Winner of Willie’s Farm Family Program at K-State Football’s Celebrate Agriculture Day!

Cole Buffo was the winner of the two tickets to the KSU-Texas Tech football game on November 7. He submitted the following essay:

**Why I became a Farmer or Rancher?**

This question in our case should be stated as why my wife and I both became farmers and ranchers. I believe first and foremost it’s the passion and dream that fuels us. It’s the legacy and family history that drives us to get up every day and work hard to produce food for the world.

Knowing the generations that worked before us to build what we have today, I think we owe it to them to keep the tradition going and build on the legacy to hopefully be able to pass it down to the next generation. I can’t think of any other occupation where you are more than just a farmer and rancher. We are doctors, nurses, mechanics, welders, fence builders, plumbers, and caretakers. I will leave it here with a quote from George Washington, ” Agriculture is the most healthful, most useful, and most noble employment of man.”

My wife and I are farmers and ranchers because we felt the call and need to serve the call of God to take care of his land and animals. Plus, to keep us grounded and teach us what the Earth has to offer. Farming and ranching not only offers new challenges each and every day, it’s a gamble as we make our lively hood from an industry that has its up and downs and changes all the time.

Cole and Kasey Buffo

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Drought Preparedness for the Cow-calf Producer Webinar on Zoom on July 9th.

by Sandy Johnson, Extension Beef Specialist, Colby

Registration is now open for a webinar that will help Kansas beef cattle producers prepare to manage and reduce the impacts of drought and reduced forage availability on cow herds.

The webinar will be hosted by the Kansas State University (K-State) Animal Sciences and Industry Department and K-State Research and Extension via Zoom on Thursday, July 9, 2020, at noon CDT.

“As the saying goes, failing to plan, is planning to fail.” says Dr. Sandy Johnson, K-State beef extension specialist. “This webinar is being conducted to help cow-calf producers evaluate the options they have to make strategic adjustments in response to reduced forage availability. We want producers to be prepared to take advantage of opportunities that may arise given current resources, markets and weather.”

The program will feature strategic reduction of grazing pressure, drought supplementation of cows, early weaned calf nutrition and management, as well as calf health.
considerations. These topic areas will be addressed by members of the K-State Beef Extension Team.

Register for the webinar online at https://tinyurl.com/KSUBeef-Drought-Preparedness. For questions about the event or to register, please contact Lois Schreiner, lschrein@ksu.edu, 785-532-1267.

Tally Time – Opportunities and Options for Pregnancy Staging

By Sandy Johnson, Extension Beef Specialist, Colby

For any number of reasons from shortage of pasture to cattle marketing opportunities, knowledge of if and when a cow or heifer is pregnant is valuable. That information can be used to identify early bred yearlings for replacements and late bred or open females to remove from pasture in order to extend the grazing season. Heifers that are known to be pregnant to an AI sire bring premiums. A group of yearling heifers pregnant with heifer calves and consequently less expected calving difficulty may be worth more than those with male calves.

Calving distribution reflects past reproductive and nutritional management. Information from staging pregnancies should mirror the calving distribution with the advantage of knowing the outcome earlier in the production cycle. If you learn in August that few cows conceived early in the breeding season there is still time to plan and execute improved nutritional management during late gestation and early lactation so cows begin to cycle earlier the next season. The cull cow market historically declines in association with common weaning times of spring calving herds. Information on pregnancy status is valuable in culling decisions. The more cows that need to be culled, the bigger the impact of timely marketing. Understanding the options available for staging pregnancies and the pros and cons of each will help determine how these tools can best be applied in different production settings.

Rectal palpation is the most commonly available tool for pregnancy determination and staging. Palpation skills vary with experience and exposure to a range of pregnancy stages. Some are comfortable with distinguishing 35 to 40-day pregnancies and may get routine exposure to that stage of pregnancy at a dairy. In areas with a shortage of large animal veterinarians, obtaining the service may be difficult. As the pregnant uterus drops over the pelvic rim, the accuracy of staging decreases. The most detailed information from staging via palpation would come when pregnancies are under 100 days. Estimates on stage of pregnancy made past this point are less specific, often indicating a trimester and not months or days of pregnancy, yet still valuable.

More and more bovine practitioners can offer ultrasound with their services. As with many technologies, machine cost has come down and consequently use has expanded. While embryos can be identified as early as 25 to 28 days of age, more skill and time is required. When larger groups of females are scanned, 30 days makes a more practical lower limit. Ultrasound allows a fetal heart beat to be observed so there is no question of viability on that day. A twin pregnancy could also be detected. Fetal sexing requires additional experience with ultrasound to attain a professional level of accuracy. The
earliest time to fetal sex is around 55 days but due to variation in development, a time period of 60 to 100 days is generally targeted. In some cases, gender can be identified up to 120 days, for example in a relatively small heifer with the fetus positioned just right.

Commercial blood tests are also available to determine pregnancy status. The tests detect one of a number of pregnancy specific proteins produced by the placenta. Thus, depending on which protein and test provider, earliest detection date varies from 28 to 30 days of gestation and proteins remain in the system from 73 to 90 days after calving. When first released, the tests were only conducted in commercial labs. Now a home version is available but the assay requires at least 21 minutes to get results. Efforts are underway on a chute-side version but nothing has reached the market yet. A disadvantage of the blood test is that the proteins remain in the system after fetal loss occurs, and so a positive test indicates the female is or was pregnant. Pregnancies can be roughly staged with blood pregnancy tests if they are repeated for two or more cycles.

Some embryonic and fetal loss occurs normally, most before day 30, but some cows pregnant at 30 days will not be pregnant at 60 days after mating. To some this might seem like the pregnancy check “caused” the loss. If low stress handling and good palpation skills are practiced, the loss is most likely due to something other than the testing process. This does mean pregnancy tests performed relatively early may need to be repeated. Even so, fetal loss from 1 to 2% from the second trimester to term is considered normal.

Costs will vary with numbers and providers but for yes/no information a blood test and ultrasound costs may be fairly close. Your local veterinarian can discuss the timing and options that best fit your production situation and goals. Stage of pregnancy can be very valuable information when making decisions related to drought management, adjusting winter feeding plans and trying to take advantage of market opportunities. Arguments have been made to wait until calving time to determine pregnancy status or when pregnancies are well into the second and third trimester as this has “worked” in the past. We have seen many things in our lives that are a departure from ‘normal’ this year. Your business will be in a better position to adapt to variation in weather and markets with detailed information on pregnancy status and stage.

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Heat Resources for Cattle Producers
By: Justin Waggoner, Ph.D., Beef Systems Specialist

The first weeks of June often bring summer-like temperatures to the southern Great Plains and with those first hot, humid days comes heat stress. Recent market conditions have created a scenario when there are greater inventories of heavier cattle on feed in many feedyards. The convergence of these two factors prompted our KSU Beef Extension Team to host a webinar highlighting the current weather outlook and how to prepare for heat stress events. The webinar was recorded and may be accessed www.KSUBeef.org. One the best strategies for dealing with heat stress is preparation and monitoring. The U.S. Meat Animal Research Center has developed a heat stress forecasting tool that provides cattle managers with a seven-day heat stress outlook by region. The heat stress forecast may be accessed at https://www.ars.usda.gov/plains-area/clay-center-ne/marc/docs/heat-stress/main/. The
Kansas mesonet also has an animal comfort page that allows users to select a specific location within the state. This site allows the user to view hourly updates, as well as previous 7-day animal comfort index chart to monitor overnight cooling. The Kansas mesonet animal comfort page may be accessed at https://mesonet.k-state.edu/agriculture/animal/. If you were not aware of these resources, I highly encourage you to check them out and make checking these sites part of your summer routine.

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Vesicular Stomatitis Virus (VSV) Information

On June 16, 2020, the Kansas Department of Agriculture confirmed a finding of vesicular stomatitis virus (VSV) in horses in Butler County, Kansas. With that finding, Kansas became the fourth state in the U.S. to have confirmed cases of VSV this year, following New Mexico, Arizona and Texas.

**Current Status:** VSV has now been confirmed on 42 premises in Butler, Cowley, Greenwood, Marion, Sedgwick, and Sumner counties.

KDA has actively responded to more than 90 other premises in the area with animals showing clinical signs consistent with VSV; we are awaiting laboratory test results. All infected premises are placed on quarantine for a minimum of 14 days from the date of the last diagnosis.

**What is VSV?** VSV is a viral disease that primarily affects horses, also cattle and occasionally swine, sheep, goats, llamas, and alpacas. Although humans can also become infected with the disease when handling affected animals, resulting in flu-like symptoms, **this is a rare event.** Vesicular stomatitis is known to be an endemic disease in the warmer regions of North, Central, and South America, and outbreaks of the disease in other temperate geographic parts of the hemisphere occur sporadically. The Southwestern and Western United States have experienced a number of vesicular stomatitis outbreaks, including a significant outbreak in 2015. Outbreaks usually occur during the warmer months, often along waterways. VSV is a state reportable disease. VSV was last isolated in the U.S. during the 2019 VSV outbreak, when eight states including Kansas reported confirmed VSV cases.

**Vesicular stomatitis clinical signs**
- Blister-like lesions in/around mouth, nose, coronary band, and/or sheath/udders
- In horses, VSV appears as crusting scabs on the muzzle, lips, ears, coronary bands, abdomen.
- Excessive salivation -- drooling/frothing at mouth
- Fever
- Reluctance to eat
- Lameness or laminitis if lesions develop around coronary band

**What should I do if I see symptoms?**
7. Call your veterinarian immediately. VSV is a reportable disease.
8. Separate affected animal(s) from all healthy animals on your property.
9. Controlling insects (fly spray, fly traps, maintaining clean pens, etc.) is essential to reducing the risk and the spread of this disease.
10. Handle all healthy animals before sick animals. After handling sick animals make sure to wash and disinfect your hands and boots. If possible, change and wash your clothes as well.

**Vesicular stomatitis treatment**

Vesicular stomatitis is treated with supportive care. Since the lesions may be quite painful your veterinarian may prescribe anti-inflammatory drugs. If your animal is having trouble eating, softening their grain in warm water could encourage higher consumption. Softening hay cubes can also help if they are having trouble eating grass/hay. Secondary infections may develop at erosion sites and systemic antibiotic therapy may be warranted.

**What should horse and livestock owners do to protect their animals?**

- Strict fly control in and around buildings.
  - Manure management and elimination of fly breeding areas.
  - Appropriate insecticide use and application for horses, barns, and outdoor areas.
- Do not share equipment, tools or tack.
- Avoid any comingling with animals which may be infected.
- There are no USDA-approved vaccines for VSV.

**How is vesicular stomatitis transmitted?**

- VSV is spread by insects and by direct contact with infected animals.
- Black flies, sand flies, and midges are the known vectors of this disease, but other insects may also be capable of transmission.
- Infected animals shed the virus from the lesions (blisters) they develop, so direct contact with infected animals or water, feed, buckets, and other fomites contaminated with saliva from infected animals can also transmit the disease.
- The virus can also be spread on shoes, clothing, hands, and contaminated equipment, so follow good biosecurity practices and change or wash your clothing and boots after exposure to sick animals.

**Are humans susceptible to VSV?**

- Humans are rarely affected with the disease, though it is possible for humans to contract it when handling infected animals.
- VSV can cause flu-like symptoms if infected saliva gets into an open wound, eyes, or mouth.
- People handling potentially infected animals should wear gloves for protection, and talk with a physician if they have questions.

**Health certificates for interstate travel**

- Because of the confirmed case in Kansas, other states and Canada are likely to increase restrictions on live livestock imports.
- Animal health officials strongly encourage all livestock owners and veterinarians to call the animal health authority in the destination location for the most current import requirements prior to travel.

**Information for the Veterinarian**

- If you suspect vesicular stomatitis, contact the KDA Division of Animal Health at 785-564-6601.
- Set up a quarantine for the farm to help prevent spread of the disease.
- Ensure good biosecurity practices when handling sick and healthy animals.

**Will this impact horse shows, rodeos, other gatherings and events?**
- At this time, KDA is not restricting events. However, we have issued guidelines (below) to help events function safely to protect the health of attendees.
- As always, animals showing signs of illness should **not** travel to events where they can expose other animals.

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