

David Hallauer
District Extension Agent, Crops & Soils

Harvest Weed Management

KSU Extension Weed Science Specialist Dr. Sarah Lancaster wrote a KSU Agronomy eUpdate article this week on fall scouting for weeds and equipment cleaning (read in its entirety at: https://eupdate.agronomy.ksu.edu/article_new/weed-management-practices-fall-scouting-and-equipment-cleaning-561-5). In it, she shares this about waterhemp species: *“research conducted in Georgia showed that one female plant in five acres added about two million seeds per acre to the soil. Those seeds can have impacts for many years. It took six years of total Palmer amaranth control to deplete the seedbank by 98% in Texas”*. That’s a lot of weed seeds – and a long time to clean them up.

As you read the article (it provides some excellent tips on preventing the spread of weeds...), you might ask: why would I plan harvest around my weediest fields last or clean the combine out so often? Some University of Wisconsin research helps with the answer.

Their 2019 analysis required collection of material from four different areas of the combine: header, feeder house, rock trap, and rotor area. Sample seeds from the collections (31) were grown out and counted. The highlights?

Viable weed seed was found in 97 percent of the samples. In short, weed seeds *are* getting through your combine.

Header samples contributed to 49 percent of the weed seeds emerged. The feeder house contributed another 30 percent.

If we have weeds at harvest, they *are* going to get through the machine and *will* likely remain viable for future growth. Not only can this be a problem on the farm on which we saw the weed escapes, but in your other fields – and those of your neighbors (transport can dislodge seed as well) – too. The result is often the spread of weed seeds to previously clean fields as well as increases in the potential for herbicide resistance issues.

Trying to prevent the spread of weed seeds? Check out Dr. Lancaster’s article at the link above. The Wisconsin study results can be found on our Meadowlark Extension District Crops & Soils page under news columns: <https://www.meadowlark.k-state.edu/crops-soils/index.html>

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Reducing Stress at Weaning

We are entering the time of year when things get busy on most every farm and/or ranch. Combines begin to bring in the harvest and the sounds of bawling cows/calves can fill the air. This can be music to the ears of some, noise to others, but to the cow calf pair it means stress and stress is seldom a good thing. Market signals are pointing to weaning and moving calves quickly this fall. Please consider the following points when weaning, especially if you've never thought about reducing stress and the health effects that go with stress.

The goal at weaning is to minimize stress on the calf as much as possible. All studies indicate that stressors such as feed changes, surgeries, commingling, etc., at the time of weaning increase the incidence of BRD and other health issues. Even in proven, properly implemented preconditioning programs, calves still have two stressors at weaning time - separation from their dams and cessation of nursing. Working on minimizing these stressors should be given thought.

Bovine respiratory disease (BRD) costs the beef industry more than \$1 billion annually in reduced performance, death loss, medicine costs, labor and reduced carcass value. Eliminating all cases of BRD is unrealistic, but no one wants the headaches of dealing with sick cattle. Some producers lack the facilities and/or the feedstuffs to implement a full wean and preconditioning program. Other say there's no choice in their operation but to remove the calves from their dams and sell them without vaccinations, deworming or weaning. This may be true for some, but this likely is only a very small percentage. Following are some weaning options for ranchers to try to help reduce stress at weaning:

*Wean on Grass. University research has shown that weaning calves onto grass with fence line contact to their dams, can be an excellent option for farms or ranches that lack the weaning facilities or the necessary feedstuffs. The more similar the environment that weaned calves are placed into, compared to what they've experienced with their mothers, the better the weaning process will be.

*Anti-Nurse Devices. By using an anti-nurse device, stress is minimized because the calf is left on its dam during weaning. Calves fitted with anti-nurse devices one week prior to weaning, generally are eating or lying down chewing their cud 12 hours after weaning, and their dams are out grazing. Compared to "normal" weaning, the stress level difference is dramatic.

*Limited Nursing Options. Weaning stress can be reduced by allowing calves to nurse once daily for about a week before weaning. This is nearly impossible for a large ranch in range conditions, but many smaller herds could successfully use this method. The calves should be limit-fed a complete ration that allows their rumen to adjust to the diet they'll eat in the feedlot.

While a complete preconditioning program is the "gold standard" for post weaning health, complementary or alternative programs may have a place in your herd. Here are a couple ideas.

*Earlier Weaning. Calves weaned at about 150 days of age tend to have fewer BRD problems than those weaned at 205 days or later. The nutrition options for these calves include high-quality forage or forage-plus-grain. Another advantage of earlier weaning in spring-calving herds is that the cows tend to go into winter in better condition.

*Pre-Weaning Vaccination & Ship. Ideally, calves would be held and fed after weaning for a period of time prior to shipment. But if this isn't possible, vaccinating 2-3 weeks pre-weaning still makes sense. This allows the buyer of the bawling calves to booster them rather than expose the calves to the vaccines for the first time. Consultation with your herd health veterinarian on specific products and timing of all vaccines is always recommended.

With the current value of calves, producers need to look at various options to reduce weaning stress and maximize performance, as each pound is worth record value today. Beyond the financial impacts, there is much to be said for the animal well-being side as well. Here's to a low stress weaning season - for calf and producer alike.

Laura Phillips
District Extension Agent, Horticulture

Fall Garden Checklist

As autumn creeps closer we need to start preparing our gardens for our next growing season. While it might seem like garden work is done for the season, giving your garden extra TLC now can have big impacts on its productivity next summer. Here are some steps to take to boost your next growing season:

1. **Map your current garden:** If you haven't already, map out where your annuals are. When spring comes, you will want to refer back to this map to ensure you are rotating your plants to curb disease that may overwinter in the soil. Ideally, you should not put plants from the same family in the same location.
2. **Do a soil test and amendments:** If you have not done a soil test in the past couple years, it might be a good time to see where your soil is at. If you need to adjust the pH, doing it now will give your soil pH time to adjust.
3. **Split up perennial flowers:** Our spring-blooming perennials can be divided up in September and early October. You want them back in the ground well before the frost hits so their roots can re-establish before the winter. You can divide lilies, peonies, and irises. Make sure to look up how frequently can be divided, as not all plants can be divided each year.
4. **Clear out the weeds:** Do one last round of weeding, and make sure to get those weeds that have gone to seed. This will help lower the number of weeds you need to deal with next spring.
5. **Clear out debris:** Remove debris from plants with disease or insect issues. Diseases and insects can overwinter in debris from infected plants. Rather than compost diseased or infected material, either add it to a burn pile or disposed of it in the trash.
6. **Take care of the leaves:** If you have leaves on your lawn, rather than rake them, go over them with a mower a couple times. This will prevent them from smothering the lawn but help provide nutrients for the soil and material for birds to nest with.
7. **If you are going to plant a cover crop:** Remove other plant debris from your garden and rake out the soil to prepare it.
8. **If you are *not* planting cover crops:** You can leave dead plant material in your garden until you plant next year, as will provide food and habitat for native pollinators, birds, and wildlife throughout the winter and early spring.
9. **Mulch tender plants:** After plants lose their foliage in late October, apply mulch to tender perennials and perennials planted in late fall. A layer of 4-6 inches of mulch will help prevent frost injury during the winter. These protective layers of mulch should be removed in early spring so that the plants can pop back up. Be sure to not apply mulch prematurely – if the plant is not yet dormant, the added insulation can post-pone their dormancy phase and cause more frost damage.

If you have questions on any of these steps or how to care for your garden, please reach out to our office for assistance.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

September is Fall Prevention Month

September is fall prevention month. More than 25% of people over 65 fall every year, and many fail to report this to their healthcare provider. Once you have fallen, you have twice the risk of falling again. Some falls cause injuries like hip fractures and traumatic brain injuries. The good news is that most falls do not lead to significant harm, and there are things you can do to prevent falls.

Many older adults fear falling, and sometimes the fear itself can contribute to the fall. Fear of falling can also limit a person's activity levels and may prevent them from enjoying life to the fullest.

This summer, Family & Consumer Sciences Agent Cindy Williams and I have been facilitating a program in Sabetha called "A Matter of Balance." "A Matter of Balance" is an evidence-based program that seeks to help older adults reduce their fear of falling and enhance their quality of life. The program addresses many factors that lead to a fear of falling and helps people look at their environment and lifestyle choices to lessen the risk of falling. Unfortunately, there are many myths surrounding falling and older adults.

One myth is that falling is a normal part of aging; this is not true. There are many things you can do to lower your risk. Strength and balance training are a great way to strengthen your muscles so that you are less likely to fall. Just taking long walks can lessen your chances of falling. Even if you have never exercised, it is never too late to start. Regular exercise and strength training can help prevent muscle loss and may help prevent bone loss.

Another myth is that limiting my activities will make me less likely to fall. Limiting activities may seem like a good idea, but it can increase your likelihood of falling. As stated above, participating in physical activities and staying active is one of the best ways to reduce falls.

Over half of all falls take place in the home. You can do things to reduce your risk of falls in the house. Remove clutter from your home; pick up shoes, dog toys, throw rugs, or anything you could trip over. Make sure electrical cords are out of your pathway. Add secure grab bars in the bathroom, and have a non-slip mat in the shower. Make sure you have adequate lighting in each room.

Talk to your doctor or pharmacist about your medications, and ask if any potential side effects could increase your risk of falls. Certain medications could make you sleepy or dizzy, increasing your risk of falls. Drugs can affect people differently, so it is important to check with your doctor. If you start taking a new medication, watch for any potential side effects and report these to your healthcare provider.

If your doctor has prescribed an assistive device like a walker or wheelchair, make sure you use it. Some believe these devices could make them more dependent, but they can help you remain more active. Make sure to have your device adjusted for you by your physical therapist. They can also talk to you about how to properly use the device.

Lastly, talk to your healthcare provider about any falls you have had. They can ensure no underlying health concern causing you to fall and talk with you about how to mitigate future falls. Feel free to talk with family and friends about your concerns. They can help you make adjustments and prevent future falls.

If you are interested in the "A Matter of Balance" program, contact Teresa Hatfield at the Meadowlark Extension District at 785-364-4125.

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Cindy Williams
District Extension Agent, Family & Community Wellness

No news article this week.