2021 NACAA Search for Excellence in

Sustainable Agriculture Recognition Program

By Katie L. Wantoch, Agriculture Agent, UW-Extension Dunn County

Red Cedar Demonstration Farm Annual Fall Cover Crop Program

Program Objectives: Farmers and community members in Dunn County expressed concerns regarding soil erosion, pest control, and soil water management. Farmers and ag professionals sought out information for improving and adopting better conservation and water management practices. I led the collaboration effort of the Dunn County Soil and Water Health Partnership, which was formed in 2014, to better promote soil health and water quality through education, on-farm demonstrations and research at the Red Cedar Demonstration Farm. The technical college ag program instructor, county conservationist, and I pursued and were awarded a five-year lease agreement for the rental of 150 acres of county and city-owned farmland. Over five years (2015-2019), I collaborated with local ag professionals and Extension State Specialists to conduct on-farm demonstrations and research projects, including application methods of cover crops, cover crop seed and mix varieties, crop rotation incorporating a fallow field, no-till planting into cover crop residue, and nitrogen use efficiency rates.

The Fall Cover Crops program is designed each year to achieve these objectives:

- heighten awareness of on-farm demonstrations and cover crop applications,
- increase farmer confidence in cover crop adoption, and
- increase proficiency of ag professionals in delivering research-based recommendations to farmers,
- with an ultimate goal of increasing cover crop acreage in Dunn County.

Program Impact:

- The 2020 Fall Field Day program was cancelled due to COVID-19.
- A total of N=62 participants attended the 2019 Fall Cover Crops Field Day program. These farmers and ag professionals were from nine counties across Western Wisconsin. Results of a post evaluation survey (n=17) indicated the following:
    - All (100%) strongly agreed that they learned that pH is the foundation of a good fertility program and is key to maintaining or improving soil health.
    - 43% 'somewhat agree' and 57% 'strongly agree' that farmers need to have a plan when considering planting cover crops.
    - Ag professionals noted,
        - "*I will be able to give this information to area farmers on a daily basis*."
        - "*This information is valuable to have when working with producers who plant cover crops. There are lots of challenges and benefits, and it is important to be knowledgeable of both aspects*."

- A six month follow up evaluation was implemented using Qualtrics following the 2018 Fall Field Day program, with n=7 farmers and ag professionals reporting the following results:
    - A majority (85%) of respondents indicated that that they have made changes or recommended changes to improve the health and productivity of their soil and water on the farm.
    - Half of respondents indicated that they have improved their understanding of the issues surrounding environmental quality and made more informed decisions regarding cover crop seed selection.
    - All respondents indicated the information and resources provided at the annual fall field day to be valuable or extremely valuable.
    - Respondents noted:
        - "*I like that there is a little something different each year*."
        - "*You have offered great programs and my hope is that you'll continue to stay in front of new technical changes to the industry that promote profitable and environmentally sound approaches to our agricultural base in the community*."

Methods of Evaluation:

- Verbal testimonials have been taken from field day program attendees.
- Written evaluations were provided to program participants directly following the Fall Field Day program.
- Six month follow up Qualtrics survey was conducted following the 2018 Fall Field Day program.

Teaching and Research:

- Teaching Media and Format:
    - Over five years, delivered seven on-farm educational field day programs at the Red Cedar Demonstration Farm.
    - Over five years, collaborated with local ag professionals and Extension State Specialists to conduct on-farm demonstrations and research projects at the Red Cedar Demonstration Farm, including application methods of cover crops, cover crop seed and mix varieties, crop rotation incorporating a fallow field, no-till planting into cover crop residue, and nitrogen use efficiency rates.
    - Designed and developed an annual comprehensive report on farm activities.

- Marketing Strategy:
    - Direct mailing of flyer to prior program participants and included in my quarterly newsletter that is mailed (600 addresses) and emailed (350 email addresses);
    - Press releases and articles drafted for inclusion in local and statewide Wisconsin agriculture publications;
    - online through the UW Extension Dunn County website and social media sites.

Results: The Fall Field Day programs are hands-on learning opportunities for all attendees, including farmers, agricultural professionals, government officials, college students and local community members. The field day has been attended by almost 400 people over five years. Material is reported to be shared with over 1,800 farm clientele each year, realizing a combined outreach of almost 9,000 farmers and ag professionals. These field days have also been financially supported by local businesses and grant funds to defray refreshment, speaker fees, and outdoor facility charges.

Cover crops and other conservation practices are certainly not new strategies for soil health and water quality improvement. However, despite a plethora of resources available, farmers often need local demonstration to determine if these management practices are suitable in their region. This new opportunity has allowed me to build relationships among county stakeholders and agriculture professionals whom I may not have had the opportunity to work with in the past.