

Research and Extension DONIPHAN COUNTY AG NEWS

Upcoming Events of Interest

Things that farmers, gardeners, and ranchers may want to check out:

- Beef Quality Assurance (BQA) Training: Sept 19, Klinefelter Barn. See notes below.
- K-State Stocker Field Day: Sept 20, Manhattan. <u>https://bit.ly/2i5S9mT</u>
- Grazing Management for Improved Soil Health: Sept 21, Salina. https://bit.ly/2058hFc

BQA Training and Certification

Beef Quality Assurance (BQA) certification is a free program offered to beef and dairy producers through the Beef Checkoff. Essentially, it provides an overview of best practices for the care, management, treatment, and transport of beef and dairy beef cattle; to ensure that the animals are treated humanely and to ensure that consumers receive only beef of the highest quality.

Most of the methods are common sense and are already commonly practiced by most cattlemen. Still, the program is free, and by obtaining certification, a producer gains a slight marketing advantage. Indeed, some cattle buyers (Tyson and Cargill, most notably) are starting to require that their cattle are sourced from BQA-certified operations. For some, this is not likely to be an issue, unless intermediate buyers (auctions, stockyards, etc) start requiring the same of their sources. However, anyone selling enough cattle to market directly to large buyers ought to get ahead of the trend. And again, certification is free! Producers may become certified through participating in an online program (www.bqa.org) or through attending an inperson training session. One of these sessions is being offered on September 19 at the Klinefelter Barn in Hiawatha. Several northeast KS extension units collaborated to hold the event, which will feature speaker Dr. Daniel Thomson of K-State's College of Veterinary Medicine. We will start with dinner at 7pm, and there is no cost to attend. We do ask for an RSVP so that we can prepare enough food. Please call the office at (785) 985-3623 or email Margaret at mchamas@ksu.edu.

Pasture Renovation

Did your pastures suffer from the extended drought? If things look a bit thin, now is a great time to act to boost them for next year.

Grass Pastures

Both brome and fescue pastures do well when reseeded in the fall (roughly mid-August through mid- to late-September), having enough time to start growing but go winter dormant. Seeding in the winter or early spring can also work, but if moisture is limiting over the summer, the plants will have a harder time surviving.

If possible, check to make sure soil nutrients are at an appropriate level. A basic soil test (P, K, and pH) runs about \$7-10 per field, and can be submitted through the extension office. Before planting, be sure to control weeds (burndown with glyphosate is most common). No-till drilling works okay for brome and somewhat for fescue; however, a lightly-tilled and firmed field will offer the best seed-to-soil contact. If seeding tall fescue, be sure to consider variety carefully. KY-31 is common, cheap, and often easily available - but it will cost animal performance in the long run because of the endophyte fungus. Endophyte-free and novel endophyte varieties are available and carry no animal health issues, but are more costly. In addition, grazing animals will often select the novel/no endophyte varieties over the infected ones, to the point that the novel/no endophyte plants are killed off and the field reverts to all infected. Either be sure to carefully manage grazing, or consider investing more time in a complete pasture renovation (for instance, the spray-smother-spray method; https://bit.ly/2wjn1E8).

For more in-depth discussion of reseeding, see the K-State publications: Brome: <u>https://bit.ly/2Ll0BYQ</u> Tall fescue: <u>https://bit.ly/2o5jDci</u>

Legume Pastures

Legume-grass pastures are common, and are a great way to get higher protein in the sward (compared to grass alone) without the bloat potential of solid-legume stands.

Red clover is possibly the most common legume for pastures. It also does well when seeded in the late summer or fall. If completely reseeding, about 8 lb of red clover seed per acre (plus whatever grass is desired) is recommended. Somewhat less is necessary to supplement an existing grass pasture; however, if the field is not to be tilled, it may be advantageous to wait and broadcast seed during the freeze-thaw cycles in the spring.

Alfalfa is more common in hayfields than pastures, and requires a bit more prep, but the "queen of forages" is worth it. The main difference is that alfalfa stands cannot be improved by simply drilling in more alfalfa seed. The plants produce chemicals that prevent new seedlings from growing, a trait called allelopathy. Rather, an old failing seeding should be plowed under or terminated, and a new one established months to a year following. In the meantime, a single-season forage crop (wheat/oats/sorghum-sudan) can be seeded and harvested, or the field returned to row crop production. However, be very careful to not use herbicides that might have residual activity.

During this "down time," check the pH and nutrient levels for sure. A pH of 6.5-7.5 is best for alfalfa, and add P and K to soil test recommendations. 12-15 lb/ac of seed is appropriate in our region.

More specifics on alfalfa, including variety selection, may be found in the following article: <u>https://bit.ly/2MAUkxC</u>

Especially this year, one of the big questions is "when can I graze it?" New stands that get good fall moisture and establish well may be grazed the following spring or summer. Ideally, wait until they get to boot or early heading (for grasses) and are at or near bloom (for legumes); at a minimum, new growth should have three fully extended leaves. This ensures that there's enough root mass to keep the plant in the ground if a cow grabs the top and pulls!

Tariff Troubles and USDA Response

The USDA recently released the details of the governmental response to trade-related price drops experienced by farmers.

The Market Facilitation Program has been a support tool in the USDA's arsenal since the Great Depression, but its funds have never before been used in response to tariffs. Starting Sept 4, producers may apply for assistance funds for soybeans, sorghum, wheat, corn, pork, dairy, and cotton products. Of most relevance to our area are the corn ((0.01/bu)) and soybean ((0.86/bu)) payments, which will at first be made only on 50% of the year's production. More money may be made available later. Some products, for us most notably beef, pork, and milk, will be supported further as USDA purchases these foods themselves and distributes to food pantries, shelters, and the like. More money has been devoted to developing more foreign markets.

These efforts certainly do not fully amend the impact of the trade war on farmers. The corn payment is even less helpful considering the expected yield of our drought-stressed crop! However, the assistance does at least acknowledge that damage has been done to the farm economy...but also suggests that the trade war is not likely to end soon. Many commodity groups have issued statements essentially thanking the administration for recognizing the hardships caused, but criticizing them for not providing adequate assistance, and urging them to end the trade war one way or the other.

https://bit.ly/2NnFdUD https://bit.ly/2C3QY1r https://bit.ly/2NyUe68

Corn...That Fixes its Own Nitrogen?!

Researchers from the University of Wisconsin-Madison, University of California-Davis, and Mars, Inc. have found a real treasure in South America: varieties of corn that fix their own nitrogen.

Currently only attributed to leguminous crops, nitrogen fixation is a collaboration between plant roots and certain bacteria. The roots provide a home and nutrients for the bacteria; the bacteria convert atmospheric nitrogen into a plant-useable form. This occurs in root nodules that can be seen on soybean, clover, and alfalfa plants, among others.

These surprising tropical corn varieties, grown in an area with poor soil and little to no fertilization, have come to a slightly different arrangement. They grow multiple sets of aerial roots, which will secrete a sugar-rich gel in which the N-fixing bacteria settle and begin doing their work. Depending on environmental and soil conditions, the reseachers estimated that this bacterial-fixed N accounted for 29-82% of the corn needs.

This discovery, should it become something that can be bred into modern corn cultivars, could have tremendous impact. Agriculture, particularly crop farming, is attacked constantly for perceived overuse of chemicals and fertilizer. This biological change in corn could spare farmer dollars spent on anhydrous and other fertilizers, and assuage concerns of "overapplied" nitrates getting in the water supply.

Of course, this will take time. However, the scientists involved are excited and encouraged by the discovery.

Source article: <u>https://bit.ly/2C011Dq</u> Research journal: <u>https://bit.ly/2wwpUlq</u>