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Research Brief

Midwest Farmer Perspectives on Conservation

2024 Farmer Survey

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Farm conservation practices impact soil health, water quality, wildlife habitat, carbon sequestration, and biodiversity. Conservation efforts, such as cover cropping, no-till planting, and buffer strips, provide farmers with tools to mitigate soil erosion, manage water runoff, and enhance biodiversity. As agriculture faces growing environmental and weather pressures, these practices can help foster resilient farming systems and long-term ecological and economic stability.

This policy brief offers insights into farmers' conservation practices, based on surveys conducted with farmers across eight Midwest states—Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. We surveyed farmers on conservation using a mixed-mode approach, distributing the survey through both mail and email. The farmer survey received responses from 527 farmers with a response rate of 16%. Implementation varied widely, with soil and water conservation methods, such as conservation tillage and nutrient management, being the most common. These practices aligned closely with farmers' perceptions of important characteristics for a "good farmer," which emphasize minimizing soil erosion and nutrient runoff. In contrast, pollinator habitats and tree planting were less widely adopted. Compared to soil and water conservation, declines in pollinators and rare species were less concerning to farmers. By understanding respondents' shared needs and concerns, this policy brief aims to inform targeted strategies to encourage broader conservation adoption and support environmental stewardship in the agricultural community.

Our survey also gathers insights into farm financial programs. For additional details on methodology, please refer to the appendix.

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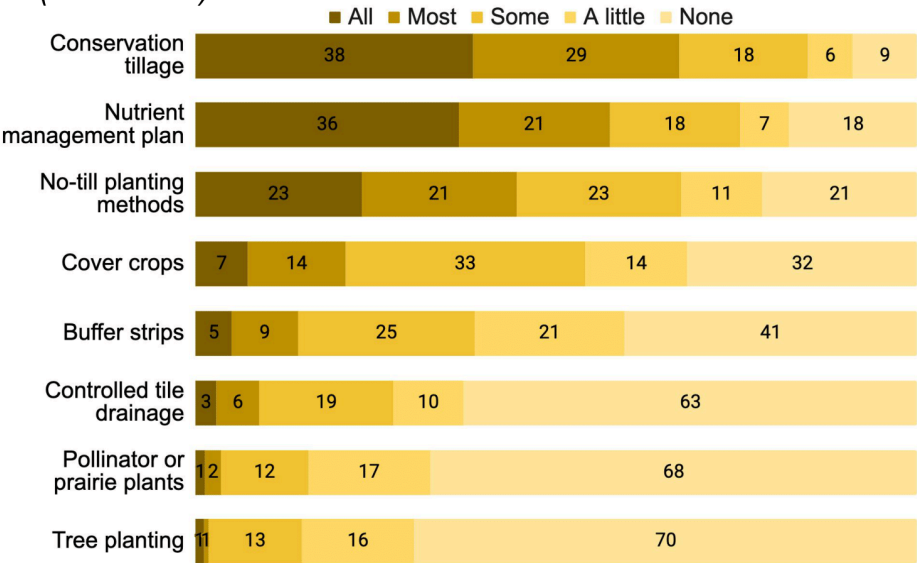
Conservation practice adoption on cropland over the past five years (2019-2023)

Among the respondents, 86% (451 farmers) reported growing row crops (annual crops like corn and soybeans) and 70% (368 farmers) produced forages (crops like grass, alfalfa, or hay). Grass-based livestock farming (fed livestock primarily through pasture and hay) was 43% of the respondents (224 farmers) while 38% (202 farmers) produced livestock in confinement facilities (fed livestock primarily in barns or feedlots). Farmers were able to select multiple production types.

On cropland, biodiversity practices were less widely adopted by farmers compared to soil and water conservation practices. Soil and water practices such as conservation tillage and nutrient management plans were the most widely used, with 67% and 57% of respondents, respectively, adopting them on all or most of their cropland. No-till planting also saw moderate adoption, with 44% using it on all or most of their land. Cover crops and buffer strips saw more limited use, with 21% and 14% of respondents, respectively, adopting them on all or most of their cropland, while 32 and 41% reported no adoption. In contrast, biodiversity-focused practices like pollinator habitats and tree planting were far less common, with 68 and 70% of respondents reporting no adoption.

Soil and water conservation practices are the most common

% saying the share of their cropland adopting each practice over the past five years (2019-2023)



Source: Survey conducted December 2023 - April 2024
Lu et al. (2024) Upper Midwest Farmer Perspectives on Conservation

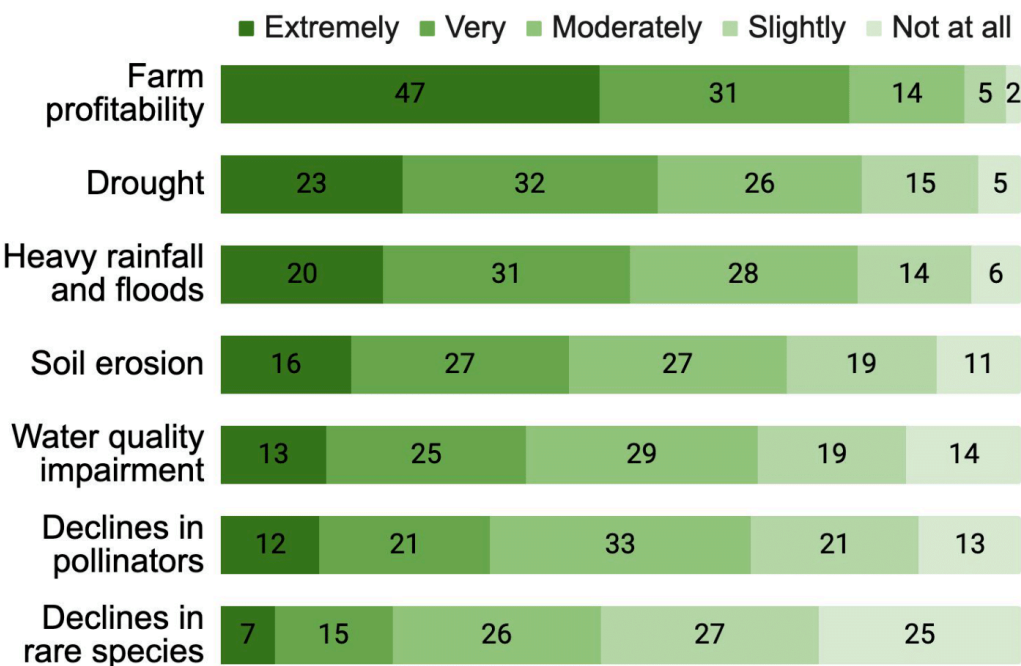
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Concerns about profitability, weather, and ecosystems

Farm profitability was the most pressing concern for farmers, with 92% indicating they were moderately to extremely concerned. Drought followed as the second-highest concern, with 81% expressing moderate to extreme concern. Other challenges, such as heavy rainfall and floods (79%) and soil erosion (70%) were also widely reported. Water quality impairment and declines in pollinators and rare species were noted by about half of respondents, with 48–67% moderately to extremely concerned and 33–52% slightly or not at all concerned.

Farm profitability is the most concerned, followed by drought, heavy rainfall and floods, and soil erosion

% saying how concerned they are about various farm challenges



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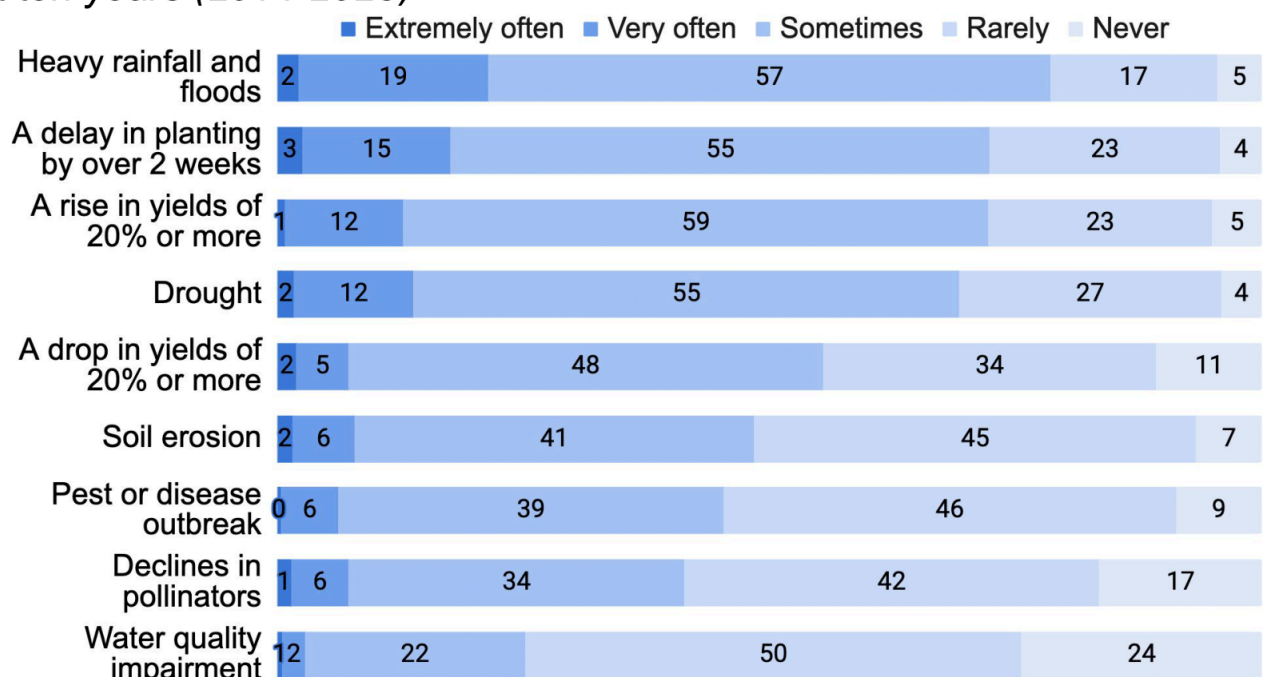
Changes seen in yield, weather, and ecosystems

Farmers reported sometimes experiencing extreme weather events, with heavy rainfall and floods being the most common, as 78% observed them at least sometimes. Delays in planting by over two weeks were also prevalent, with 73% experiencing them at least sometimes. Yield variations, including a rise or drop of 20% or more, were notable, with 72% reporting increases and 55% reporting decreases at least occasionally.

Environmental challenges, such as soil erosion, pest outbreaks, and declines in pollinators, were less frequent but still significant, with 41–49% of farmers surveyed experiencing these issues sometimes or more often. Water quality impairment was reported less frequently, with 74% observing it rarely or never.

Farmers sometimes experience weather extremes and yield variations

% saying how often they observed or experienced farm challenges over the past ten years (2014-2023)



Source: Survey conducted December 2023 - April 2024

Lu et al. (2024) Upper Midwest Farmer Perspectives on Conservation

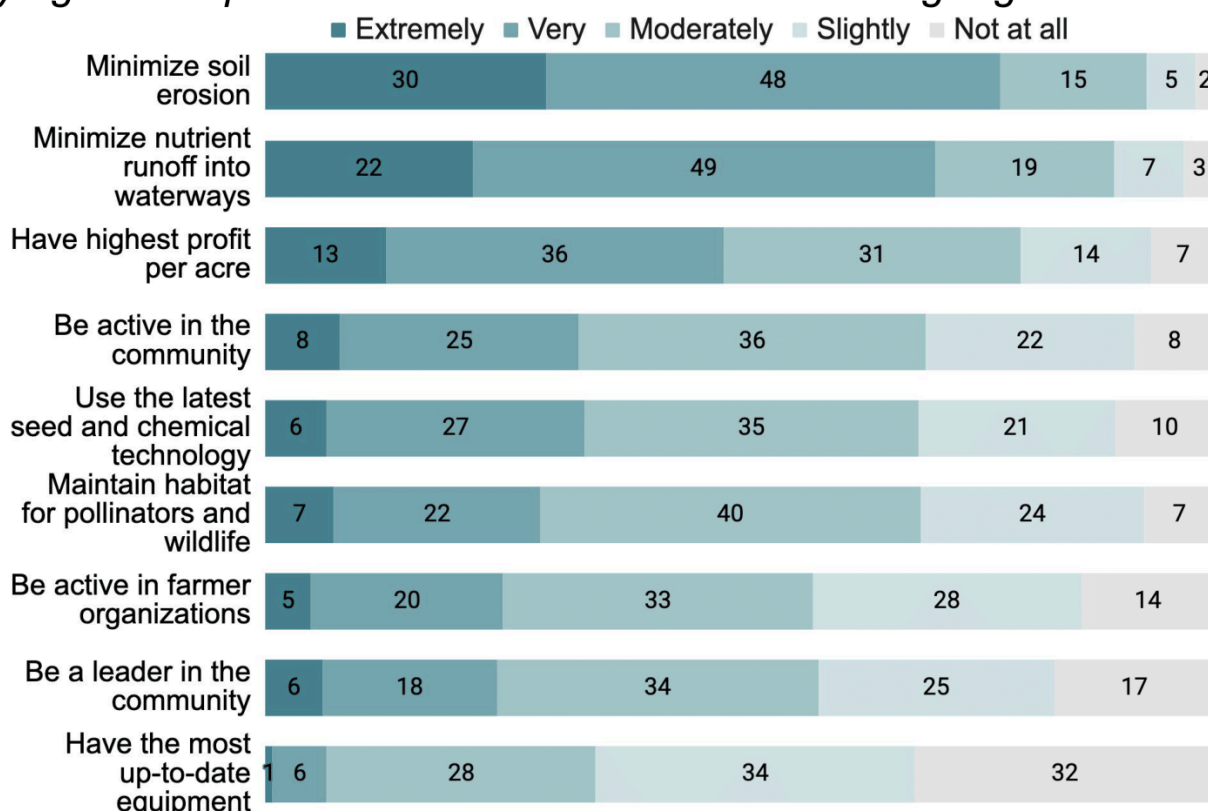
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How important is soil and nutrient management for a “good farmer”?

Farmers considered minimizing soil erosion and nutrient runoff as the most important characteristics of being a good farmer, with 93% and 90%, respectively, rating these moderately to extremely important. Achieving the highest profit per acre was also highly valued, with 80% rating it moderately to extremely important. Community involvement, such as being active in the community, was seen as moderately important, with 69% of respondents rating it moderately to extremely important. Having up-to-date equipment was considered less critical, with 35% rating them as moderately to extremely important.

Soil and nutrient management are very important for being a good farmer

% saying how important each characteristic is to being a good farmer



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Acknowledgements

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