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District Extension Agent, Crops & Soils/Horticulture

Summer Monitoring

The start of the growing season can be an exciting time. Grass greens up. We might be getting ready to put cattle out on grass or are looking ahead to haying season.

Mid-summer is sometimes a different story. It's hot. Ticks attack from below and mosquitos from above. Regularly checking pastures might get replaced with the busyness of haying. After haying, the busyness of hauling water or moving livestock to other grass means we don't return to those hayfields like we did earlier. Most of the time, it all balances out and we're just fine, but sometimes, it's good to be a little more deliberate about monitoring.

When you're chasing weeds in the pasture, take a yard stick and do some random checks of grass height. It's easy to 'guess' how much grass might be left out there, but actually measuring may tell us a different story. It may mean we have to make decisions about rotations or supplementation earlier – but it may mean a better stand in the long term.

A look now and again at hay fields post-harvest isn't a bad thing, either. When we remove almost the entirety of the plant during harvest operations, we force root reserves to push out new growth. Regular visits may only tell us what we don't want to hear: that drought conditions are worse than we thought and recovery hasn't happened as quickly as we'd like. It can also allow us to catch issues like fall armyworm feeding or lack of recovery in thinner soils that we can do something about.

June 18-24 is National Forage Week, and might be a good time to start that more deliberate monitoring. It doesn't have to be much, but regular scouting can help you make decisions in the short term that you'll reap the benefits from for years to come.

Tree Health Evaluation

It's been a tough few years for our trees. We're seeing it in thinning canopies after leaf out this spring or in some cases issues where trees didn't leaf out at all.

Why did they go backwards? There are lots of reasons, and most decline isn't attributed to just one. A tree can handle one dry spell pretty well. It can handle drought plus a spring disease okay. Start getting two or three dry years plus disease plus a defoliating insect, etc..., and problems start to occur. That's when characteristics like those above start to show.

Monitor trees by observing exposed (not shaded) branch tips. If less than four inches of growth is seen over the previous year, the tree may be under stress and susceptible to decline.

Not sure what new growth looks like? Color is the key. New twigs emerging from the bud may be greener with brighter colored leaves. Leaves will be attached directly to new stems rather than lateral branches and look more compressed than growth from previous years.

If the tree is unhealthy, determine why. It might be a mechanical injury or sunscald. If compounding stressors are a factor, consider how to alleviate them. For example, trees need to receive water to a depth of 12 inches every couple of weeks during summer – via rainfall or supplemental watering. Planning now for supplemental watering or winter protection or disease/insect management can save you valuable time – and a valuable tree – later.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Problematic Pinkeye

There are many benefits to regularly checking on livestock after turning out on pasture. You can monitor forage resources, make sure water supplies are adequate or assess the general health and condition of animals. If you're like me - you can simply enjoy spending time outside with the cows in peace and quiet of nature, away from people. One issue that can happen at any time of year, but is frequently seen in summer is Pinkeye.

Infectious Bovine Keratoconjunctivitis (IBK) or pinkeye can be very problematic at times. It is manifested as an inflammation/infection of the cornea and conjunctiva of one or both eyes. Pinkeye is a highly contagious infectious disease that affects cattle worldwide. The incidence and severity of this common disease can vary widely from year to year. One year there will be limited issues and the next can be a total train wreck! Pinkeye can cause substantial losses to the cattle industry through decreased weight gain, lowered milk production and treatment costs. Additionally, market research shows substantial discounts for feeder calves with indications of active or past pinkeye infections. In fact, a recent South Dakota study shows that calves with eye issues only averaged 57% - 76% value of their non-affected counterparts.

Excessive eye weeping and eye closure are the two signs most commonly observed. Severely effected animals will be reclusive and move cautiously, even running into objects with reduced vision. As the disease progresses, the cornea becomes cloudy or white. Frequently, an ulcer develops near the center of the cornea. Cattle with pinkeye keep the affected eye or eyes closed because of pain and to avoid bright sunlight. The infection may run its course for several weeks. Long-term effects can be minor scaring to blue eyes to "dead" or popped eyes.

Moraxella bovis (*M. bovis*) is the major causative agent; however, other organisms have been detected in eyes with infections resembling pinkeye. Most often pinkeye is not the result of a random direct bacterial infection, but rather caused by a combination of factors. Factors contributing to infections are: physical eye injury, plant parts (seeds, stems, leaves, pollen), dust, pest such as flies and excessive ultraviolet light exposure.

Prevention efforts should be directed at minimizing eye irritation and reducing transmission between animals. Since flies cause both irritation and transmission, fly control efforts are paramount, although don't completely eliminate pinkeye risk. The benefits of fly control are many, in addition to the reduced risk of pinkeye. Reducing dusty conditions and providing protection against sunlight also aids in control. Cattle often have grass or weed seeds in their eyes, and these materials can irritate the eye and contribute to pinkeye development.

If a pinkeye is noted in any animal, the best way to get ahead of an infection storm is rapid response and treatment. Prompt treatment of cattle with pinkeye usually includes an antibiotic, topical treatment and often includes eyepatches to limit further irritation. Since the cornea heals slowly, any ulceration is likely to require several weeks for complete recovery. Caution needs to be given to the handling of animals with pinkeye infections, as they may have blindness and they may become more flighty than normal. Vaccinations for pinkeye have variable results, mainly due to the wide range of specific causative organisms in a particular region, that may or may not be included in a vaccine.

There are other infections that look like pinkeye so it is recommended that you consult with your herd veterinarian to assist you in the diagnosis, treatment and control of pinkeye or any other eye health issue. Prevention and control are best achieved with a watchful eye and proper animal health product guidance from a veterinarian. K-State's Pinkeye publication [MF-2210](#) provides additional information for those wanting to learn more.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Rural Child Care Part 2

In April 2023, I discussed the need for rural childcare in Kansas. The lack of childcare in the area significantly impacts the parents of children needing care and local employers. The problem existed before COVID-19, but the pandemic has further exasperated the problem. According to Child Care Aware of Kansas, Kansas meets 49% of the needed childcare slots. Since 2020 Kansas has lost 344 childcare providers. Currently, Kansas needs 85,000 childcare slots to meet the current demand. Our local area faces similar childcare challenges as the rest of the state. The Meadowlark Extension District, which encompasses Jackson, Jefferson, and Nemaha counties, needs approximately 977 more childcare slots to meet demand.

On May 9th, the Meadowlark Extension District hosted an informational session with Dr. Bradford Wiles, a Kansas State Research and Extension Specialist. Dr. Wiles has been working with rural communities across the state to improve the childcare gap. Dr. Wiles spoke with community members about the district's current childcare situation and answered the group's questions.

One of the first steps Dr. Wiles recommended to the group is to seek community input. With the cooperation of a newly formed childcare task force, we ask that you complete a brief survey on rural childcare in our area. Dr. Wiles and his staff will support this effort by collecting the surveys and providing feedback on the survey results. The task force is hoping to find innovative solutions that fit the specific needs of Jackson County. It is crucial to get input from everyone in the community, whether you need childcare or not. Everyone's response is extremely important. Please take the time to complete this short survey. The survey link is listed or follow the QR code.

English

<https://tinyurl.com/mcjsa6mj>



Spanish

<https://tinyurl.com/5n7e7jpb>



Thank you for providing your input and supporting our community. For more information about the Jackson County Child Care Task Force, contact Teresa Hatfield at 785-364-4125 or thatfield@ksu.edu.

Cindy Williams
District Extension Agent, Family & Community Wellness

Should I Vacuum Package Food at Home?

There are several types of home vacuum packaging equipment available, which vary in price and sophistication. These machines may extend the storage time of refrigerated, dried and frozen foods, but vacuum packaging is not a substitute for heat processing of home canned foods.

Vacuum packaging is also not a substitute for the refrigerator or freezer storage of foods that would otherwise require it. In fact, vacuum packaging can add to the concerns associated with storing of these perishable foods.

Producing a vacuum means removing air from the contents of a package. Oxygen in air does promote certain reactions in foods which can cause a decrease in quality. Removal of oxygen from the environment in the package will preserve some quality characteristics and extend the food's shelf life.

On the other hand, removal of oxygen does not eliminate the possibility for all bacterial growth, it just changes the kinds of bacteria that grows. It does tend to limit the growth of spoilage bacteria. These are the bacteria that change the quality of food in noticeable ways (color, odor, sliminess, etc.). When these bacteria are allowed to multiply, they can let you know if the food is going bad before it reaches the point it makes someone sick. In a low-oxygen environment like vacuum packaging produces, the spoilage bacteria do not multiply very fast so the loss of food quality is slowed down.

Some pathogenic (illness-causing) bacteria, however, like low-oxygen environments and reproduce well in vacuum-packaged foods. In fact, without competition from spoilage bacteria, some pathogens reproduce even more rapidly. These bacteria often do not produce noticeable changes in the food, so there may be not indicators to warn the consumer that the food is unsafe to eat.

So, what does this mean? It means that perishable foods still need to be treated carefully to prevent pathogens from making them unsafe. Refrigeration at 38-40°F is critical to maintain safety. Vacuum packaging can also be safe for food that will be stored frozen. The food must be thawed carefully—in the refrigerator is preferred—to prevent bacterial growth.

Probably the most effective use of vacuum packaging is to extend the storage quality of non-perishable dry products such as nuts, crackers, or grain products. These products are low enough in moisture that bacteria growth is prevented.