



Welcoming Pollinators with Wildflowers:

A quick guide to establishing
pollinator habitat.



Ready, set, grow!

Where will your wildflowers grow? Size doesn't matter much because pollinators have an amazing ability to locate host plants. Finding a sunny and well-drained location is your biggest priority. Think about the possibility of using a corner of your yard, a roadside strip, or an area not being cropped. If you build it they will come!

Tackle a small
area to start
with and
expand when
you learn what
works on your
site.

Do it right, prep the site!

Removing deep-rooted weeds can be a pain. But reducing competition at the outset is worth it in the end. The following page offers some options on how to rid your chosen space of grass and other potentially invasive species.



Mulch on top of cardboard can be laid out in a planting area to reduce competition from other plants.



After three years, plants have filled in and are attracting pollinators.

Site Prep Techniques:

Solarize:

Kill weeds with plastic sheets before planting or seeding (black is best!). For best results:

- Aim to solarize your area for at least three weeks in the spring or summer. By securing a plastic sheet or tarp to the ground with heavy weights, you will harness the power of the sun to kill vegetation under the plastic.
- Ensure the edges of the plastic are secure to prevent ventilation and keep out light.
- Remove when ready to plant.



Cultivate:

Tilling is the best option for removing roots and preparing the soil. This weed control requires an early start (3-6 weeks prior to planting). If you choose to keep your wildflower plot chemical free, mulch with wood chips.

To prepare your site:

- Hand work or rototill small areas, being sure to remove old roots and sod; a cultivator is appropriate for larger sites.
- Till once, allow weeds to emerge and repeat;
- Wait at least one week after any herbicide application before tilling to ensure your treatment is effective.

Tilling may expose weed seeds or promote sprouting from existing roots.

Apply herbicide:

Herbicide can control unwanted vegetation during the growing season. It should always be applied by a licensed operator under suitable weather conditions. You should:

- Apply herbicide (eg. glyphosate) as per manufacturer's instructions.
- Ensure any areas of dense sod are tilled under or removed before planting. Wait at least 1 week after spraying before tilling.

Be aware that herbicide will control existing weeds but will not stop new seeds from germinating.

Mulch:

Starting at least one season before intended planting, smother unwanted vegetation with a thick layer of mulch (or mulch-covered cardboard). This approach is well-suited for smaller gardens or for establishing plants within a natural area. When using mulch:

- Lay out cardboard on your site and top it with at least 5 cm of wood chips. Hand-weed anything that grows through the mulch for 2-4 weeks before planting.
- Plant wildflower plugs (small plants) by cutting through the cardboard with a shovel to ensure the roots can establish in the soil.
- Spread seeds over a thin layer of the mulch.
- Be aware that in wet areas, vegetation may grow more aggressively. Consider applying herbicide around mulch border.
- Water throughout the first growing season.

What are your time and resources? Choose one or more of these techniques based on what works for your site.

Know What to Sow:

Wildflowers can be established using plugs (small plants) or seeds.

Establish native wildflower seeds:

Choose native species according to their sun and moisture preferences. Our resource, “Recommended Native Pollinator Plants for the Grand River Watershed” is a good place to start. For seed spreading, it is important to:

- **Calculate seed distribution densities at 0.7 kg seed per hectare (1 lb seed per acre).**
- Plant in autumn. Seasonal cycles of cold and warmth prepare them for germination. By seeding wildflowers in spring, you risk delaying their germination by a year.
- **Broadcast your seeds by hand using a ratio of one part seed to ten parts millet, sand or sawdust.**



Broadcast seeders do not work well because of the varied seed size.

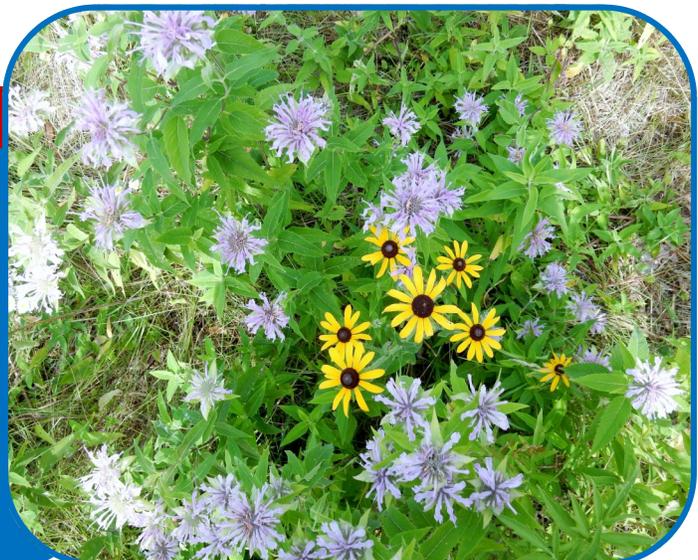
- Ensure seeds have direct contact with soil or a thin layer of mulch.
- Supplement with extra seeds in future years to achieve desired density.

Plant plugs:

Small seedlings can be purchased or grown from seed in flats. When using this method:

- Dig a hole leaving ample room for roots.
- Lightly press soil around base of plant to reduce air pockets.
- Mulch evenly around each plant.
- Space plants roughly 30-45 cm (12-18 in) apart.
- Plant the same species in clusters of three or more.
- Don't be surprised if your planting looks a little sparse at first. Even sites that appear thinly planted will become a mosaic of colours within a couple of years.

A variety of different flower types, colours, shapes and flowering times will provide nectar and pollen to many different species through the growing season.



Observe, Maintain and Enjoy!

The journey from site preparation to planting at times may seem more labour than love, but will be well worth the effort. In the beginning, **occasional weeding and watering is very important** to help your plants thrive as they put down deeper roots. If bare patches remain after a couple of years, reseed or replant to fill them in. Over time, you may find that willing volunteers, including goldenrods and asters, will seed in on their own. Don't worry, they too will offer valuable food and habitat for many pollinators.

No fertilizer needed!

Adding it will encourage aggressive weed species to grow. Many native species grow best in nutrient-poor soils.



Remember: Site prep is important and can take a full growing season to be ready for planting! Take your time and be patient for nature to follow your lead.

For more information contact: 519-621-2761 or ruralwater@grandriver.ca

Part of the Great Lakes Agricultural Stewardship Initiative