

Jody G. Holthaus
District Extension Agent
Livestock and Natural Resources

Clean Winter-feeding Sites to Reduce Stable Fly Pressure

From our Environmental Management Specialist, Joel DeRouchey:

To provide protection for cows and calves during the winter and early spring months, temporary feeding sites are often used. While these sites can be used effectively, manure accumulation occurs in the areas around where they are fed over those months. There are several reasons for cleaning the manure from these sites but the most important is to lower the impact of nutrient and fecal bacteria runoff to surface water and reducing stable fly production.

Areas of manure accumulation over the winter months have substantial levels of fecal bacteria and nutrients accumulated. There are approximately 4.5 million fecal coliform bacteria per lb. of manure/wasted feed material at a typical winter-feeding site. If we assume 50 square feet for a single hay feeder and a total of 10 tons of wasted hay and manure mixture from this site, this equals approximately 90 billion fecal bacteria. Fecal bacteria present on these sites can survive in the manure/wasted feed material, especially surrounding round bale feeders due to the moisture that is held in that material for numerous months.

From an environmental standpoint, research clearly shows increased fecal bacteria levels in surface water in Kansas during the spring and early summer months. One contributing factor to this is the runoff of fecal bacteria from the multitude of winter-feeding sites, which are generally located in lower, sheltered areas that also have drainage to open water surfaces. Since intense rainfalls begin to occur in spring and into the summer, runoff will occur if the manure is not properly cleaned and removed.

Along with the environmental concerns is the abundant production of stable flies that occurs at these sites. These sites serve as an ideal breeding ground for stable flies due to the combination of a food source (manure and wasted forage) as well as an ideal moisture level of the soil from the covering from both manure and wasted forage. Entomologists at Kansas State University that have trapped flies emerging from winter feeding sites estimate more than 1 million stable flies can emerge from a single hay ring feeding site. The economic threshold for a reduction in weight gain for cattle is five stable flies per leg. Thus, if these areas are not cleaned and cattle are grazed in areas surrounding these sites, it is likely there would be a loss of performance during the summer grazing period.

Site cleaning options:

- **Spreading.** By cleaning and spreading the material over a larger land area, the material will dry and be exposed to sunlight, thus killing the fecal bacteria and spreading out the manure so limited nutrient accumulation occurs. This is the ideal method of disposal, but limitations of producer's access to a manure spreader may prevent its use in some situations.
-
- **Piling and composting.** Composting generates heat and kills fecal bacteria and prevents their use as a larvae food source. This may be a practical alternative to complete removal of material. The pile must be turned after a couple weeks of initial composting to incorporate the outside material.

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Cold Weather Crown Stress in Corn

Under ideal conditions, we'd plant corn when soil temperatures reach 50-55 degrees F and were headed upward. Air temperatures would also be increasing and we'd have plenty of sun with rain each week to replenish soil moisture.

We don't often get perfect spring growing conditions, though, and with what we've seen this spring for temperatures and moisture, our corn crop may deserve some evaluation as the growing season gets going. If my windshield survey is correct, we're somewhere around 90 percent emerged, and while we'd like to think we're off to the races, corn stands could still face some issues, one of those being what we often call cold weather crown stress.

Cold weather crown stress isn't a given under the wet/cool growing conditions we're seeing, but cooler soil temperatures and extended periods of saturated soils increase the potential for issues. According to Iowa State University, *Fusarium* or a fungus that causes anthracnose can sometimes be isolated from affected plants, but not always. Even the presence of a 'rotted' crown area may not always signify damage, though many of these plants will tend to be stunted, with leaf discoloration (much like nutrient deficiencies), wilting, and even death in cases where soils remain wet long enough that decay results in a 'disconnect' between leaves and roots.

Other stresses can make plants more susceptible to crown issues *and* cause problems later. Compaction, fertility deficiencies, or herbicide injury can enhance the potential for crown damage. Stress (drought/heat) conditions later on tend to result in further problems, with late season stresses on these plants potentially leading to stalk rots and lodging.

With any luck, we won't see a thing, but it never hurts to scout. As sun returns and temperatures rise, corn growth will take off. Be on the lookout for patches of uneven plant growth. Some of it may be attributed to our typical 'ugly duckling' stage as plants really start to grow rapidly, but watch for areas of potential crown damage as well.

Slug Damage

If you've got a garden in, take some time to monitor for slugs. Found on many garden (and landscape) plants, moist soils in spring are perfect conditions for slug feeding damage.

Damage will show up as missing leaf material and chewed on stems, even though you may not find the culprit. Predominantly nocturnal in nature, slugs feed at night then hide, leaving tattered plants in their wake and *maybe* a slimy trail that turns silvery upon drying.

If you find a trail, damage, or happen upon an actual slug, you have three control options. The first is increased light and air movement to reduce the chance for soils to stay moist. Recent weather has made it difficult, but consider reducing mulch until soils dry is an option.

Commercial slug baits are available. Just make sure you get one that is a) safe for use on the intended crop and b) not harmful to other pets/humans. Iron phosphate baits are preferred. They may require multiple applications and take some time to take hold, but they can add some long-term effectiveness to your slug control efforts.

You can also trap slugs. Bury a shallow pan to ground level and fill with beer or a mixture of sugar, yeast, and water. Slugs will fall in to the pan and drown.

For a list of slug baits, contact any District Office or e-mail me at dhallaue@ksu.edu

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

Tips to Cope with COVID-19 Financial Stress

The uncertainty of tomorrow is one of the biggest sources of financial stress and anxiety for couples during the COVID-10 pandemic. Megan McCoy, Kansas State University professor of practice in personal financial planning, wants to help with a new financial therapy digital tool called MoneyTalk (<https://bird.morningstar.Com/MoneyTalk/index.html>)

“Right now, our brains are freaking out about the ambiguity of tomorrow,” said McCoy, a licensed family therapist who specialized in financial therapy. “What is the world going to look like? What are our finances going to look like? What is our health going to look like?”

When faced with uncertainty, it can become frustrating for couples to deal with anxiety and stress differently, McCoy said. She is part of K-State’s Institute of Personal Financial Planning (<https://www.ipfp.k-state.edu/>) and helps train financial planners to use counseling-like skills, such as facilitating couples’ conversations about money with each other.

She has consulted with Morningstar (<https://www.morningstar.com/>) to aid in the development of a new way to help couples talk about money: the MoneyTalk app. The app builds on a theory called narrative financial therapy and involves creating a self-help tool for couples who want to talk about money differently with each other. The app is a chat-style app fed by a robot avatar named Mo.

The goal is for both partners to talk to Mo first, and then to each other. The app was developed to aid you in reflecting upon your thoughts and feelings around money solo, and then it gives you tools and resources to bring up money with your partner to engage in a healthier and more insightful conversation together.

Morningstar is using the new app to conduct a randomized control trial, and participants can try out the app for free (<https://bird.morningstar.com/MoneyTalk/index.html>). McCoy will then use the data to explore the efficacy of the app, and she said she hoped it would help couples successfully talk about money during the current COVID-19 pandemic and in the future.

“Couples need to make a concerted effort to talk about the anxieties and worries,” McCoy said. “When you keep them in your head, they grow and manifest.”

Even though couples are staying at home more and spending perhaps more time than usual together, they may not be talking about important topics, either because it is uncomfortable or causes disagreement. This is especially true about money as it is often seen as taboo to talk about money, even with your loved ones.

Nancy Nelson
Meadowlark Extension District
Family Life

How Exercise Lowers Your Cancer Risk

We continue to learn more about the protective role that regular physical activity plays in prevention and management of almost all chronic diseases, including cancer.

Exercise can help reduce your risk of certain cancers and can improve the effectiveness of treatment and quality of life for those who have cancer.

Following the recommendations provide by the Physical Activity Guidelines for Americans ([health.gov/our-work/physical-activity](https://www.health.gov/our-work/physical-activity)) can contribute to the prevention of bladder, breast, colon, esophagus, kidney, stomach, and uterine cancer. Exercise can also help improve survival rates for people with breast, colon, and prostate cancer.

For those with cancer and receiving treatment, moderate exercise can help reduce side effects of treatment, like fatigue, and provide better quality of life. Physical activity recommendations, for those who have cancer, include 30 minutes of moderate activity 3 times a week (90 minutes total) and some strengthening exercises 2 to 3 times a week.

So, how does exercise actually lower your cancer risk? First, it helps you maintain a healthy weight. Exercise helps your body regulate hormone levels, as some hormones increase cancer risk. Exercise also speeds digestion, reducing time that potentially harmful substances are in the colon.

While we talk about the need to get moderate or vigorous activity, it is also so important to limit extended periods of sitting. This also increases cancer risk, even if you exercise regularly. Get up and move for a couple of minutes during every hour you are awake, and more often if possible.