

David Hallauer
District Extension Agent, Crops & Soils

Variability in Soil Sampling

While not the only factor affecting variable production levels across a field or hay meadow, soil fertility is certainly one we use management to try and overcome. We can't change the weather. We can do little for soil type. We can, however, affect fertility levels.

Doing so often starts with a soil test. Unfortunately, if done incorrectly, it can actually *add* to the variability we're trying to overcome. Whether pulling your own samples or working with a contractor, an understanding of how to reduce soil testing variability can make test results a lot more valuable.

Number of cores is a good place to start reducing the potential for error in a soil sample. A sample should be a composite of a minimum of 12-15 cores from a relatively small area (two to four acres - more is generally better). KSU Nutrient Management Specialist Dr. Dorivar Ruiz-Diaz often shares a Phosphorous confidence interval chart when discussing soil sampling procedures. It shows that for P, our degree of confidence in a sample consisting of just five cores is plus or minus five parts per million. In short, if your soil test result comes back at 12 ppm, the range of results might range from seven up to 17 ppm. That would change our KSU P fertilizer recommendation for 140 bushel corn from 40-45 pounds per acre all the way down to 15 pounds per acre. An accurate number of samples is key, and a single core is not an acceptable sample.

Sampling depth needs to be a consideration as well. Organic matter, pH, and other nutrient levels often change with depth. If stratification has occurred – and it's not uncommon in reduced tillage systems – keeping a consistent sampling depth can make a big difference in accuracy of results. For most nutrients, a six-inch sampling depth is suggested. Deeper sampling depths (24 inches) will be valuable to get accurate nitrogen and sulfur numbers. IF monitoring pH in long term no-till with surface applied N, shallower sampling should be considered.

Finally, try to sample at the same time each year, particularly if you are monitoring for changes over time. There may not be a lot of difference from samples pulled in fall vs. spring for some nutrients, but for others, trying to keep the sampling time consistent from year to year will reduce the variability seen in numbers compared across time.

There are other places, even in excellent soil testing programs, where variability can be introduced. Make sure you are keeping the process consistent to give you the best chance to reduce that soil fertility variable – and the yield variability that accompanies it.



Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Programs for Dairy Producers

My title is Livestock and Natural Resources and I try to offer articles in each of these program areas. However, if you feel I talk about beef cattle more than other species of livestock and not nearly enough about natural resources, I'd couldn't argue much. A couple of programs focused on our dairy producers have been rolled out recently, both nationally and locally as well. Please take advantage if these are of interest to you and drink real milk!

Milk Loss Program

The USDA has recently announced that assistance will be available to dairy operations that had to dump or remove milk without compensation from the commercial milk market due to qualifying weather events. The Milk Loss Program (MLP), administered by the Farm Service Agency (FSA), will provide service to dairy operations that faced these weather events during 2020, 2021 and 2022.

Eligible weather events covered under the program include: Droughts, Wildfires, Hurricanes, Floods, Derechos, Excessive heat, Winter storms, Freeze (including a polar vortex), and Smoke. Tornadoes will also be considered a qualifying disaster event, however, only during the year 2022. The milk loss claim period is each calendar month that milk was dumped or removed from the commercial market. Each MLP application covers the loss in a single calendar month. Milk loss that occurs in more than one calendar month due to the same qualifying weather event requires a separate application for each month.

Dairy farmers can sign up for MLP beginning Sept. 11 and running through Oct. 16, 2023. Affected producers are encouraged to sign up as soon as possible with your local FSA office. More information can be found at: https://www.fsa.usda.gov/ search Milk Loss Program.

Kansas Dairy Fall Seminars

Kansas Dairy is offering a day of value-added education, in two locations across Kansas. September 19 in Wichita at American Ag Credit and September 26 in Seneca at the Nemaha County Community Building. The morning program will focus on the Dairy Business Innovation Alliance (DBIA) grant writing session education. A noon lunch will be provided by event sponsors and the afternoon program will have some rapid-fire presenters discussing topics from HR issues on the farm, farm transition, wellness in the community, to rebuilding plans for the K-State Dairy research and teaching center.

There is no cost to attend, but an RSVP for a meal count is requested to the Meadowlark Extension District at 785-336-2184 or ahaverka@ksu.edu. These field day seminars are brought to you by Kansas Dairy Commission, Kansas Dairy Association, AgriSure, Health Innovations Network of Kansas, K-State Research and Extension - Meadowlark District and other generous partners. Full details can be found on our District Events pages https://www.meadowlark.k-state.edu/events/



Laura Phillips
District Extension Agent, Horticulture

Planting Fall Cover Crops

As you go over the garden checklist from last week, cover crops might stand out as a novel idea for your garden. On the surface, cover crops sound like extra effort, but their long-term benefits actually reduce your workload. After warm season vegetables die off, the soil in your garden slows down too. Without plants to cycle nutrients, store carbon, and prevent erosion, your soil can suffer. A barren garden also provides a perfect space for winter and early spring weeds to cause trouble. This is where cover crops come into play.

While different crops offer unique benefits, you will see positive impacts from any cover crop. Roots from cover crops prevent otherwise barren soil from eroding, and allow for greater water infiltration. As they outcompete weeds for resources and create a shade canopy over the soil, they lower the need for herbicides and hand weeding. You will also reduce your need for fertilizers. Their roots prevent nutrient leaching and increase nutrient cycling. Additionally, when cover crops decompose, they add organic matter to your soil. Legumes in particular will move nitrogen from the air into your soil for your spring and summer plants to use.

Capitalizing on these benefits may be easier than you think. First you need to choose a crop. Ideally you will have more than one cover crop. We recommend choosing at least two species, ideally one legume and one non-legume. If you want to plant early spring vegetables, then oats, winter wheat, barley or grain rye are great options. They will go dormant in the winter and leave a small yet meaningful mat of decomposing organic matter for you in the spring. Field peas and oats are a good, reliable pair for those just starting out. Hairy vetch, a legume that produces long vines, pairs well with a small grain crop that it can climb on, like winter wheat, barley, or oats.

After you choose a crop, you should plant before the beginning of October. To prepare for planting, remove existing garden vegetation, mulch, and debris. Then use a rake or garden fork to smooth and loose the top layer of soil. If your entire garden is not done for the year, you can still plant cover crops in the portions of your garden that have died off or stopped producing.

Once you have prepared the soil, check the weather. If possible, time the planting directly before a rain. You can sow them by scatting seeds across the garden (known as broadcast seeding) either with a broadcast seeding implement or simply throwing the seeds with your hands. Alternatively, you can mix the seeds with soil or compost, then spread the mixture evenly across the garden. Whatever method you choose, try to make distribution as even as possible. Follow the instructions that come with your seeds when deciding how much seed to use.

Once the seeds are on the ground, use a rake to gently work them into the soil. While the exact depth varies by crop, most of the seeds will need to be $\frac{1}{2}$ inch deep. You can walk across them to press them in deeper. Although not necessary, you can give them a boost with a balanced fertilizer such as 10-10-10 at a rate of 1 pound per 100 sq feet. If you are planting legume cover crops, use a fertilizer with lower nitrogen rates such as 5-10-10.

Lastly, sit back and watch your cover crops grow and heal your soil!



Teresa Hatfield
District Extension Agent, Family and Community Wellness

Annual Notice of Change Letter-Arriving in September for Medicare Beneficiaries

Medicare beneficiaries must watch their mailbox for the Annual Notice of Change Letter (ANOC), which will arrive in September. Medicare sends the ANOC notice to Medicare beneficiaries enrolled in Part D prescription drug plans and those with Part C Medicare Advantage plans. The ANOC is an important document that contains valuable information about your plan for 2024. Make sure that you keep this information and review it carefully.

The ANOC letter will come from your Part D or Part C insurance company. The ANOC will not come from Medicare itself. The packet will contain the details of your current plan and changes for 2024.

Changes to look for:

Formulary Changes: Pay attention to the list of medications the plan covers. Make sure the plan will still cover the drugs you are taking. You may look for another plan if the plan no longer covers your medication.

Premium Changes: Many plans will change the monthly premium cost each year. The premium is the amount you pay to the plan monthly.

Co-Pays/Co-Insurance: This is the amount you will pay at the pharmacy. Plans may change this amount annually. Co-pays are a set amount for your medication. For example, a preferred generic drug may have a \$0 co-pay at the pharmacy. A co-insurance is a percentage of the cost of the drug. For example, you may pay 25% of the total cost of a brand-name drug. Insurers place prescription medications in drug tiers; the higher the tier, the more the drug will cost.

Pharmacy: Some plans have preferred pharmacies. If you use a preferred pharmacy, you may save money on co-pays and co-insurance. Sometimes pharmacies can be "out of network," meaning if you use an "out of network" pharmacy, your Part D plan will not help you cover the cost of the medication.

Annual deductible: Some plans ask you to pay the entire cost of your medication up to a certain amount before they start helping you pay for your drugs; this is called the annual deductible. In 2024, the maximum deductible is \$545 per year.

Plan Availability: Sometimes, an insurer will discontinue your current plan. If that happens, they will enroll you in another plan within the same company. Compare this plan to make sure it fits your needs.

Because of these changes, you may consider looking at other prescription drug plan options in 2024. You may be able to find a better plan that covers your medications at a lower cost. Even if you are happy with your current plan, comparing other plans might be a good idea. Last year, Medicare beneficiaries who visited the Meadowlark Extension District and compared and changed plans saved an average of \$460.00 for the following year.

Medicare Open Enrollment is from October 15-December 7, 2023, during which you can change Part D and Part C plans for the following year. The Meadowlark Extension District is currently making appointments for Medicare Open Enrollment. To make an appointment with a trained SHICK counselor, call 785-364-4125.





Cindy Williams
District Extension Agent, Family & Community Wellness

No news article this week