

GARDENING

NATIVE PLANT POLLINATOR GARDEN

SEE INSIDE

Design Templates

Tips & Tricks



KAWARTHA
CONSERVATION

Healthy
Garden
Series



GETTING STARTED

PREFERRED CONDITIONS

- 6+ hours of direct sun per day.
- Average to fast draining soil. Compost is not recommended unless you have very heavy clay soil. For information on soil types, see the **Additional Resources** section on page 8.



SHEET MULCHING

- Layer newspaper across the planting area, making sure the pages overlap.
- Water the surface.
- Sprinkle with soil (5cm) and a layer of mulch (5cm).
- For best results, let rest for a few months. Alternatively, you can plant into it right away.

You've decided to plant a garden to add pollinator habitat to your yard. Now what? There are a few things to do before you begin.

Step 1: Placement

Where will you place your garden? Consider ease of access, preferred sight lines, and the overall style and function of your yard.

Step 2: Requirements

Does your space meet the requirements? Pick a day to observe the sun's movement. Does the space receive more than 6 hours of sunlight? Check out your soil. Measure soil drainage with an infiltration test. For soil texture, use the ribbon method or mason jar test. Sandy, fast-draining soils typically contain less organic matter and provide fewer nutrients than slower-draining loam or clay soils. See the **Additional Resources** section on page 8 for information on how to conduct these tests.

Step 3: Space

How big is your space? Determine how many repetitions of the **Garden Plan** on page 4 will fit within the space, and arrange to your liking (see examples of **How to Use the Template** on page 3).

Step 4: Supplies

What supplies do you have? What supplies do you need? Use the **Materials** table on page 6 to make a list.

Step 5: Mark Out Your Space

Get crafty! Mark out the planting space using flags, string, or even a long garden hose. Your space does not need to be level.

Step 6: Prepare Your Space

Get rid of your grass! Sheet mulching is a quick and easy way to do this. Alternatively, you can remove grass by hand using a spade or a rented sod skimmer. Most landfills and municipal yard waste programs will not accept sod - compost or repurpose it elsewhere on your property. Use hand tools when you get close to existing trees to avoid harming their roots.

Step 7: Compost

If using, work compost into the top 10 - 15cm of soil.



HOW TO USE THIS TEMPLATE



This garden guide uses a modular template. The **Base Unit** is a 2m x 2m (4m²) garden that can be planted on its own, or multiplied to create a larger garden. You can repeat, mirror, and rotate the base unit to create gardens of all shapes and sizes. The possibilities are endless! A detailed version of the **Garden Plan** is provided on page 4.

If you already have a garden that you want to enhance, select a couple species from the **Plant Species** list on page 5 and work them into your existing space. Dense, biodiverse gardens are loved by native pollinators and reduce maintenance needs.

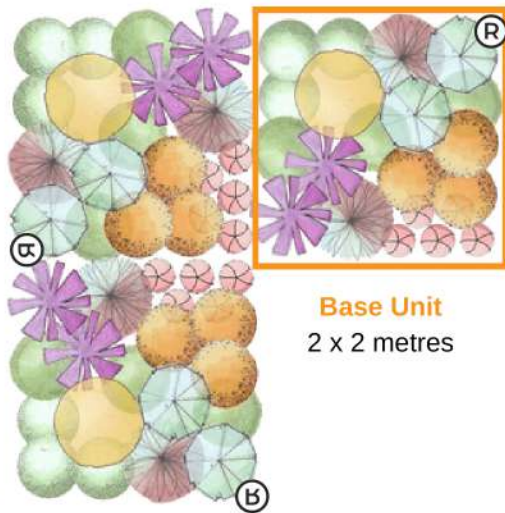


The **(R)** in the corner of each base unit indicates the reference corner. It is marked as the base unit is repeated, mirrored, or rotated.

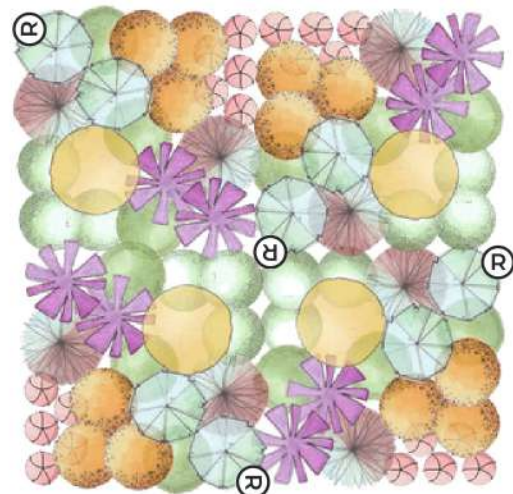
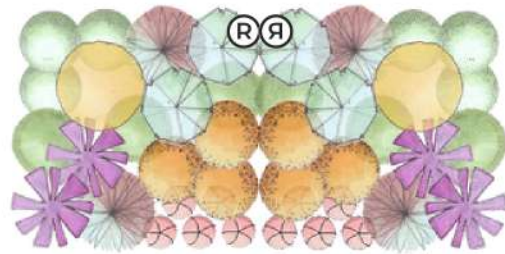


FUN FACT

Some flowers need their pollen to be "buzzed" out by bees that vibrate at high frequencies. Bumble bees are great "buzz pollinators".

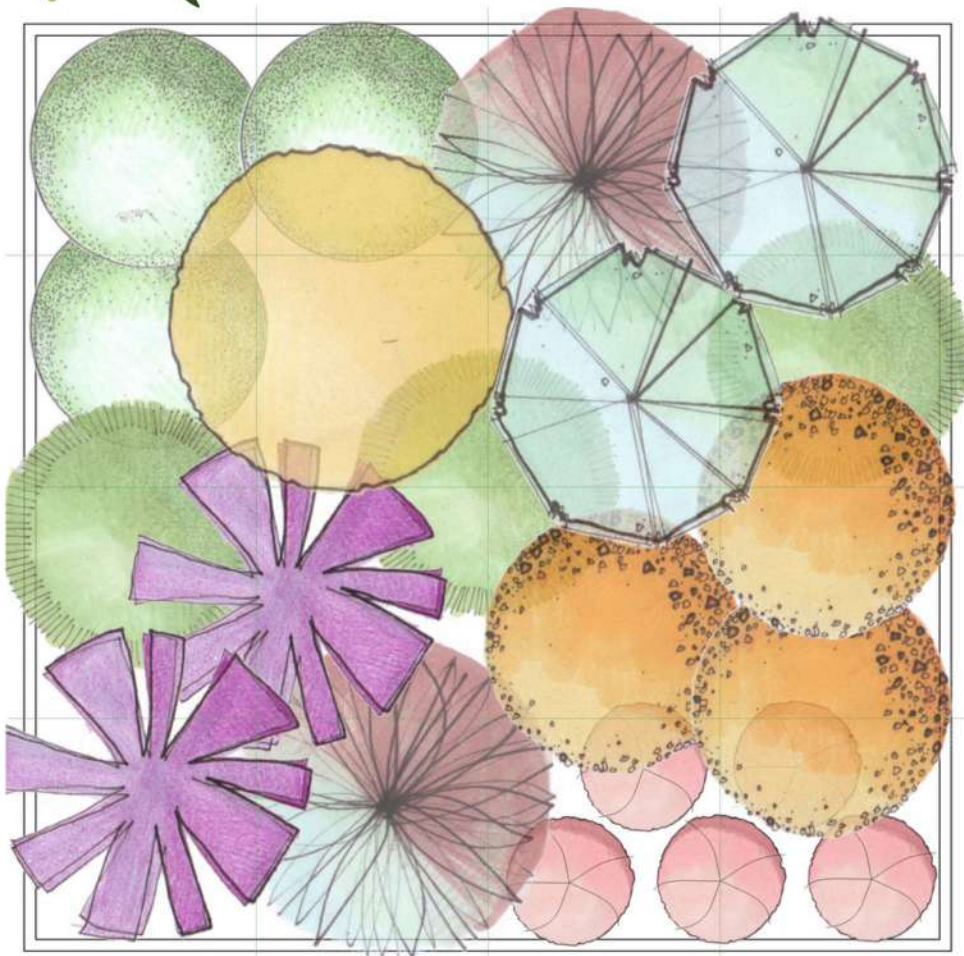


Base Unit
2 x 2 metres





GARDEN PLAN



-  **Pearly Everlasting**
Anaphalis margaritacea
-  **Butterfly Milkweed**
Asclepias tuberosa
-  **Prairie Smoke**
Geum triflorum
-  **Junegrass**
Koeleria macrantha
-  **Wild Bergamot**
Monarda fistulosa
-  **Little Bluestem**
Schizachyrium scoparium
-  **Showy Goldenrod**
Solidago speciosa
-  **Sky Blue Aster**
Symphyotrichum oolentangiense

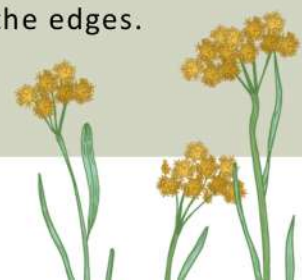
Note: Base Unit is 2m x 2m (4m²). Grid lines are set at 0.5m intervals.



Butterfly Milkweed has a sensitive tap root that should not be moved while planting. Be extra gentle.

TIME TO PLANT

- Lay out your plants, using the base unit above for reference. Make adjustments to the design if desired. Some plants will be close together, this is intentional.
- Using a spade, dig a hole the same depth and twice as wide as each plant. Remove each plant from its container and loosen the roots if they appear stuck (gently squeezing the sides of the container can help). Place each plant in its hole, tucking roots downward and ensuring the top of the soil surface is level with that of the surrounding soil (not too deep, not too shallow).
- Using your hands, fill in the gaps around the plant with soil, tucking down along the edges.
- Water as soon as possible, until soil is saturated.
- After planting, layer 5cm of mulch in gaps between plants (not on them).



PLANT SPECIES



Pearly Everlasting



Qty: 3

Nursery size: 10cm pots
Mature size (h x w): 45 x 30cm
Bloom time: Summer
Benefits: Larval host (Painted Lady Butterfly)
Alt: Nodding Wild Onion or Virginia Mountain Mint (less DT)

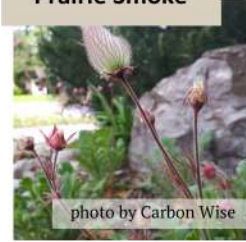
Butterfly Milkweed



Qty: 3

Nursery size: 10cm pots
Mature size (h x w): 40 x 30cm
Bloom time: Early Summer
Benefits: Larval host (Monarch); nectar/pollen for many insects
Alt: Whorled Milkweed or other Milkweed species

Prairie Smoke



Qty: 5

Nursery size: 10cm pots
Mature size (h x w): 15 x 15cm
Bloom time: Spring
Benefits: Early source of nectar & pollen for bumblebees
Alt: Wild Strawberry (spreads faster)

Junegrass



Qty: 3

Nursery size: 10cm pots
Mature size (h x w): 45 x 30cm
Bloom time: Spring to Summer
Benefits: Provides cover; birds eat seeds
Alt: Canada Wild Rye (less DT, can harm dogs if swallowed)

Wild Bergamot



Qty: 2

Nursery size: 10cm pots
Mature size (h x w): 60 x 45cm
Bloom time: Summer
Benefits: Supports many bees, hummingbirds, moths, butterflies
Alt: Pale Purple Coneflower for more delicate look

Little Bluestem



Qty: 2

Nursery size: 10cm pots
Mature size (h x w): 45 x 30cm
Bloom time: Summer
Benefits: Larval host (Skipper Butterfly); birds eat seeds
Alt: Sideoats Grama (similar size) or Big Bluestem (taller)

Showy Goldenrod



Qty: 1

Nursery size: 10cm pots
Mature size (h x w): 45 x 35cm
Bloom time: Fall
Benefits: Attracts bees and butterflies late in the season
Alt: Grey Goldenrod (MA)

Sky Blue Aster



Qty: 2

Nursery size: 10cm pots
Mature size (h x w): 45 x 30cm
Bloom time: Fall
Benefits: Never forgo an aster! Supports many pollinators
Alt: New England Aster (MA) for classic combo w/ Goldenrod

ACRONYM KEY

DT = Drought Tolerant
 MA = More Aggressive





MATERIALS

MULCH ALTERNATIVES

Shredded dry leaves saved from the previous autumn. Wait to shred until the threat of frost has passed in the spring.

Arborist woodchips, which can often be obtained for free from arborists. Note that you cannot usually control when or how much is delivered.

Landscape fabric is not recommended. It prevents plants from spreading as intended and fails over time.



Don't be afraid to leave a few spots in your garden free of mulch. Some pollinators, like the Metallic Sweat Bee, use these soil patches to create their nests.

Item	Unit	# / Base Unit	Notes
Plants		21	See Plant Species on page 5 for recommended species and sizes. Some species may only be found at native plant nurseries.
Soil	Cubic yards	0.25	Assumes 5 cm depth to replace sod or to spread over newspaper if sheet mulching. If your total soil is less than 0.25cu. yard, it is best to purchase bags. Avoid peat mix.
*Compost & Sand	Cubic yards	0.10	Not recommended unless soil is heavy clay. Order 0.05cu. yards each of compost and sand, and deduct the total 0.10cu. yards from soil order.
Mulch	Cubic Yards	0.25	Assumes 5cm depth. If your total mulch is less than 0.25cu. yards, it is best to purchase bags. Avoid dyed mulch. Natural cedar, pine, or 'Ontario Blends' preferred.
*Newspaper	Square metres	10	Required for sheet mulching. Matte 10 cardboard can be substituted, but only use 1 layer and give it 2 - 3 months to break down.
*Edging	Metres	8 (2 per side)	Many materials can be used as edging. You can repurpose existing materials instead of purchasing new. Clean edges can also be maintained using an edging tool or other straight-edged spade on a semi-regular basis.

* Optional items

MAINTENANCE

DID YOU KNOW?

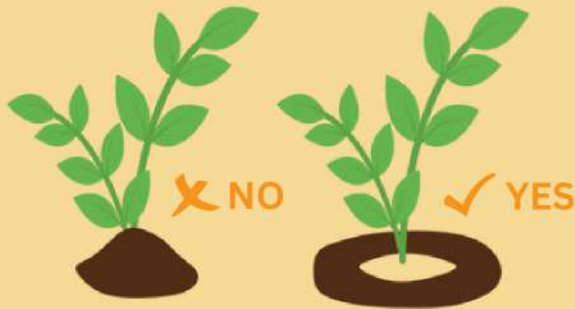
There are over 1,000 species of pollinating insects in Canada, including bees, butterflies, moths, beetles, and flies.



- Water regularly in the weeks and months after planting. Eventually, you will only need to water during droughts.
- Monitor the garden for weeds. The template is designed so that plants knit together at the ground level over time, reducing weed pressure. You may wish to reapply mulch annually.
- Resist the urge to clean up your garden in the fall. Dead plant material provides important habitat for pollinators.
- Cut back dead plant growth each spring to approximately 6" above the ground. You can chop and drop pieces on the ground as mulch, or compost them.



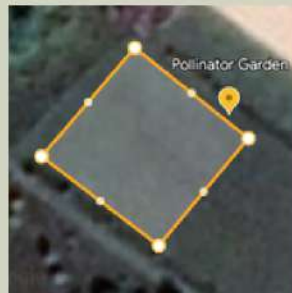
PROPER MULCHING



Remember, when applying mulch - think donuts, not volcanoes! Mulch applied to plant stems can cause dampness and rot.



3D visualization of a potential combination of the pollinator **base unit** (two repetitions).



MAPPING

You can measure your space with digital tools like Google Earth Online or the City of Kawartha Lakes Maps and Apps Portal:

- earth.google.com
- geohub-kawartha.hub.arcgis.com

ADDITIONAL RESOURCES



This garden guide is one of three guides available through Kawartha Conservation's Healthy Gardens program. If your space does not meet the preferred conditions of the Native Plant Pollinator Garden guide, or you wish to plant multiple gardens, check out the other guides in the series.

Native Plant Understory Garden
Low Maintenance Rain Garden
Native Plant Pollinator Garden



View these additional resources to help you assess your site conditions and prepare your site for planting.

- How to Conduct an Infiltration or Soil Drainage Test (Reep Green Solutions): bit.ly/SoilDrainage
- Ribbon Test for Soil Texture (Grow It Build It): bit.ly/RibbonTest
- Mason Jar Test for Soil Texture (Grow It Build It): bit.ly/MasonTest
- Ontario One Call (Call Before You Dig): OntarioOneCall.ca



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