

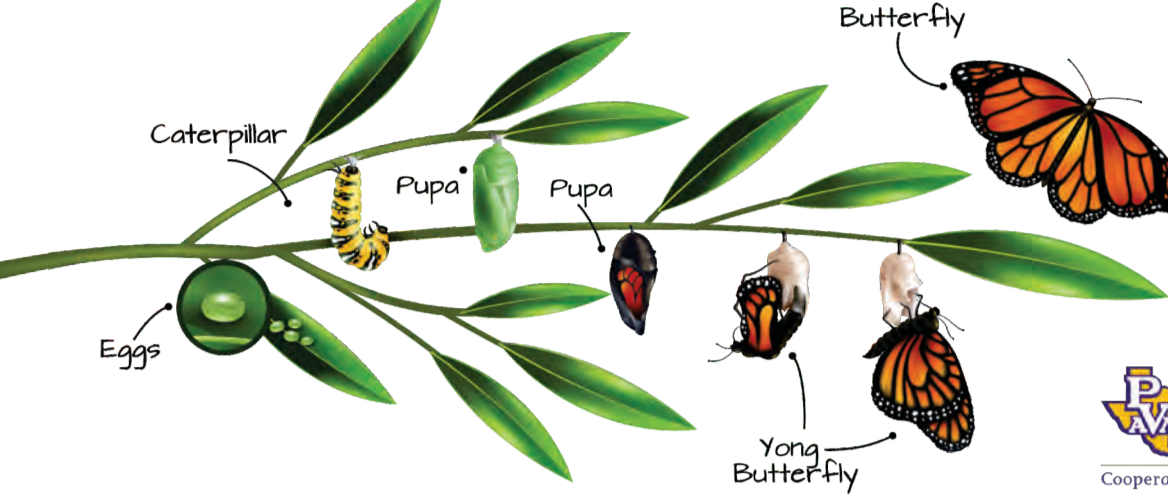
# BUTTERFLY GARDEN GUIDE

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Locate butterflies around your home, take photos and share on Facebook, Twitter or Instagram with #PrairieViewPollinatorProject

Butterflies are important pollinators that have a range of shapes, sizes and diets. They are all beneficial, and they enjoy nectar from fruits, vegetables, trees, shrubs and wildflowers. Butterflies enjoy flowers in purple, orange and yellow/gold hues. In Texas, Monarchs, Swallowtails, Skippers, Yellows/Sulfurs, and Hairstreaks are ever present in gardens and fields. Many of the same butterfly attracting plants also play host to moths once the sun sets.

## Butterflies of Texas



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### MONARCH BUTTERFLIES

**Monarch Butterflies** are the large orange and black brush foot butterflies that pollinate weeds and wildflowers including Milkweed. They also drink nectar and collect pollen from crop plants such as Strawberries and Onions.

**Monarchs** are part of the family Nymphalidae, the brush foot family, which includes Red Admirals, Gulf Fritillaries, and Painted Ladies - all of which are common in Texas and have many of the same preferences. Brush Foot Butterflies typically use weeds, including toxic stinging plants, as host plants, and wildflowers as nectar plants. This is the largest butterfly family.

Monarchs live 2-5 weeks during which they mate, lay eggs and pollinate. Caterpillars have 5 instars as they molt and grow, during which they feed



on milkweed. After molting one last time, caterpillars become jade green chrysalis. Once the chrysalis becomes clear, the butterfly emerges, warms up, solidifies its wings, and takes flight.

Monarch Butterflies migrate south during the fall. Every generation uses the same roosting location in Mexico. Butterflies are tagged and tracked so that entomologists can have a record of how many generations there are and the life span of each butterfly during this amazing journey.

Monarchs are also most common during summer and early fall. Once Monarchs become more frequently sighted, it is a sign that the Autumn season is beginning, and the butterflies are ready to stock up on nectar and pollen to fuel their travel.

### SWALLOWTAIL BUTTERFLIES



Swallowtail Butterflies are large bright butterflies, usually in yellow and black hues, that have little tails on their hindwings, hence their name. They enjoy gathering at mud puddles, feasting on overripe fruits, and enjoying nectar from large shrubs and trees such as orange trees.

There are several species of Swallowtails common in Texas gardens, fields and forests. Giant Swallowtails are giant black and yellow beauties that fly around fruit groves, tall trees and large yellow or purple wild flowers. Black Swallowtails can be found near parsley, fennel and other herbs. Tiger Swallowtails enjoy fruit trees, forests, and are named for their black and yellow striped appearance.

Most Swallowtail caterpillars have osmeteria, the stinky horns that protrude when the larvae are disturbed.

Some larvae use camouflage to blend in with their host plants, while others grow terrifying eye-like markings to frighten birds and unsuspecting humans.

### SKIPPERS



Skippers are small moth-like butterflies that visit low growing herbs and vines such as Lantana. Coppers are bronze or orange butterflies frequently found in cooler climates, but they also reside in warm areas in wide-open prairies and forests.

There are multiple species that reside in Texas, including the Silver Spotted Skipper, which pollinate garden plants and enhance their color and beauty. Skippers look similar to moths, but hold their wings upright, compared to moths that keep their wings down in a tent-like fashion.

Skippers have long proboscis and occasionally hover near nectar flowers to pollinate instead of landing

Most Skipper butterflies have a jerky, erratic flight pattern. They tend to be present during the afternoon and evening until the sun sets.

### YELLOWS, WHITES AND SULFURS



Yellows, Whites and Sulfurs can be found everywhere, from Cabbage and Kale plants, to beautiful flowering ornamental trees. Their name is derived from the yellow, white and orange colors that adorn their wings.

Small green and white larvae include loopers that feed on lettuce, kale, cabbage and potatoes.

Pairs of Cloudless Sulfur butterflies can be seen courting during the summer months.

The Cabbage White is related to Sulfur Butterflies, and its larva is a primary pest of leafy green vegetables.

The Cloudless Sulfur, the most widespread of the Sulfurs in The U.S. is bright yellow with very little marking on the wings. The larva feed on plants such as Senna, which are toxic.

### HAIRSTREAKS



Hairstreaks are unique butterflies. They are not picky and pollinate larger blooms such as Coneflower and small flowers including Salvia and Pentas. They have small tails that they rub together on their wings. Their tails are typically blue or silver with small, red or orange marks. It takes a keen eye to find these small butterflies.

Hairstreaks have metallic appearances including spots and stripes. Some are dusky brown.

Composite flowers such as Buddleia (Butterfly Bush) are frequented by several Hairstreak species.

Hairstreaks typically have thin antennae with alternating black and white marks.

The North American Gray Hairstreak larvae are pests of fruits and seeds.

Male Hairstreaks have reduced front legs, while females have fully functioning front legs.

## Butterfly Garden Plants

Butterflies require shelter as well as water and nectar. A great way to provide this is to incorporate tall growing forbs and shrubs. Several butterfly species use unique host plants that may not be common. Some butterflies enjoy toxic plants or plants with stinging hairs. Several plants that butterflies favor are in the family Asteraceae, which includes Sunflowers and Zinnias. The small tubular flowers in the center are filled with sweet nectar. Composite flowers with plenty of green foliage function as the best host and nectar plants for butterflies.



### PURPLE CONEFLOWER (ECHINACEAE)

Add a beautiful purple hue to the garden. This is a favorite of Monarch, Swallowtail and many other butterflies and is a key plant to include in butterfly gardens. It is a perennial and will continue to bloom year after year. Coneflower is very hardy in warm climates and

needs a healthy dose of water, without drowning the plant. It tends to grow quickly and spread, and it grows many blooms on the same plant. It enjoys full sun.



### MILKWEED (BUTTERFLY WEED)

A favorite of Monarch Butterflies and their larvae, this plant invites insects of all types into the garden, including brightly colored beetles, varied butterflies and even bees. It comes in several colors, but orange or yellow and red are the varieties that are most common in

stores. Milkweed can be grown through seeds or transplants. It prefers full sun but tolerates shade. It does fine in clay, sand or rocky soils. Beware the milky sap which is toxic and irritates the skin.



### GOLDENROD

So called because of its vibrant golden flowers, this plant is a native flowering shrub-like beauty that enhances every environment with its colors. Birds roost in it, bees use it as their favorite source of pollen and nectar, and butterflies drink from its blooms during the day when the gold shines brightly. It

prefers slightly acid soils, and it grows in rocky earth in the wild. It also enjoys full sun, and it tends to grow quickly and become a problem weed.



### PENTAS

Every garden needs Pentas. This plant is a favorite of butterflies specifically. No matter the species, you can count on Pentas to bring a flock of butterflies into your garden.

It serves as a decorative flower for both front and back yards, and even a patio plant. They are slow growing perennials that enjoy warm climates but grow as annuals in cooler areas.



### GARLIC / ONION

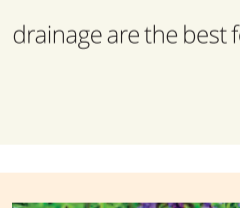
With their tall, high-reaching blooms and beautiful vibrant colors, it is only right that Onion and Garlic plants belong in the garden.

Bring butterflies into your vegetable patch with these beautiful additions. They smell fantastic too. Sandy loam soils with good drainage are the best for these plants.



### FRUIT TREES/ SHRUBS

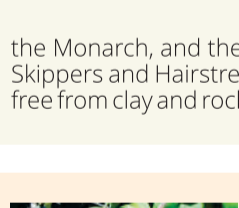
Apple, pear, blueberry, blackberry, strawberry and many more fruits act as a bullseye for butterflies. Fruit plants give off strong aromas, and butterflies can't resist their sweet tooth or the delightful smell. Citrus trees bring in the Giant Swallowtail, berries tempt smaller brush-footed butterflies related to the Monarch, and the foliage makes a great place for small Skippers and Hairstreak butterflies to rest. Sandy loam soils free from clay and rocks are beneficial for fruit crops.



### ZINNIA

These delightful daisies come in a rainbow of colors - from red, orange and purple to exotic colors such as black and green.

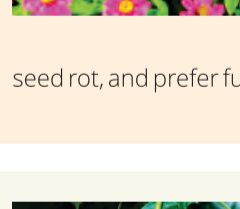
Plant a rainbow of flowers that are sure to attract even the pickiest of butterflies. Zinnias require warm, well drained soils to avoid root and seed rot, and prefer full sun for a larger flower quantity.



### BUTTERFLY BUSH (BUDDLEIA)

It's in the name; Butterflies adore this plant. Include several of these in a yard or garden, and there will be an abundance of butterflies for all to watch and enjoy.

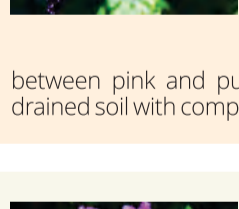
Three colors are available: pink, white and purple. Alternate between pink and purple to get the strongest effect. Well drained soil with compost is needed for this bush.



### TRUMPET VINE

Paint a splash of bold red color to enhance any landscape. Trumpet vines are loved by all, especially butterflies and hummingbirds.

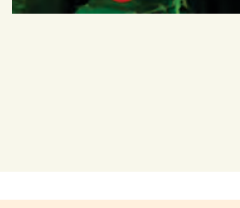
Full or partial sun, and any healthy soil will keep trumpet vines strong. They also require a support structure.



### AZALEAS

Yellow, white and one of the brightest magentas to ever grace the plant world, all in one flower that steals the show. Butterflies, bees, moths and hummingbirds will all be obsessed with this shrub, and it makes an excellent window plant; the foliage adds a beautiful, smooth green after flowering

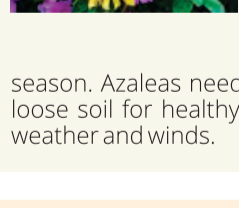
season. Azaleas need partial shade with dappled sunlight, loose, well drained roots, and a location free from cool weather and winds.



### BUTTONBUSH

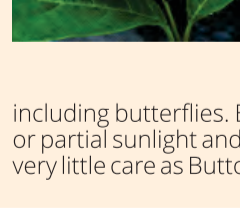
Adds a splash of white color to the garden. These are great plants for bees since bees do enjoy white blooms. Buttonbush forms a round cluster of flowers with the stems reaching out. This is a great shrub to use as cover for fences and windows, and a good sheltering plant for pollinators,

including butterflies. Buttonbush is not picky and enjoys full or partial sunlight and nice, wet soil. Other than that, there is very little care as Buttonbush tends to do its own thing.



### MEXICAN SUNFLOWER

Another plant in the family Asteraceae which Butterflies love. These single-loom flowers shine brightly, attracting Monarchs, Swallowtails, Skippers and many other butterflies with its vibrant vermilion hue. It is heat and drought tolerant and an excellent potting plant.



### BEE BALM

A magenta clustered flower, this plant attracts a wide array of pollinators. As its name suggests, bees will visit this magnificent plant for nectar, along with butterflies and even hummingbirds. Once it begins to seed, birds will visit Bee Balm for a snack.



### PANSY

Perfect for Spring and Fall, this small, flowering plant is a great addition to pollinator gardens because of its very bright colors, and the multitude of shades that it displays. Some are fully yellow, purple, or a mix of colors. They normally sit in the front row of a plant bed. Butterflies and bees are both drawn to yellow and purple flowers, so a large display of pansies is what they are on the lookout for. They are also edible to humans.

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There are plenty of other bushes, trees, shrubs and flowers that butterflies and other pollinators will find attractive. Many have a strong aroma, especially during spring and early summer. The plants listed above are available in plant and garden stores and are some of the most popular flowers for pollinators to visit. It is best to plant similar flowers and colors close together to enhance the aroma and color that pollinators sense, which will increase the effectiveness of the pollinator garden.

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