Increasing Adoption of Cover Crops and Other Conservation Tools Among Ohio Farmers

Maggie Beetstra, graduate fellow, School of Environment and Natural Resources
beetstra.2@osu.edu

Issue
Farmers have been slow to participate in cover crop programs.

Background
Conservation programs are important tools used to protect agriculture and the environment. Many conservation programs focus on increasing farmer adoption of cover crops. Cover crops can be beneficial to a cropping system—they can prevent soil and wind erosion, combat nutrient and soil runoff into nearby waterways, improve the soil and add nutrients, suppress weeds, improve the availability of water in the soil, and break pest cycles. Despite all the potential benefits, farmers have been slow to participate in cover crop programs. Researchers used a mix of surveys and interviews to determine why adoption of cover crops is low among Midwestern, and particularly Ohio, farmers. Here is what they discovered:

Recommendations
- Timing is key.
  - Farmers think differently depending on the time of year due to fluctuations in financial stability, the amount of work to do, and stress.
  - In January and February, farmers are more likely to be financially stable, think more clearly, and have time to consider conservation practices. This is the recommended time of year engagement with farmers should occur regarding cover crop programs.
  - Cover crop data collection and engagement activities should mirror what is happening in the growing cycle. For example:
    - Data collection with questions about cover crop termination decisions should occur near spring termination.
    - Cover crop engagement activities should focus on cover crop benefits in the winter months, and how crops can address on-farm issues near planting, etc.

Seasonal changes in farmer availability

Stress around finances
Recommendations (continued)

- Winter cover crop programs can be improved.
  - Farmers interviewed had practical suggestions regarding how financial aid programs for winter cover crops could be improved.
  - Crop planting deadlines need to be more flexible. Program deadlines for planting cover crops are unrealistic, leading to less cover crop acres planted and less farmer participation overall.
  - Different soil types, topography, and micro-climates can impact how effectively a cover crop will grow, so the same seeding rate is not appropriate on every field.
  - Making payment rates consistent among participants (e.g., beginner and veteran cover crop farmers being paid the same) would increase feelings of fairness and may help to increase retention rates.
  - More outreach is needed to educate farmers about cover crops and their benefits. This outreach should also include explanations of incentive programs and how they offset the cost of planting cover crops.

Methods

In order to examine farmers' willingness to adopt cover crops in the Midwest, researchers used multiple surveys and interviews. For one study, Midwestern farmers were surveyed about their resource levels and cover crop perceptions at three time periods: April/May 2019, August 2019, and January/February 2020. A similar study was conducted with farmers from northern Ohio. The farmers interviewed included a mix of cover crop users and non-users at three time points in 2020: January/February, May/June, and September. During each interview, researchers asked the farmers to identify the one or two benefits and challenges related to cover crops that come to mind at that particular time of the year. In another, 25 farmers were interviewed across northern Ohio at two time points: January/February 2020 and May/June 2020. In each interview, researchers asked questions about time and financial resource fluctuations and performed cognitive testing. Finally, researchers conducted an interview with 26 farmers across northern Ohio in May/June 2020. All the farmers used cover crops at the time or had at some point in the past five years. In each interview, researchers asked open-ended questions about the farmers’ experience with cover crop incentive programs and for suggestions about how to improve such programs.

Learn more: kx-assets.s3.amazonaws.com/2021-03/KX_PolicyBriefs_v4.pdf