Gardening for Butterflies

Attracting, rescuing and raising butterflies

Monarch butterfly on Meadow Blazing Star (Liatris ligulistylis)

THELMA BEAUBIEN

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Front Cover: Male Monarch butterfly in flight around the Lantana

Beau's Butterfly Garden

Dedicated to my grandchildren, Averie and Jadyn,
whose curiosity of my garden inspired me to
share my experience with other butterfly lovers.
Discover, embrace and protect the natural world, girls.

Contents

Introduction

I have been an avid gardener and photographer for forty years in Southern Ontario. My gardens have evolved over that time. Initially I designed for colour, wanting to focus on getting the best and brightest flowers for my photos. What I discovered was that butterflies came to some plants and ignored others. Why? What attracted these little beauties? I learned what worked best by planting and experimenting with a wide variety of annuals and perennials, native and non-native plants. I soon began to garden through the eyes of a butterfly.

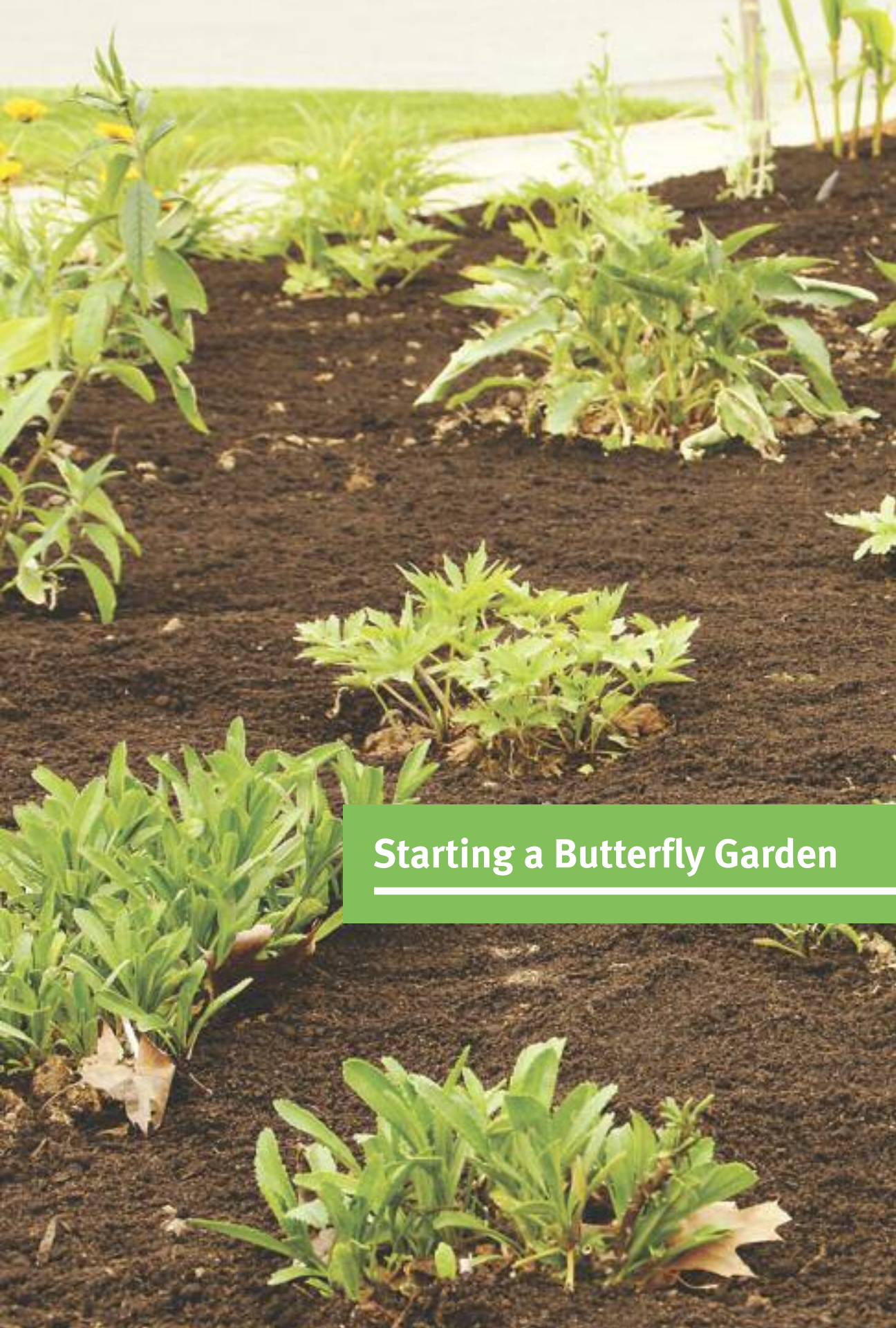
Gardening for Butterflies shares the development of this butterfly haven.

In this book I have described flowers preferred as a nectar source as well as host plants to attract a female butterfly to lay her eggs to start a new life cycle.

To date more than two dozen different species of butterflies have been photographed and recorded nectaring in my front yard garden.

Gardening for Butterflies will help you every step of the way to create your own special garden and guide you through the fascinating experience of raising butterflies.

Please enjoy your journey as much as I have enjoyed mine.



Starting a Butterfly Garden

Butterflies are cold-blooded and need a lot of sunlight to be able to keep active. For a new garden location this is essential. Since my front yard provided the most sunlight, it was the logical location.

If adding butterfly-friendly plants to an existing garden, watch for shadows from larger shrubs and plants as this can reduce the amount of sunlight. A minimum of 6 hours per day of sun is the general guideline.

The soil is the base on which garden plants survive. To improve the soil from the original topsoil in the front yard we used hand shovels to dig over and loosen the soil. Then a special mix called Triple Mix (garden soil blended with compost and mulch) was added. Eight cubic yards of this mix was rotor tilled in to a depth of 6-8 inches.

I divided a number of plants from the backyard garden, to fill the 50x30 foot wide space in the front yard. Also, local garden clubs and nature groups frequently have plant sales giving an inexpensive opportunity to help fill the garden.

May of the first year

August of the first year

Taking courses and resourcing through native plant groups was an opportunity to acquire seeds. The first step was to learn how to stratify the seeds. This is the process whereby seeds are placed in cold storage for a specified period of time. Then using a special seed-planting soil and the knowledge of the repotting process encourages strong growth. Shelves with grow lights overhead were built in the basement and with tender loving care the 'grow-native op' was in full production. This was a fun learning experience and it provided financial savings.

There are many sources available today to resource gardening information online and through nature organizations, native plant growers and garden centers. Working with fellow members of Waterloo Region Nature, Master Gardener friends and plant nurseries were the best resources. Their practical experience provided the beginning of a mixture of native and non-native butterfly and pollinator-friendly plants. They were particularly helpful in pointing out the plants to avoid that reproduce too vigorously by seed.

August of the second year!

A list of plants in Beau's Butterfly Garden is included at the end of the book with both common and botanical names. When looking for a particular plant use the botanical name for reference first. Experience has shown that common names and organization of plants can vary considerably in each garden center. It's much faster and easier if the plants are organized by botanical name.

Ongoing maintenance of the garden includes adding compost in early spring. When all the plants are in, a weed and wood free product called Nincompoop is added as mulch. This helps keep the weeds down and is rich in manure and organic nutrients that encourage earth worms. Lots of them!

Throughout the gardening season deadheading (removing dead flower heads from a plant) to encourage further blooming and weeding is a weekly ritual. Many times while on hands and knees I spot little eyes watching me.

While weeding I spotted this Giant Swallowtail caterpillar on the rue watching me.

Plants for Nourishment

Question Mark butterfly on a non-native perennial, Butterfly Bush.

Giant Swallowtail flying in to visit

With the right plants, they do fly in! Butterflies require nourishment from nectar, a sugar-rich liquid, which is found in both native and non-native plants and is the essential food for butterflies and other pollinators that will visit your garden.

But how do butterflies find the plant that is right for them? This is a common question asked by many visitors to Beau's Butterfly Garden. Butterflies see a far broader spectrum of colour than do humans. They also smell with the scent-detecting sensors at the ends of their antennas. Butterflies flutter from flower to flower to taste the nectar with the bottoms of their feet. They use their long proboscis (looks like a drinking straw) to obtain the nectar from tubular shaped and single petal flowers.

Monarch on the Meadow Blazing Star drinking nectar

By using both annual and perennial nectar-rich plants, a wonderful array of colour and creativity in a butterfly garden can be obtained.

Because photography is a large part of my daily life I gave careful consideration to the location of the plants according to their height, colour and timing of the blooming period.

What developed far exceeded any vision or expectation. In just seven years more than two dozen different species of butterflies have been photographed and recorded visiting the nectar-rich plants in the garden.

Perennial nectar plants

The flowers of the Meadow Blazing Star bloom from the top down.

My initial priority was to encourage the Monarch butterfly. One plant that came highly recommended as a great nectar source is a plant native to Canada, Meadow Blazing Star (*Liatris ligulistylis)*. This plant has the nickname 'Monarch Magnet'! Often the Meadow Blazing Star is the first preference of Monarchs flying around the garden.

Once the plant is established collect the seeds in autumn. Seeds need to ripen on the plant and when they become black they are ready. This is probably the most challenging plant to grow from seed as it takes two years before they bloom and three years to develop multiple stems of blooms. The corm can also be divided in the autumn to expand on the number of plants.

In the first year of the garden Monarch butterflies were more plentiful. Often I would see a dozen or so flying about the Meadow Blazing Star.

It is a delight just to sit, watch and photograph. However, during the year of the lowest Monarch migration in history, it was difficult to find more than one in the garden at a time. This thankfully has since improved.

The flower heads are spread out and spaced well apart. This makes for many Monarchs to nectar on the plant at once.

Black Swallowtail

Another perennial that has produced tremendous results in attracting a wide variety of butterfly species is a non-native perennial, Butterfly Bush, (*Buddleia davidii)*. Over the years a number of different colours have been planted in the garden including purple, white, yellow and red. Purple and red are the clear preferences of many

species. The colour and shape of the flower is also important to pollinators. The long arching branches with the flowers at the extremities makes an ideal landing platform for the butterfly's feet and provides the perfect staging for a photographer. Butterfly Bush has been found to be invasive in some warmer climate areas. In Southern Ontario I experience winter kill of the bush and need to replace it.

Eastern Comma

Eastern Tiger Swallowtail

Painted Lady

The different colours of the Butterfly Bush attract many species of butterflies.

For any butterfly gardener the native perennial Coneflower *(Echinacea purpurea)* is a long standing tradition. I always enjoy the large, long lasting daisy-like blooms. Tall strong stems hold the blooms upright from summer to autumn. Now commercial nurseries have developed a variety of shades such as red, pink, yellow and white. The majority of my Coneflower is planted at the front of the garden because it remains attractive and colourful throughout the summer and brings pleasant comments from passersby.

Great Spangled Fritillary perched high on top of Coneflower (Echinacea purpurea).

As the flower matures the 'cone' in the middle extends upward.

Question Mark butterfly with its wings spread in the sun on the Coneflower – double – Coconut Lime.

I have recorded a number of butterfly species enjoying the nectar of a Coneflower. The shape of the 'coned' center is a good landing platform.

You can remove the spent flower heads to encourage additional blooms but I prefer to let them go to seed. In the autumn watching the Goldfinches cling to the stem and feed on the seeds is a signal that the gardening season is coming to an end.

New England Aster

Late fall blooming native plants provide nourishment for migrating butterflies such as Monarchs, Painted Ladies, Red Admirals and Question Mark to name a few. These include asters and there are a large number of native varieties to choose from. The New England Aster, (*Symphyotrichum novae-angliae)* is one of the most popular with many garden centres selling this plant.

There are a number of very attractive Goldenrod, (*Solidago)* that are native and non-invasive. Talk to native plant nurseries about the best choice for your garden location. They are an important nectar source for migrating Monarch butterflies.

Annual nectar plants

Verbena located in front of the 7 foot Compass Plant.

The absolute best annual nectar plant for attracting butterflies is a non-native called Verbena bonariensis. The plant has multiple three-foot tall bloom heads in a beautiful pink colour. It blooms continuously until late autumn. Locating the plant in an area where their blooms rise above the other plants provides a good sighting of butterflies and staging for pictures.

This plant will reseed itself but not invasively. To prevent this remove the plants in autumn once the butterflies have gone.

Silver-spotted Skipper

Viceroy

Milbert's Tortoiseshell

A good annual to grow from seed is Mexican Sunflower, (*Tithonia rotundifolia)*. There are a number of varieties of Tithonia and experience has shown that butterflies are more frequently attracted to the orange flower. I grow the cultivar 'Torch'.

Tithonia is a dramatic plant to include in the center or back of your garden as it can grow five to six feet tall and has multiple branches reaching out from the main stalk. The plant has a shallow root system so it is advisable to stake the main stalk.

Remove a few lower branches in late summer to allow adequate moisture from rainfall to reach the root system.

In the autumn be sure to collect seeds for next year's flowers otherwise the birds will feast on them.

The tall bright orange flower heads add a visual impact!

Zinnias are a must-have for your butterfly garden. They grow in a wide variety of colour and height from 12 inches to 36 inches tall. The shorter varieties add that bright colour for a border and the blooms last throughout the growing season. Check out your local garden nurseries for those that will work best for your setting.

Bright orange 'Profusion Double Fire' Zinnia compliments the taller orange coloured Tithonia.

'State Fair' Zinnia

Host Plants

Black Swallowtail caterpillars resting on the rue

You, the gardener, can observe each stage of the metamorphosis of a butterfly simply by adding specific plants that different species of butterflies require to continue their cycle of life.

Growing host plants in your garden is the first step. Each species of female butterfly has a specific host plant that they will lay their eggs on. Therefore when the caterpillar emerges it does not need to look for its food source. Some species of butterflies use a number of different plants that offer their caterpillars food.

Following are the butterflies and their host plants in Beau's Butterfly Garden.

Monarchs

Milkweed *(Asclepias)* - The Monarch caterpillar feeds ONLY on plants in the milkweed family. I have five varieties of milkweed to attract this butterfly. As you will note each plant varies in height, colour and shape. Other pollinators also visit these blooms for nectar.

Butterfly Weed (Asclepias tuberosa)

Butterfly Weed is in the milkweed family. This is an example of a plant where knowing the botanical name identifies the plant family – *Asclepias tuberose*. Because of its height Butterfly Weed makes an attractive border plant.

Tropical Milkweed is an annual non-native plant in southwestern Ontario. Its brightly coloured flowers are a wonderful accent to any garden.

Tropical Milkweed (Asclepias curassavica)

Common Milkweed This milkweed grows along the roadside and in fields. It has been removed from the Province of Ontario's list of noxious weeds. You should be aware that this plant spreads in a garden by sending numerous strong tap roots out horizontally underground. To keep it under control dig out unwanted feeder plants that have emerged.

Common Milkweed (Asclepias syriaca)

Swamp Milkweed (Alternate names: rose, red, marsh) - To date the variety of milkweed where the greatest number of Monarch eggs and caterpillars have consistently been found in the garden is on the swamp milkweed.

Swamp Milkweed (Asclepias incarnate) – 'Soul Mate'

Swamp Milkweed (Asclepias incarnate) – 'Soul Mate'

Also in the garden is *Asclepias incarnate* – 'Ice Ballet' which is a milkweed with white blooms.

Here are a few facts about milkweed:

1. Swamp milkweed is clump-forming and needs dividing every few years. The optimum condition for growing is moist to average soils. However, this milkweed will grow in drier areas of a garden with extra water from rain barrels during the heat of the summer.

2. There is a tendency with the female Monarch butterfly to prefer young, tender leaves on which to lay her eggs.

3. If you break a leaf on a milkweed plant, you will see a white liquid referred to as 'milk'. If you come into contact with the 'milk', wash your hands thoroughly as it causes irritations if in contact with the eyes or other body areas.

4. Like many plants in our gardens milkweed is not edible.

5. In some years aphids can be abundant on milkweed. To keep them under control simply spray the plants with a few drops of dish detergent in water.

Please consider adding milkweed to your garden. The Monarch is starving for it as too many of the common milkweed plants have been destroyed!

In autumn all milkweed plants form seed pods after the bloom is spent. The pods dry and crack open. This is the time to start collecting the seeds before the wind blows them. If you are not in need of more plants, give the seeds away or scatter them in a natural area.

Many people who visit the garden ask me if I have seen a Monarch. Smiling, my answer is YES! Now you know the secret - plant the RIGHT plants and they FLY in to continue their life cycle. That simple!

Monarch nectaring on the bloom of the Swamp Milkweed plant.

Swallowtails

An area of Beau's Butterfly Garden is dedicated to attracting Swallowtails to continue their life cycle. Following are the host plants, both native and non-native, included in the garden. Both Giant and Black Swallowtails have been successfully recorded as reproducing on these plants.

Queen Anne's Lace (*Daucus carota)*

Rue (*Ruta graveolens*)

Dill (*Aneyhum graveolens*)

Parsley (*Petroselinum crispum*)

Gas Plant (*Dictamnus albus*)

Fennel (*Foeniculum vulgare*)

Golden Alexander (*Zizia aurea)*

Swallowtail friendly plants

Black Swallowtail

The Black Swallowtail had been recorded a number of times nectaring in the garden. It didn't take long for the females to begin laying eggs.

Black Swallowtail caterpillar on fennel

The Black Swallowtail prefers plants of the carrot family (*Apiaceae*) including Parsley, Dill, Rue, Fennel and Queen Anne's Lace. Over the years I have found caterpillars on each of those plants.

This butterfly species will overwinter in the chrysalis stage and then emerge as a butterfly in the early spring. Therefore it is always best to leave these plants as is for the winter as a chrysalis may be hidden within the branches.

Giant Swallowtail

Viewing a Giant Swallowtail flying in your garden is an exciting moment. They are Canada's largest butterfly with a wing span of 4 inches.

rue in bloom

The most popular plant in the garden for the Giant Swallowtail to lay eggs on is rue. It is an herb that grows to a height of 18 - 24 inches. An individual flower is miniature but they are plentiful in clusters.

Giant Swallowtail on rue

Giant Swallowtail ovipositing on rue

When the female butterfly curves her abdomen and lays an egg it is called ovipositing.

The Giant Swallowtail requires a fair amount of space to get into position to place an egg on the plant. Therefore, it is best to keep the plant growing at the edge of a garden or along the edge of a walkway as this picture illustrates. Most of the eggs collected have been placed on the base of the flower where the seed pod grows.

American Lady

Pearly Everlasting retains its shape during the growing season.

Pearly Everlasting (*Anaphalis margaritacea*) is a native plant that the American Lady butterfly enjoys in abundance! Clusters of striking white blooms form at the top of the stems and last well throughout the gardening season. This plant is clump forming and easy to maintain.

Wild Indigo Duskywing

False Indigo (*Baptisia australis*) has beautiful blue-coloured flowers on this spring- blooming plant. Sometimes in the late summer there is another blooming period. Once established it does require staking.

Striking tall blooms add a splash of colour early in the Spring months.

Additional Host Plants

I am growing additional host plants in hopes of attracting other butterflies.

Wild Lupine (*Lupinus perennis*); Turtlehead (*Chelone* spp.); Aster (*Symphyotrichum* spp.) Canada Violet (*Viola canadensis* spp.); Thistle (*Cardus* spp. *Cirsium* spp.)

You do have to choose which host plants you put in your garden. No matter what the size of our gardens, the space fills quickly. As well, some species of butterflies have native trees as host plants. Have fun selecting!

Plant Signs

With more than 70 plants growing in a season, plant signs with common and botanical names are an added feature to assist in guiding visitors through the garden. Neighbours walking by will stop to read the signs

I use two types of plant signs. The first are picture signs of the host plant with the common and botanical names plus a picture of the butterfly species that reproduces on that plant.

The other style is a metal sign used for all other native and non-native plants. Both common and botanical names are shown. The name has been printed, laminated and then glued on a metal plant stake.

Monarch Waystation

With the variety of milkweed planted combined with natural gardening methods, Beau's Butterfly Garden met the requirements of the University of Kansas Monarch Watch Program. The garden was then registered as a Monarch Waystation. It was a proud moment when I received the registration certificate and plaque!

Swamp Milkweed and Common Milkweed surround the waystation sign.

Additional Needs of Butterflies

Ripe or Rotting Fruit

Eastern Comma enjoying the fruit

Besides nectar there are some species of butterflies such as the Red-spotted Purple and Eastern Comma that are attracted to the liquid of rotting fruit. Try peeled ripe bananas, apples, oranges and watermelon in a container or a short shepherd's hook (taller ones are used for bird feeders) with a dish attached.

Puddling

Red Admiral on the moist sand

Butterflies love to puddle which is to rest and sip salts and minerals from moist material. They will use a container low to the ground or a section of the ground that is kept damp with mud, clay, mulch or sand.

Most butterflies in the garden have been puddling on the wood mulch walkway (the only place where wood mulch is used). Dampen the wood in the heat of the summer on an area near a nectar flower by simply using rain water from the rain barrel. The butterflies will stay very still to sip, sometimes with their wings open, so it is a great time to snap a picture!

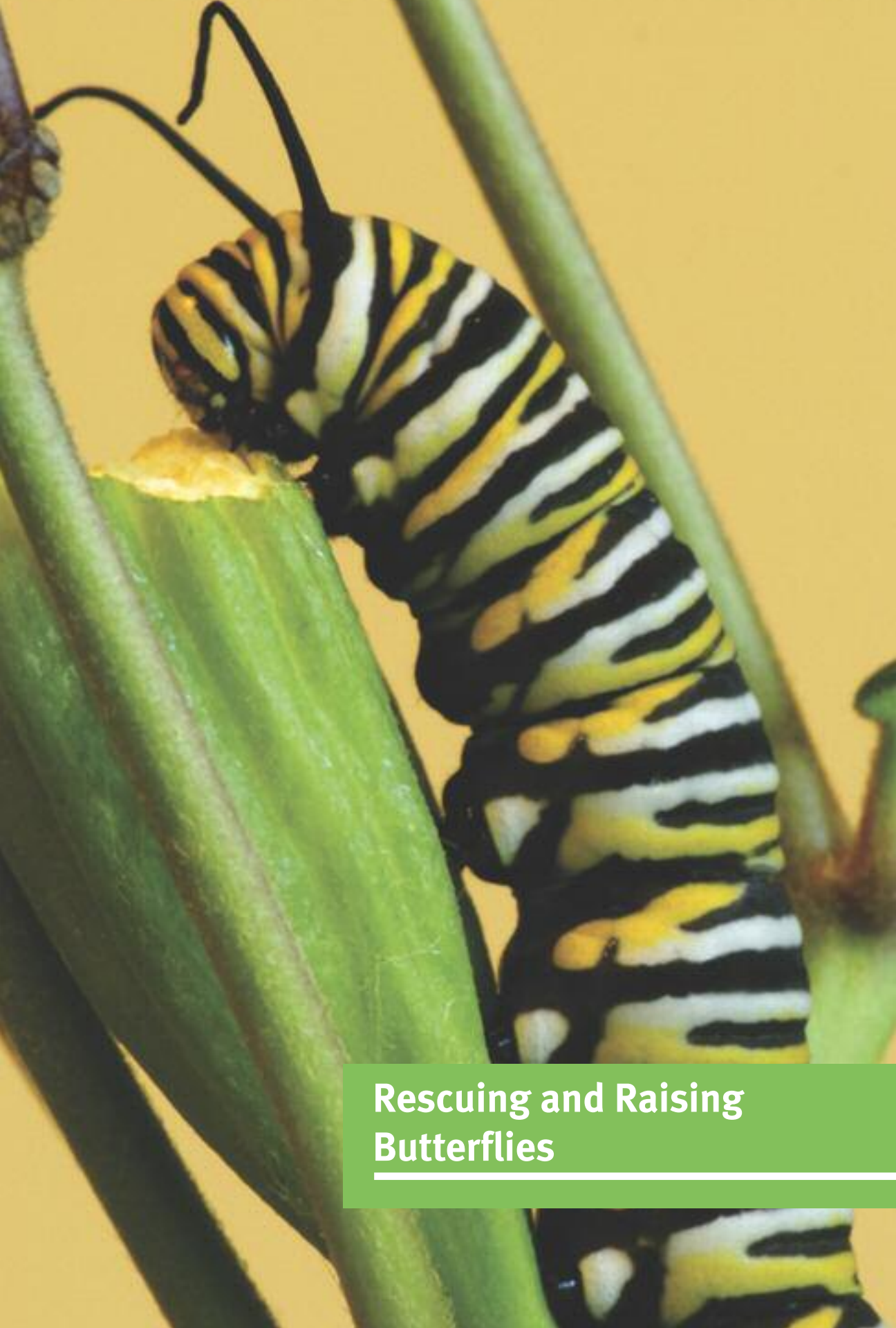
Eastern Comma puddling on the wood mulch walkway.

Shelter

Shelter for a butterfly can be in a dense bush, within a shrub pile, firewood pile or tall grasses.

These shelters are appealing at night when the temperature cools or when it is raining. They hang with their wings closed so they are much harder to see.

American Lady caterpillar on Pearly Everlasting



Rescuing and Raising Butterflies

Butterfly Life Cycle

The ‘complete metamorphosis’ of a butterfly is four stages. This life cycle may take anywhere from one month to a whole year depending on the species. Below are the four stages of a Monarch butterfly.

Egg: 3-4 days

Caterpillar (larva): 10-14 days

Chrysalis (pupae): 10-14 days

Male Monarch

The male Monarch has black marks on its hind wings.

Female Monarch

The female Monarch has much darker veins on its wings.

So now you're getting butterflies to your garden sipping nectar. Host plants are growing and you are wondering if the butterflies are laying eggs or if caterpillars are eating leaves.

What's next? The need to protect this stage of the metamorphosis of the butterfly is critical. Eggs and caterpillars have a number of predators such as wasps, dragonflies, birds, spiders, etc. Rescuing the egg or caterpillar and placing it in a protected area shields it from predators.

This shows a 'stink bug' taking the life of a mature Monarch caterpillar on a milkweed plant.

Locating and Rescuing Eggs

Butterfly eggs are very small. The size, shape and colour vary between species and are about 1 – 3 mm in diameter. Eggs are easier to find with a magnifying glass.

The Monarch butterfly lays her eggs usually on the underside of the milkweed leaves and sometimes on the flower buds. The Giant Swallowtail prefers the base of the flower on the rue.

To collect an egg cut the leaf at the stem of the plant or an area of the leaf around the egg. If the egg is on a flower or flower bud, cut the stalk a few inches below.

Using an airtight plastic container with a clear lid, such as a takeout food container, spread a lightly dampened paper towel on the bottom and place the leaf or a stem of leaves on the towel. Snap the lid on tight so that extra air will not dry out the plant material. Keeping the container out of direct sunlight will allow the leaves to stay fresher longer.

A rescued Black Swallowtail caterpillar is placed in a container with rue and fennel.

You can tell when the baby caterpillar is going to emerge from the egg because the tip of the egg looks black - that's their head. This is the time to add a couple of fresh leaves to the container as the baby caterpillar will seek food after eating its nutrient-rich egg shell.

Giant Swallowtail caterpillar eating its egg shell. The egg had been placed (laid) on the base of the flower just under the petals of a rue.

Monarch caterpillar eating the egg shell. The egg was on the underside of a milkweed leaf.

Locating and Rescuing Caterpillars

If you notice small holes in the middle and sides of the leaves this is a good indication of caterpillar activity. Check under the leaves and between groups of small leaves at the top of the plant as this is a common place for newborn caterpillars to hide from predators.

This second instar Monarch caterpillar was discovered in a cluster of leaves on the tip of a milkweed plant

Caterpillars go through a number of stages called instars. The Monarch butterfly for example, has five instars. If you notice that your caterpillar is very still do not move it. They could be about to shed their skin to the next instar stage after which they will resume eating.

The Black Swallowtail caterpillar has just finished shedding its skin to the next instar stage

A first instar Black Swallowtail is very dark in colour

Sometimes you may find them eating an unripe seed pod

Remember not to handle a caterpillar directly. As with the egg cut the leaf and place it in an airtight container. Add an extra couple of fresh stems or leaves daily to ensure that they have plenty to eat.

Frass is the droppings of a caterpillar. They are small pellets and can be green or black depending on the butterfly species. If you see frass on a leaf, check the underside of the leaves directly above for a caterpillar.

American Lady caterpillars form web-like nests in which to hide at the end of each stem. Sometimes you can watch them eating and wandering about on the leaves.

Pearly Everlasting, host plant for the American Lady, quite often has numerous caterpillars. The adult butterfly lays a number of eggs on the plant.

Web nest where the caterpillar hides from predators. As they increase in size you will find them out of their nests in search of food.

Cages to Raise Your Butterflies

Larger caterpillars become eating machines so every one to two days a fresh supply of food is necessary and lots of it.
They also wander before pupation which is discussed further in the next section. If you have children or are a child at heart you may wish to keep your new 'friend' close by inside. Here are a couple of suggestions:

1. Cages with three sides netted and one side clear plastic as shown below are available to view your caterpillars in action.

The netted cages can be kept outside well secured from the wind with the potted plant inside. Another method would be to place a stalk of their host plant in water. Use a coffee can with a hole cut in the lid so that your 'friend' does not wander into the water and drown.

2. Some people like to use a plastic animal cage, available at pet stores. These are ideal as they are clear plastic for viewing the action.

3. Another option is to use an outdoor wood cage that is large enough to hold their host plant potted in a container of soil. Keep the cage out of strong afternoon sunlight and use a sheet of plastic over the top to protect it from heavy rains. Here your caterpillar will be free to roam and feed.

A pot of rue is used to feed a number of Black Swallowtail caterpillars.

My son, Ken, has developed an excellent outdoor cage made with non-toxic materials and no-see-um netting. Visit his website for further information: www.avenuekdesign.ca

The feeding of caterpillars and cleaning frass is the time when they require daily attention.

But whichever method works the best for you, it's important to keep the experience fun for everyone!

Caterpillar to Chrysalis (pupation)

Pupation is a stunning process to observe in the metamorphosis cycle. The caterpillar's activity of non-stop eating will slow down and it will begin to wander. This is another advantage of having it in an enclosed area. The wandering can go on for a few days. If the caterpillar has travelled down the plant and up to the ceiling of the cage there is no need to be concerned. If it is hungry it will find its food source again.

The Monarch caterpillar will attach to the ceiling of the cage and hang in a 'J' shape. The picture below illustrates the Monarch caterpillar's skin shedding and the formation of the chrysalis (pupae). Over the next 10 to 14 days the butterfly develops inside the chrysalis and the wings become visible.

Stages of the Monarch butterfly pupation.

The caterpillars of the Black and Giant Swallowtails will attach vertically either to the side of the cage or to an object like a stick or the stem of a plant. That is when you will know the pupation stage has begun.

The Black Swallowtail caterpillar attached to a stick and the chrysalis after pupation.

The image produced here is a result of attaching two images together.

Below is a Giant Swallowtail caterpillar attached by its string to the stem of a rue plant. This string holds the chrysalis firmly to the stem until the butterfly emerges.

The green-coloured chrysalis for the Wild Indigo Duskywing wraps itself in a leaf making it difficult to find by predators. Numerous holes left in the leaves from their feeding are a good indication of caterpillar activity.

Here the American Lady caterpillar attaches itself to the stem of its host plant, Pearly Everlasting, and hangs down.

You've done it! The feeding process is over and the container or cage can be cleaned of food and frass.

A New Generation Begins

When a butterfly emerges from the chrysalis the process is called eclosing. The chrysalis may either turn dark or become clear when the butterfly is ready to emerge. It only takes a few seconds for the butterfly to emerge so if you notice changes in the colouring keep a careful watch.

The pictures below show a Monarch and Black Swallowtail eclosing. The Monarch butterfly emerges from the bottom of the chrysalis and the Black Swallowtail emerges through the top.

MONARCH



BLACK SWALLOWTAIL



Newly eclosed butterfly wings need to dry and this usually takes several hours after which they open their wings to finish the process. What is happening during this time is that they pump fluid into their wings to expand them.

When their wings have expanded and they begin to flap you can try placing your finger near their feet to see if they will climb on. Then you can place the butterfly on a flower where they will flatten their wings and allow you to take the perfect picture!

Butterflies do not fly in the rain so if the weather is inclement leave it inside the cage until conditions are more suitable. You can always provide a flower or two and they will drink the nectar while waiting.

Monarch (male) on Butterfly Bush

We have now completed the butterfly metamorphosis together. This journey is one I hope you and your family will enjoy. It really is fun!

Recordkeeping

Garden Journal

My garden journal is kept close by and twice a day I walk through the garden to record the species, number of butterflies and to note any particular flower that most attracts them. As a photographer my camera is also with me. As butterflies move quickly having a photograph assists in identifying the species later.

Keeping records of the butterflies that visit your garden together with photographs provides invaluable information for Lepidopterists. You can enter your records on ebutterfly at www.e-butterfly.org. Beau's garden records on this site are used by the Toronto Entomologists' Association (TEA) for the Ontario Butterfly Atlas which can be found at their website www.ontarioinsects.org. As well, the information entered on e-butterfly is used for the annual Ontario Lepidoptera Report which is produced by TEA members.

To identify butterfly species I use a number of resources such as Ontario butterfly guides and consulting with butterfly experts. The most recent guide available is from the Royal Ontario Museum. It is called, 'The ROM Guide to Butterflies of Ontario'.

For determining the classification, common, uncommon or rare status assigned to each species, I use "The Butterflies of Waterloo Region", Master in Environmental Studies thesis by Jessica Linton. This can be found on the TEA website under Publications.

If you are new to identifying our winged friends then a butterfly monitoring outing would help. Check your city or nature association. They will team you up with someone experienced.

Engaging Children

Children find the natural world fascinating! Everywhere they go they discover sights and sounds familiar and new. Spending time now to research names of plants, trees, animals, birds and insects will last a lifetime.

My grandchildren, Averie and Jadyn, sitting on the bench in the garden.

Below is the story of my daughter-in-law, Amanda, and the project with the girls.

> "Grandma Beaubien has shared her love of nature and butterflies with her granddaughters, Averie and Jadyn. The girls are her "little butterflies". Each time we visit grandma and grandpa's house, we always take a walk in her garden to look for butterflies and they love helping fill the bird feeders.

For Easter 2015, the girls received a bird feeder each, which was set up outside our front window. They sit and watch for birds to come and have a snack. They love trying to identify the birds that visit. We have created a Nature Book for each of them. Every time we see a new bird, butterfly or animal, we take a photo and put it into their book with its name. They love sharing their book with others and are proud to be able to identify many different birds. The bird and butterfly watching plus finding animals are not restricted to our house. When we go out or visit our cottage in New Brunswick, the girls are always looking and trying to identify what they find.

We anxiously await more birds, animals and butterflies!!"

Monarch Watch

Tags for the migrating Monarchs are purchased online through the Monarch Watch website http://www.monarchwatch.org. Since our area has the 'super generation' of the Monarch life cycle that overwinters in Mexico, the tags are shipped in August. They do sell out, so order early.

Butterflies of Beau's Butterfly Garden

Butterflies Rated ‘rare’ in Waterloo Region

Variegated Fritillary on Viola

Fiery Skipper on Meadow Blazing Star

arthemis X astynax – an intergrade between a White Admiral and Red-Spotted Purple

Butterflies Rated ‘uncommon’ in Waterloo Region

Banded Hairstreak

Milbert’s Tortoiseshell

Pearl Crescent

Silver-spotted Skipper

Giant Swallowtail

Butterflies Rated ‘common’ in Waterloo Region

Great Spangled Fritillary

Eastern Tiger Swallowtail

Red-spotted Purple

Clouded Sulphur

Black Swallowtail

Monarch and bee

Question Mark

Juvenal's Duskywing

Eastern Comma

Red Admiral

Mourning Cloak

Cabbage White

Viceroy

Wild Indigo Duskywing

Painted Lady

American Lady

Spring Azure

Summer Azure

Beau's Butterflies by Family

	Common Name	Scientific Name
Papilionidae - Swallowtails	Black Swallowtail	*Papilio polyxenes*
	Eastern Tiger Swallowtail	*Papilio glaucus*
	Giant Swallowtail	*Papilio cresphontes*
Pieridae - Whites & Sulphurs	Cabbage White	*Pieris rapae*
	Clouded Sulphur	*Colias philodice*
Nymphalidae - Brush-footed Butterflies	Great Spangled Fritillary	*Speyeria cybele*
	Variegated Fritillary	*Euptoieta claudia*
	Mourning Cloak	*Nymphalis antiopa*
	Milbert's Tortoiseshell	*Nymphalis milberti*
	Red Admiral	*Vanessa atalanta*
	Painted Lady	*Vanessa cardui*
	Viceroy	*Limenitis archippus*
	Red-spotted Purple	*Limenitis arthemis astyanax*
	intergrade of White Admiral & Red-spotted Purple	*arthemis X (hybrid) astyanax*
	Pearl Crescent	*Phyciodes tharos*
	Question Mark	*Polygonia interrogationis*
	Eastern Comma	*Polygonia comma*
	Monarch	*Danaus plexippus*
	American Lady	*Vanessa virginiensis*
Lycaenidae - Gossamer-Wings	Banded Hairstreak	*Satyrium calanus*
	Spring Azure	*Celastrina lucia*
	Summer Azure	*Celastrina neglecta*
Hesperidae - Skippers	Juvenal's Duskywing	*Erynnis juvenalis*
	Silver-spotted Skipper	*Epargyreus clarus*
	Wild Indigo Duskywing	*Erynnis baptisiae*
	Fiery Skipper	*Hylephila phyleus*

Plant List

PERENNIALS

Common Name	Botanical Name	Notes
Aster - New England	*Aster novae-angliae*	
Aster - Upland White	*Solidago ptarmicoides*	
Aster-Michaelmas Daisy	*Aster novae-belgii*	
Beardtongue - Hairy	*Penstemon hirsutus*	
Bee Balm	*Monarda didyma*	
Bee Balm-Wild Bergamot	*Monarda fistulosa*	
Bee Balm	*Monarda*	
Black-eyed Susan	*Rudbeckia hirta*	
Blanket Flower	*Gaillardia*	
Blazing Star - rough	*Liatris aspera*	
Blazing Star - meadow	*Liatris ligulistylis*	
Blazing Star - dense	*Liatris spicata*	
Blazing Star - prairie	*Liatris pycncstachya*	
Butterfly Bush - Black Knight	*Buddleia davidii*	
- Miss Ruby	*Buddleia davidii*	
Butterfly Gaura	*Gaura lindheimeri*	
Canadian Violet	*Viola canadensis*	
Cardinal Flower	*Lobelia cardinalis*	
Cardinal Flower - Blue	*Lobelia siphilitica*	
Columbine	*Aquilegia canadensis*	
Coneflower-double-Coconut Lime	*Echinacea purpurea*	
Coneflower - Pale Purple	*Echinacea pallida*	
Coneflower - Virgin White	*Echinacea purpurea* 'Virgin W.'	
Coneflower - White Swan Purple	*Echinacea purpurea* 'Swan W.'	
Coneflower - Branched	*Rudbeckia triloba*	
Coneflower - Gold Fountain	*Rudbeckia goldquelle*	
Coneflower - Autumn Sun	*Rudbeckia* 'Herbstsonne'	
Coneflower - Yellow	*Ratibida pinnata*	
Coneflower - Ruby Star	*Echinacea purpurea* 'Rubinstern'	
Coneflower - Prairie	*Chapeau mixicain*	
Compassplant	*Silphium laciniatum*	
Cup plant	*Silphium perfoliatum*	
Delphinium	*Magic Fountains*	
Dianthus	*Dianthus* 'Early Bird'	
False Indigo	*Baptisia australis*	
False Sunflower-Bressingham Doubloon	*Heliopsis*	

Common Name	Botanical Name	Notes
Gas Plant	*Dictamnus Albus* 'Rosea'	
Gas Plant	*Dictamnus Albus* 'Albiflorus'	
Golden Alexander	*Zizia aurea*	
Goldenrod - Zig zag	*Solidago flexicaulis*	
Joe Pye Weed	*Eupatorium purpureum*	
Joe Pye Weed	*Eupatorium fistulosum* 'Gateway'	
Crocosmia	*Crocosmia* 'Lucifer'	
Lupin - wild	*Lupinus perennis*	
Milkweed - Butterfly Weed	*Asclepias tuberosa*	
Milkweed - Swamp	*Asclepias incarnata*	
Milkweed - Common	*Asclepias syriaca*	
Milkweed - Tropical	*Asclepias curassavica*	
Nodding Wild Onion	*Allium cernuum*	
Obedient plant	*Physostegia virginiana*	
Pearly Everlasting	*Anaphalis margaritacea*	
Pincushion	*Scablosa* 'Butterfly Blue'	
Prairie Smoke	*Geum triflorum*	
Queen Anne's Lace	*Daucus carota*	
Rattlesnake Master	*Eryngium yuccifolium*	
Rue	*Ruta graveolens*	
Sea Holly	*Eryngium planum*	
Shasta Daisy	*Leucanthemum* 'Snowcap'	
Turtlehead - pink	*Chelone lyonii*	
Turtlehead - white	*Chelone glabra*	
Vervain - Narrow-leaved	*Verbena simplex*	
Yarrow - paprika	*Achillea*	

ANNUALS

Dill		
Parsley		
Gomphrena - Fireworks		
Salvia - Hot lips; Blue Knight		
Tithonia -Mexican Sunflower		
Verbena - Bonariensis		
Zinnia-Profusion Double Fire		

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ABOUT THE AUTHOR

Thelma Beaubien resides in the Region of Waterloo.

She has received numerous awards for her photography including many national competitions. Her images have been published in several magazines and with a number of organizations including the City of Waterloo and its 150th Anniversary celebration book. The popularity of her audio visual shows had her presenting to many clubs and groups over the years and these shows were also included in the prestigious Burlington Visual Arts Festival.

Thelma belongs to a number of clubs including the Waterloo Region Nature club where she initiated and co-ordinates the very successful Wonders of Nature Festival, including the most recent partnership with the City of Kitchener's Natural Areas Program (KNAP).

Having nature at her doorstep provides an opportunity to share with others her first hand experience.