

Attracting Pollinators to Your Yard

Grow with USask



Pollination is the process of moving pollen (male) from the anther in one flower to the stigma (female) in another flower of the same species. The act of successful pollination produces fertile seeds. Almost all flowering plants need to be pollinated. Some plants are self-pollinating but the majority of plants are pollinated by: bees, birds, insects, wind and/or water.

Plants to Attract Bees

Fruit trees: apples, pears, honeysuckle, sour cherries, sas- katoon, pincher- ry, chokecherry	Flowering herbs: thyme, oregano, borage lavender, mint, catnip, rosemary,	Vegetables: pumpkins, cucumbers, melons, peas, flowering broc- coli and cabbage, tomatoes, squash
Cotoneaster, Lilacs	Alyssum, Rudbeckia	Candy tuff, Golden Rod
Joe Pye weed	Bellflower, Lamb's Ears	Liatris, Mondarda
Milkweed	Foxglove	Verbena, Snapdragon
Coneflower	Sea Holly	Dandelion, Larkspur
Monkshood	Fleabane	Daisy, Columbine
Bugle weed	Globe thistle, Native thistle	Aster, Salvia
Hollyhock	Baby's breath	Queen Ann's Lace



Bee pollinating the flower of a Haskap plant

BEES

Bees require nectar and pollen for food. Bees love plants with striking colours and fragrances, elaborately shaped petals and ample nectar. Bees also like different flowers close together, so that they do not have to fly very far, therefore try planting large flower beds or borders around the edge of your garden. Bees will also be attracted to onions and chive plants, together with fruit trees like apples and pears. Bees and butterflies are attracted to color. Bees are especially attracted to blue, violet, purple, white and yellow. Bees prefer single flowers or flat flowers rather than double flowered, puffy blooms.

Different bee species have different tongue lengths, plant a variety of flower shapes to attract a diversity of bees. Plant a variety of plants; trees, shrubs, flowers, grasses

All living things require water to live. Bees require a clean, shallow water source. Provide a bee bath in your yard. Provide 'rock islands' in your bird bath where bees can land and sip water from the side. Refresh water daily.

BUTTERFLIES and MOTHS

- Butterflies and moths belong to the Lepidoptera order of insects.
- As larvae grow, they go through a series of 'instars' and change in appearance.
- When fully mature, the larvae develops into a pupa, referred to a chrysalis at this stage (butterfly) or cocoon (moth).
- A few butterflies and many moth species spin a silk case or cocoon prior to pupating. Others may pupate in crevices or underground.

Common Prairie Butterflies

Swallowtail family: *Papilionidae*

Canadian tiger swallowtail (*Papilio Canadensis*)

Skipper Butterfly (Family *Hesperiidae*)

Yellowpatch or Peck's skipper (*Polites coras*, *Polites pekus*)

Silver spotted skipper

Common checkered skipper

Copper, Blue and Hairstreak Butterfly Family: *Lycaenidae*

Spring azure (*Celastrina ladon*)

Summer azure (*Celastrina neglecta*)

Grey Hairstreak (*Strymon melinus*)

Brushfoot Butterfly family: *Nymphalidae*

Mourning Cloak butterfly (*Nymphalis antiopa*)

Variegated Fritillary (*Euptoieta claudia*)

Milbert's Tortoiseshell (*Nymphalis milberti*)

Red Admiral (*Vanessa atalanta*)

Painted lady (*Vanessa cardui*)

White or Sulphur Butterfly family: *Pieridae*

Cabbage White Butterfly (*Pieris rapae*)



Canadian tiger swallowtail (*Papilio Canadensis*)

In order to attract butterflies, you not only need to attract and feed adult butterflies on nectar rich plants and flowers. You also need to offer them an inviting place to rest, hibernate, lay their eggs and provide food for their larvae and caterpillars to eat.

- Butterflies are near sighted and are more attracted to stands of a particular color. Adult butterflies searching for nectar are particularly attracted to red, orange, yellow, purple and pink blossoms, flat-topped flowers and short flower tubes. An area of plants which flower at the same time will be more appealing to butterflies than a lone plant with few flowers.
- Set flowers in sunny places, alongside some rocks or stone walls where they can settle.
- Offer a few protected patches in the garden, specifically using shrubbery, tall grasses or brush piles, to protect butterflies from the elements, and to give caterpillars a nice safe place to pupate.
- Very shallow bird baths or even a small dish of water in your garden will also be inviting to butterflies. Damp gravel or wet sand will provide a mineral lick for butterflies which can provide fluids and minerals.
- Nectar bearing plants are a magnet for adult butterflies. Examples: lilac, marigold, ornamental thistles, sunflower, sweet pea, verbena and zinnia.

Plants to Attract Specific Butterflies

Anise Swallowtail
(*Papilio zelicaon*)

Sweet Fennel, Lomatium,
Citrus

Black Swallowtail
(*Papilio polyxenes*)

Parsley, Green Fennel, Dill
and Rue

Cabbage Whites
(*Pieris rapae*)

Cabbage, Radish, Mustard,
Peppergrass, and related
plants

Checkered skipper
(*Pyrgus communis*)

Mallow, hollyhock

Checkered white
(*Pontia protodice*)

Mustard family

Clouded sulfur
(*Colias philodice*)

Alfalfa, clover

Common Hairstreak
(*Hypolycaena philippus*)

Mallow family , hollyhock ,
rose and marsh mallows

Monarch
(*Danaus plexippus*)

Milkweed sp.

Mourning cloak
(*Nymphalis antiopa*)

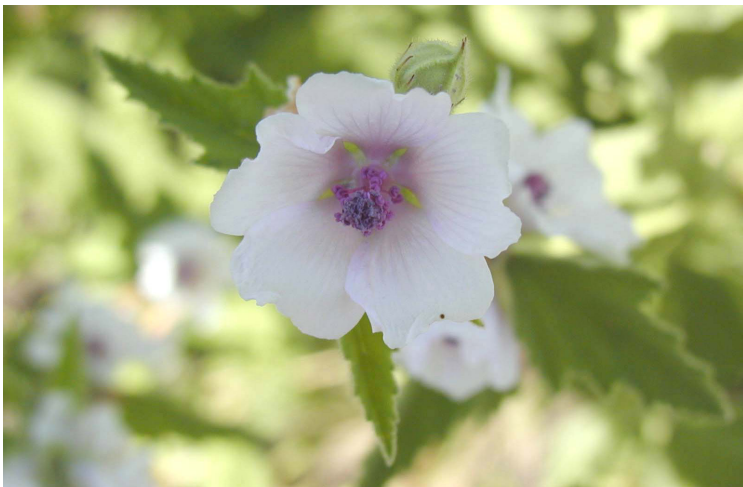
Willow, aspen, cottonwood,
elm



Plant dill in your yard if you would like to attract the black swallowtail butterfly.

Specific Plants that will Attract Butterflies

Azalea
 Bee Balm (*Monarda didyma* and sp.)
 Butterfly bush
 Butterfly weed (*Asclepias tuberosa*)
 Cardinal flowers (*Lobelia cardinalis*)
 Clematis
 Columbine
 Coral Bells (*Heuchera* sp.)
 Delphinium
 Dianthus
 Foxglove (*Digitalis* sp.)
 Fuchsia spp
 Lilac
 Monarda (see Bee Balm)
 Penstemon
 Phlox
 Salvia
 Scarlet trumpet honeysuckle (*Lonicera sempervirens*)
 Snapdragon
 Speedwell (*Veronica*)
 Spiderwort (*Tradescantia*)
 Turk's Cap Lily (*Lilium superbum*)



Plant marsh mallow in your yard to attract the Common Hairstreak butterfly.

BIRDS

Birds need a place to nest and live. Birds have different requirements for nesting sites. Some birds like to build their nests in evergreens (like pine or spruce). Other birds prefer deciduous trees (like oak, birch, apple, and ash) where they can make their homes either in the intersections of large branches or in cavities in the tree trunks. Some birds, like woodpeckers, prefer very large trees or dead standing trees for homes. Shrubs that are not too dense or thinly branched often make good homes for bird nests.

Robins, Cedar Waxwings and Chipping Sparrows are some of the birds that will nest in small trees like dense ornamental cedars, junipers and similar trees. Large spruce trees may attract crows and grackles and later Merlins to the abandoned crow nest. When trees become large enough, woodpeckers or nuthatches may excavate nest holes. These holes may be used later by Black-capped Chickadees.

When erecting birdhouses, make sure you choose the right bird house to attract the desirable bird.

Provide shelter, food and water for your feathered friends.

Birds need shelter (man made or natural) from weather elements like snow, wind, rain. Perches protected by overhangs, bird feeders with extended roofs, large trees, shrubs and even grass will protect trees from the elements.

Provide many different layers in your yard for birds: large trees to shrubs to perennials to annuals, some grasses. Remember birds live in nature, create a natural setting. Select a range of shrubs and plants so that there is food and shelter available year round.

Create a brush pile at the edge of your property, starting with your old Christmas tree and any fallen branches. Create a pile six feet in length with loosely stacked branches. Brush piles provide cover for birds and attract insects to their decaying branches.

Create a dust bath in a sunny spot near where the birds like to feed. Sparrows in particular like to spend hours playing on the dusty ground.

Birds need water for drinking and bathing. Smaller birds prefer only about ½" of water while larger birds prefer 2" deep. Top up and change water daily. Make sure the bird path or pond is in an open location where birds can clearly watch for predators and danger. Remember, cats are predators! Tie a bell around your cats neck to warn birds of the approaching enemy.

Like all living creatures, birds need food. Food for birds can come from plants, fruit, seeds and insects. Include fruit trees like; small crabapples, Saskatoon berry, high bush cranberry, haskap or blue honeysuckle, pincherry, mountain ash, chokecherry, dogwood, hawthorn and hackberry in your landscape.

Plant flowers that will produce seed in the summer can be a food source for birds in the winter. These plants include:

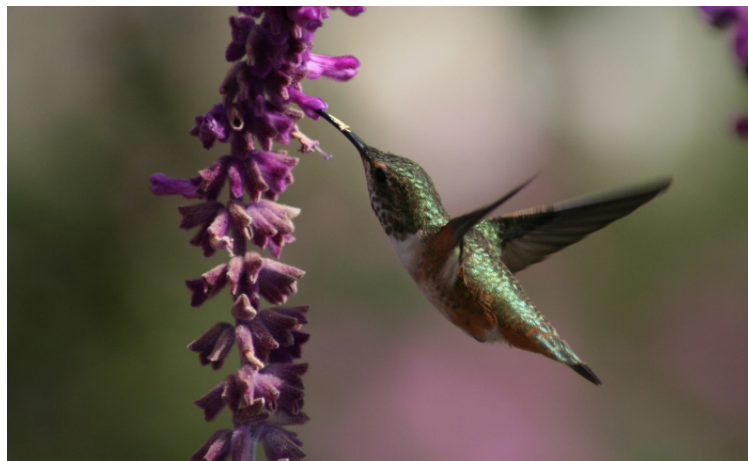
coneflower, sunflower, sedums, daisies, zinnias, golden rod, aster, echinaceae, rudbeckia, coreopsis, blazing star, native and non-native grasses that produce seed (ex. switchgrass, 'Karl Foerster', Indian grass, Little Blue Stem, Prairie Dropseed, Side Oats Gramma

Do not remove leaf litter from under your perennials or shrubs. This material provides an excellent home for bugs and insects that birds feed on. Refrain from using pesticides. Not only will pesticides kill beneficial insects but they plants and water sprayed with chemicals may be toxic to birds. Bird feeders are an excellent way to attract birds. Do some research and make sure you are supplying the correct bird seed for the bird you want to attract. Don't waste your money on cheap birdseed that is full of filler seed that birds won't eat. The filler only attracts rodents.

Attracting hummingbirds

Hummingbirds need nectar rich plants and water. The ruby-throated hummingbird is the only one found regularly in our area. Its arrival in spring coincides with the blooming of certain nectar-producing plants with which it has coevolved over the millennia. Nectar plants provide a high-energy food source for these tiny creatures who can produce up to 200 wing strokes per second.

To encourage hummingbirds in your yard, install a hummingbird feeder filled with sugar water near plants that will



attract hummingbirds. Recommended plants include: tubular flowers like nicotiana, petunia, monarda/bee balm, red columbine, delphinium, hollyhock, butterfly bush, cardinal vine, lantana, phlox, coral bells, impatiens, gladiolas, gaillardia, foxglove, canna lily, dahlia, lantana, honeysuckle (vine and bush), begonia and fuschia.

Hummingbirds prefer shelter from wind and some shade.

BATS

Bats are an important pollinator in many areas of the world. Over 300 species of fruits in the world depend on bats for flower pollination, especially mangoes. Calabash and sausage trees as well as bananas are a few of the other fruits

that benefit from bat pollination. While bats may not be essential to fruit pollination in Canada, they play a big part in the ecosystem by assisting with insect control (especially mosquitoes) and as an indicator species of how healthy our ecosystem is: if bats are few and far between – it is a sign that our ecosystem is not in balance. An unbalance ecosystem is not good for any living creature – including humans.

Are bats harmful to people? While it is true that the North American bat can carry rabies, the incidence of bats with rabies is minimal. According to the website 'Community Bat Programs of BC' (www.bcbats.ca), only 0.5% of bats carry the rabies virus. Since 1970, 6 of the 7 cases of rabies in Canada were attributed to bats. Bat droppings can carry fungal spores that lead to a lung disease in humans known as histoplasmosis. Avoid handling bats and if you must, wear gloves. If you are cleaning up bat droppings, wear rubber gloves, moisten the droppings with water before gathering up to prevent fungal spores from becoming airborne.

How do I attract bats to my yard?

- Grow a variety of plants, shrubs and trees in your yard to attract a variety of insects. Bats eat insects – make sure there is an ample supply. Pale blue and white flowers are easier to see at night and will encourage more active night insects (i.e. bat food).
- Plant night-scented flowers (ex. night scented stock, herbs, evening primrose, nicotiana, white jasmine)
- Build a pond/ have a water source. Fish will eat insects so if you want to encourage bats, limit the number of fish in your pond.

Let your garden go a little wild – encourage some native flowers or weeds, provide a brush pile in a corner for insects and even bats to inhabit.

- Put up a bat box
- Reduce or remove artificial night lighting
- Keep your cat indoors at night – bats are active at night.

