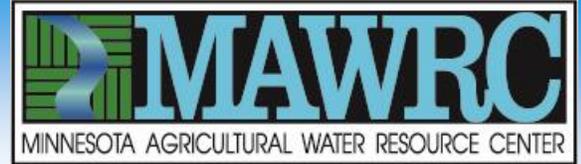


MAWRC Monthly

- June 2016



University of Minnesota Field Day Highlights MNDrive-Discovery Farms Partnership

An innovative research partnership underway in Kandiyohi County could help address issues related to nitrates in surface waters while also maintaining, even improving, crop production efficiency. The University of Minnesota held a field day at the site in early June to explain their bioreactor research project, which is largely funded through Minnesota's Discovery, Research, and Innovation Economy (MnDRIVE) program. The bioreactor research team combines experts in agricultural engineering, microbiology and nutrient management to explore new approaches to the basic woodchip bioreactor concept.

The site is unique in having a large woodchip bioreactor divided into 8 cells, allowing comparisons between bioreactor materials. The team is exploring methods of increasing bioreactor efficiency by adding additional food sources for the de-nitrifying bacteria, while also evaluating the effect of temperature and other factors. The bioreactor is treating tile water from a Discovery Farms field site focused on evaluating precision nitrogen management strategies.

Farmfest is Approaching Fast

Farmfest 2016 is just weeks away! Hopefully you have already collected and frozen some tile water samples. You still can, if your tiles are flowing. We can also screen well samples for nitrates. Simply take a sample that day and bring it with you to our display in the AURI tent, right across from the main forum building.



On Wednesday afternoon, August 3, Farmfest forums will include a discussion and update on the EPA's Waters of the United States (WOTUS) proposal and Minnesota's buffer law.

Several MAWRC members have tents, displays, food and great giveaways at Farmfest. Be sure to visit them all! Show hours are 8 am to 5 pm on Tuesday, 8 am to 4 pm on Wednesday and Thursday. Learn more at <http://www.ideagroup.com/farmfest>.

Sand Creek Watershed Hosts Cover Crop Demo

Approximately 25 farmers and conservation staff attended an on-farm demo of a cover crop inter-seeder available to farmers in the Sand Creek Watershed in Scott County. This implement allows farmers to plant cover crops into a standing corn crop in June. If successful, it could make cover crops a more viable option on more acres in Minnesota. MAWRC coordinates a farmer-led council that provides feedback to county conservation staff on ways to increase the implementation of conservation practices in the watershed.



MDA Hosts Drainage Research Field Day

The Wilkin County farm of Jared and Jerry Nordick serves as home base for several research projects, all related in their focus on tile drainage. The MDA hosted a field day in late June to help spread the word about several innovative conservation practices many farmers are already implementing.

The MDA research plots include a comparison of controlled drainage, a practice in which a control structure is used to seasonally raise and lower the water table within the field. Data will be collected in upcoming years to measure tile discharge volume and nitrate loading. Previous studies show that controlled drainage has the potential to reduce both by about 50%. The study will also look at the potential to increase yield by keeping water in the field into the summer season, when the area often experiences occasional dry conditions.

The Nordick farm also includes a Discovery Farms site, now in its fourth year of data collection. Data thus far suggests that tile drainage in northwest Minnesota is very different from tile drainage in southern Minnesota, primarily due to the fact that the area typically receives about 10 fewer inches of annual rainfall.

The last stop on the tour included a saturated buffer/pollinator habitat combination. The establishment of the pollinator habitat was supported by a grant from the Minnesota Corn Growers, who also sponsored the field day. Monarch butterflies are sure to flock to the site throughout the summer to feed on the abundant milkweeds.



Have You Completed Your Green Star Farms Conservation Evaluation?

The MAWRC's Green Star Farms Initiative is a simple online tool you can use to evaluate your stewardship and insure that you are addressing water resource needs on your farm. The program asks you to score yourself on a 0-10 scale on key areas like nutrient management, tillage, pest control and the like. The evaluation takes about 30 minutes and best of all, it is a confidential resource for only you to use. If you would like a neutral third party to help you, that option is also available, just check the request box when you register.

Now you're thinking "wait, if I have to register, it isn't confidential, right". Actually it is. We only ask you to register and answer some basic questions about your farming operation to track the demographics of participants. Your registration information and your stewardship evaluation are not connected.

To learn more and complete your own confidential evaluation, go to <https://greenstarfarms.org/>.

The MAWRC is a non-profit research and education corporation comprised of 24 agricultural organizations working together to address water issues. For more information, go to www.mawrc.org.

