

BUTTERFLY GARDENS FOR NORTH TEXAS

The Butterfly Life Cycle



Butterfly Lays Eggs



The Egg



The Larva (Caterpillar)



Caterpillar Becoming Pupa



Pupa (Chrysalis)



Butterflies Emerging

Then the life cycle starts all over again!

The Bu



The Butterfly Life Cycle

All butterflies have "complete metamorphosis." All butterflies go through four stages: egg, larva, pupa and adult. Each stage has a different goal - for instance, caterpillars need to eat a lot, and adults need to

feed through four stages: egg, larva, pupa and adult. Each stage has a different goal - for instance, caterpillars need to eat a lot, and adults need to

reproduce. Depending on the type of butterfly, the life cycle of a butterfly may take anywhere from one month to a whole year.

The First Stage: The Egg

A butterfly starts life as a very small, round, oval or cylindrical egg. Some butterfly eggs may be round, some oval and some may be ribbed while others may have other features. The egg shape depends on the type of butterfly that laid the egg.

Butterfly eggs are usually laid on the leaves of plants, so if you are actively searching for these very tiny eggs, you will have to take some time and examine quite a few leaves in order to find some.

The Second Stage: The Larva (Caterpillar)

Butterfly larvae are actually what we call caterpillars. Caterpillars do not stay in this stage for very long and mostly, in this stage all they do is eat. When the egg finally hatches, the caterpillar will start his work and eat the leaf they were born onto. This is really important because the mother butterfly needs to lay her eggs on the type of leaf the caterpillar will eat – each caterpillar type likes only certain types of leaves. Since they are tiny and cannot travel to a new plant, the caterpillar needs to hatch on the kind of leaf it wants to eat. Caterpillars need to eat and eat so they can grow quickly. When a caterpillar is born, they are extremely small. When they start eating, they instantly start growing and expanding. Their exoskeleton (skin) does not stretch or grow, so they grow by “molting” (shedding the outgrown skin) several times while it grows.

The Third Stage: Pupa (Chrysalis)

As soon as a caterpillar is done growing and they have reached their full length/weight, they form themselves into a pupa, also known as a chrysalis. From the outside of the pupa, it looks as if the caterpillar may just be resting, but the inside is where all of the action is. Inside of the pupa, the caterpillar is rapidly changing.

Now, as most people know, caterpillars are short, stubby and have no wings at all. Within the chrysalis the old body parts of the caterpillar are undergoing a remarkable transformation, called ‘metamorphosis,’ to become the beautiful parts that make up the butterfly that will emerge. Tissue, limbs and organs of a caterpillar have all been changed by the time the pupa is finished, and is now ready for the final stage of a butterfly’s life cycle.

The Fourth Stage: Adult Butterfly

Finally, when the caterpillar has done all of its forming and changing inside the pupa, if you are lucky, you will get to see an adult butterfly emerge. When the butterfly first emerges from the chrysalis, both of the wings are going to be soft and folded against its body. This is because the butterfly had to fit all its new parts inside of the pupa.

As soon as the butterfly has rested after coming out of the chrysalis, it will pump blood into the wings in order to get them working and flapping – then they get to fly. Usually within a three or four-hour period, the butterfly will master flying and will search for a mate in order to reproduce.

When in the fourth and final stage of their lives, adult butterflies are constantly on the look out to reproduce and when a female lays their eggs on some leaves, the butterfly life cycle will start all over.

Easiest Butterflies to Attract to our Gardens



Eastern Black Swallowtail Caterpillar



Eastern Black Swallowtail



Monarch Caterpillar



Monarch



Gulf Fritillary Caterpillar



Gulf Fritillary



Giant Swallowtail Caterpillar



Giant Swallowtail



Eastern Tiger Swallowtail Caterpillar



Eastern Tiger Swallowtail



Painted Lady Caterpillar



Painted Lady



Pipevine Swallowtail Caterpillar



Pipevine Swallowtail Male



Pipevine Swallowtail Female

BUTTERFLY GARDENS FOR NORTH TEXAS

Host and Nectar Plants

Butterflies are attracted by certain, specific plants. Two kinds of plants! The plants they look for are the “**host plants**” they lay eggs on, and the nectar-producing plants that the adult butterflies need for food.

To attract butterflies to your garden you must begin, however, with the host plants they need. These are the only plant species that the mother lays eggs on, since the larvae (caterpillars) can only eat these specific plants. An example is the Monarch butterfly and their host plant – milkweed (including butterfly weed). Milkweed contains a mild toxin to which the young caterpillar is immune. He ingests it, however; and so does any predator that eats the caterpillar. So predators, such as large insects, mice and birds have learned not to eat Monarch caterpillars.

In a period of just a week or two, a female butterfly can lay hundreds of eggs on a host plant. Yet only a few of them will become adult butterflies. On average, out of 500 eggs, only five survive the typical backyard living conditions in Texas. Butterflies-to-be are most vulnerable to predators and disease during this period - the caterpillar (larval) stage in the spring. During this time they’re still totally flightless, clinging to the host plants where they were born.

All plants produce nectar, but some more than others. Butterflies know instinctively which one's to look for. Throughout our hot, dry summer (when most butterflies grow up) and into the fall, nectar plants are vital to an adult butterfly's survival, particularly for migrating butterflies such as Monarchs, as they “bulk up” for a long flight. They also need a water source – and they prefer one that’s very shallow. Some even prefer mud.

Abbreviations

A=Annual

P=Perennial

S=Reseeds

Shade

TP=Tender Perennial

F= Full Sun

SH=Shade

PS=Part-Sun to Afternoon

TT=Texas Tough

H=Also a Host Plant

N=Also a Nectar Favorite

Easiest Butterflies to Attract to our North Texas Gardens & Their Host Plants

Eastern Black Swallowtail - Rue, Dill, Parsley, Fennel

Giant Swallowtail - Citrus, Rue, Hop Ash "Ptelea trifoliata"

Pipevine Swallowtail - Dutchman's Pipe "Aristolochia Fimbriata" and Woolly Pipevine "Aristolochia tomentosa"

Tiger Swallowtail - Mexican Plum and Hop Ash "Ptelea trifoliata"

Zebra Swallowtail - Paw Paw Tree

Monarch - Tropical Milkweed "Asclepias curavassica" and "Asclepias Tuberosa" and all other Milkweed species N

Queen Monarch - Tropical Milkweed "Asclepias curavassica" and "Asclepias Tuberosa" and all other Milkweed species N

Gulf Fritillary – PassionVine (all varieties), Maypop "Passiflora incarnate", Wood Violets N

Variegated Fritillary - Passion Vine (all varieties), Maypop "Passiflora incarnate", Wood Violets N

Zebra Longwing - Passion Vine (all varieties), Maypop "Passiflora incarnate", Wood Violets N

Buckeye - Heliotrope, Plantain, toad flax, Indian paintbrush, frog fruit "phyla nodiflora" N, Verbena bonariensis N, Ruellia "Mexican Petunia"

Question Mark - False Nettle "Boehmeria cylindrical", Hops, Elms, Hackberry

Comma - False Nettle "Boehmeria cylindrical", Hops, Elms, Hackberry

Red Admiral - False Nettle "Boehmeria cylindrical", Hops, Stinging Nettle, Pellitory

Phaon Crescent - Frogfruit "Lippia nodiflora"

Pearl Crescent - Asters

Texan Crescent - Ruellia, Flame Acanthus

Viceroy - Willows, some fruit trees

Southern Dogface - Lead Plant "Amorpha canescens", False Indigo "Amorpha fruticosa" N and "Baptisia australis", Clover

Cloudless Sulphur - Candlestick tree "Cassia Alata" N, Argentine Senna "Cassia Corymbosa" N, False Nettle

American Painted Lady - Borage, Sunflower, Hollyhock, Ribgrass Plantain, Yarrow N

Painted Lady - Borage, Sunflower, Hollyhock, Ribgrass Plantain, Yarrow N

Best Nectar Plants to Attract Butterflies to your Garden

Abelia x Grandiflora - evergreen shrub, 3' tall x 4' wide, white blooms, **P, F**

Agastache - Anise Hyssop, fragrant, many colors, butterfly favorite, **P, F, PS, TT**

Asters - New England and other varieties, 18-36" tall, **P, F, PS**

Bee Balm "Monarda didyma"- many varieties, red, pink and purple blooms, 12-36" tall, **TP, PS**

Blackfoot Daisy - 9" tall, white daisy flowers, **P, F, TT**

Butterfly Bush "Buddleia davidii"-all varieties dwarf/tall 18"-10' tall, Butterfly favorite, **P, F, PS, TT**

Butterfly Weed "Asclepias tuberosa" - 18-24" tall, **TP, S, F, PS, H**

Candlestick Plant "Senna Alata" - Shrub, 6-12' tall with yellow flowers, **F, PS, H, S**

Cleome "Spider flower" - Dwarf varieties also, 12-48" tall, **A, S, F, PS**

Coneflower "Echinacea" - Purple and other varieties 18-24" tall, **P, F, PS, TT**

Coreopsis -"Moonbeam"-12" tall, yellow blooms; thread leaf varieties 36-48" tall, **P, F, S, TT**

Cosmos bipinatus - "Bright Lights" and other varieties, 24-48" tall, **A, S, F, PS, TT**

Daylilies - 12-36" tall, many varieties and colors, **P, F, PS, TT**

Duranta "Golden Dew Drop" - all varieties, 36- 48" tall, **TP, F, PS**

Eupatorium greggi - Hardy Ageratum "Greg's Blue Mist flower", 24-36" tall, blue flowers, Butterfly favorite, Texas Native, **P, F, PS, TT**

False Indigo "Baptisia australis" - Blue flowers, 24-36" tall, **P, F, PS, TT**

Gaillardia "Indian Blanket Flower"-12-18" tall, all varieties, red-orange & yellow blooms, **P, F, TT**

Globe Amaranth "Gomphrena globosa" - Purple blooms, 12-18" tall, **A, S, F, TT**

Goldenrod "Solidago Canadensis" - yellow blooms "Little Lemon" is 12" tall, other varieties are 24-36" tall, **P, F, TT**

Heliotrope - all varieties, blue and white blooms, fragrant 12-24" tall, **TP, PS**

Lantana - all varieties, "Confetti" variety also a host plant, **P, F, TT, H**

Lemon Verbena "Aloysia triphylla" - fragrant, almond scented flowers, 48-72" tall, Butterfly favorite, **TP, F, PS**

Liatris "Gay Feather" – 36- 48" tall, **P, F, TT**

Loosestrife "Lythrum" - Purple-pink blooms, 24-48" tall, **P, F, PS, TT**

Mexican Flamevine "Senecio" - 8-10' vine, orange- red blooms, **A, S, F, PS**

Mexican Sunflower "Tithonia" - flame-orange blooms, 48-72" tall, butterfly favorite **A, S, F, TT**

Morning Glory Vine - Many colors available, large blooms, vines to 10' **A, S, PS, TT**

Penta "Egyptian Star Flower" - all varieties , ranges from 6" to 2' tall, many colors **A, F, PS, TT**

Phlox paniculata - Summer phlox varieties, 12-36" tall, many colors, **P, F, PS**

Rudbeckia “Goldstrum” and other varieties, 12-36” tall, **P, F, PS, TT**

Salvia Farinacea “Victoria Blue” and other varieties 12-18” tall, **P, F, TT**

Salvia Guarantica “Black & Blue Salvia”- 36” tall, black stems; deep blue blooms, **P, F, PS, TT**

Scabiosa “Pincushion flower” - blue and pink varieties, 12” tall, **P, F, PS, TT**

Shrimp Plant - yellow and red varieties, 18-24” tall, **TP, PS**

Texas Star Hibiscus “Hardy Swamp Mallow” - 4-6’ tall, crimson blooms, white variety also, **P, F, PS, TT**

Tropical Butterfly Weed “Asclepias curavassica” – Bloodflower - 18-24” tall, **TP, S, F, PS, H**

Turks Cap “Malvaviscus drummondii” - 24-48” tall and wide, **P, TP, F, PS**

Verbena bonariensis “Lollipop”- 24-48” tall, butterfly favorite, **P, F, PS, TT**

Verbena “ Homestead Purple” and perennial varieties, 9-12” tall and wide, many colors, **P, F, TT**

Vitex “Chaste Tree”- fragrant blue flowers, deciduous shrub, 12-15’ tall, **P, F, PS, TT**

Yarrow “Achillea” - all varieties and colors, 12-24” tall, **P, F**

Zinnia (all varieties) – 6-18” tall, many colors, **A, F**

Butterfly Gardening Web Links

<http://www.dallasbutterflies.com>

<http://texasdiscoverygardens.org>

<http://www.monarchwatch.org>

<http://www.thebutterflysite.com>