RESEARCH BRIEF

Identifying Needs of Wisconsin Cover Crop Information Providers



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INTRODUCTION: The Cover Crops Research and Outreach Project (CCROP) is a collaboration of UW-Madison, Michael Fields Agricultural Institute, and USDA's Dairy Forage Research Center. This collaborative aims to research and provide useful information to farmers and other agricultural professionals about cover crops. Farmers grow cover crops (often over the winter) to protect soil from erosion and to increase organic matter. Between 1998 and 2016, the share of Natural Resource Conservation Service conservation program (EQIP) expenditures supporting cover crops increased, but the use of cover crops is uneven across the state, and we sought to know more about the resources farmers need as they consider cover cropping. In March of 2020, the CCROP team conducted a survey to learn more about Wisconsin farmers' information needs regarding cover crops. We targeted agricultural educators to gauge levels of

interest and specific needs regarding cover crop education in different areas of the state.

We created and tested survey questions with CCROP team members and distributed the survey with the assistance of UW-Madison Division of Extension, including its Nutrient and Pest Management Program, the Department of Agriculture, Trade and Consumer Protection's Producer-Led Watershed Group program, Wisconsin Land and Water, and Wisconsin's statewide NRCS office.

RESULTS: Our 90 respondents represented a wide array of educators (Fig. 1), including soil conservationists, county conservation specialists the largest group), watershed network coordinators, university outreach personnel, and county agricultural extension agents.

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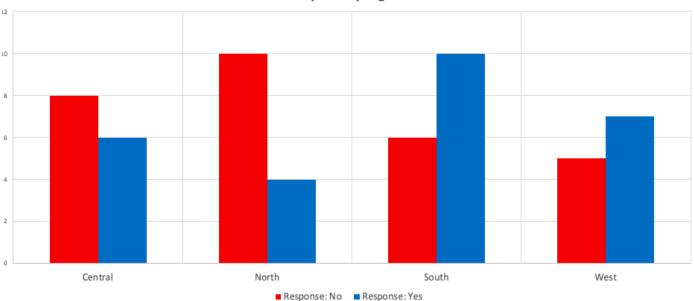
County Ag Ext Agent
Watershed Grp. Collab.
Cty Cons. Spec.
Cty Cons. Spec. & Watershed
Soil Conservationist
NRCS District Conservationist
Ext Educator

Figure 1. Categories and distribution of Wisconsin agricultural information providers responding to survey.

0 10 20 30

Figure 2. Do you think you have sufficient locally appropriate information about cover crops?

Response by Region



Respondents were evenly distributed throughout the state, and over 95% reported that they had provided cover crop information to farmers in their area in the last year. Roughly a quarter of the respondents fielded 6 to 10 requests, while 25% fielded over 20 requests, again from around the state. Educators provided cover crop information via demonstrations, on farm trials, field days, and meetings, as well as providing one-on-one advice and making videos about cover crops.

While more agricultural educators in the south and west of the state feel that they have the needed resources to answer questions, people in the north or who cover the full state (central) indicated they lack sufficient locally appropriate information (Fig. 2). Asked "on what topics do you think farmers would like more information," educators ranked in the top 5 of 14 choices: "impacts on profitability" (G), "planting strategies" (A), "impacts on yield" (E), and "species selection" (D) (Fig. 3). "Interseeding," and "soil health" were also identified as of interest to farmers, although less consistently in the top 5.

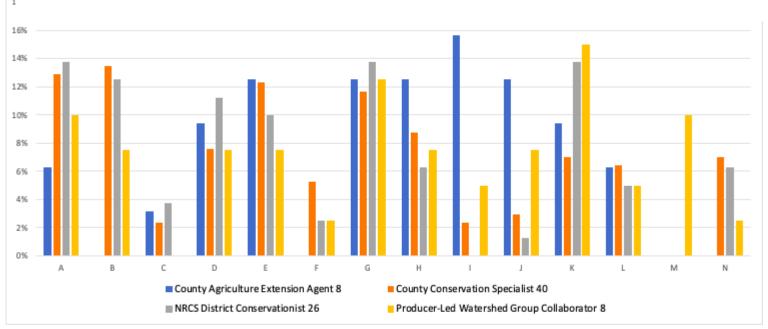
County extension agents were distinctive in ranking "impacts on water quality" and "impacts on soil erosion" in the top 5 cover crop topics of interest to farmers more often than did other groups responding to the survey.

Watershed group collaborators more often identified "credit considerations" in their top 5 items of interest to farmers, as well as "soil health" and "interseeding." NRCS staff and county conservation specialists more often selected "planting strategies," "planting before/after," "profitability," and "impacts on yields," in their top 5 topics "of most interest to farmers."

ADDITIONAL FINDINGS: Individual comments generated by the survey reflect the quantitative data indicating that educators, especially in the north would like to see information better tailored to farmers in their region. In addition, respondents submitted a number of comments regarding the need for more specific information about the impacts of cover crops on water quality. A number of agricultural educators commented that farmer-to-farmer communication is an effective way for farmers to learn about cover crops, and that more staff time and field workers would help with the implementation of new cropping strategies.

In a follow-up conversation between members of the CCROP team and a group of county conservationists about the survey results, participants noted that cover crop equipment setup is an area where they struggle to provide information. The discussants identified producerled groups as especially effective in providing

Figure 3. Four groups of agricultural information providers chose the top 5 cover crop related topics they believed would be of interest to farmers. The 14 topics they chose from included: A) planting strategies; B) planting before/after; C) harvesting; D) species selection; E) impacts on yields; F) cost of seed; G) impacts on profitability; H) inter-seeding; I) impacts on water quality; J) impacts on soil erosion; K) soil health; L) crop insurance considerations; M) credit considerations; N) on-farm examples.



equipment-related information, especially in explaining planter components, how to repurpose equipment, and working on a tight budget. One participant commented that information on cover crops targeted to farmers can often be fairly technical, and that there is a "next group" of more risk averse farmers that educators need to reach with more accessible information in order to further cover crop adoption. Farmer testimonials, including videos, may help make cover crops more accessible, as well as to provide a farmer-to-farmer perspective. It was also noted that adopters of cover crops have

encountered challenges which have left others hesitant to try cover crops—aerial seeding failures were specifically mentioned.

Participants in the conversation observed that while profitability of cover crops is often raised by farmers and educators as an issue, often that topic is effectively addressed in terms of how cover crops are one element in a "systems approach" involving soil conservation and health, soil structure, and resilience during flooding and droughts, all of which ultimately plays a key role in overall farm sustainability.

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Dairy Forage Research Cente