

Penn State Extension

Monarch butterflies make an epic journey, sometimes traveling over 3000 miles across North America to overwinter in mountainous forests in central Mexico.

Along the way they must make many stops to feed on flower nectar and find a shelter for the night.

A "Monarch Motel" or Waystation is a specially designed area of your garden that provides these necessary resources for monarchs to produce successive generations and sustain their journey to Mexico in the fall, as well as their return trip north in spring.

Good To Know...

Milkweed is a Must No Milkweed, No Monarchs

Plant a Butterfly Buffet
Plant your garden to
provide season long blooms

Avoid using pesticides
They kill more than just
"pests"!

Be a Good Host

If you want to keep butterflies in your garden, rather than just passing through, you need to include butterfly host plants. A host plant is a plant or family of plants unique to each species of butterfly that provide a place for butterflies to lay their eggs. Because tiny caterpillars cannot travel far to find their own food, these plants then become a food source for the emerging caterpillar.

Milkweed is a Must

Plants of the Asclepias genus, commonly known as Milkweed, are the host plants where monarchs lay their eggs. When young caterpillars eat the milky sap that gives milkweed its common name they build up a toxicity that makes them poisonous to birds. A bird that decides to take a nibble on a monarch caterpillar isn't likely to make the same mistake twice!

Design Considerations

Butterflies are attracted to bright colors, especially orange, yellow, red and purple. Because butterflies can't hover, they need a flower shape with a wide landing pad or clustered flowers for landing. They prefer to visit flowers in sunny patches, sheltered from the wind. If there is no natural shelter, you can plant a windscreen such as Spicebush, *Lindera benzoin*, that provides both food and shelter.

Plan for a Puddle

Have you ever noticed how butterflies gather on moist spots in a
garden? This is known as puddling.
Butterflies pull the moisture and
minerals they need out of the damp
soil - so be sure to
leave some bare
ground for this use.

Plant a Butterfly Buffet

Beautiful flowers aren't just a delight to human eyes. Bountiful blooms signal a rich banquet of nectar for butterflies as well. Plan to plant a season long buffet of flowers that bloom from early spring through late fall to provide a continuous food source for a wide variety of butterflies.

Take Six

To provide a banquet for Monarchs preparing for Fall migration, think about starting with a Milkweed species such as Swamp Milkeed Asclepias incarnata (1), a mid season nectar source such as Purple Coneflower Echinacea purpurea (2), late season nectar sources such as Goldenrod Solidago spp. (3) and Asters (4). Annuals such as Mariglolds, Cosmos, Mexican Sunflower Tithonia spp. (5), and Zinnias (6) fill in the gaps between blooming periods.

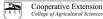
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Plant a Pollinator Paradise

Penn State Extension

1 out of every 3 bites of food we eat depend on pollinators...

...However, many of our pollinators including bees, butterflies, birds, and bats are suffering population declines due to loss of habitat and other environmental factors. Home gardeners may not think they can have much of an impact - but in fact, adopting a few easy practices can make even

a small garden a Pollinator Paradise!

Plan to plant a buffet of floral food sources that bloom throughout the season - starting in early spring through late fall - to provide a continuous food source for a wide variety of butterflies and other beneficial pollinators. —

Be a Good Host If you want to keep butterflies in your garden, rather than just passing through, you will need to include some **butterfly host plants**. A **host plant** is a plant or family of plants unique to each species of butterfly that provide a place for butterflies to lay their eggs and feed the caterpillars that emerge. Because tiny caterpillars cannot travel far to find their food, it's a good idea to plant these host plants in groupings or small drifts.

GOOD TO KNOW... Many more butterflies host on native trees and shrubs than they do on flowering plants. Trees and shrubs are also important early pollen and nectar sources for pollinators. Oak trees for example support over 500 species of Lepidoptera (butterflies and moths)!

SPRING

Plant early blooming nectar sources such as Golden Alexander *Zizia aurea*, Flowering Dogwood *Cornus spp.* and others.

SUMMER

Mid-season blooms such as Purple Coneflower *Echinacea pupurea* keep the food supply going.

FALL

Late season nectar sources such as Asters, and Goldenrod *Solidago spp*. provide and end of season energy boost, and valuable resources for migrating pollinators such as the Monarch Butterfly.

ANNUALS ALL SEASON

Annuals that bloom throughout the season fill in the gaps between spent blooms.

Small Steps that make a Big Difference

Avoid pesticide use wherever possible as it can be hazardous to pollinators. Leave **a patch of ground bare** for nesting bees such as Mason Bees. **Mud puddles** that form here will also allow butterflies and other pollinators to **absorb moisture and essential minerals** from the damp soil. **Leave garden cleanup until spring** to provide habitat and nesting materials for wildlife and beneficial pollinators.





For Butterflies...

Butterflies are attracted to bright colors, especially orange, yellow, red and purple. Because butterflies can't hover, they need a flower shape with a wide landing pad or clustered flowers for landing. They prefer to visit flowers in sunny patches, sheltered from the wind. If there is no natural shelter, you can plant a windscreen such as Spicebush, *Lindera benzoin*, that provides both food and shelter.



For Bees...

Bees cannot see the color red, but can see in the ultraviolet spectrum and are most attracted to darker colors. Bees love plants in the mint family *Lamiaceae*, and are attracted to the strong scent of plants such as Virginia Mountain Mint *Pycnanthemum virginianum*. Plants of the genus Eupatorium, such as Joe Pye Weed *E. dubium*, and Boneset *E. perfoliatum*, are highly attractive to a wide range of pollinators.

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