

David Hallauer
District Extension Agent, Crops & Soils

Uneven Emergence

Despite our best efforts – and often because of factors outside our control – emergence issues occasionally arise in our corn crop. Sometimes the issue is bad enough over a large enough area our decision to replant is simple. At other times, it can be a tough call.

A study by researchers from Wisconsin and Illinois dives deep into some of the factors affecting emergence looking at yield loss, stand loss, and the relative yield contribution provided by delayed plants in a complex plot design. Two different hybrids (fixed and flex) were planted at differing planting dates and delayed emergence levels of 25, 50, and 75.

As one would expect, the results are complex, but provide a nice look at what can be expected when planting is either delayed or emergence is uneven. For example, the study showed if 25 percent of the plants in the field emerged three weeks late, yields were about 90 percent of the maximum plot yield – and the exact same yield as was attained with 25 percent of the plants were missing and never did come up. This suggests that the contribution from late emerging plants doesn't affect yield much one way or the other.

Another interesting facet of the study compared even emergence at three different planting dates (one and a half weeks between plantings), with the optimum planting date yielding five percent more than planting a week and a half later and an over ten percent yield drag when planting three weeks later. Interestingly, a week and a half delay even with varying degrees of stand loss didn't fare a lot worse, with yield losses of six to nine percent at varying degrees of delayed planting.

The bottom line: sometimes things go awry, and we get to make a stand evaluation to determine whether to keep it or start over. If emergence delays are the issue, a delay of even up to a couple of weeks may not mean too much. Let's just hope it doesn't become an issue at all..

For full results, request a copy from any District Office or visit:

<https://store.extension.iastate.edu/product/3081> .

Alfalfa Weevil Showing Up

If you're an alfalfa grower and have not yet scouted fields for alfalfa weevil, it's time to do so. Larvae have been confirmed across the entirety of the Meadowlark Extension District with infestation numbers all over the board. A week of cooler weather helped slow feeding (and even resulted in some slight level of weevil mortality), but as temperatures warm, feeding will resume. If stands are thin or growing slowly, damage can quickly become severe.

For additional information on weevil levels, drop me a line at dhallaue@ksu.edu or contact any of our District Office.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

HPAI Detection in Kansas Dairy Herds

There has been a buzz in the news recently about cows getting sick on dairies in the southwestern part of the United States. Early this week confirmation has come that “Bird Flu” has been confirmed in Kansas Dairy herds. There is no immediate concern to human health, but I felt it would be good to use my news column space to share a press release from our Department of Agriculture.

MANHATTAN, Kan. — The Kansas Department of Agriculture, in conjunction with the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (USDA– APHIS), has identified highly pathogenic avian influenza (HPAI) in two commercial dairy operations. These are the first cases of HPAI in commercial dairy operations in Kansas. Initial testing by the National Veterinary Services Laboratories has not found changes to the virus that indicate mammal-to-mammal transmission, indicating that the risk to the public remains low.

At this stage, there is no concern about the safety of the commercial milk supply or that this circumstance poses a risk to consumer health. The pasteurization process of heating milk to a high temperature ensures milk and dairy products can be safely consumed, as confirmed by the Centers for Disease Control (CDC). In line with long-standing policy, the CDC does not recommend consuming unpasteurized milk or raw milk. Pasteurization has continually proven to successfully inactivate bacteria and viruses, like influenza, in milk. Dairies are also required to only allow milk from healthy animals to enter the food supply chain.

Also, routine testing and well-established protocols for U.S. dairy will continue to ensure that only safe milk enters the food supply. In keeping with the federal Grade “A” Pasteurized Milk Ordinance (PMO), milk from sick cows must be collected separately and is not allowed to enter the food supply chain. This means affected dairy cows are segregated, as is normal practice with any animal health concern, and their milk does not enter the food supply.

Consumers in the United States and around the world can remain confident in the safety and quality of U.S. dairy. We continue to encourage all dairy producers to closely monitor their herd and contact their local veterinarian immediately if cattle appear infected. Symptoms are mostly restricted to late-stage lactating cows and include a drop-in milk production, loss of appetite, and changes in manure consistency. We encourage dairy producers to minimize wildlife access to their dairy cattle’s water and feed sources.

The Kansas Department of Health and Environment works to protect and improve the health of all Kansans. The agency has been notified of the findings and will monitor the situation as they did for HPAI when it was found in the poultry industry.

The Kansas Department of Agriculture is dedicated to serving Kansas farmers, ranchers, agribusinesses and the consumers/customers they serve while promoting public health and safety, protecting animal health, and providing consumer protection and food safety to the best of our ability.

— Kansas Department of Agriculture

Laura Phillips
District Extension Agent, Horticulture

Get a Free Replacement Tree for Your Callery Pear

You may have heard about invasive pear trees that are posing a threat to biodiversity. You may even have one in your own backyard. These trees pose threats to pollinators, biodiversity, buildings, and even people.

The best thing to do with a Callery pear, as any state agency or conservationist will tell you, is to cut them down. While you may be hesitant to lose your shade tree, there are buy back programs that will help you replace the tree at no cost.

Callery pears, which are native to China, were once touted as fast-growing, beautiful ornamental trees, great for city parks, lawns, and street trees across America. For a short period, each spring, these trees put on a deceptive show, flaunting beautiful white flowers that can draw in onlookers. But make no mistake – these trees are no longer welcome in Kansas.

There are multiple cultivars of Callery pears in Kansas and Missouri that are raising concern among conservationists. One of the most common is the Bradford pear. These trees are spreading at an alarming rate, snuffing out other native trees and plants.

Beyond destroying biodiversity, they are harming our pollinator populations. Despite their beautiful flowers, they do not support any of our native pollinators. When these flowers start emerging in early spring, they block out critical sunlight for our native wildflowers, further reducing pollinator habitat.

In cityscapes or backyards, they pose another threat: property damage. Its' egg-shaped structure and brittle wood mean they are a fall hazard. Their limbs generally have weak unions with the trunk, and falling limbs are incredibly common. They can reach heights of 30 to 40 feet, posing serious threats to surrounding structures and people.

If you are looking at your Callery pear tree and admiring the shade and beauty it brings to your yard, we can help ease the pain of losing your tree. Deep Roots KC, in collaboration with other local organizations and sponsors, offers Callery pear buy back events. If you cut down a Callery pear, take a picture with it, and register for one of the Buy Back events, you can get a free native tree to replace it.

There is an upcoming Buy Back event in Shawnee County on April 27th. To register, or see other dates and locations, visit deeproofs.org/callery-pear-events.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Reusable Water Bottles: Importance of Keeping them Clean

Many of us carry around reusable water bottles. We all know the importance of keeping our bodies hydrated and using a reusable water bottle is an excellent alternative to buying plastic water bottles. Reusable bottles come in all shapes and sizes, from metal to glass to safe plastic, and in various colors and designs. These types of bottles are great, but you must keep them clean.

If you do not wash your water bottle regularly, it could harbor a tremendous amount of bacteria, mold, or even viruses. One report states that drinking from a typical water bottle can be worse than licking your dog's toy. This is not surprising because we constantly touch our bottles, sometimes with dirty hands, and they come in contact with different surfaces. You could get sick from drinking from a dirty water bottle. The build-up of germs could lead to nausea, upset stomach, and headaches. You may also have allergy symptoms if mold is present on your bottle. Bottles used only for water will have fewer germs than those used for beverages containing sugar, such as sports drinks, juice, or soda. Also, don't let water sit in your bottle for long periods between uses.

Certain types of bottles harbor fewer bacteria, mold, and viruses. Slide-top bottles harbor the most bacteria, followed by squeeze-top and screw-top bottles. The straw-top bottle has the fewest bacteria. Because these types of bottles can breed germs, this doesn't mean that you should toss that bottle. There are ways you can protect yourself from these harmful bacteria.

Try to wash and disinfect your water bottle every day. Wash with hot water and a few drops of dish soap, soak for a few minutes, shake, rinse with warm water, place on a clean towel, and let air dry. For a deeper clean, use a vinegar soak of 1/5 white vinegar and 4/5 water after washing. Let soak overnight, then rinse thoroughly with water. Make sure to pay extra attention to cleaning your lid and cleaning any crevices. Avoid using harmful chemicals; they can leave behind residue and alter the taste of your water.

Look for a bottle without crevices or hard-to-clean areas. You might also consider using a stainless-steel bottle, as stainless steel has been shown to harbor less bacteria. Remember that disposable single-use bottles were not meant to be used more than once. Using these types of bottles over and over exposes you to harmful chemicals from the breakdown of the plastic.

Regularly cleaning your water bottle will help keep you healthy and safe. Using these types of bottles also helps to protect the environment. Carrying and using your water bottle consistently will also keep your body and brain hydrated.

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

Crunched for Time? Physical Activity is Possible

Maintaining an active lifestyle should be one of your top priorities, however, finding time to be active can be challenging. By taking care of yourself, we can be the kind of person we strive to be. You don't need an hour—or even 30 minutes—to get a complete, effective workout. We can always find a few free minutes in our day. Short workouts can do wonders to both the mind and the body.

If children don't have a full 60 minutes at one time, physical activity can be broken into two 30-minute periods or four 15-minute periods during the day. The physical activity should be moderate (brisk walking) or vigorous (running). Suggestions for moderate and vigorous activity include:

- Moderate—riding a bike, brisk walking and games that require catching and throwing
- Vigorous—running; sports such as soccer, ice or field hockey, basketball, swimming or tennis; and active games requiring running and chasing, such as tag or flag football.

Ideas for Squeezing in Physical Activity:

- Be active with friends and family. Having a support network can help you keep up with your program.
- Schedule it in. The more regular activity you do, the quicker it will become a habit. Think of ways to link activity to daily life. For example, you could schedule walking with a co-worker after lunch.
- Include work around the house. Get busy with yard work and other active chores around the house. Have the family help you with raking, weeding, planting, or vacuuming.
- Work out during screen time. Watch a movie while you jog on a treadmill or download a video on your phone and watch while you ride a stationary bike. Find ways to be active during commercial breaks.
- Be an active parent. Instead of standing on the sidelines, walk up and down the soccer, football, or softball field while the kids play their game.
- Sign up for Walk Kansas. Walk Kansas is an 8-week healthy lifestyle challenge that the whole family can participate in. It runs March 31 through May 25, 2024. Gather your time of six or go solo this year.

Register online at [Walk Kansas.org](https://www.walkkansas.org) or by contacting your local K-State Research and Extension Office. In the Meadowlark Extension District, we have offices in Holton—785-364-4125; Oskaloosa—785-863-2212 or Seneca at 785-336-2184. Registration is open March 1 through April 8th. Any questions contact me at the Oskaloosa Office.