K-STATE Research and Extension | Meadowlark District

April 11, 2025

David Hallauer
District Extension Agent, Crops & Soils

Herbicide Efficacy Tour: August 5th

This year's Meadowlark Extension District Plot Tour/Fall Crops Meeting is going on the road to Ashland Bottoms (S 33rd St and W 40th Ave. off McDowell Creek Road (39.1170, -96.6359), the home of K-State Research & Extension's 2025 herbicide efficacy trials. Coordinated by Extension Weed Scientist Dr. Sarah Lancaster, these trials include herbicide efficacy research driven by a combination of farmers *and* industry partners.

Plots (corn/soybean) include the effect of corn planting date on herbicide efficacy, pre-emergence *and* residual herbicide programs and product rate comparisons all in replicated trials available for up close viewing. Dr. Lancaster will be on hand to explain plot backgrounds and answer questions.

Registration begins at 9:00 a.m. with refreshments courtesy of the Meadowlark Extension District at the Ashland Bottoms site address above. A walking tour (please plan accordingly and wear comfortable shoes; onsite restrooms will not be available) of selected plots will run from 9:15 to 10:30. Participants can then view plots of interest on their own – or are free to proceed with their day. A list of trials is available at: https://www.agronomy.k-state.edu/extension/weed-management/herbicide-evaluation-plots-ashland-bottoms/ . Plots will be available through harvest if participants would like to take a look on their own.

Please RSVP by August 1st to help with refreshment/handout counts online at https://tinyurl.com/ashlandrsvp , or via e-mail/text to dhallaue@ksu.edu or (785) 851-9520. Include your name, number attending, and a contact phone number and e-mail. In case of inclement weather, participants will be notified via text/phone.

K-State Research and Extension is an equal opportunity provider and employer. Kansas State University is committed to making its services, activities, and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, or a dietary restriction please contact David G. Hallauer at 785-364-4125 or dhallaue@ksu.edu .

Hope to see you there!

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Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Wet Hay Handling

Often, I wonder if these news columns are ever read but periodically do receive feedback from folks who read them. Same could be said for contributions to the District newsletter, but IF you've read the latest newsletter, David Hallauer – District Crops agent and I had complementary articles relating to hay harvest timing. This is another hay harvest related topic that summer rains might help to create. It seems like a relatively dry spring turned into a wetter summer, right about the hay harvest time.

Hay that gets rained on while it's still in the windrow will lose nutritional value, and if it's put up too wet or been sitting in water, has the potential for issues and needs to be managed accordingly. Moisture within harvested hay can lead to combustion. Hay should be put up at 20 percent moisture or less. When the moisture is above that percentage, microbes begin to break down plant matter, and mold growth occurs. This process produces heat and leads to the danger of combustion within the bale.

If weather conditions don't allow for proper drying and curing, baleage or high moisture baling techniques that utilize wraps to create anaerobic fermentation can be considered to limit decomposition and heat production. Should you find yourself with wet baled hay, store it away from other bales, and outside to limit the risk of a fire spreading. Periodically check temperatures with a thermometer, making sure any bales at 170°F or higher are closely monitored. Bale combustion can begin at temperatures as low as 190°F, especially in course stemmed hay, which allows more oxygen in.

Not all wet baled hay will combust, but wet bales will continue to decrease in quality. Mold growth uses plant tissues as an energy and protein source, ultimately decreasing hay quality. Hot temperatures denature cell structures, which change proteins and carbohydrates, making them less beneficial for the animal when digested. In some cases where anaerobic conditions and heat occur, hay may caramelize or become golden colored and smells sweet. This heat-fermented hay is highly palatable but also lower in quality due to heat damage during the fermentation process.

The biggest issue with mold is that it has the potential to produce mycotoxins. If mycotoxins are found in high enough levels, they can be deadly to animals who've ingested them. Most of the time death doesn't occur; but reduced intake, decreased ruminal function, and overall poorer performance of the animal is the result. This has an economic loss, as does poor rebreeding rates and decreased calf weights due to the issues associated with mycotoxin ingestion.

The best way to use moldy hay is to allow the animals to sort it. Providing good quality hay to offset the poorer hay will help to reduce the performance issues discussed. Mold often reduces palatability and thus increases the amount of hay wasted. Pregnant animals are more sensitive to mycotoxins, which can lead to abortions, so use cation with moldy hay around this class of livestock. Horses are highly sensitive to mold in hay, with danger of both respiratory and toxin issues. Additionally, mold can also be a health risk to the producer. Always wear a dust mask when working with hay that may have high amounts of mold.

Testing wet harvested hay is critical to knowing the quality remaining in the forage, as well as potentially testing for molds or mycotoxins. The quality of hay will continue to drop throughout the year until the bales cool and drop below the 20 percent moisture threshold. To make sure to get an accurate assessment of hay quality, sample by lot (*hay harvested from the same field within a 48-hour period*) a few weeks before feeding. This should give an accurate idea of the forage quality while still giving the lab time to get results back. Knowing the quality of hay allows for better decision making of how to use low quality forage and prevent underfeeding of animals.

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Laura Phillips
District Extension Agent, Horticulture

Japanese beetles

This time of year, many of us are combating Japanese Beetles in our gardens and lawns. Similar in appearance to other June bugs, the adult Japanese beetle is 1/4 to 3/8-inch long with a shiny, metallic-green head. The body has bronze wing covers and five clumps of hair that border the sides of the abdomen. The larvae are cream-colored grubs with a light brown head about 1 ¼-inch long at maturity.

Adult female Japanese beetles lay eggs in July beneath wet lawns. Upon hatching, larvae feed on the sod roots and overwinter until the following summer. In June, the larvae pupate, and adult beetles emerge to feed above ground. Japanese beetles are incredibly destructive and feed on every part of the plant. The beetles skeletonize leaves and consume flowers and fruit entirely. Hundreds of varieties of plants can play host to this non-selective pest. Some plants, however, are more attractive to Japanese Beetles than others. If you are looking to put in new flowers, trees, or shrubs, reach out to our office for a list of plants that do not attract Japanese Beetles.

In many cases, you inevitably want to grow something that attracts these pests. As with any pest, it is good to check your plants daily for symptoms, so you know when to start taking measures to protect against damage. Controlling them is a challenge this time of year as new adult beetles emerge from underground daily over several weeks. In small quantities, beetles can be manually removed from plants and dropped into a bucket of soapy water. Mornings are the best time to observe as beetles are slower and easier to catch. Often you can shake the branches or leaves of your plant above a bucket, and the beetles will let go and fall into the bucket.

If you have small scale plantings, you can cover your plants in a net to physically prevent the beetles from getting to your plants. This is difficult if you have a full-size tree, but can work well on dwarf trees, shrubs, and other plants.

While you can buy traps that lure Japanese beetles into a container where the pests can be gathered and disposed of, these are not recommended for controlling the beetles. The traps use pheromones used to attract beetles and can draw in even more beetles than would naturally appear. Not all these beetles may end up in traps and the result is, you may also catch native beetles as well. If you do use a trap, place it far away from your desirable plants to lure the beetles away from your garden or lawn instead of into it.

Insecticides such as cyfluthrin (Tempo), bifenthrin (Hi-Yield Bug Blaster II) and cyhalothrin (Bonide Beetle Killer, Spectracide Bug Stop Indoor + Outdoor Insect Killer, Spectracide Triazicide, Bonide Caterpillar Killer) can be used for Japanese beetle control with about two to three weeks protection. Carbaryl (Sevin dust) can also be effective but only for about one to two weeks. The downside of using such products is they will also eliminate parasitoids and other natural predators. Neem products (Natural Guard Neem-Py, Fertilome Triple Action Plus) and Pyola (pyrethrins in canola oil) can offer control for three to four days.

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Teresa Hatfield
District Extension Agent, Family and Community Wellness

Plan for Peace of Mind: The Importance of Advance Directives

Do you ever think about what would happen if you could not speak for yourself in a medical emergency? Who would you want to make your decision for you? Who knows your wishes concerning life-sustaining technology? Advance Directives are legal documents that allow you to voice your future healthcare wishes through a designated person you appoint.

Unfortunately, only one in four Americans over 18 has these documents. Many people believe this type of planning is only for older adults; however, anyone at any age can experience an accident, a serious disease, or surgery that leaves them incapacitated and unable to make their own health care decisions.

K-State Extension has a publication containing all the documents you need to complete your advance directives. The documents are easy to complete and won't take too much time. Three types of advance directives are available: a durable power of attorney for health care, a living will, and a pre-hospital do-not-resuscitate order.

The durable power of attorney for health care allows you to select an agent. The person you appoint will be able to make health care decisions on your behalf if you are temporarily or permanently incapacitated due to illness or injury. This appointed person has the authority to make treatment decisions. This person, however, cannot revoke any previously existing documents regarding your wishes, such as a living will.

A living will is a document that allows you to write your wishes for end-of-life care if you cannot speak for yourself. It differs from the power of attorney for health care in that it does not appoint a person to speak for you; it states in writing what type of care you want at the end of your life. The living will addresses life-sustaining care, such as using a ventilator, artificial nutrition, and hydration.

The do not resuscitate (DNR) order is a legal document that allows adults to express their wishes not to have resuscitation attempted should they stop breathing or their heart stop beating. Having a DNR means that you do not want to have cardiopulmonary resuscitation (CPR) attempted. The decision to have a DNR should not be taken lightly. Generally, you, your physician, and a witness will have to sign this document. You can revoke the DNR anytime by signing the signature line "I hereby revoke the above declaration."

An advance directive offers peace of mind by knowing your wishes will be honored. If you would like more information about advance healthcare directives, contact Teresa Hatfield at thatfield@ksu.edu or call 785-364-4125.

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

No news article this week.