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Livestock and Natural Resources

Stretching Hay Supplies

Unusual weather patterns are causing havoc on our livestock operations. The unusual drought and lack of hay, and now the really cold weather and the increased demand for forages, have left farmers and ranchers “foraging” for more hay or trying to figure out how to make their supply last.

I’ve had quite a few questions on how to stretch the hay as much as possible. Fortunately, the beef cow is highly adaptable when it comes to feedstuffs and energy concentrations. We also have some by-products available that are high protein feeds with energy levels higher than corn, another advantage is that the starch has been removed during the ethanol process, which leaves a product that does not interfere with fiber digestion in beef cattle rations.

Here are a few ration suggestions for a 1350-pound cow, British bred beef cow, in late pregnancy.

Ration 1- Brome hay 14 pounds, Corn Stalks 14 pounds, Dried Distillers grain 2 pounds

Ration 2-Brome hay 12 pounds, Dried Distiller’s grain 7 pounds

Ration 3-Brome hay 12 pounds, Dried Distiller’s grain 4, Corn grain 3 pounds

Ration 4-Brome hay 12 pounds, Corn Silage 31 pounds

Fed with free choice mineral and vitamin mix. Because these rations have high energy feedstuffs, you will not be full-feeding cows, but rather they will be on limited intakes.

If dry corn gluten is more accessible, you can substitute gluten for the Distiller’s grain, by adding 10% more. So if the ration calls for 4 pounds of distiller’s grains, you can substitute 4.4 pounds of corn gluten.

Make sure the bunk space is adequate so all cows get their share. Have a good fences or offer a free choice bale of lower quality, such as cornstalks, soybean residue or oat straw. This can act as a filler.

Make every effort to reduce feed waste. For some producers, tub grinding feeds or feeding a total mixed ration in bunks, tires or other feeders have dramatically reduced feed waste and lowered winter feeding cost. For hay feeding operations, research has shown that hay rings or panel feeders in good repair can help minimize waste. Research has also shown that restricting time access to the hay feeder can also decrease waste. If you are unrolling hay in an open field, be sure to feed only what is needed on a daily basis. Feeding more causes substantial loss. Remember cows laying on snow need 25% more energy, also during snaps of cold weather, they will need 10% more feed.

Source: Stretching Hay Supplies for Beef Cow Herds, Iowa State University, IBC 45.

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Kansas Mesonet

Some people have really good memories and can easily remember what a particular summer was like twenty years ago. Others have years of calendars or notebooks of daily weather data. One of the facets of a number of farm data management platforms is the availability of weather data. Some don't have any of the above – that's the category I fall in to.

One resource that can help fill the gap is information from the Kansas Mesonet. Established in 1986 at KSRE research centers and experiment facilities around the state, these stations provide valuable current and historical weather data for ag producers and homeowners alike. Gradually, the Mesonet is expanding to new locations selected based upon unavailability of automated weather data in the region. They intend to improve weather collection in the state and make it readily available to the public and research.

What information can they provide? A visit to the main page (www.mesonet.k-state.edu) shows a map of the state with tabs for temperature, 24 hour precipitation, and wind speed. On seven degree days like this morning, it's a snapshot of where everyone around you is sitting as well. Each individual weather collection station is shown. A simple click on any station pulls up that station's current conditions and a NOAA weather forecast image for the day.

There's also huge datasets behind the home page, as well. Tabs for Weather, Agriculture, and Fire provide information on everything from soil temperature to growing degree days to heat indices. Soil moisture data is available at many sites across the state. Inversion prediction information is available as well.

Thinking about a spring burn and want to know about soil moisture and what humidity levels look like? The Kansas Mesonet has that information. Thinking about a spring garden or corn planting? Soil temperatures are available to help you make planting decisions. Lots of historical data is available as well, allowing you to look at long term and recent trends. They even have an animal/cattle comfort level webpage based on current conditions.

Looking for weather data? The Kansas Mesonet likely has it. Check them out at www.mesonet.k-state.edu. For real time updates, follow them on Twitter at [@ksmesonet](https://twitter.com/ksmesonet). Don't have a station nearby? Reach out to Christopher "Chip" Redmond and inquire about the requirements for a station! Contact him at christopherredmond@k-state.edu or 785-477-6204.

Farm Transition Meeting - February 13, 2019

Trying to keep the family farm going is a dream for many farmers, but there are usually a lot of questions on how to make that happen. For example: should you structure the farm in a trust, an LLC or a simple partnership? We hope to answer these questions and many more at our Farm Transition meeting on February 13th at the Fair building in Holton, 12200 214th Road.

Roger McEowen, Kansas Farm Bureau Professor of Agricultural Law and Taxation at Washburn University and a former KSU Ag Law Specialist will be on hand to try and answer these questions. We'll also have Mark Peterson, Stanton, Iowa, tell his unique tale of keeping the family farm going for another family while facing his own dilemma of how to pass the farm on once again. The meeting will begin at 1:30 pm and is open to all interested persons. We are happy to partner with the Jackson Heights FFA Alumni to bring these speakers to our area.

Cindy Williams
Meadowlark Extension District
Food, Nutrition, Health and Safety

When The Power Goes Out

When refrigerators and freezers suffer a loss of electrical power, the refrigerated and frozen foods inside can become susceptible to foodborne contaminants in just a few hours.

Severe weather events such as blizzards, thunderstorms and tornadoes can bring down power lines in a neighborhood, or even entire grids of a city. When the power goes out, the clock starts ticking on the viability of meats, seafood, ice cream, cut produce and even leftover pizza.

According to the USDA, bacteria such as *E. coli*, *Salmonella* and *Campylobacter* can grow within minutes of food entering the “Danger Zone”—the range of temperatures between 40F and 140F. The insulation in freezers and refrigerators are your best allies during a power failure, as long as you don’t subvert them.

“One advantage of winter storms is that we often have 24 hours or more of advance warning,” said Londa Nwadike, a food safety specialist with K-State Research and Extension and the University of Missouri. “This allows you to take some pre-emptive steps to preserve your food.” A refrigerator in good working order can maintain its temperature for about four hours; a full, reliable deep freezer can keep food frozen as long as 48 hours. Nwadike said there are small cheats that can help stretch your advantage.

*Share space with friends—if you have nearby friends and neighbors that have extra space in their freezer, consolidating frozen foods is a great strategy. “A full freezer will maintain its temperature longer.

*Fill in the gaps—If you know a winter storm or blizzard is on the way, consider moving as much as possible from the refrigerator to the freezer. Leftover pot roast, tuna casserole, and plastic bottles of fruit juice will keep these foods in a colder environment, and helps fill empty spaces in the freezer. “You can also use water bottles, plastic gallon jugs of water, plastic storage containers filled with water,” Nwadike said. “Just get them frozen before the power goes out. If you have a source for dry ice (sometimes found in grocery stores), consider adding a few blocks to your freezer. Dry ice can extend your safe zone by several hours.

*Keep ‘em shut! —As much as you can, Nwadike said, keep the doors closed. “Don’t open them to peek in and check to see what the temperature is—just leave them closed. Avoid that temptation.”

Refrigerator and freezer-rated thermometers are also a good permanent addition to your appliances. Nwadike says they’re inexpensive and will give you a reading the first time you open the appliance, after the power has been restored, and are important to use anytime.

After that, the question is simple: Keep it or toss it?

The USDA provides a handy chart detailing which foods are most vulnerable (meats, seafood, dairy, ice cream) and which are a bit more stable (whole fruits and vegetables, condiments, hard block cheese). When checking the freezer, Nwadike said ice can be a good indicator.

“If an item is still frozen solid, or if you can still feel ice crystals, that’s a good thing,” Nwadike said. “But whatever you do, don’t taste something and think, “Well, if it tastes OK, it’s still good.” Bacteria doesn’t always reveal itself that way.”

The often-repeated adage holds true: When in doubt, throw it out.

Some homeowners’ insurance providers will cover a certain amount of food loss that results from a power outage. Nwadike advises homeowners to check with their insurance providers to find out what is covered, and what kind of documentation will be required to make a claim.

Even if the loss of food creates a financial hardship, it pales in comparison to the risks of consuming unsafe, contaminated food. Some foodborne illnesses can result in a costly hospital stay, if not death.

February 1, 2019

Nancy C. Nelson
Meadowlark Extension District
Family Life

No news from Nancy