



Ag Items of Interest

Eastern KS Grazing School: Sept 13-14, 2017

The Meadowlark District is hosting a grazing school in Holton in mid-September. Topics include grazing math, paddock setup, weed management, and forage selection. Download the flyer at <http://bit.ly/2vPn10f>.

Crop Tech Tools

As much as I sometimes hate to admit it, I rely on my smartphone a lot. My husband may say I'm addicted to it more than I just "rely" on it, but that's beside the point. While I might spend a fair amount of time on Facebook, I do also truly use it for more than watching baby goat videos, and I'm certain I'm not alone. Heck, who needs the TV or radio when the weather forecast is in your pocket? And you can watch the radar feeds and see what might be coming? I use my phone to track pretty much everything about my livestock. I track my pasture moves, feed changes, vaccinations or other medical treatments, and any random observations that I might want to remember for later. It's also nice to be able to snap photos, both for fun and to record something of interest.

There are many apps designed for farm use, some of which I've utilized and some I probably should. Below are a handful that look promising. I'm curious what others use their phone for around the farm, or if you've found any really useful applications or programs!

For the corn folks – the University of Wisconsin Integrated Pest Management has put out a handful of calculators (titled simply "Crop Calculators") including a silage moisture adjuster, maturity date predictor, and a grain yield estimator. If you can take the time to count ears and kernels a few times in a given field, it will provide an estimate of what your corn crop could be.

Those growing soybeans can download "KSUSoyYieldCalc", developed by Dr. Ignacio Ciampitti at K-State, to estimate soybean yield from estimates of stand, seed weight, pods per plant, and seeds per pod.

For the livestock folks – I'm considering trying one of these to replace my text list of animal notes and treatment protocols. "Livestocked" (by GDB5) and "Livestock Manager" (by CAPTURE Solutions) look like good options. Both offer the ability to track individual animals through the farm system, including health issues, breeding and delivery; as well as herds of animals. Other apps are more targeted, for instance "Calf Book" by EDJE Technologies, Inc. is like a digital version of the small notebooks commonly carried around during calving season. I also recently tested "Cow Poop Analyzer" by Texas A&M Agrilife Extension Service. Snap a photo of your pastured cows' manure, and it will show an array of stock photos of manure from cows eating different quality levels of pasture. By finding the manure most similar to yours (er, your cows'), you can guesstimate the forage quality of your pasture!

For anyone – "PlantNet Plant Identification" (by plantnet-project.org) and "ID Weeds" (by MU Extension) assist in identifying various plants around your farm or property. In particular, PlantNet allows you to take a picture of a plant (the flower, seeds, or leaves) and it will search through images that other users have identified, to find a match. I've used it and it's pretty good!

As a side note, all these apps were found on the Google Play store and are available for Android devices (and these are also all free!). I'm certain that similar, if not identical, apps exist for Apple devices.

Fall Lawn Care

Fall is coming, and the cool weather brings the best time to take care of cool-season lawns. September is an ideal time to apply nitrogen: aim for 1-1.5 lb of N per 1000 square feet. If possible, use a quick-release N source – the fertilizer label should state this.

The Horticulture Newsletter from K-State Research and Extension provides some extra tips on selecting grass varieties for lawns – not to mention gardening and fruit and vegetable production advice. Check the links below for details:

Turfgrass selection: <http://bit.ly/2vareMK>

Turfgrass fertilization: <http://bit.ly/2wJZgqJ>

All newsletters: <http://bit.ly/2vjFsqV>

Cover Crop Considerations

As the growing season for our row crops starts to wind down, anyone thinking about cover crops should get moving. Cover crops offer a number of environmental, ecological, and financial benefits. Covering the field with growing plants during the “off-season” helps retain soil, water, and nutrients on the field. Furthermore, the biomass created by the covers will break down and contribute to soil organic matter, and potentially introduce plant-available nitrogen for the next crop. Cattle can graze the covers, cutting down on winter feed costs.

What you plant, and when, and how, is determined first by why you’re planting cover crops.

Are you in it to keep soil from running off the field? Consider small grains (wheat, oats, triticale, cereal rye) for their fast growth and fibrous roots.

Are you looking for forage for livestock? Definitely include small grains for the dry matter volume, but consider adding brassicas (radish, turnip) or legumes (clover, pea) for extra protein and energy.

Do you want to suppress weeds? Seeding brassicas as early as possible helps get a thick canopy before winter, inhibiting the growth of fall weeds. Cereal rye or another overwintering grass cover can put on a good amount of biomass, which should slow weeds in the spring.

Are you trying to improve the soil, either through organic matter addition or fixing nitrogen? Small grains will provide the most tonnage, though they’re very high in carbon (relative to nitrogen) and so won’t break down as quickly next spring, “tying up”

N when some crops might need it. Brassicas and annual legumes cycle and/or fix nitrogen, keeping it in an available form for the next crop. A mixture can do some of each. Really, any cover crop will benefit the soil through breakdown of roots and aboveground biomass.

So once you know your “why,” the rest starts to fall into place. There are some other factors to consider:

Herbicide use: what did you spray on your current crop? This may prohibit the planting of certain covers, particularly when you get into complex mixtures. Similarly, are you able/willing to spray cover crops next spring? If not, stick to spring cereal grains or the brassicas that winterkill and then leave a nice seedbed for no-till planting in the future.

What’s your next crop? If you’re planting corn, consider the brassicas, which cycle a lot of soil nitrogen, and legumes, which fix nitrogen and convert it to plant-available forms. Heavy use of cereals – especially winter cereals – runs the risk of delaying planting as you must burn them down first, and then the high-carbon residue will “tie up” nitrogen, or make it unavailable for awhile. Meanwhile, before soybeans, the cereals fit well by providing extra cover to reduce weeds, and there’s generally more time before planting beans to deal with burndown of the cover crop.

How should you plant? Flying on cover crops is possible, but is dependent on weather conditions and the type of crops being seeded. It’s more successful in corn than beans. Drilling works well after harvest, though waiting that long will reduce cover crop growth before it gets too cold. Drilling ensures even seeding of the field and allows a lower seeding rate. Often it comes down to timing!

It’s worth noting that there are resources, both technical and financial, for those interested in cover crops. The EQIP program through NRCS is one such resource; technicians will help develop a plan and then can provide some cost-share. The Missouri River WRAPS program, through the Conservation District, has limited funds to support soil erosion mitigation work, and can also help advise on cover crop selection. And of course, K-State Research and Extension has done a lot of work on covers, their benefits, and their management. More work needs to be done though! Identifying the best cover crops and seeding methods is a constant struggle, and as more people try covers, I’d love it if they share their results (biomass production, observations during the next crop year, etc.). Let me know how I can help!