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# Farmer Demonstration Networks as a Catalyst for Conservation Adoption

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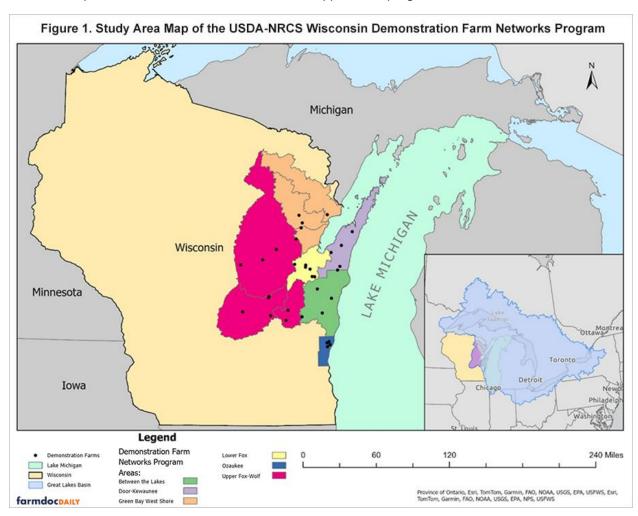
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Cover crop use in the US Cornbelt remains low, despite significant public and private investment in efforts to support adoption (*farmdoc daily*, February 22, 2024). The US Department of Agriculture alone invests \$6.5 billion annually into conservation programs, many of which focus entirely on support payments rather than technical support (e.g., EQIP) (USDA, 2023). A large literature on the factors that influence cover crop adoption finds that payments alone are often not successful in supporting conservation adoption, as the choice to adopt conservation is complex and personal (Deane et al., 2023; Prokopy et al., 2019). Moreover, the success of conservation in the Cornbelt goes beyond adoption and requires that producers prefer to persistently use cover crops in their system (*farmdoc daily*, April 24, 2025).

One major hurdle to sustained adoption is the steep learning curve that a producer faces in the first years of cover cropping (*farmdoc daily*, June 5, 2025). In a recent article, we studied the role of a USDA-funded demonstration farm program in cover crop adoption (Craska et al., 2025). Demonstration farms are one method to that promote peer farmer communication and learning (Sutherland and Marchand, 2021), along with participatory extension programs (Knook et al., 2018) and formal farmer networks (Pape and Prokopy, 2017). Our analysis provides the first empirical estimate of conservation adoption after a demonstration farm program, and we are the first to study cover crop adoption in a program's entire region, including on non-participating farms. We found that cover crop adoption was significantly higher after the program was rolled out, speaking to the power of farmers as demonstration leaders and the capacity for existing networks of farmers to increase conservation adoption.

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The USDA's Natural Resources Conservation Service, in partnership with University of Wisconsin Extension and County Land and Water Conservation Departments, launched the Wisconsin Demonstration Farm Networks program in 2014 in a single watershed in Wisconsin (Lower Wolf) (program website). Since then, the program has rolled out in five additional Wisconsin watersheds and spread to other states, including New York and Ohio (see Figure 1 for a visual of network regions). At the center of the program are the Demonstration Farmers. Demo farmers trial conservation practices that have water quality benefits, host field days, and participate in program activities (e.g., roundtables). In exchange, they receive conservation payments via EQIP, additional support payments to cover up to 100% of the practice cost, and additional technical support from program conservation staff.



Because the program was rolled out across the study area over time, we used two-way fixed effects regression to compare cover crop adoption within a network region before and after the program as well as to compare networks regions to other network regions that had not yet begun the program. We used remote sensing estimates of cover crop use from Zhou et al. (2022). We estimated the likelihood that a random point had cover crops based on whether a point was (1) located in a network region that had already become active (i.e., the program had started) (2) whether it was close it was to a demo farm (i.e., within 5 or 10 kilometers) and (3) how many demo farms were active in that network region. Our regression controlled for other characteristics of the network region that might influence conservation adoption (e.g., soil type and geology, average farm size and income, federal payments, and the number of local conservation staff) as well as state and federal policy changes that affected the entire study region.

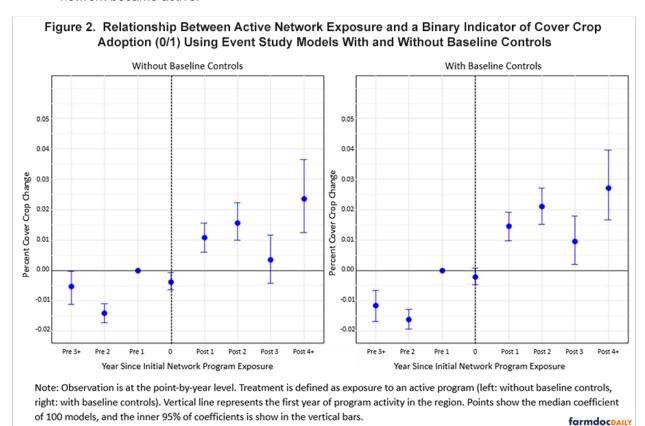
We found significant increases in cover crop adoption following the program's rollout in all estimates. Adoption was 0.6 percentage points more likely in the network region as a whole, which is a 10% percent increase compared to a baseline cover crop rate in the region of only 6.3% percent. Adoption was even more likely in closer proximity to demo farms: a random point was 0.8 percentage points (13%) more

likely to have cover crops if it was within 5 kilometers of a demo farm. We also found adoption increased with the number of demonstration farms in the network region. Adoption increased 0.1 percentage points (2%) with each additional farm in the region. Adoption increased over time, with a 3 percentage point (48%) increase in adoption likelihood four or more years after the network becomes active.

Our results suggest that demonstration farm networks, led by real farmers trialing practices on their working farms, are an effective tool to share information with conservation-curious producers. All farmers in the region remained eligible for EQIP payments, making this program an additional support for local producers. Yet the adoption we estimated far outpaced previous estimates by Park et al. (2023) of the impact of EQIP payments alone. In the study region during the period we analyzed, farmers received \$10.6 million in EQIP. Per the findings of Park et al., we would expect at most a 0.06% increase in cover crop adoption due to this public spending level, which is far below the change we observe (10% on average and nearly 50% after 4 years).

Based on our results, we suggest the following for policy or program leaders seeking to increase conservation adoption and/or the cost-effectiveness of conservation programs in their region:

- 1. Work with trusted conservation leaders and existing farmer networks as a complement to existing payment-based programs.
- 2. Choose a program region scale that allows information-sharing between farmers. Adoption increased with density of demonstration farmers within the region.
- 3. Allow the program time to grow. We found the largest increases four or more years after a network became active.



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