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THE WISCONSIN POLLINATOR PROTECTION PLAN

Prairies, Roads & Open Spaces

Best Management Practices to protect pollinators

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Restored prairies, open spaces and roadsides can provide feeding and nesting opportunities for pollinators while also complementing other management goals like erosion control, native plant propagation, aesthetics and wildlife habitat. The best management practices outlined here apply to a wide array of habitat improvement projects on public, private and tribal land, with some special considerations for roadside rights of way. For more details, go to the Wisconsin Pollinator Protection Plan, available online.

Timeline

Start with realistic expectations of your short-term results.

- Year 1: You will have few flowers as native plants develop roots first, and you will need to mow any weeds before they go to seed.
- Year 2: Some early species will bloom, but you will still not see many flowers. You will need to mow, pull, or spot treat weeds with herbicide before they go to seed.
- Year 3 and beyond: You will have lots of flowers, but you may continue to use hand-pulling and spot treatments to control weeds. You may also mow, graze or burn.

Planning

Start by outlining short- and long-term goals, and develop a management strategy to meet them. Your county conservation office may be helpful. Consider:

- How much of the area is already covered by forbs (herbaceous flowering plants) or flowering shrubs and trees, and are any of them key pollinator plants like lupine or milkweed?
- Are there noxious weeds or invasive plants that need to be controlled?
- Are there nearby areas that might provide nesting habitat for bees, including downed wood, bunch grasses, brush piles, old rodent burrows or hollow stems?
- Might weeds or pesticide use on adjacent lands affect your site?

Planting

Choose plants that suit your site's soil type, drainage, slope and sunlight, and aim to have at least 3 species blooming from early spring to late fall.

- Choose seed mixes with a 3:1 ratio of wildflowers to grasses.
- Diversify grasses, including short grasses like little bluestem that won't shade out forbs but will provide nesting habitat for bees.
- Choose low-maintenance native plant species. Include early season flowers and plants that host butterfly larvae, such as milkweeds and lupines.

- Some trees and shrubs can benefit pollinators, including American basswood, willows, and many fruit trees.
- You can plant annuals the first year to provide flowers and block weeds while perennials get established.
- The more wildflower species in a mix, the more expensive it will be, but lower maintenance costs and inputs can offset the extra cost. You can defray costs by hand-harvesting seed from established prairies, with permission, taking no more than 10 percent of available seed from any one species.
- Seed from October through December. Many forbs require winter dormancy before germination, and grasses can outcompete them if planted in the spring.
- Do not fertilize. Native prairie plants don't need fertilizer and only weeds will benefit.

Site preparation

Sites that were historically native prairie may require only tree and brush removal, but many sites will require more work.

- You can remove vegetation with herbicides, solarization, or sod removal. Consult resources below for details about each of these methods.

Roadsides

Native prairie plants can help maintain rights of way to protect driver safety, control erosion, prevent invasive weeds, and be visually attractive. Maintenance managers face challenges, but there are ways to overcome them.

- Choose salt tolerant native forbs for plantings closer to the roadway.
- Seed with an annual cover crop in the first year after planting to prevent erosion.
- Stagger mowings or mow only the first 8 feet of roadside to allow wildflowers to bloom while still cutting off seed heads on invasives. Mow the first 8 feet regularly and other areas less frequently.
- Put plants that provide pollinator nesting and forage on both sides of the road to minimize bee and butterfly mortalities from crossing traffic.
- Collaborate with landowners, natural resources experts, engineers, maintenance staff and volunteers to implement your plan and manage it over the long term.

Resources

- **Wisconsin Pollinator Protection Plan:** <https://datcp.wi.gov/Documents/PPPComplete.pdf>
- Planting guides
 - **Xerces Society:** <http://www.xerces.org/providing-wildflowers-for-pollinators/>
 - **Pollinator Partnership:** pollinator.org/guides, pollinator.org/beesmartapp
- Nurseries and seed sources
 - **Wisconsin Department of Natural Resources:** <http://dnr.wi.gov/files/pdf/pubs/er/er0698.pdf>
 - **Plant Native:** <http://plantnative.org/>
 - **For milkweed seed:** <http://www.xerces.org/milkweed-seed-finder/>
- Establishing and maintaining prairies
 - **Xerces Society:** <http://www.xerces.org/wp-content/uploads/2013/12/EstablishingPollinatorMeadows.pdf>
 - **Minnesota Department of Natural Resources:** <http://www.dnr.state.mn.us/prairierestoration/index.html>
 - **Midwest Invasive Plant Network:** www.mipn.org/control/
 - **The Prairie Enthusiasts:** <http://www.theprairieenthusiasts.org/>
 - **Wisconsin Prescribed Fire Council:** <http://www.prescribedfire.org/>