indicated for the treatment of bowine respiratory disease (BRD) associated with Mannheimia haemolytica, Pasteurella multocida, and Histophilus somni in beef and non-lactating dairy cattle, and for the control of respiratory disease in beef and non-lactating dairy cattle at high risk of developing BRD associated with M. haemolytica, P. multocida, and H. somni.

WARNINGS: FOR USE IN ANIMALS
ONLY. NOT FOR HUMAN USE. KEEP OUT
OF REACH OF CHILDREN. TO AVOID
ACCIDENTAL INJECTION, DO NOT
USE IN AUTOMATICALLY POWERED
SYRINGES WHICH HAVE NO ADDITIONAL
PROTECTION SYSTEM. IN CASE OF
HUMAN INJECTION, SEEK MEDICAL
ADVICE IMMEDIATELY AND SHOW THE
PACKAGE INSERT OR LABEL TO THE
PHYSICIAN.

Avoid direct contact with skin and eyes. If accidental eye exposure occurs, rinse eyes with clean water. If accidental skin exposure occurs, wash the skin immediately with soap and water. Tildiprinsoin may cause sensitization by skin contact.

For technical assistance or to report a suspected adverse reaction, call: 1-800-219-9286.

For customer service or to request a Material Safety Data Sheet (MSDS), call: 1-800-211-3573. For additional Zuprevo 18% information go to www.zuprevo.com.

For a complete listing of adverse reactions for Zuprevo 18% reported to CVM see: http://www.fda.gov/AnimalVeterinary/ SafetyHealth.

DO NOT USE ZUPREVO 18% IN SWINE.

Fatal adverse events have been reported following the use of tildipirosin in swine. NOT FOR USE IN CHICKENS OR TURKEYS.

RESIDUE WARNING: Cattle intended for human consumption must not be slaughtered within 21 days of the last treatment. Do not use in female dairy cattle 20 months of age or older. Use of this drug product in these cattle may cause milk residues. A withdrawal period has not been established in preruminating calves. Do not use in calves to be processed for yeal.

PRECAUTIONS: The effects of Zuprevo 18% on bovine reproductive performance, pregnancy and lactation have not been determined. Swelling and inflammation, which may be severe, may be seen at the injection site after administration. Subcutaneous injection may result in local tissue reactions which persist beyond the slaughter withdrawal period. This may result in trim loss of edible tissue at slaughter.

Made in Germany
Distributed by: Intervet Inc d/b/a
Merck Animal Health, Summit,
NJ 07901 Copyright © 2011, Intervet
Inc., a subsidiary
of Merck & Co. All rights reserved



www.joplinstockyards.com APRIL 2015 **39**

ECONOMIC INDICATORS

What's Up for Ground Beef?

A look at market, price signals

Beef's getting better, to judge by the uptrend in quality grades and resurgent consumer demand. However, an increasing share of that demand has been for ground beef – and an average pound of that versatile staple now sells for more than \$4.

Last year a Rabobank AgriFinance white paper entitled "Ground Beef Nation" (GBN) questioned the industry's priorities now that Americans consume 11 billion hamburgers each year. It called for greater efficiency and retooling to fit a changed market for one-third to half of young cattle, and warned business as usual could lead to weakened market share for beef over time.

Everybody began to discuss the implications as the Choice beef cutout quote touched \$2.50 per pound. They had seen the rise of giant burgers 10 years ago in step with low-carb dieting. They saw another move forward when ground beef was the go-to promotion in the 2008-09 recession, and last year as many steaks were priced two or three times higher than the grinds.

Could cattle ranchers, feeders and packers have it wrong? Will a slice of the market ignore quality again, and if that turn is coming, how should seedstock producers reorient genetic selection?

The Angus Foundation set out to learn more, commissioning its own white paper. The 35-year-old nonprofit arm of the American Angus Association® funds education, youth and research for the breed and broader beef community.

"Whether we're talking about ground beef or high-end cuts, it's important to know their cy - just the opposite, Speer relative values and the market signals that originate with consumer demand for each," said Foundation President Milford Jenkins. "That helps guide the breeding plans of registered and commercial Angus breeders toward more profit."

The resulting paper, "Changes in the Ground Beef Market and What it Means for Cattle Producers," was authored by Nevil Speer while a professor at Western Kentucky University; Tom Brink, the founder and president of Top Dollar Angus; and Mark McCully, vice president of production for the Certified Angus Beef ® brand. The full paper is available at http://www.angusfoundation.org/fdn/Research/ FdnWhitePapers.html and at http://www.cabpartners.com/ news/research.php.

"Ground beef is an awfully important part of the brand's business, but it still doesn't carry the value of the middle meats and most whole-muscle cuts," said McCully. "Most cattlemen don't realize how incredibly complex the entire ground beef market is - from varying lean points, to different raw material options, to premium opportunities."

Speer summarized the reasons for the current white paper, highlights of which were presented at the Cattle Industry Convention in San Antonio, Texas, in February.

"We wanted to explore and outline some of the important dynamics around the ground beef category," Speer said, noting the paper looks at "the economics and efficiencies associated with meeting the growing demand for ground beef within the current structure."

People might think hamburger is hamburger, he said, "but the ground beef market is complex, representing a wide array of ingredients from a variety of sources coming together to make different types of products."

That's not a sign of inefficiennoted.

"The decision as to how to most appropriately combine materials for ground beef is based on a least-cost approach, given the market for various cuts at any given time," he said. "That decision working well today."

Despite rapid growth, ground beef does not overshadow sales of steaks and roasts, still driven by a combination of quality and price. While ground beef makes up 63 percent of foodservice volume, it's just 37 percent of value; at retail, those numbers are 49 percent and 39 percent, respectively.

Even with ground beef at \$4, the average for all beef was at \$6 per pound, offering little incentive to forego the greater figure for the lesser, Brink said.

What if forces outside of the market set up production of steers and heifers solely for grinding as GBN suggests?

"It would reduce industry revenues, elevate production

is complex and dynamic, but costs and unnecessarily raise consumer beef prices," Brink said, citing price relationships. "Fed cattle have been trading at a growing price premium versus cows over the past 15 years."

> The paper concludes there is no empirical evidence to support producing cattle specifically for the ground beef mar-

> "The trend toward a larger and more precise focus on marbling and quality grade has served cattlemen well," McCully said. "We are producing a higher quality product in the end and driving consumer demand."

> -Source: Release from Certified Angus Beef.

Beef Price Turnaround on Horizon

Consumers likely to see effects in 2016

Story By Jason Vance

There have been a lot of ▲ changes at Jennings Premium Meats since it opened for business in 1954. One recent change is what customers are buying.

"When the beef prices started to move up, we started seeing people migrating from steaks to ground beef, pork and poultry," Jason Jennings says. "People still come in and buy steaks and those sorts of things, but it's not like it was."

Cattle prices have set records for the past five years in a row, and that has increased prices at the meat case, says University of Missouri Extension agricultural economist Ron Plain.

"Consumers saw some very high beef prices last year," Plain says. "On average, retail beef went for over \$5.60 per pound."

The run-up in prices is due to 18 straight years of smaller calf crops. Those smaller numbers tightened supplies, pushing prices higher. But a turnaround could be coming.

The U.S. Department of Agriculture recently revised the number of calves born in 2014. For the first time in nearly 20 years, calves increased from the year before.

"The crop was about half a percent larger by USDA's estimates," Plain says. "We can look forward to more cattle and a little bit better prices for consumers in the meat case."

Although more beef is on the way, those calves won't show up in grocery stores until 2016.

Jennings says lower beef prices will help consumers.

"Beef prices had gotten to a point where a lot of people had shied away from that and moved to other proteins," he says. "I think that is going to be a good thing for people to be able to get back into the beef market, and not just into ground beef but roasts, steaks and briskets."

But more beef at a lower price won't be a win for everyone.

"Cattle producers are going to lose as they see cattle prices declining," Plain says. "We still may average higher here in 2015 than last year, but I would guess cattle prices will be lower in 2016."

—Source: Jason Vance is with University of Missouri Cooperative Media Group.

40 APRIL 2015 www.joplinstockyards.com

NOT ALL VICTORY DANCES HAPPEN IN THE END ZONE Choose the BRD treatment that gets him back to the herd sooner. Defeat BRD with Zuprevo® (tildipirosin), the treatment experts count on for rapid absorption and extended duration.* Ask your veterinarian to prescribe Zuprevo for BRD treatment. Learn more at usa.zuprevo.com. Choose Confidence. Choose Zuprevo.



IMPORTANT SAFETY INFORMATION

FOR USE IN ANIMALS ONLY. NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN. TO AVOID ACCIDENTAL INJECTION, DO NOT USE IN AUTOMATICALLY POWERED SYRINGES WHICH HAVE NO ADDITIONAL PROTECTION SYSTEM. IN CASE OF HUMAN INJECTION, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THE PACKAGE INSERT OR LABEL TO THE PHYSICIAN.

DO NOT USE Zuprevo® 18% IN SWINE. Fatal adverse events have been reported following the use of tildipirosin in swine. NOT FOR USE IN CHICKENS OR TURKEYS.

Cattle intended for human consumption must not be slaughtered within 2I days of the last treatment. Do not use in female dairy cattle 20 months of age or older. A withdrawal period has not been established in pre-ruminating calves. Do not use in calves to be processed for veal.

The effects of Zuprevo® 18% on bovine reproductive performance, pregnancy and lactation have not been determined. Swelling and inflammation, which may be severe, may be seen at the injection site after administration. Subcutaneous injection may result in local tissue reactions which persist beyond slaughter withdrawal period. This may result in trim loss of edible tissue at slaughter. Full product information available on adjacent page.

^{*} Menge, M. et al., Pharmacokinetics of tildipirosin in bovine plasma, lung tissue, and bronchial fluid [from live, non-anesthetized cattle].

The correlation between in vitro susceptibility data and clinical effectiveness is unknown.





BUSINESS BEAT

AgriLabs® to Expand Vaccine Portfolio for Beef, Dairy Cattle

AgriLabs® is building on its tions for maintaining herd partnership with Addison health. Biological Laboratory by rolling out two new autogenous products — Moraxella bovoculi and Streptococcus uberis mastitis vaccines — made with EN-ABL®, a new adjuvant from VaxLiant® that is U.S. Department of Agriculture (USDA)-approved for safety. These products not only expand AgriLabs' autogenous portfolio, but also meet the growing demand for customized vaccine solutions, offering producers more op-

"This product expansion further strengthens a partnership with Addison Labs that has been a significant asset to the growth of I-Site XP®, a broad protection vaccine against pinkeye," said Brian Reardon, business unit manager for AgriLabs. "By extending this partnership with Addison Labs, we are ensuring producers have more access to herdspecific vaccines as herd conditions change."

New autogenous vaccines added to the lineup

Autogenous vaccines fit a specific need and are an option to control losses associated with disease. With this new offering of autogenous vaccines, AgriLabs is addressing problems such as:

• M. bovoculi — Pinkeye, associated with Moraxella bovis and M. bovoculi, appears to be an increasing problem among cattle. A single dose of I-Site XP® vaccine protects cattle against M. bovis. Currently, no commercial vaccines are available to treat M. bovoculi. Having an autogenous vaccine constructed by Addison Labs, marketed by AgriLabs, is an excellent choice.

CONTINUED ON NEXT PAGE

Barenbrug **USA Launches Forage System**

No matter which cool season or warm season perennial grass base is used, pasture does not grow uniformly throughout the year. Livestock producers have to manage feed demand and feed supply, no matter what class of livestock or level of grazing management. The best grazers pay close attention to minimizing periods of feed deficit or surplus.

Pinpoint, Barenbrug's Forage Delivery System, is the new costeffective solution for seasonal feed supply challenges. Pinpoint products will help producers achieve the goal of grazing for 300+ days out of the year. By working together as a system the Barenbrug Pinpoint family of products will help increase profitability by lowering feed cost and reducing stress on the operation.

Production records regularly indicate that winter feed costs are the single largest expense, and keeping feeding costs low is key to a profitable operation. Typically, feed grazed directly by animals will always be less expensive than conserved forage (hay, silage, baleage that is harvested and fed later). In addition, grazing animals recycle nutrients onto the pasture instead of concentrating them in areas where conserved forages are fed. Pinpoint products, along with other management changes, will allow growers to reduce their hay-feeding season regardless of where they're located.

Barenbrug's new Forage Delivery System will provide a solution for timely forage needs. Even with ideal pasture and livestock management, periods of feed deficit still exist. Base forages have distinct growth curves that cannot meet the feed demand of grazing animals during every season of the year. Managers can plan for seasonal forage deficits. Pinpoint products can help fill these deficits.

Pinpoint products, as part of an improved management plan, can help you optimize the utilization of grazed forages and reduce dependency on supplemental feed, fuel and other inputs.

—Source: Barenbrug USA release.



42 APRIL 2015 www.joplinstockyards.com

AGRILABS VACCINE • FROM PREVIOUS PAGE

• S. uberis — S. uberis is the most common Streptococcal species isolated from mastitis case submissions in the United Kingdom, New Zealand and U.S. This documented distribution and level of significance in such variable climates and management systems leads to the inevitable conclusion that S. uberis might be the greatest nemesis to economical milk production to all herds worldwide. The vaccine production process for this organism is efficient and allows the use of autogenous vaccines as an effective tool in the battle against such a formidable and significant mastitis opponent as S. uberis. All combination of Streptococcus can be included in the formulation as well as other causative autogenous bacteria. Bovine E. coli and Clostridium autogenous are also available.

New VaxLiant adjuvant, ENABL® C1 autogenous option

AgriLabs' relationship with Addison Labs will incorporate an autogenous option using a novel ENABL ad-

juvant developed for use in cattle vaccines. Research shows that ENABL, which had a 21-day withdrawal period, improves vaccine stability and can provide a stronger immune response.

Going the autogenous route

Addison Labs manufactures the licensed autogenous vaccines that contain ENABL, and AgriLabs is the exclusive distributor for these vaccines. Addison Labs follows all USDA regulations and approved guidelines to ensure a safe and quality product. When considering an autogenous vaccine, it's best for producers to discuss with their veterinarian the best course of action. For more information, veterinarians and producers can contact their AgriLabs representative.

—Source: Adapted from a release from AgriLabs

ON THE **CALENDAR**

Beef Improvement Federation to Meet June 9-12 in Biloxi

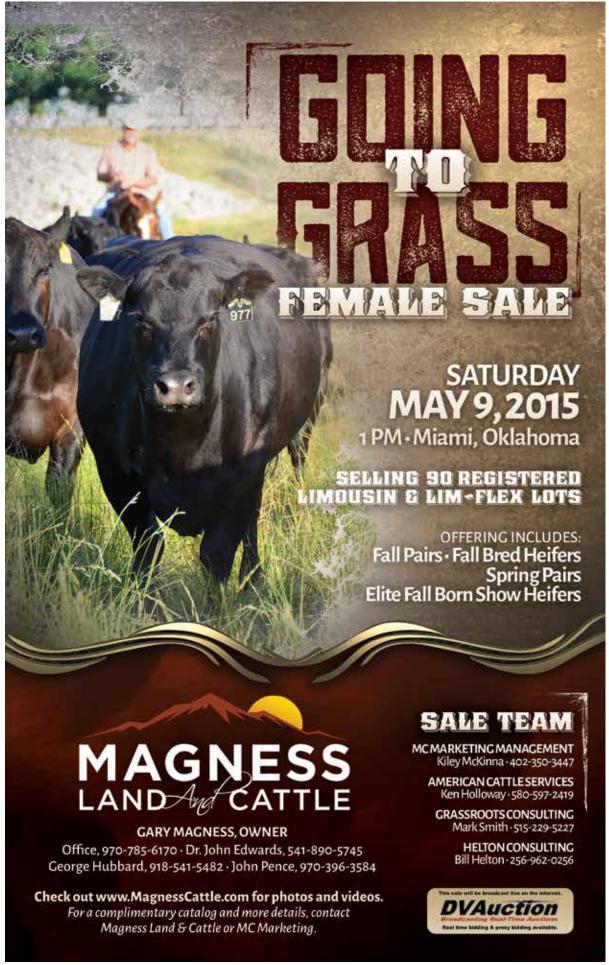
Improvement The 2015 Beef L Federation (BIF) Annual Meeting and Research Symposium will be June 9-12 at the Beau Rivage Hotel and Conference Center in Biloxi, Mississippi. The theme for this year's program is "Rebuilding a Cowherd."

The meeting will allow the research community and industry to meet and discuss issues surrounding the genetic improvement of beef cattle and for attendees to learn about technologies and management practices that can aid in the profitability of their operations.

Some of the topics to be covered include setting the stage for cowherd rebuilding, what sustainability means and why it matters, what sustainability data say about the beef industry, how current market incentives affect genetic selection, profitability: looking to an operation's future, balancing novel and proven applications for female selection, cow lifetime productivity and an adaptability panel discussion.

A link to online registration for conference is now available the beefimprovement.org/library/ registration-info. Early registration is offered at a discounted rate and ends April 15. Early registration cost to attend the full conference is \$250. Day-only, student and media discount rates also are available. Conference information is available by contacting Brandi Karisch, Mississippi State University, at 660-325-7465 or bkarisch@ads.msstate.edu.

— Source: Adapted from a release from Angus Media.



www.joplinstockyards.com APRIL 2015 **43**

MARKET WATCH

Joplin Regional Stockyards Market Recap | March 2015

JRS Sale Day Market Phone: (417) 548-2012
Mondays (Rick Huffman) | Wednesdays (Don Kleiboeker)
Market Information Provided By Tony Hancock
Mo. Department of Agriculture Market News Service
Market News Hotline (573) 522-9244
Sale Day Market Reporter (417) 548-2012

Feeder Cattle & Calf Auction | March Receipts 34,161 • Last Month 12,512 • Last Year 24, 448 Video Markets from 3/3, 3/9, 3/23, 3/30 • March Total Video Receipts 2,861

Date:	South Central State	s Texas,	Okla., New Me:	New Mexico, Kansas, Mo. Of							
3/3/15											
	FEEDER STEERS		MED & LG 1				Eastern States	All States	East of the Miss.,	La., & Ark.	
HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY		FEEDER STEERS		MED & LG 1-2		
183	810-830	823	\$195.75-\$198.00	\$196.49	Current	HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY
600	875	875	\$187.85-\$188.10	\$187.95	Current						

Date:	South Central State	s Texas,	Okla., New Mex	cico, Kansas, M	o. Offering: 1034						
3/9/15											
	FEEDER STEERS		MED & LG 1				Eastern States	All States	East of the Miss.,	La., & Ark.	
HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY		FEEDER STEERS		MED & LG 1-2		
180	525	525	\$290.00	\$290.00	April Value Added	HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY
	FEEDER HEIFERS		MED & LG 1			119	775	775	\$197.00	\$197.00	Current
100	500	500	\$269.50	\$269.50	Current Value Added		FEEDER HEIFERS		MED & LG 1-2		
180	525	525	\$260.00	\$260.00	April Value Added	85	600	600	\$218.50	\$218.50	Current
	FEEDER HEIFERS		MED & LG 2			70	700	700	\$190.00	\$190.00	Current
300	700	700	\$206.50	\$206.50	Sept-Oct						

Date:	South Central State	s Texas,	Okla., New Mex	xico, Kansas, M	o. Offering: 681						
3/23/15											
	FEEDER STEERS		MED & LG 1				Eastern States	All States	East of the Miss.,	La., & Ark.	
HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY		FEEDER STEERS		MED & LG 1-2		
60	830	830	\$203.00	\$203.00	Current	HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY
170	890	890	\$189.85	\$189.85	Current	60	850	850	\$209.50	\$209.50	August
	FEEDER STEERS		MED & LG 1-2			60	850	850	\$209.50	\$209.50	September
85	580	580	\$260.00	\$260.00	Current Value Added		FEEDER HEIFERS		MED & LG 1-2		
118	825	825	\$199.00	\$199.00	Current	128	775	775	\$204.25	\$204.25	Nov-Dec

Date:	South Central State	s Texas,	Okla., New Mex	tico, Kansas, Mo.	Offering: 363						
3/30/15											
	FEEDER STEERS		MED & LG 1-2				FEEDER HEIFERS		MED & LG 1-2		
HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY	HEAD	WT RANGE	AVG WT	PRICE RANGE	AVG PRICE	DELIVERY
58	850	850	\$200.00	\$200.00	Current	305	750	750	\$203.00	\$203.00	October

Tune in to the JRS Market Report





Monday 12:15 p.m. Wednesday 12:15 p.m. Monday 12:40 p.m. Wednesday 12:40 p.m.





M-F 9:55-10:05 a.m.
(during break before AgriTalk)
M/W/F Noon Hour
(during Farming in the Four States)
T/Th Noon Hour (after news block)



Monday 12:50 p.m. & 4:45 p.m. Wednesday 12:50 p.m. & 4:45 p.m.



44 APRIL 2015 www.joplinstockyards.com

EVENT ROUNDUP

April

10-12 Spring Ag & Urban Fest Ozark Empire Fairgrounds, Springfield, Missouri FMI: 417-833-2660

11 New Day Beef Genetics Bull Sale Wheeler & Sons Livestock, Osceola, Missouri FMI: 660-351-2825

16 1 p.m. Special Video Sale Joplin Regional Stockyards, Carthage, Missouri FMI: 417-548-2333

18 Replacement Cow and Bull Sale Joplin Regional Stockyards, Carthage, Missouri FMI: 417-548-2333

21 Southwest Regional Grazing School Halfway, Missouri FMI: 417-345-2312, ext. 3

23 Heartland Highland Cattle Auction Norwood Producers Auction Yards, Norwood, Missouri FMI: 417-345-0575

28-30 Southwest Regional Grazing School Mount Vernon, Missouri FMI: 417-466-3102

May

7 Spring Cattle Producer Seminar Joplin Regional Stockyards, Carthage, Missouri FMI: 816-308-3202

9 Magness Land & Cattle Female Sale Miami, Oklahoma FMI: 970-785-6170

Show-Me-Select Replacement Heifer Sale Joplin Regional Stockyards, Carthage, Missouri FMI: 417-466-3102

24-25 Best of the Best Calf Roping Risen Ranch Cowboy Church Arena, Carthage, Missouri FMI: 417-548-2333

June

9-11 Southwest Regional Grazing School Neosho, Missouri FMI: 417-451-1007, ext. 3

9-12 Beef Improvement Federation Annual Meeting Biloxi, Mississippi FMI: 660-325-7465

25 Value-Added Feeder Cattle Sale Joplin Regional Stockyards, Carthage, Missouri FMI: 417-548-2333

AI SERVICES



Chute-Side Service • Liquid Nitrogen Semen & Breeding Supplies

Conception. Calving Ease. Carcass. Cows.





Al Service 25 Head or More

Join us for a Meet & Greet Reception with special guest speaker, Robert Cain, Founder of Seaagri, Atlanta, Georgia. The #1 Sea Mineral Producer In The World! Hosted By SWEET WATER RANCH

10:00 a.m. APRIL 24TH, 2015

JOPLIN REGIONAL STOCKYARDS Carthage, MO (I-44 & EXIT 22)

RSVP by April 19th TO: 918-314-0946

Coffee, Water & Homemade Pastries Will Be Served.

"IMPROVED AGRICULTURE WITH SEA MINERALS"

SEA-90 Sea Mineral Products are water soluble crystals and can be offered to livestock as a source of minerals and trace elements and applied to grazing fields, hay and crops as fertilizer in several different ways. **SEA-90 (Foliar and Broadcast):** Replenish vital minerals and trace elements to soil, crops, pasture and hay. **SEA-90** not only produces major improvements in plant growth (volume) but improves the nutrient value of hay. We **doubled** our Hay Quantity & Quality by our second year of use.

SEA-90 Foliar Fertilizer is amazingly inexpensive to use at only \$4.00 per acre per application! At Sweet Water Ranch we dissolve **SEA-90** in water in our 500 gallon sprayer, spraying it over the hay and grazing fields. (One 50 lb bag with 200 gallons of water covers 10-12 acres). We applied it to our first hay cutting in 2012 at Sweet Water Ranch and tested the mineralized hay and compared our non-fertilized hay and found the nutrient quality of the Sea Mineral fertilized hay was improved tremendously in the **first year of use**. The hay was tested through the OSU AG Analytical Laboratory and showed an increase of Dry Basis Protein **from 7.5% to 9.7%.** Then In our **second year of use**, our hay tested out with another increase of Dry Basis Protein **from 9.7% to 13.6%!** We also saw significant improvement in Relative Feed Values (RFV).

SEA-90 Sea Mineral Natural Fertilizer can be broadcast dry on your hay & grazing meadows while the grasses are growing or dormant. The gardner can till or spray **SEA-90** into garden.



www.joplinstockyards.com APRIL 2015 **45**

CONSTRUCTION

JOPLIN TRUSS

PROMPT, RELIABLE SERVICE

2 Locations to Serve You

Hwy 96

Sarcoxie, MO

(417)246-5215

1-800-695-6371

Hwy 86

Stark City, MO

(417)472-6800

1-800-695-1991

Blevins Asphalt Construction Company

is now accepting asphalt shingle tear-offs at our facilities listed below: **Blevins Asphalt** Intersection of Highway 60 and James River Expressway Springfield, Mo.,

CONSTRUCTION

200' east of Buddy's Auto Salvage. North of Carthage, Mo. @ Civil War Road and Highway 71 intersection, near the Carthage Underground.

SHINGLE TEAR-OFF AND NEW ROOF SCRAPS

Please NO garbage. Limited wood, metal, nails, etc. A loader & attendant are on site for trailer removal & assistance. Cash only, charge accounts available.

For questions please call: 417-466-3758, ask for Adam or Efton. www.blevinsasphalt.com

SERVICES

NEWBOLD & NEWBOLD PC

CERTIFIED PUBLIC ACCOUNTANTS ESTABLISHED 1970

> JAMES E. NEWBOLD, CPA KEVIN J. NEWBOLD, CPA KRISTI D. NEWBOLD, CPA

FARM TAXES

www.newboldnewbold.com 402 S. ELLIOTT AVE. AURORA, MO • 417.678.5191

CATTLEMEN TO CATTLEMEN Pipe Corrals · Barb Wire · Woven · Portable Welding We Clean Fence Rows

Customer Satisfaction is #1 We Sell & Install Wineland Concrete Waters Wineland Livestock Tanks

417-461-4514 · Jamie Miller · Miller, MO

FEED & HAY

AC-DC Hay Company

Specializing in your hay needs

Need Hay?

Prairie ~ Alfalfa ~ Straw ~ Brome **Tony Carpenter** 208 North NN Hwy Lamar, MO 64726 Call: 417.448.7883

FERTILIZER

Sea Minerals

Energizes & Conditions Your Soil for Higher Yield

\$1500 / Ton

C & C FARM 417.499.3243

Feed Your Family

(Fresh food factory)

AQUAPONIC

I Build

Worms feed the fish. Fish, manure and minerals feed the plants.

TYLER ENTERPRISES

www.seamineralsusa.com 918-367-5146 OR 918-698-5308

Sea Minerals

NO MINERALS • NO LIFE

Build your organic matter number Buy no fertilizer or chemicals Stimulates life in the soil Organisms farm around the clock FREE CHOICE TO CATTLE Apply to any growing forage! \$50 per 50 lb. bag • \$1600/ton shipping www.seamineralsusa.com ton lots 918-367-5146 OR 918-698-5308



Where Did Your \$1 Go?



Get Details at www.mobeef.com

REAL ESTATE



SUPPLIES

\$30 MILLION WORTH OF CATTLE STOLEN LAST YEAR THAT WERE UNBRANDED!

Even in cold and windy weather, ours works-WE GUARANTEE IT!

> "Trust everyone, but BRAND all your cattle."

24-hour tum-around

2 Letters.....\$120 3 Letters.....\$130 4 Letters\$140 Complete Number Sets \$350

1 Letter.....

www.huskybrandingirons.com 800-222-9628 | Fax 800-267-4055

TRAILERS



CATTLE

HC Brangus

1, 3-year-old Brangus bull used on heifers. Absolutely no calving problems. 3, 14-month-old Brangus bulls weighing 1200 lbs+. Bulls all raised together. Trich and semen tested.

Homer & Carolyn Millikan

Rt. 2, Box 1320 | Sedgewickville, MO Phone: 573.866.2795

CATTLE

CHAROLAIS BULLS

Purebred. Service Age. Good Selection.

Reasonable Prices.

Carl Speight • Dadeville, Missouri

H) 417.995.3120 C) 417.777.1658

SIMANGUS & **BALANCER (GvAn) Bulls**

Top of the breed genetics 18 mo., forage, fall bred heifer mates Top AI

Harriman Santa Fe (Bob) | Montrose, MO 660/492-2504 | bharriman39@hotmail.com





Nothing Harvests Grass as Efficiently as a Beefmaster BEEFMASTER BULLS

FOR SALE

www.vaughnfamilyfarms.com 63% Retained Heterosis means increased weaning weights

Vaughn Family Farms

Davin & Gail Vaughn - Mount Vernon, MO Contact: Jason Bates at 417.616.9000

BB

OGDEN HORSE CREEK RANCH

KO Reg. Angus Bulls | AI Bred Heifers Bred Cows & Pairs | Quarter Horses

Kenny Trevon 417-366-0363 417-466-8176



University studies demonstrate statistically significant weight gains as a result of fly control with Bayer ear tags (versus control group)¹

See the difference for yourself.

Put Bayer's PROVEN insecticide cattle ear tags into your horn and face fly control program today.





Corathon⁶

- Corathon® with FyberTek® contains 50% organophosphate insecticide
- Can be used on beef and non-lactating dairy cattle

CyLence Ultra® Insecticide Cattle Ear Tag

- CyLence Ultra® contains 5th generation pyrethroid and a synergist
- Can be used on beef and dairy (including lactating) cattle





¹Data on file. Bayer Animal Health.

©2015 Bayer HealthCare LLC, Animal Health, Shawnee Mission, Kansas 66201

We've got your back.

MFA Cattle Feed with Altosid®.





A horn fly's life cycle is complete in 10 to 14 days. So they live fast. In that time, each female can lay up to 500 eggs in pasture manure, building up a population enough for one big fly party. Studies show that a calf with 200 flies on it during the summer weighs 15 pounds less at weaning compared to a calf with fly control.

MFA mineral with Altosid® puts a stop to the party.



