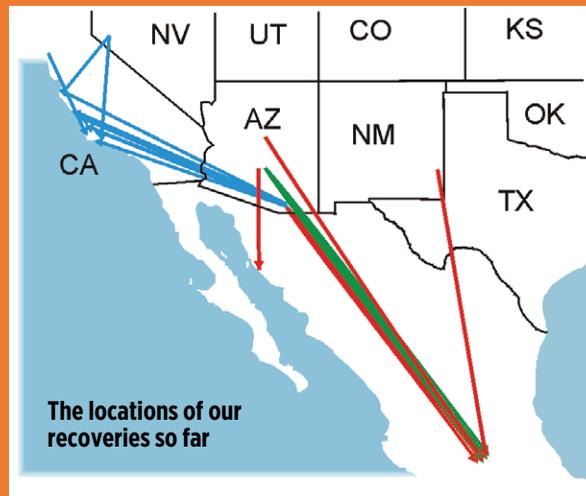


How To Participate



Southwest Monarch Study

Join Us!

The monarch butterfly is the jewel of the butterfly world and best known for its long range migration. The Southwest Monarch Study is studying the breeding patterns and migration destination of monarchs in the Southwestern United States including Arizona, Nevada, New Mexico, Utah, Western Colorado and the deserts of Southern California. As a Citizen Science study everyone is invited to participate. No effort is too small.

Tagging

Every fall monarchs begin their long migration journey to Mexico and California. Join in tagging monarchs to discover their migration destination. It only takes a single tag to get a recovery in Mexico or California. (A recovery is when a monarch you tagged is found in another location.) We never know who will find a new piece to the monarch migration puzzle!

Monitoring

Each spring monarchs leave their overwintering sites in Mexico and California and begin to breed across the Southwest. Some of these monarchs will stay in the higher elevations of the Southwest for the summer while others may continue to the northern tier of the United States and even Canada. You can help us learn when milkweed, the monarchs' only host plant, first appears in your area and when monarchs first arrive to lay eggs. By monitoring breeding habitats in nearby nature areas and your yard we can learn an important piece of the breeding pattern.

Testing

By testing monarchs in your area for OE (*Ophryocystis elektroscirrha*) we can learn more about the prevalence of this infection in the Southwest. This is easy to do and doesn't harm monarchs.

The Southwest Monarch Study is a 501(c)(3) non-profit Citizen Science organization. Visit us on-line for more information about creating monarch habitats, educational opportunities, conservation projects and research projects you can join. Your donations help keep tags and programs free to the public.

Thank you for your support!



In partnership with:



Southwest Monarch Study

www.swmonarchs.org

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Conserving the Migration in the Southwest

A Citizen-Science study dedicated to monarch butterfly research and conservation in the Southwestern United States

Like more information?

Email info@swmonarchs.org

www.swmonarchs.org
info@swmonarchs.org

Monarchs at Risk?

While the number of monarchs normally vary from year to year, the long term trend is downward. Researchers continue to study this decline and theories include the loss of habitat, increased use of insecticides and herbicides, roadside mowing, long term drought and weather extremes. Scientists have determined that the monarch migration is at risk. There will likely always be monarchs but the survival of their long range migration is of great concern.

Create a Monarch Habitat

Draw monarchs to your yard as well at schools, city parks, libraries, churches and public buildings. Here is what you need:

- Trees or tall shrubs for shelter, shade, a place to spend the night and protection from predators. Look for monarchs on the southeast side of trees, waiting to warm in the morning sun.
- Milkweed is the monarchs' only host plant. A host plant is where a butterfly lays their eggs. Plant several native milkweeds.
- Monarchs will lay eggs on milkweed before they are in bloom. Plant flowers that monarchs favor for nectar that bloom in the spring, summer and especially for the fall migration.
- During hot and dry weather monarchs in the Southwest will often be found puddling.

Native Milkweeds

Arizona

Lower Deserts

Desert (Rush) Milkweed, *Asclepias subulata*
Pine Needle Milkweed, *Asclepias linaria*
Arizona Milkweed, *Asclepias angustifolia*

Middle & High Elevations

Antelope Horns, *Asclepias asperula*
Butterflyweed, *Asclepias tuberosa*
Horsetail Milkweed, *Asclepias subverticillata*
Showy Milkweed, *Asclepias speciosa*

California (Southern Deserts)

Desert (Rush) Milkweed, *Asclepias subulata*
Desert Milkweed, *Asclepias erosa*

Monarch caterpillars on Desert (Rush) Milkweed



Colorado (Western)

Showy Milkweed, *Asclepias speciosa*
Horsetail Milkweed, *Asclepias subverticillata*
Antelope Horns, *Asclepias asperula*
Butterflyweed, *Asclepias tuberosa*

Nevada

Southern Nevada

Desert Milkweed, *Asclepias erosa*
Desert (Rush) Milkweed, *Asclepias subulata*
Antelope Horns, *Asclepias asperula*

Northern Nevada

Narrowleaf Milkweed, *Asclepias fascicularis*
Showy Milkweed, *Asclepias speciosa*

New Mexico

Showy Milkweed, *Asclepias speciosa*
Antelope Horns, *Asclepias asperula*
Horsetail Milkweed, *Asclepias subverticillata*
Butterflyweed, *Asclepias tuberosa*
Broadleaf Milkweed, *Asclepias latifolia*

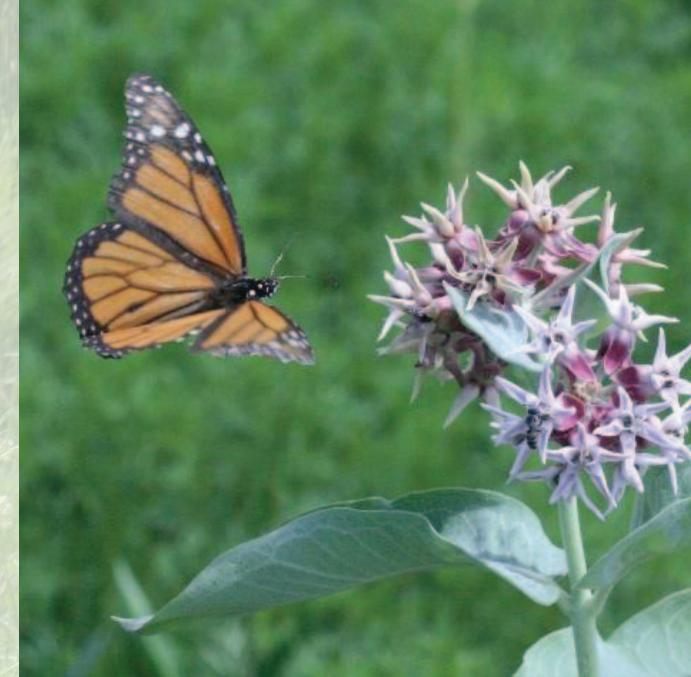
Utah

Northern Utah

Showy Milkweed, *Asclepias speciosa*
Antelope Horns, *Asclepias asperula*

Southern Utah

Showy Milkweed, *Asclepias speciosa*
Antelope Horns, *Asclepias asperula*
Horsetail Milkweed, *Asclepias subverticillata*
Butterflyweed, *Asclepias tuberosa*
Broadleaf Milkweed, *Asclepias latifolia*



Migration Nectar – Fuel for the Journey

In Fall monarch butterflies begin their long journey to the overwintering sites. Migrating monarchs are not breeding, instead they need rich nectar to fuel their long flight. Look for monarchs along rivers and streams. Plant pockets of Common Sunflower (*Helianthus annuus*), and trails of Rabbitbrush (*Ericameria spp.*), in their native range as well as Thistles (*Cirsium spp.*), Asters (*Aster spp.*), and Goldenrod (*Solidago spp.*).

In the lower deserts monarchs favor milkweeds still in bloom, Common Sunflower (*Helianthus annuus*), Tithonia, Asters (*Aster spp.*), Sweetbush (*Bebbia juncea*) and Desert Broom (*Baccharis sarothroides*) on their migration. They will also visit lantana, butterflybush, zinnias, cosmos and other garden specialties in home gardens.