It's as easy as 1, 2, 3

A successful pollinator garden must provide nectar- and pollen-rich **flowers** for food, as well as **nesting sites**. Butterflies also need **host plants** to feed their caterpillars.

1. Flowers

Continuous blooms: Provide flowers from April to October so bees have a constant supply of food. Start with 2 or 3 kinds of flowers for each season. Add annuals to fill in gaps in bloom times. A garden in sun or part-sun is best.

Plant in patches: Plant 3 to 5 of each plant so they can be seen from a distance, and will provide lots of food in one spot.

Nectar and pollen: Plants must provide both nectar for energy, and pollen for protein to help the next generation of bees grow.

Different flower shapes and sizes: Different kinds of pollinators need different flowers. Include a variety of shapes and sizes, so there's food for all your insect visitors. Bees favour white, blue-purple, and yellow flowers.

In my garden, favourite bee flowers include:

- **Spring:** willow, flowering trees and shrubs, perennial *Geranium*, catmint, *Pulmonaria*, *Salvia 'May Night'*
- Summer: anise hyssop, Calamintha nepeta 'Blue Cloud', Scabiosa, Liatris Echinacea, bergamot, mountain mint
- Fall: asters, all goldenrod varieties, Mexican sunflower, Brazilian verbena

2. Nesting sites

My garden is tailored to meet the needs of native bees. Did you know that most **native bees** live alone, and that they **nest in the ground** or **in cavities**? I had no idea either!

I do not have a European honeybee hive, but honeybees do frequent my garden.

Ground nesting sites: Hold the mulch! Many native bee species nest in the ground. A pollinator garden must have areas of **bare ground** where bees can dig out nesting tunnels. On the surface, they look like small ant hills.

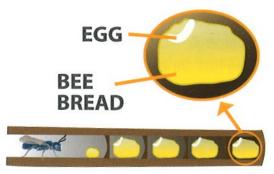
Ground nest (illustration from *Pollinators of Native Plants* by Heather Holm)



EGG BEE BREAD

Old stems and bee houses: For cavity nesting bees, you can include a bee house filled with **hollow stems**, or wooden blocks drilled with tunnels. Tunnels must be lined with paper tubes and removed each year to prevent the spread of parasites and diseases.

Instead, I leave last year's plant stems cut to 15 inches above the ground as **nesting tunnels**. Bees are surprisingly opportunistic and will use all sorts of cracks and holes they find too. **Cavity nest in a hollow stem** (illustration from *Pollinators of Native Plants* by Heather Holm)



3. Butterfly host plants

Nectar: Adult butterflies will drink nectar from some of the same plants as bees. However, they do prefer brightly coloured flowers in pink, purple, red, orange, and yellow.

Host plants: Butterflies need to lay their eggs on specific host plants that their caterpillars can eat. Without host plants, you will not attract many butterflies or help them reproduce.

We all know that **Monarch** butterflies need milkweed to feed their caterpillars. However, different butterflies require other, usually native, host plants:

- American Painted Lady: pussytoes, pearly everlasting
- Black Swallowtail: golden alexanders, dill, parsley
- Eastern Tiger Swallowtail: black cherry, wild plum
- Mourning Cloak: willow
- Red Admiral, Question Mark: nettles
- Fritillaries: violets
- native trees host hundreds of different moths and butterflies

Native plants

Native plants are the best sources of nectar and pollen for native bees, and are host plants for butterfly caterpillars. They've evolved together to be a perfect match.

I do also grow beneficial non-native plants.

Native plants aren't easy to find in conventional nurseries and big box garden centres. I buy plants from the following places:

- annual **Rare and Unusual Plant Sale**, Experimental Farm, Mother's Day
- annual Fletcher Wildlife Garden Plant
 Sale, 1st Sat. in June, Experimental Farm
- Beaux Arbres Native Plants, Bristol, QC
- Fuller Native Plants, Belleville
- Make It Green Garden Centre, Kanata
- Ontario Native Plants, online ordering

Growing from seed

To keep plant costs down, I also grow them from seed. Since many native plant seeds need to go through winter weather before germinating, it's easiest to plant them directly in the garden in the fall. If you don't, you can plant them in pots outdoors in the winter, believe it or not! Cover them with chicken wire to keep squirrels out.

Plants grown from seed may not bloom in their first year. They "sleep" the first year while they develop roots, "creep" in the second year, and "leap" in the third year with more vigorous growth. Give away divisions and seedlings to share your pollinator plants with others. Find seeds at:

- annual Seedy Saturday, Ron Kolbus Centre, early March
- Wildflower Farm, SW Ontario
- Botanically Inclined, SW Ont.

Don't dig up wild plants

Don't dig up native plants from wild spaces. Indiscriminate digging of native plants has decimated some natural populations. If you collect seeds in the wild, collect only a few.

No pesticides

Pesticides harm more than just insect pests. Also avoid fungicides and herbicides. Keep pollinators safe and don't use them in your garden. ID insects before you squish them.

Learn more

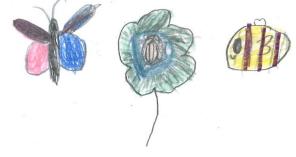
Now it's time to sit back and observe the beautiful, strange, and entertaining wonders around you. To learn more:

- Fletcher Wildlife Garden, Ottawa
- <u>Bees of Toronto</u> online PDF
- Butterflies of Ontario
- BugGuide.net
- <u>Restoring the Landscape with Native</u> <u>Plants</u>, plus Heather Holm's great books
- <u>Northeast Pollinator Plants</u>, 'Planting for Pollinators' page
- <u>Xerces Society</u>
- images of Piet Oudolf gardens, such as the High Line, for design inspiration
- Bringing Nature Home, Douglas Tallamy

The Corner Pollinator Garden (Fraser Ave. & Sherbourne Ave.)

Create Your Own Pollinator Garden

You Can Make a Difference!



Original drawing by Blake

Welcome to my corner pollinator garden. In 2017, I got rid of the grass and planted this garden. It has already attracted **bees**, **butterflies**, **fireflies**, **beneficial insects**, and **hummingbirds**. Plant it and they will come.

Native pollinator **populations are declining** due to habitat loss, pesticides, introduced pests and diseases, and climate change. Urban pollinator **gardens can provide new, safe habitats** for pollinators in need. You can do it too!

I am a pollinator enthusiast who's read a lot. I'm happy to share with you what I've learned.

For a **tour** or if you have **questions**, email me at <u>cornerpollinatorgarden@gmail.com</u>.