

Corner Post **CONVERSATIONS**

K-STATE | Midway District
Research and Extension

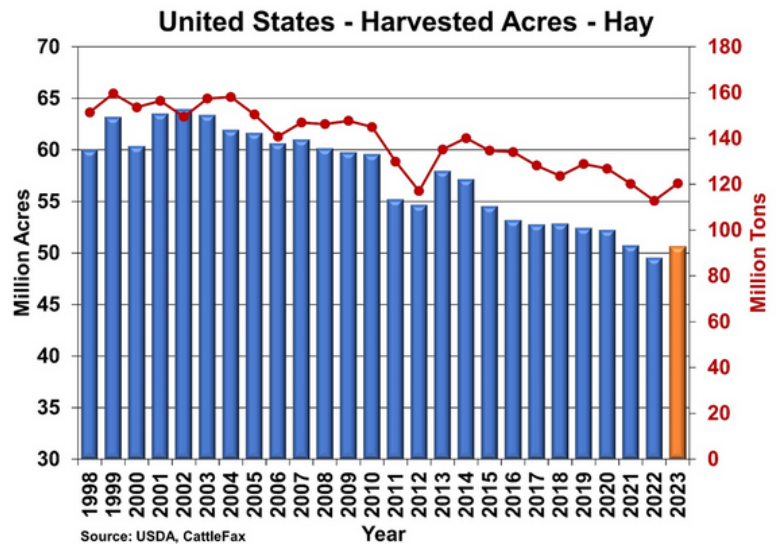
"AS I SEE IT"

Hay and feed availability continues to be a major concern for producers across Midway District and Kansas. Current drought conditions caused by the 3-year “La Nina” weather pattern have in part created the smallest hay production crop since the 1950’s according to the USDA. In April, the USDA estimated that the U.S. average all hay price was \$249/ton. This was \$18/ton higher than March and only \$1 lower than the record high price last October. Alfalfa prices increased \$20 higher from March to a new record high \$287/ton. As the weather pattern switches to more of a wet El Nino pattern, it will still take some time to see price relief as prices for all hay in May are likely to make a new record high. Yet, the tides are turning and there is potential for the second half of the year to have softer prices.

The USDA estimates that harvested hay acres will increase 1.1 million acres to 50.65 million acres. With improved moisture conditions and a conservative yield estimate of 2.4 tons/acre, hay production has the potential to increase by 8 percent this year or 8.75 million tons, back to 2021 levels. While still not a large production historically, when combined with the decline in beef cow numbers, hay prices would be expected to trend lower into the end of the year.

Historically, hay prices tend to peak in May and then as the first cutting is baled, prices tend to drift lower into the fall. This is expected to be the case this year. While year over year, the 2023 average price is expected to increase \$8/ton compared to a year ago, in the second half of the year prices are expected to average about \$20 below year ago levels.

Statistics Provided by: CattleFax and the USDA



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This newsletter is designed to provide you with timely information on relevant issues facing livestock producers today. If I can assist you moving forward please contact me. Looking forward to working with you!

June 2023/July 2023

MANAGEMENT CONSIDERATIONS

Cow Herd Management for Spring-Calving Cow Herds:

1. Evaluate BCS in conjunction with feed/forage availability.
2. Think through your plan if you anticipate early-weaning or needing to feed/supplement on pasture through the summer.
3. Schedule early pregnancy checking activities if not already done.

Salt and Mineral Program:

1. Closely manage free-choice salt and mineral programs.
2. Record date and amount of salt and mineral offered and calculate herd consumption on a pasture or group basis.
3. Adjust how you are offering product to cattle if needed to achieve intake early in the summer.
4. If consumption is 2X the target intake, then cost will be too!
5. Properly store bags and pallets to avoid damage and product loss.

Bull Battery Management:

1. Closely evaluate bulls at the start of the spring breeding season
2. Watch for injury so you can intervene and treat bulls promptly if needed.
3. Ensure they are aggressively covering cows.
4. Monitor BCS, particularly on young bulls.
5. If pulling bulls from cows to manage the length of the breeding season, schedule those dates and have them on the calendar in advance.

Calf Management:

1. If considering creep feeding calves, make sure you understand what your objective is by doing so and calculate the value of gain relative to cost of gain.
2. Monitor calves for summer respiratory illness.
3. Schedule any pre-weaning vaccination or processing activities.

General Management

1. Continue to evaluate early-summer grass growth and adjust your grazing plan as needed.
2. Continue efforts to control invasive species in pastures.
3. Employ multiple strategies and chemistries for controlling flies and insects.
4. With high feeder calf prices, consider price risk management tools.

For Late-Summer and Early-Fall Calving Cow Herds

1. Evaluate cows for BCS and adjust your plan to ensure mature cows are ≥ 5.0 and 2-4 year old females are ≥ 6.0 at calving.
2. Review your calving health protocols as needed.
3. Keep track of Calving distribution throughout the calving season (% 1st cycle, % 2nd cycle, % 3rd cycle.) This information will also help you make replacement heifer decisions.
4. Keep track of your calving interval. Are you staying within a 45 to 60 day calving season?

MANAGING HEAT STRESS

by Clint Laflin, Midway Extension Livestock Agent

Each season presents unique challenges to beef producers, and summer time is here. Temperatures can soar to over 100 degrees this time of year. Heat stress effects all classes of cattle, and cost's the U.S. beef industry an estimated \$370 million in cattle losses each year. A.J. Tarpoff, a beef veterinarian with K-State Research and Extension, said cattle are resilient animals; they will often acclimate to hot temperatures.

But an accumulation of factors – including humidity, solar radiation, the color of their hide, diet and more – can drastically change a cow's ability to withstand summer's heat.

"It really is a multi-layer challenge," Tarpoff said. "Each animal within a group or pen is not affected the same way. Animals with higher body condition scores, or with darker hides, or finisher steers and heifers that are getting ready to go to harvest are at higher-risk of heat stress." Tarpoff said heat stress decreases the reproductive efficiency and performance of cattle grazing on pasture. In confined facilities, heat stress often causes cattle to eat less, which also negatively affects their performance.

The human body cools itself on a hot day by sweating, called evaporative cooling. But Tarpoff notes that cattle sweat only 10 percent as much as humans, and panting is their primary way of dissipating heat.

"As temperatures rise and their heat load increases, they will start breathing faster," he said. "They are dissipating heat through tiny droplets in the respiratory tract."

Doing so, however, causes cows to eat less, setting them on a path to poor growth and future performance.

"This all has to do with heat load," Tarpoff said. "The internal temperature of cattle will peak two hours after the hottest point of the day. So our strategy for keeping cows cool needs to be built around knowing that."

Another factor is that cattle produce heat by digesting food, typically four to six hours after eating. "So if we feed animals within the wrong period of time, we can actually increase their heat load because the heat of digestion and the heat from the environment are building on top of each other," Tarpoff said. "We want to keep that from happening."

MANAGING HEAT STRESS - CONTINUED

by Clint Laflin, Midway Extension Livestock Agent

Tarpoff listed best management practices for helping to reduce heat stress in cows:

- **Handling.** Receive, ship or move cattle only during the coolest parts of the day, preferably before 10 a.m.
- **Feeding.** Modify feeding times. Feed 70 percent of the animals' ration as late in the evening as possible, which puts the peak heat of digestion overnight when temperatures are likely cooler. Decrease feeding during the day.
- **Managing heat.** Split cattle between pens or reduce stocking density. Maximize airflow by removing obstructions around facilities, including weeds. If feasible, install shade structures, which can reduce solar radiation and reduce the temperature on the pen's floor. Install sprinklers to wet cattle down at night or early morning so as not to increase humidity.

Then, of course, there is the importance of providing water. Lots and lots of water.

"To put it into perspective, when the temperature goes from 70 degrees Fahrenheit to 90 degrees, a cattle will consume about double the amount of water," Tarpoff said.

As a rule, he said cattle should consume "about five times the amount of water as the dry matter they are consuming."

"Cool, clean and readily-available water is critical during heat stress events. We may have to increase the water tank capacity within a pen to meet these needs. Producers need to be prepared for that."

Tarpoff said he follows two sources for help in making a decision when to put a heat stress management plan into full effect.

The [U.S. Meat Animal Research Center \(MARC\)](#) maintains a seven-day forecast tool for the United States, taking into account temperature, humidity and solar radiation.

"The other tool I use is the [Kansas Mesonet](#), which provides an animal comfort index," he said. The Kansas Mesonet, housed at Kansas State University, is a network of observation towers located across the state that updates climate information every hour.

"I know that if we don't have those night-time cooling hours, the animal won't be starting each day at thermo-neutral, so they're more at risk on the second or third day," Tarpoff said. "That's when we should start putting in some of these management strategies."