BEEF CATTLE INSTITUTE
KANSAS STATE UNIVERSITY

THE GRAZIER

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CALENDAR of EVENTS

Aug. 22 – Fall Term Begins

Sept. 9-18 – Kansas State Fair, Hutchinson, Kansas

Sept. 14-17 – AABP Annual Conference, Charlotte, North Carolina

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Managing Pinkeye in the Cow Herd

By A.J. Tarpoff D.V.M., M.S., Beef Extension Veterinarian, Kansas State University

Pinkeye (Infectious Bovine Keratoconjunctivitis) can be a costly disease for cattle producers during the summer and early fall in Kansas. Understanding the cause, signs, treatment, and prevention of this disease can go a long way in reducing pain and discomfort for the cattle and the pocket book.

Cause: Pinkeye is a multifactorial disease that is often caused by bacteria, Moraxella bovis. Factors that can contribute to the disease are as follows:

- UV radiation from the sun
- Dust
- Grass awns, scratches on the eye from grazing tall grass
- Face flies
  - Flies feed on discharge from the eye. They can spread the bacteria rapidly from animal to animal.
- Stress
- Concurrent diseases (IBR, BVD)

These factors can cause physical irritation to the surface of the eye initiating the disease, or inhibit the body's natural defense mechanisms.

Signs: Excessive tearing, blinking, and squinting are all early signs of pinkeye. The excess tears often drain down the face collecting dirt and grime. This can be seen from a distance. As the disease progresses the eye becomes extremely red, the clear part of the eye becomes white and cloudy. The clear cornea can form an ulcer and even rupture in severe cases.

Treatment: Injectable long acting oxytetracycline products are often used with good effect. There are other veterinary prescription options as well. It is always important to work with your local veterinarian and have a valid Veterinary Client Patient Relationship (VCPR). If pinkeye is becoming an issue on a premise, the veterinarian has the tools and expertise to help in face of an outbreak. Samples may be sent to the diagnostic lab to determine the best course of treatment. To help with the healing process, it is recommended that a patch be glued over the eye. An eye patch does two things to promote healing. First, it takes away the irritant of the sun's UV radiation. Eliminating this irritant will increase cattle comfort during the healing process. Second, the patch can help decrease the spread of the disease by physically blocking flies from feeding on the tears of the affected eye.

Prevention: Prevention starts with ensuring optimal herd health. Quality forage along with Vitamin and trace mineral supplementation supports a strong immune system. The immune system can be hindered during times of stress from shipping, weaning, weather, and changes in feed. This is why a solid vaccine program against respiratory pathogens such as IBR and BVD is important. These viruses can contribute to the severity of pinkeye outbreaks. There are pinkeye vaccines available on the market, but inherently they have some downfalls. There are many different subtypes of the Moraxella bovis bacteria. Many of which can be isolated from just one infected animal. Although the vaccines have several strains, unfortunately they are not cross protective. This means if a different strain of the bug infects the animal, disease will still occur. The pinkeye vaccine still has its place in a herd health plan, but disease may still occur. If these vaccines are to be used, it is important to administer at least 4 weeks prior to pinkeye season (some products require 2 doses) to ensure adequate response. Other ways to prevent the disease is to manage the environment and vectors of the disease. This can include mowing tall strands of grass and weeds in the pasture reducing the scratching potential while grazing. Fly control

Continued on next page

Managing Pinkeye *(continued from front page)*

is also very important. Strategies may include fly tags, pour-on products, dust bags etc. Providing simple shade structures can decrease the irritation of the sun during the middle of the day. Also isolating infected animals may decrease the spread to other animals. Using these strategies will help prevent pinkeye severity on an operation.

Storytelling with Big Data

By Audrey Hambright

Producers and veterinarians are continually looking for a more efficient way to manage records for their cow herds and health programs. Technology in its constant evolution has provided new ways to manage and collect data, but how can they use it effectively?

The Beef Cattle Institute has recently brought on new talent to help optimize the way data is collected and how it's used. But for Jiena Gu, it's not just about collecting data, it's about telling a story.

Originally from the Guangdong Province in China, Gu came to K-State with a degree in bioengineering. Since then she has completed her public health certificate and is currently working towards a master's degree in statistics which she will receive this August. Prior to joining the BCI team this summer, she worked as a statistics specialist in the internal admission and recruiting office for Kansas State University.

Gu was drawn to statistics while majoring in biology and public health where she realized the importance of data.

"If you want somebody to believe you, you have to use the data to tell a story," Gu said.

As project coordinator for the BCI, Gu provides data management and analytical support for BCI projects related to the creation of interactive decision tools and visualization systems for production and research data.

Gu hopes to help people understand their data better, to visualize it and tell a story. More specifically, she aims to help producers and veterinarians create a better strategy for cattle health. Gu is currently working on creating an interactive analytical dashboard that will help the beef producer and beef cattle industry make better decisions and strategies. Gu will use big data mining and machine learning methods to gain useful insight from big data, improving management and ultimately increasing disease prevention.

Jiena Gu, project coordinator for the Beef Cattle Institute

"Jiena has skills in analyzing and visualizing data to generate information needed for decision makers," said Dr. Brad White, interim director for the BCI. "These skills will help BCI provide actionable information to the beef industry."

In addition to developing interactive dashboards for data management, Gu will also be providing guidance in project analysis for students working with research data.

"If you understand the data better, you can make a better decision," she said.

And better decisions, by Gu's standards, will help tell a better story.

News to share?

We want to hear from you! Send your news and story ideas to bci@ksu.edu.

Follow us ONLINE!

PRODUCER spotlight

Matt Perrier

DALEBANKS ANGUS

Eureka, Kansas

Matt Perrier, Dalebanks Angus, looks over a group of cows.

By Audrey Hambright

Matt Perrier of Dalebanks Angus, is truly in the business of giving both the customer – and the consumer – what they want.

A 1996 graduate of Kansas State University, Perrier quickly put his degree to use in animal sciences and industry on taking a job with the Pennsylvania Beef Council, where he worked in retail and food service promotion. His role of moving beef in the eastern seaboard states taught him how important it is for the beef industry to be focused on the consumer.

"If we truly give consumers what they desire, they will come by and pay more for it next time," he said. "I learned how much consumers enjoy eating experiences that involve beef."

In the spring of 1997, took a position as a regional manager for the American Angus Association (AAA) in Fort Worth, Texas. In 2000, he relocated to St. Joseph, Missouri, where he served as the director of AAA's commercial program department and commercial industry operations until receiving an opportunity to move back home to his family's operation in Eureka, Kansas.

Dalebanks Angus runs close to 500 head of females split into spring and fall calving herds. In the seedstock business, its goal is to produce registered bulls with a balance of trails to profit its commercial beef industry customers. Most often, these priorities are calving ease, weaning weight and reproductive efficiency.

With the family operation in business for more than 100 years, the Perriers have a long-term outlook on management and customer service. They have been fortunate to achieve 90 percent return customers. A testament to that fact, Perrier said that the genetics are working and calves sired by the Dalebanks Angus bull(s) are adding value to the commercial cow/calf producers.

Perrier has been involved in many industry organizations including the AAA, which he represented at the Young Cattlemen's Conference through the NCBA. He was elected chairman for that group in 2006. This year he is currently serving as the president of the Kansas Livestock Association. As an operation, Dalebanks Angus was recognized as the BIF Seedstock Producer of the year in 1997.

Matt Perrier and his family.

Looking forward, Perrier believes animal agriculture can do more to tell the story of how producers bring food to the market.

"[Consumers] want to know this. They don't want data and facts," he said. "They do want to feel comfortable that we took care of that animal and the food we're producing is safe and wholesome and that we did everything to make sure it was a good eating experience."

In addition to increasing communication, Perrier encourages producers to be flexible and manage their risks.

"We have to understand the money that enters into the beef community has to come from the consumer," he said. "From carcass quality and consumer friendly products, if we can deliver a good experience, they'll pay for premium protein."

Just as importantly, Perrier wants producers to recognize the work they do.

"I think it has become even more of a noble profession," he said. "Feeding people across the world is one of the more important jobs that can be done. We need to take pride in the fact that we do not provide those products for people across the nation and globe."

RURAL practitioner

Dr. Trent Fox

VETERINARY RESEARCH AND CONSULTING BUSINESSES

Hays, Kansas

by Audrey Hambright

Dr. Trent Fox has found success in his young career in veterinary medicine with help from mentors and a steadfast belief in his goals.

A native of St. John, Kansas, Fox received his bachelor's degree from Kansas State University in animal sciences and industry and a master's degree in ruminant nutrition from Texas A&M University before embarking on his journey in veterinary medicine. Fox was originally on a pathway to becoming a nutritionist for feedyards and began working on a PhD in diagnostic medicine/pathobiology at the K-State College of Veterinary Medicine when he was encouraged by several faculty members to look at veterinary school.

Fox felt fortunate to be accepted into veterinary school and finished his PhD while working on his DVM degree. Several mentors were key to Fox's success. Dr. Del Miles, Dr. Bob Smith, Dr. Galen Weaver, Dr. Mike Apley, Dr. David Renter and Dr. Shan Hullman have all been influential in their approach to practice and how they interact with people.

"Critical parts of animal agriculture are the people that are there every day working with the animals," he said. "Empower them with the skills they need so that they can do their job every day."

After graduating in 2010, Fox took a position as a staff veterinarian for JBS Fiver Rivers Cattle Feeding in Greeley, Colorado, before stepping into his current leadership role as a part of Veterinary Research and Consulting Businesses now based out of Hays, Kansas. The business operates in eight states from Kansas to California, conducting feedlot consultation and production-based research.

"[We] ensure that they're doing everything they can to create a safe, wholesome beef product," he said. "And work with and empower the people to improve animal welfare and well-being."

Although Fox noted that regulations affecting antimicrobials will present a challenge, he also feels this will cause the industry to shoulder the challenge together and become better. One opportunity he sees is to find products that have less shared-class components that could impact human health.

Fox has also been active in industry organizations, serving on the 2015 program committee for the American Association of Bovine Practitioners and the executive board for the Academy of Veterinary Consultants. He is also a former member of the animal health and well-being committee for the National Cattlemen's Beef Association.

His advice to those pursuing their careers in veterinary medicine is to always look to their mentors, but that ultimately they will have to decide what they want to do.

Dr. Trent Fox pictured with his family.

"When I was a junior/senior, people told me it was impossible to come out of school and go into feedyard consulting," he said. "This was what I always wanted to do, went at it completely jumping into the fire. It's been very rewarding so far. If there's something you want, you got to go after it."

Finally, in addition to his industry involvement and mentors who have guided him along the way, Fox attributed his success to his supportive wife Mandy, and busy family who allow him to be gone often to pursue his career. He enjoys taking a break from the road to spend time and watch them develop in their lives.

WHAT YOU NEED TO KNOW

Animal health experts Dr. Mike Apley and Dr. Brian Lubbers address your questions about upcoming changes to the Veterinary Feed Directive:

Watch the VFD modules at www.beefcattleinstitute.org

In Research

Economic Impacts of Food and Drug Administration Veterinary Feed Directive Rules on Beef Cattle Sector

By Emilie Herbst

The cattle industry has faced a great deal of public scrutiny, especially when it comes to antibiotics. Due to this the FDA has created new laws beginning January 2017, known as the Veterinary Feed Directive (VFD). These laws will effect all cattle operations as well as consulting veterinarians and feed nutritionists. A VFD will be required from a licensed veterinarian to obtain animal feed that contains medically important drugs to humans. Veterinarians are also required to maintain a veterinary-client-patient-relationship (VCPR) before writing a VFD. The VFD must then be kept on record by the prescribing veterinarian, the feed distributor and the producer for 2 years.

BCI is conducting a survey of consulting veterinarians and feed nutritionists to evaluate the expected added costs for both the producer and the veterinarians as well as what is expected to happen to animal health overall. The survey will also assess what veterinarians have done to prepare clients, staff and themselves for the upcoming changes. Alternative methods for giving antibiotics will also be evaluated. Interviews with cow-calf, backgrounder and feedlot operators as well as veterinarians and feed nutritionists will be conducted to discuss how the industry is preparing for the VFD and what they are expecting to happen once the VFD is put in place.

The results of the survey and the interviews will be used to inform the industry of what to expect as far as economic implications and how to prepare for the upcoming changes. Interviews with the same cattle producers as well as a follow up survey will be issued around 6 months after the VFD is put in place to evaluate the effects the law has had on feed nutritionists, consulting veterinarians and their clients.

Emilie is a graduate of Texas A&M University with a degree in agricultural economics and will begin her graduate studies in the agricultural economics program at K-State this fall. She is originally from Boerne, Texas.

Student Spotlight Elliott J. Dennis

Hometown: Franklin, Tennessee

What is your degree program and anticipated graduation date? PhD in Agricultural Economics, May 2019

Leadership activities: Treasurer of Graduate Student Council; Committee Member Graduate Student Case Study Competition

Student Postition: Graduate Research Assistant for Dr. Ted Schroeder

Research Focus: 1) Livestock and Meat Demand 2) Price Analysis 3) Animal Health. My current project examines the cost to the cattle industry if metaphylaxis were to be removed as a health management practice.

What would you tell your undergrad or first-year self if you could share one piece of advice? Each day do what matters most.

RESEARCH Update

The BCI Research Updates are designed to bring you relevant information impacting the beef industry. We review current cattle health, production and economic research and BCI will send a periodic summary of information that may be relevant to your operation.

Get updates!