



Watersheds
CANADA

WILDFLOWER GARDEN GUIDE



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What is a Wildflower Pollinator Garden?

A wildflower garden is a visually spectacular, self-maintaining, low cost garden that truly brings the beauty of nature to your backyard. Native wildflower species are easier, cheaper, and more ecologically beneficial than using non-native wildflower plants.

Being native, wildflower species are well adapted to the local conditions and climate so they are often hardier and easy to maintain. They also reproduce on their own, are more resistant to diseases, do not require fertilization, are easy to propagate, share, and are a low cost alternative to ornamental non-natives. Most importantly, native wildflowers attract and protect native pollinator species.

Pollinator species, including bees, butterflies, and hummingbirds play a critical role in natural ecosystems and in human food production. It is estimated that these pollinators, particularly bees, are essential for 15-30% of food production (Kremen et al, 2002).

Why is it Important?

Unfortunately, many of our pollinating species are declining due to habitat loss, climate change, invasive species, new diseases, and pesticide use.

Honey bees around the world have been experiencing a phenomenon called Colony Collapse Disorder (CCD). It occurs when the worker bees suddenly disappear, leaving behind the queen bee, nurse bees, and immature bees. Once the food runs out, the remaining bees die and the colony collapses. It is unknown what the exact cause of CCD is. Researchers believe it may be due to climate change, loss of habitat, the invasive varroa mite, pesticide poisoning, stress caused by the transportation of hives for pollination services, or a combination of all these factors (VanEngelsdorp et al, 2009).

Butterfly species have also been declining, notably the now endangered Monarch Butterfly. The population of Monarch Butterflies has declined by 84% between 1996 and 2015 (Thogmartin et al, 2017). One of the major reasons for the decline is the loss of Milkweed plants available to Monarchs. Milkweed is the major source of food for both the caterpillars that eat the leaves and the adults that eat the nectar. Common Milkweed was long considered a noxious weed and has been largely removed for agriculture production.

Thus, to protect these valuable and declining species, it is critical that property owners preserve and create pollinator habitat wherever they can. The best way to do this is to build your own wildflower garden!



Different flower types can attract different pollinator species:



To attract hummingbirds, consider planting Columbines, Lupines, or Bergamot.



To attract bees, consider planting Lance Leaf Coreopsis, Purple Coneflower, or Asters.



To attract Monarch Butterflies, consider planting Milkweed species such as Common Milkweed, Butterfly Milkweed, or Swamp Milkweed.

Starting on page 14 of this guide, there are descriptions of some popular, attractive, and hardy wildflower species that you may consider for your garden.

* Make sure to research wildflowers native to your region.

Check out the native wildflower database at watersheds.ca



Seed Mixes

- + Low cost
- + More potential plants
- + Easy to spread and plant
- Takes longer to establish and begin blooming
- More difficult to choose precise location of species
- Once seeds begin growing, more susceptible to stresses, like weed competition and drought

This is the best option for gardens covering a large area, such as a field or meadow.

Potted Stock or Plugs

- + Takes less time to establish and bloom
- + Allows you to choose precise location of each plant
- + Ensures plants are in good condition and produces a higher survival success rate
- Higher cost
- Fewer individual plants
- More physically demanding to plant

This is the best option for gardens covering a smaller area.



Planting Your Wildflowers

Finally, the last, most important, and most enjoyable step is planting your new wildflowers.

If you decided to spread wildflower seeds:

- Place your seeds in a bag and mix with sand. Many seeds are very small and mixing it will help to spread the seeds evenly. Gently drop the mixture evenly throughout the planting area.
- Rake the area lightly to shuffle the seeds into the soil.
- Add a light layer of mulch composed of straw or peat to retain moisture and protect the seeds from birds and mammals. Do not over mulch or the seeds may not receive enough sunlight to germinate.
- Water the whole area well and maintain moisture.
- Germination should occur between 20 and 30 days.
- Depending on the species selected, other specific instructions may be required to initiate germination. For example, many seeds require cold stratification or overwintering to germinate.

Maintaining Your Wildflowers

Water your new plants regularly for the first year or two. It is best to water in the early morning and late evening to reduce evaporation. It is also best to water directly around the base of the plants. Once your wildflowers have become established,



watering should only be necessary during periods of drought in the summer. Observable signs of drought are drooping and colour change of flowers and leaves. Depending on the species selected and the site conditions, additional watering may be necessary.

Pulling weeds and grasses will likely be necessary for the first year or two before the wildflowers become established. While removing sod, adding new soil,

and adding mulch will greatly reduce the amount of weeds and grasses that grow, they can still quickly overwhelm and outcompete your new flowers if left unattended.

Re-mulching can be beneficial every year or two for preventing grasses and weeds from establishing. Mulch may blow away or wash away overtime. However, once your wildflowers have grown and filled in the open areas, further mulching is not necessary.



Black Eyed Susan

Rudbeckia hirta

- Have bright yellow petals and dark brown centers. Leaves are grayish green coloured, lance shaped, and are covered in hairs.
- Easy to grow, low maintenance, water occasionally during the first year. Tolerates heat, drought, and a variety of soil types. Short-lived perennial but usually self-seeds.
- Plant seeds in early spring. Full to partial sun exposure.
- Long lasting blooms throughout the summer.
- Attracts pollinator species, such as butterflies and bees.



Blue Lupine

Lupinus perennis

- The flowers are a deep blue/purple with hints of white and appear in long, spike like clusters. The leaves are dark green, hairy, and divided into multiple leaflets
- Easy to grow, low maintenance, water occasionally the first year. Full to partial sun exposure. Prefers sandy loam soil types. Blooms in spring, between May and June.
- Plant seeds in late fall and they will grow the following spring.
- Attracts pollinator species, including butterflies and hummingbirds.



Common Milkweed

Asclepias syriaca

- The flowers are creamy white to rosy pink coloured, are fragrant, and appear in round, globe shaped clusters. The leaves are large, bright green coloured, and have red veins.
- Easy to grow, low maintenance, water occasionally the first year. Tolerates heat, drought, and a variety of soil types.
- Plant seeds in late fall and they will grow the following spring. Full to partial sun exposure. Blooms throughout summer.
- As with all Milkweed species, these wildflowers are favored by the endangered Monarch Butterfly. Also attracts other pollinator species, such as bees and hummingbirds.



New England Aster

Symphyotrichum novae-angliae

- The flowers have deep purple coloured petal rays, yellow centers, and have a daisy-like appearance. The leaves are hairy, light to grayish green colored, and lance shaped.
- Easy to grow, low maintenance, water occasionally the first year. Tolerates heat, drought and a variety of soil types.
- Plant seeds in late fall and they will grow the following spring. Full to partial sun exposure. Blooms in late summer to fall.
- Attracts pollinator species, including bees and butterflies.



Swamp Milkweed

Asclepias incarnata

- The flowers have bright pink coloured petals and appear in small clusters. The leaves are oppositely arranged, narrow, and lance shaped.
- Easy to grow in wet areas, water well the first year. Tolerates periodically flooded areas. Do not allow soil to dry out.
- Plant seeds in late fall and they will grow the following spring. Full to partial sun exposure. Blooms throughout summer.
- As with all Milkweed species, these wildflowers are favored by the endangered Monarch Butterfly. Also attracts other pollinator species, such as bees and hummingbirds.

References

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