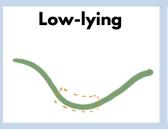
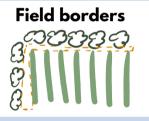
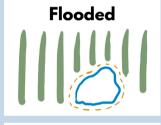
Where to install a prairie planting

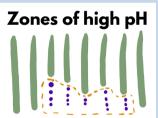
Prairie plantings can be installed strategically, in low production areas, to maximize the benefits they provide while minimizing lost revenues from prairie conversion. In blueberry fields, these areas may be⁷:











Targeted areas to build organic matter

When selecting a prairie site, it is also important to consider factors like weed pressure, planting area, and distance to crop, which may all affect establishment success. For more information about how to design and establish prairie plantings, check out the bulletin using the QR code below.





Resources

For technical assistance or payment programs for prairie plantings, contact:

- MiSTRIPS, a Michigan-based prairie strip program (no-contract funding, technical assistance): https://lter.kbs.msu.edu/who-we- help/ag-professionals/mistrips/
- USDA FSA Conservation Reserve Program, CP-43 is a prairie-strip specific incentive payment program available to Michigan landowners: https://www.fsa.usda.gov
 - CP-43 is a "Climate Smart Practice" under CRP, which provides an additional 5% incentive
- Bee Better Certified, a pollinator certification program for farmers, the website includes a cost estimator: https://beebettercertified.org/
- A complete list of pollinator planting resources: https://shorturl.at/MqqNv

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Authors: Ellen Badger Hanson (WMU) & Rachel Drobnak (MSU) Photos credit: Rachel Drobnak, Ellen Badger Hanson

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Prairie Plantings on Blueberry **Farms**

Benefits, considerations & resources



What are prairie plantings?

A prairie planting is a conservation practice that establishes a diverse mix of native perennial flowers and grasses in an agricultural landscape. These plantings provide environmental, economic, and aesthetic benefits to farms.











Prairie benefits on blueberry farms

Southwest Michigan blueberry farms with native prairie plantings have seen ^{1,2}:

- Increased pollination of blueberry flowers
- Increased abundance and diversity of insect natural enemies
- Increased pest egg removal
- No change in overall abundance of insect herbivores

These benefits resulted in **increased berry yields** in rows directly adjacent to prairie plantings after three years and across the entire adjacent field after four years.¹.







With increased berry yields, these prairie plantings pay for themselves in as little as 3-5 years, depending on blueberry prices and whether the producer utilizes cost-sharing resources to install the prairie¹.

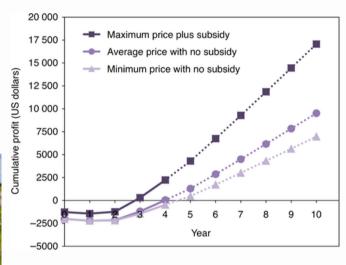


Figure 1. Cumulative profit of prairie plantings when installed on blueberry farms, under three different price levels¹.

General benefits of prairie plantings

- Planting a prairie increases native plant richness on agricultural land and contributes to an overall increase in biodiversity³. Prairies contain flowers that bloom from early spring to late fall, providing resources for pollinators across the growing season.
- Prairie plantings aid in water retention. In row crop systems, prairie strips have been shown to reduce water runoff by 37%. This leads to 20 times more soil retention and 4.3 times more phosphorus retention in fields with strips compared to those without.
- Prairies increase soil carbon storage. Prairie plantings in marginal lands around agricultural fields had 90% more soil organic matter and twice as much total soil carbon as adjacent cornfields⁵.

Considerations

Prairie plantings do not protect the pollinators they attract from pesticide drift⁶. There are several options for reducing the risk of harm to pollinators, including:

- Altering method and/or timing of application to reduce drift
- Planting a grass buffer between crops and prairies
- Installing prairies further from crop field edges
- Adopting more Integrated Pest Management practices

Though prairie plantings are low-maintenance, they do require some continued management to avoid takeover by weeds. Mowing, burning, or targeted herbicide applications can help reduce weed pressure.



Check out this **Blueberry Pollinator Stewardship Guide** to limit drift impacts on pollinators in nearby habitat





Top: A WMU student collecting soil samples. **Left:** An established prairie strip next to a blueberry field.