

News Release (for immediate release)



Bazile Groundwater Management Area Project

Demo Site Field Day 2022

On June 30, 2022, the Bazile Groundwater Management Area (BGMA) Project hosted its third annual field day on the nitrogen inhibitor demonstration site. This demo site, located west of Creighton, Nebraska, is one of three separate research demonstration sites by the BGMA and consists of 80 plots and the research is facilitated by faculty of the University of Nebraska Extension System. This year, the field day's focus was a hands-on approach to available tools. Field day attendees saw presentations from four speakers who talked about available tools and research at different levels throughout the profile of a field. They finished the day with supper and time to discuss with other attendees.

Starting above the crop canopy, Variable Rate Irrigation (VRI) technology was presented by Steve Melvin, Nate Dorsey, Bruno Patias Lena, (all UNL Irrigated Cropping Systems Extension Educators) and Jamie Duan, a UNL graduate student. The presentation highlighted utilization of new drone technologies.

At the crop canopy and ground surface level, the next session focused on a hands-on 'in field' demonstration on research occurring at the demo site and was presented by Javed Iqbal, UNL Nutrient Management & Water Quality Specialist. Javed focused on the "4Rs nutrient stewardship" concept (application of nutrients from the Right source, at the Right place, in the Right time, and at the Right rate) that clarifies the project titled, "Reducing nitrate leaching below crop rootzone by adapting novel nutrient management approaches in Nebraska", with funding from the Nebraska Environmental Trust (NET).

Moving into the subsurface, UNL Graduate Student, Xiaochen Dong, gave his presentation on Subsoil carbon injection/remediation research. This research of woody biomass injected below surface for its benefits for soil health and natural denitrification effects is conducted on the BGMA soil health demo site.

At the deepest part of the soil profile discussed, Aaron Hird, Soil Health Specialist with Nebraska's NRCS, put together a hands-on demonstration on Soil Infiltration and Variability. Aaron and his team brought soil cores, demonstrated water infiltration per type of soils, and got attending interacting in learning how to check soil infiltration. Field day attendees also went home with their own infiltration kits from the BGMA Project Group so they could try it out on their ground.

The Bazile GMA Project is an ongoing joint effort of the Lewis and Clark, Lower Niobrara, Lower Elkhorn, Upper Elkhorn NRDs, and the Nebraska Department of Environment and Energy to curb the rise in nitrate concentrations. By offering educational opportunities, establishing demonstration sites, and offering cost-share on select best management practices (BMPs), one of the Project's goals is widespread adoption of best management practices across the area. These best management practices are designed to give the producer more efficient control over inputs while reducing the environmental impact. If anyone is interested in adding any BMPs to their operations, contact BGMA Coordinator Lisa Lauver at 403-371-7313 via phone or by email at llauver@lenrd.org, or your local NRCS office.