

Creating a Bee-Friendly Garden

Bees play an important role as pollinators, working on both wild plants and food crops. Growing plants that appeal to bees provides them with the pollen and nectar they need to survive.



Pollinators, such as bees contribute significantly to the production of fruit, vegetables and other foods that we enjoy.

Seven Ways to Help Bees in Your Home Garden:

Many practices that help bees also help to keep your garden looking its best!

- **Plan for Continuous Bloom:**

This provides colourful flowers throughout the growing season, as well as a steady supply of food for bees. Trees and shrubs can also provide valuable food for bees when garden flowers are not in bloom.

- **Mass Plants:**

Placing several of the same species in a group helps to attract bees. Massing makes plants easier to find so that bees use less energy to collect pollen or nectar. Remember to allow each plant enough space to grow, and keep a variety of plants in your garden.

- **Avoid Pesticides:**

Bees are sensitive to pesticides, so avoid them if possible. Plants along roadsides, in vacant areas, and in the garden all benefit bees. If weeds are an issue, try to remove them without spraying.



Maple flowers (left) bloom early in the season and are an important food source for bees. Lavendar (right) is both colourful and fragrant - an asset for people and bees alike.

- **Choose Single Blooms:**

Double bloom flowers are stunning, but they are not easily accessed by bees. Planting flowers with a single bloom provides nectar and pollen that bees can gather.

- **Use Colourful Plants with Scent:**

Bees rely on the colours and scents of flowers to find food. Purple, yellow, white and blue flowers are easy for bees to see in the garden. Fragrant flowers are also irresistible to bees!

- **Dead-Head and Prune:**

Removing spent flowers helps promote longer blooming. This means more colour for you, and more food for bees! Pruning plants to promote bloom will ensure plant health and bee food supplies each year.



Bees can see Ultra Violet. For example, a flower that looks yellow to us may appear purple to bees. Plants with combinations of colours, are easier for bees to find.



Unlike double blooms (left), single blooms (right) are easy for bees to access.

- **Water and Fertilize Adequately:**

Watering plants properly promotes nectar production. This means more food for bees and other pollinators. Too much fertilizer decreases nectar production in most plants. Try to use slow-release (chelated) fertilizers or natural alternatives such as compost. Be sure to use all fertilizers as instructed.

Sources: *Plants for Beekeeping in Canada, Jane Ramsay. Nectar Trees, Shrubs and Herbs of Ontario, C. Larsson and R. Shuel*



Helleborus (left) flowers early in spring, while Flax (right) blooms in late summer to early fall. Hawthorn (below) is an important shrub for bees.



While visiting flowers, bees are not defensive unless disturbed. Helping bees has positive effects on food production and the environment! Purchasing locally produced honey supports pollination in your community.

Produced by the

**UNIVERSITY
of GUELPH**

Honey Bee Research Centre
308 Stone Road East, Guelph, Ontario
www.uoguelph.ca/honeybee



Annuals that Attract Bees:



Cosmos are a food source for bees during summer.

Name:

Alyssum
Aster
Calliopsis
Cosmos
Dahlia (single)
Marigold (single)
Poppy (single)
Sunflower

Bloom Time:

June-frost ★
August-October ★
late spring-summer ★
June-late August ★
summer ★
late spring-fall ★
summer ★
summer-fall ★

Height:

15cm/5-6"
30-90cm/1-3'
60-120cm/24-48"
60-120cm/24-48"
30-180cm/12-72"
20-60cm/8-24"
to 90cm/36"
3m/10'

Perennials Visited by Bees:

Common Name:

Anise Hyssop
Bergamot (Horsemint)
Burning Bush
Christmas Rose
Coral Bells
Creeping Thyme
Crocus
Evening Primrose
Flax
Forget-Me-Not
Garden Hyssop
Gladiolus
Goatsbeard
Goldenrod
Grape Hyacinth (Common)
Hollyhock
Mountain Bluet
Purple Rock Cress
Sage
Snowdrop
Stonecrop
Tickseed
True Geranium
Turtleheads

Scientific Name:

Agastache foeniculum
Monarda punctata
Dictamnus albus
Helleborus niger
Heuchera sanguinea
Thymus serpyllum
Crocus spp.
Oenothera spp.
Linum spp.
Myosotis scorpioides
Hyssopus officinalis
Gladiolus spp.
Aruncus dioicus
Solidago canadensis
Muscari botryoides
Alcea rosea
Centaurea montana
Aubrieta deltoidea
Salvia spp.
Galanthus spp.
Sedum spp.
Coreopsis spp.
Geranium spp.
Chelone spp.

Bloom Time:

June-September ★
July ★
June ★
October-May ●
June-August ◐
June-August ★
April or September ★
June-September ★ ◐
late June-September ★
May-June ★
June-September ★
July-August ★
late spring-summer ★ ◐
July-September ★
March-April ★
June-August ★
May-July ★
spring ★
June-July ★
January-April ◐
September-October ★
spring-fall ★
summer ★
Late summer ★ ◐

Height:

60-90cm/23-35"
90cm/30"
60-90cm/24-36"
45-150cm/12-60"
25-30cm/10-12"
10-60cm/4-24"
8-12cm/3-5"
to 150cm/60"
31-91cm/12-36"
15-20cm/6-8"
18-60cm/7-20"
60-180cm/24-72"
91-122cm/36-48"
60-100cm/24-36"
12-15cm/5-6"
150-250cm/60-96"
45-60cm/18-24"
8-15cm/3-5"
60-90cm/24-36"
12-30cm/5-12"
to 30cm/12"
20-30cm/8-12"
15-61cm/6-24"
100cm/36"

Legend: ★ = full sun ◐ = part sun/part shade ● = full shade *spp.* = multiple species

Consult with local garden centres to determine which of the listed plants are suitable for your growing conditions.

In the Vegetable Garden:

Farmers have always relied on bees to ensure high yields of food crops. Berries, many vegetables, herbs, melons, pumpkin and squash are all pollinated by bees. Herbs particularly attractive to bees include lavender, mint, catnip, sage, anise, thyme, rosemary, coriander, and fennel.

Left: Raspberries are an example of a crop pollinated by bees.

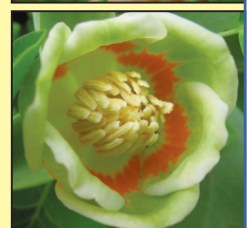


Trees Known to Attract Bees:

Common Name:	Scientific Name:	Bloom Time:	Height:
Angelica Tree	<i>Aralia spinosa</i>	August ☀️ 🌙	3-10m/10-33'
Apple, Crabapple	<i>Malus spp.</i>	late May ☀️	2-9m/6-30'
Basswood	<i>Tilia americana</i>	mid June-mid Aug ☀️ 🌙	to 31m/102'
Black Locust	<i>Robinia pseudoacacia</i>	May-June ☀️	9-15m/30-50'
Catalpa	<i>Catalpa speciosa</i>	late June ☀️ 🌙	12-18m/39-59'
Cherry, Peach, Plum	<i>Prunus spp.</i>	spring ☀️	2-15m/6-50'
Clammy Locust	<i>Robinia viscosa</i>	June ☀️	to 12m/39'
Eastern Redbud	<i>Cercis canadensis</i>	April-May 🌙	3-9m/10-30'
Hoptree	<i>Ptelea trifoliata</i>	May-June 🌙 🟢	4-8m/13-26'
Japanese Pagoda Tree	<i>Sophora japonica</i>	late Aug-late Sept ☀️	15-23m/50-75'
Linden	<i>Tilia spp.</i>	mid summer ☀️ 🌙	20-40m/65-130'
Maple, Amur	<i>Acer ginnala</i>	early June ☀️ 🌙	6-9m/20-30'
Maple, Hedge	<i>Acer campestre</i>	early May ☀️ 🌙	15-25m/50-82'
Maple, Japanese	<i>Acer palmatum</i>	May ☀️ 🌙	3-6m/10-18'
Maple, Norway	<i>Acer platanoides</i>	early May ☀️ 🌙	15-23m/50-75'
Maple, Red	<i>Acer rubrum</i>	early April ☀️ 🌙	to 28m/92'
Maple, Silver	<i>Acer saccharinum</i>	March ☀️ 🌙	15-25m/50-82'
Maple, Sugar	<i>Acer saccharum</i>	early May ☀️ 🌙	25-35m/82-115'
Maple, Vine	<i>Acer circinatum</i>	late April ☀️ 🌙	15m/50'
Ohio Buckeye	<i>Aesculus glabra</i>	May-June ☀️ 🌙	to 18m/60'
Tulip Tree	<i>Liriodendron tulipifera</i>	June-July ☀️ 🌙	12-24m/39-79'
Willow	<i>Salix spp.</i>	April ☀️	3-30m/10-98'
Yellow Wood	<i>Cladrastis lutea</i>	June ☀️ 🌙	9-12m/30-39'

Below (from top):

Vegetables like cucumber, herbs like anise hyssop, and trees such as Basswood, Catalpa and Tulip Tree are all beautiful and beneficial to bees, the world's number one natural pollinators.



Shrubs and Groundcovers for Bees:

Common Name:	Scientific Name:	Bloom Time:	Height:
Beauty Bush	<i>Kolkwitzia amabilis</i>	June ☀️ 🌙	4.5m/15'
Caragana (Siberian Pea)	<i>Caragana arborescens</i>	June ☀️	to 6m/20'
Cotoneaster	<i>Cotoneaster spp.</i>	May-July ☀️ 🌙	to 1m/3'
Currant	<i>Ribes spp.</i>	April-May ☀️ 🌙	1.8-2.5m/6-8'
Deutzia	<i>Deutzia spp.</i>	May-June ☀️ 🌙	1-4m/3-13'
False Spirea	<i>Sorbaria sorbifolia</i>	July-August ☀️	to 2m/6'
Hawthorn	<i>Crataegus spp.</i>	May-June ☀️ 🌙	to 6m/20'
Heather	<i>Calluna vulgaris</i>	August-November ☀️	to 50cm/20"
Hydrangea	<i>Hydrangea spp.</i>	July-September 🌙 ☀️	30-91cm/1-3'
Japanese Lilac	<i>Syringa reticulata</i>	June ☀️	to 9m/30'
Oregon Grape	<i>Mahonia aquifolium</i>	May ☀️ 🌙	90-180cm/3-6'
Red-Osier Dogwood	<i>Cornus stolonifera</i>	June 🌙	2m/7'
Russian Olive	<i>Elaeagnus angustifolia</i>	June ☀️ 🌙	to 9m/30'
Scarlet Firethorn	<i>Pyracantha coccinea</i>	May ☀️ 🌙	to 2m/6'
Shrub Rose (single)	<i>Rosa spp.</i>	spring-summer ☀️	30-305cm/1-10'
Snowball	<i>Viburnum spp.</i>	April-May ☀️ 🌙	60-450cm/2-15'
Sumac	<i>Rhus spp.</i>	June-July ☀️ 🌙	2-8m/6-25'
Summersweet	<i>Clethra alnifolia</i>	late July-late Sept ☀️ 🌙	1-3m/3-10'
Tatarian Honeysuckle	<i>Lonicera tatarica</i>	late May/early June ☀️ 🌙	to 3m/10'
Weigela	<i>Weigela florida</i>	April-June ☀️ 🌙	to 1.5m/5'
Willow	<i>Salix spp.</i>	April ☀️ 🌙	to 8m/26'
Winterberry	<i>Ilex verticillata</i>	June ☀️ 🌙	2-3m/6-9'