



MONARCH BUTTERFLY GARDENING

LOCATION

Plant your butterfly garden in a sunny location (5-6 hours each day) but sheltered from the winds. Butterflies need the sun to warm them as they cannot fly if it is cooler than 55 degrees. Also, they will not want to feed in an area where they are constantly fighting the wind to stay on the plants.

Butterflies need water just like we do. Consider placing a bird bath or fountain with water in your garden.

ABSOLUTELY DO NOT USE PESTICIDES, HERBICIDES, OR FUNGICIDES IN YOUR GARDEN!
They will kill your caterpillars.

Food for Monarch Butterflies

Butterflies use two different types of plants - those that provide nectar for the adults (nectar plants), and those that provide food for their caterpillars/larva called the host plant.



Caterpillars eating milkweed seed pods

Host Plant for Monarch Caterpillars – MILKWEED

It is recommended that you plant **NATIVE MILKWEED**. However, many people plant the non-native tropical milkweed as well. Researchers are continuing to evaluate its impact on the health of the western monarch population with equal number of researchers recommending its use as discouraging its use. **VERY IMPORTANT: If you do plant tropical milkweed (asclepias curassavica) , commit to PRUNE your plants to 6" to 10" stems and remove all leaves by late October every year to kill off the microscopic parasite O.e.** that, when left to accumulate beyond one year, can kill caterpillars and produce disabled monarchs that cannot survive. See www.tinyurl.com/pruningmilkweed
Additional planting note: Plant milkweed around the garden rather than all in one area. Monarch females like to fly around a garden, carefully picking where they lay their eggs, likely for the best egg survival rates.

Nectar Plants for Monarchs - Monarch butterflies drink nectar from a great many plants, including herbs. Try planting: Anise Hyssops, Milkweed, Lantana, Butterfly Bush, Aster, Coneflower, Coreopsis, Dianthus, Heliotrope, Lantana, Marigold, Pincushion (scabiosa), Sage (salvia), Verbena, Yarrow, Zinnia, Blue Cardinal Flower, Bloodflower, Globe Amaranth, Heath Aster, Mist Flower, Mustard Greens, New York Ironweed, Oriental Lilies, Coyote Mint, Star Clusters, Tithonia (Mexican Sun) and more. Excellent websites for nectar plant recommendations:

- www.tinyurl.com/nectarplantsformonarchs
- <http://pollinators.org/guides>
- <http://www.xerces.org/monarch-nectar-plants/>
- <http://www.monarchjointventure.org/> (About Monarchs)

THE CHRYSALIS and METAMORPHOSIS

The Monarch is a larva/caterpillar for two weeks, during which time it eats ravenously and grows 2500 times bigger than when it emerged from an egg laid on the milkweed plant. It will eat about 32 milkweed leaves during those two weeks. Expect your milkweed plant to be eaten up. It almost always will



grow back in 4 to 5 weeks. The larva then goes on a 24-hour trek to find the place to make its chrysalis. It rarely makes its chrysalis on the milkweed. Caterpillars can travel less than a foot away from the milkweed plant to 30 feet away or climb up a wall 10' high to make their chrysalids! They often make their chrysalids on the underside of plants and objects. Once they find the location for their chrysalis, they hang upside down in a 'J' for 24 to 48 hours before forming the chrysalis. The chrysalis is on the INSIDE of the caterpillar. It will shed its entire skin including feet, eyes, mouth, antenna to reveal the chrysalis.

THE BUTTERFLY EMERGES (ECLOSES) FROM THE CHRYSALIS

The chrysalis will harden in about 20 minutes and metamorphosis will go on for 2 weeks inside the chrysalis. The day the monarch butterfly will eclose (emerge/be born), the chrysalis will thin and look black and orange. You are seeing the butterfly inside! Wait and watch it emerge; it is stunning! When it first emerges from the chrysalis, the wings are curled and wet. Watch in the first 10 minutes as the wings fill with monarch meconium (blood) pumped from the bulbous black body into the veins of the wings. They will still be wet and flimsy for about 2 hours. The new butterfly must hang upside down undisturbed for a minimum of 2 hours for the wings to harden. When the butterfly opens and closes its wings, it will soon be ready to flit off into the sunshine.

LIFE CYCLE REVIEW for Western Monarchs

- Tiny white egg on the milkweed – 2 to 4 days to hatch
- Black, yellow, and white banded caterpillar on the milkweed – 2 weeks
- On a trek and hanging in a "J" just prior to making its chrysalis – 1-2 days
- In the bright green chrysalis for metamorphosis – 2 weeks
- Life as a glorious Monarch Butterfly – 3 to 6 weeks (monarchs born March thru October)
- Overwintering butterflies born in November will live 3 to 8 months, migrating and semi-hibernating.

ADDITIONAL RESOURCES

www.tinyurl.com/AllAboutMonarchs -Susie Vanderlip blog

www.monarchwatch.org

www.monarchjointventure.org

FACEBOOK – For regular posts on monarchs

Group: Monarch Butterfly Guardians - Southern California

VIDEOS OF MONARCH LIFE CYCLE by Susie Vanderlip

www.tinyurl.com/Lovemonarchs



THE STORY OF CHESTER, The Monarch Caterpillar/Larva

Author/Photographer: Susie Vanderlip

Photo storybook for children, ages 3 thru 10

Available at www.storyofchester.com

eBook on Amazon, Barnes & Noble, and iBookstore

Susie's Beautiful Photo Greeting Cards:

Also available at Pacific Ranch Market in Orange

