FOOD


Black Swallowtail caterpillar (*Papilio polyxenes*)

A butterfly looks for plants that are good sources of nectar to give it the energy it needs for flying — to look for other nectar plants, to find a mate, to patrol and chase off intruders, and to find the right plant on which to lay eggs. Besides nectar, some butterflies also feed on rotting fruit or vegetation.

Butterflies also need minerals, which they get from damp soil or sand, or manure. After rain, you can often see Tiger Swallowtails gathered round a mud puddle in a dirt road feeding on the mineral salts.

Butterflies particularly like plants that have flat pads, umbels, cones or spikes. The flower heads of all these plants are made up of tiny flowerlets. A butterfly can probe each one without moving about very much and using unnecessary energy.

SHELTER

The ideal butterfly garden is in full sun and sheltered from the wind. Sun is important because butterflies need to warm up after cooler overnight temperatures. You don't see them on the wing much before mid-morning when the sun is stronger.

Stones are useful in the garden because they absorb the sun's heat and provide basking spots where a butterfly can charge up its battery.

MAKING A GARDEN

Most people do not have ideal sites. Just choose the sunniest spot in your yard, put in good nectar plants, and the butterflies will come. All the plants listed below are quite easy to grow and do not require special conditions. Joe-Pye weed and swamp milkweed will do well in dry conditions although they prefer a moister soil.

Violets are among the earliest nectar plants to flower, followed by Arabis, Forget-me-nots, Chives, Sweet Rocket, and Dianthus. Then come the summer Yarrows, Daisies, Mallows, Milkweeds, Coneflowers, and Rudbeckias. Finally come, Joe-Pye weed, Goldenrods, and Asters.

HOST PLANTS

Black Swallowtail (*Papilio polyxenes*)

Besides good nectar plants, butterflies need special host or larval plants on which to lay eggs. After the eggs hatch, the caterpillar or larva spends its life eating the leaves of the host plant. As it grows bigger, it sheds its outer skin four to six times before becoming a chrysalis. Finally the adult butterfly emerges and the cycle may be repeated, depending on the species and time of year. On average, from egg to adult takes about a month.

Not any plant will do for caterpillars. Each butterfly species has its preferred host plants. Female butterflies search for these particular species on which to lay their eggs. You can often see one flying from plant to plant, landing briefly on a leaf, then taking off again. The butterfly is "tasting" the leaf through sensors on her feet to see if she has found the right one.

Many of these host plants are trees like birches, poplars, and willows (see list below). These may already be growing in your neighbourhood and need not be considered unless you are starting from scratch in a new subdivision.

The two host-plant families that are easiest to provide are the various Milkweeds for Monarch butterflies and Fennel, Dill, Parsley, or other members of the carrot family for Black Swallowtails. Both of these plant groups are also extremely good nectar sources for all kind of insects, especially the beneficial ones that eat or parasitize the pests in your garden.

Other attractive host plants are Violets for Fritillary butterflies and Pearly Everlasting for the American Painted Lady. If you have a large garden or an out-of-the-way corner, you might also put in a Nettle bed for Red Admirals and Question Marks and Thistles (*Cirsium*) for Painted Ladies.

DIVERSITY

The more variety you have in your garden, the more insects, including butterflies, you are likely to attract. By using wildflowers such as Queen Anne's lace, Goldenrods, and Black-eyed Susans among your garden plants, you can offer the widest choice possible. If you have grass, you could also have a wildflower lawn that includes Creeping Buttercups, Thymes, and Clovers.


Monarch Butterfly (*Danaus plexippus*)

HAZARDS

Butterflies have been declining in number due to a combination of factors: bad weather, development, and pesticides. Cool, wet summers are not ideal for butterflies, and very hot, dry ones may limit the abundance of plants due to drought. Butterflies can overcome unsuitable weather conditions, but not pesticide spraying or loss of habitat.

To help restore butterfly populations, we need to recreate suitable habitats for them. Each garden for butterflies is a tiny island on its own that a butterfly might miss. The more such gardens there are, the greater their chance of being effective. Neighbours on a block might join together to contribute different parts of a combined habitat for several species. Please join us and become one of the butterfly gardeners of the world!


American Lady (*Vanessa virginiensis*)

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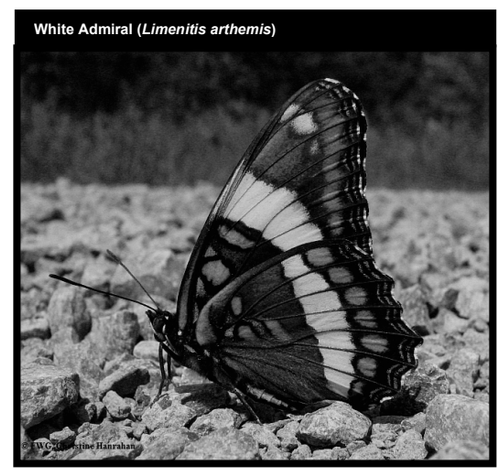

White Admiral (*Limenitis arthemis*)

PLANTS FOR BUTTERFLIES

(* best; A = annual; P = perennial; Sh = shrub)

Nectar Sources

Achillea spp. - Yarrow (P)
Agastache spp. - Large-leaved Hyssop (P)
Ageratum - Floss Flower (A)
Allium schoenoprasum - Chives (P)
Anaphalis margaritacea - Pearly Everlasting (P)
**Anethum graveolens* - Dill (A)
**Arabis* (P)
**Asclepias incarnata* - Swamp Milkweed (P)
**Asclepias tuberosa* - Butterfly Weed (P)
**Aster* spp. (P)
Aubrieta - Rock Cress (P)

**Buddleia* - Butterfly Bush (Sh)

Centaurea montana - Perennial Cornflower (P)
Centranthus ruber - Red Valerian (P)
Chrysanthemum spp. - Daisies (P)
Coreopsis (P)
Cosmos (A)

**Daucus carota* - Queen Anne's Lace (P)
Dianthus spp. - Pinks, Sweet William (P)
Dipsacus sylvestris - Teasel (P)

**Echinacea* - Coneflower (P)
Echinops - Globe Thistle (P)
**Eupatorium* spp. - Boneset, Joe-Pye Weed (P)
**Euphorbia variegata* - Snow-on-the-mountain (A)
**Foeniculum vulgare* - Fennel (A)

Heliopsis (P)
Heliotropium arborescens - Heliotrope, Cherry Pie (A)

**Iberis umbellata* - Candytuft (A)

**Lantana* (A)
Liatris spp. - Gayfeather, Blazing Star (P)
Ligustrum amurense - Amur Privet (Sh)
Lupinus spp. - lupines (P)

Malva spp. - Mallows (P)
Monarda spp. - Bee Balm, Bergamot (P)
Myosotis spp. - Forget-me-nots (P)

Nepeta mussinii - Catmint (P)

**Petroselinum crispum* - Parsley (P)
Phlox paniculata, *P. maculata* (P)

Rudbeckia spp. - Black-eyed Susan (P)

Salvia farinacea (A)
**Scabiosa caucasica* - Pincushion Flower (P)
**Sedum spectabile* (P)
Silene armeria - Sweet William Catchfly (A)
**Solidago* spp. - Goldenrods (P)
Syringa spp. - Lilacs (Sh)

Tagetes patula - French Marigold (A)
Tithonia - Mexican Sunflower (A)

**Verbena bonariensis* (A)
Veronica spp. (P)
Viola spp. - Johnny-jump-ups, Violets (P)

Zinnia (A)

Host Plants for Larvae

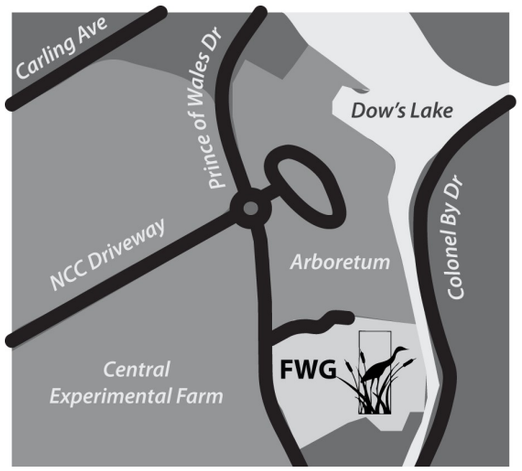
Admiral, Red - nettles
Admiral, White - birches, willows, poplars, hawthorns
Azure, Spring - dogwoods, viburnums, blueberries, meadowsweets
Blue, Silvery - lupines, vetches
Brown, Eyed - sedges
Fritillary, Great Spangled – violets
Giant Swallowtail - Northern Prickly-ash
Hairstreak, Banded - oaks, walnuts, hickories
Monarch - milkweeds
Mourning Cloak - willows, meadowsweets, elm, poplar
Painted Lady - thistles, asters, mallows
Painted Lady, American - Pearly Everlasting, pussytoes
Question Mark - nettles, elms, hops, hackberries
Skipper, European - timothy
Skipper, Peck's - grasses
Skipper, Least - grasses
Sulphur, Common - clovers, alfalfa
Sulphur, Orange - alfalfa, clovers
Swallowtail, Black - wild carrot family, rue
Swallowtail, Tiger - birches, willows, ashes, prunus species
Tortoiseshell, Compton's - birches, willows
Viceroy - willows, poplars, apples, prunus sp.
White, Cabbage - mustards, brassicas, nasturtiums
Wood Nymph, Large – grasses

Text: Gillian Boyd
Photos: Christine Hanrahan, Diane LePage, Jeewa Mendis

GARDENING FOR WILDLIFE

Loss of natural space is a major factor in the decline of many plant and animal species. The Fletcher Wildlife Garden was established in 1990 to encourage the creation or restoration of wildlife-friendly gardens and plantings in urban and rural areas. The Garden includes a variety of habitats: two woodlots, an open field, an amphibian pond, a ravine, and a butterfly meadow that is also a Monarch butterfly waystation. Our Backyard Garden demonstrates local plants suitable for various growing conditions. Our website and publications explain how you can use local plants to attract and support local birds, butterflies, pollinators, and other creatures; how to deal with invasive plants; and where to find other helpful information.

The Fletcher Wildlife Garden is a project of the Ottawa Field-Naturalists' Club, which has an agreement with Agriculture and Agri-Food Canada for the use of the land. We also liaise with the Friends of the Central Experimental Farm.



45° 23' 12" N 75° 42' 15" W

Visit us online to read our blog and newsletters, view photo galleries, and learn about volunteering opportunities. Friend us on Facebook!

This brochure was redesigned with the support of the TD Friends of the Environment Foundation.

Fletcher Wildlife Garden

How To

GARDENING FOR BUTTERFLIES

WHAT DO BUTTERFLIES NEED? JUST LIKE US, THEY WANT FOOD, SHELTER, WARMTH, AND A SUITABLE PLACE FOR A FAMILY.

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