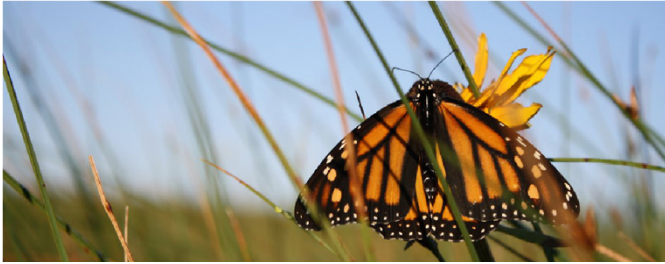




Restoring Habitat for Monarchs in Santa Barbara County

By creating habitat for monarchs using locally native nectar plants, gardeners can improve habitat for other species of butterflies and all other native insects, which form the base of the food chain upon which all wildlife depend.



The beloved Western monarch butterfly (*Danaus plexippus*) is experiencing a rapid population decline. In California alone, there were nearly 4.5 million monarchs just 30 years ago, while in January 2024 the Western Monarch Count recorded about 233,000 butterflies. Many factors have contributed to the decline, including use of pesticides and herbicides, increased wildfires, loss or deterioration of overwintering sites, loss of habitat and habitat fragmentation, and loss of milkweed (*Asclepias* sp.), which is necessary to monarchs for reproduction. There is no fast and easy way to restore the population of monarchs, but there are ways to help this iconic species survive.

Monarchs go through four life cycle stages: egg, caterpillar, chrysalis, and butterfly, and are famous for their long annual migration. Adult butterflies arrive at the coast in the fall and stay at overwintering sites on the coast where temperatures are warmer through winter. During this time the butterflies need to conserve their energy and are in a period of reproductive diapause. They use environmental cues, such as increased daylight time and warmer temperatures, to know when it is time to leave their overwintering grounds.

The Santa Barbara County population typically mate and disperse in late winter. The females fly off in search of milkweed, the only host plant on which monarchs can lay their eggs. Successive generations continue to travel north and east throughout the spring and summer. The butterflies that return to the coast in the fall are the third or fourth-generation descendants of the prior year's overwintering population.

To learn how you can best support overwintering Western monarchs in Santa Barbara County, first determine whether you live in an inland breeding area or a coastal overwintering area. It can be harmful to add milkweed to areas that are within 1 mile of coastal overwintering grounds because having milkweed near overwintering grounds may disrupt the period of reproductive diapause. During warm days in the winter monarchs fly to nectar sources and hydrate, so it is especially important to increase viable sources of nectar near overwintering grounds.

HOW YOU CAN HELP

If you live within 1 mile of coastal overwintering grounds:

- Plant native nectar plants, particularly those that bloom late fall, winter, and early spring
- Do not add milkweed to your garden

If you live more than 1 mile from coastal overwintering grounds:

- Plant native nectar plants
- Plant locally native species of milkweeds

The species of native milkweed that are most commonly found in Santa Barbara County are California milkweed (*Asclepias californica*), Indian milkweed and (*Asclepias eriocarpa*), and narrowleaf milkweed (*Asclepias fascicularis*); wooly milkweed (*Asclepias vestita*) and desert milkweed (*Asclepias erosa*) are also native to parts of the county. Please do not plant tropical milkweed (*Asclepias curassavica*) as this species commonly hosts a protozoan parasite that infects monarchs and disrupts migratory patterns. Most species of California native milkweed grow best in wet areas such as swales and ditches.



ALICE CASON

For additional information about habitat restoration in Marin, please contact Kristen Hopper, SPAWN Nursery Manager, at khopper@seaturtles.org. For more ways to help save Western monarchs visit Xerces' website: www.savewesternmonarchs.org.

LIST OF NATIVE NECTAR PLANTS FOR MONARCHS

One of the best ways to support Western monarch butterflies is to restore habitat by adding native nectar plants that support adult monarchs as they migrate through Santa Barbara County on their way to and from their overwintering grounds in the fall and spring. The following list of locally native fall and spring blooming plants are known to be nectar sources utilized by monarchs. Monarchs prefer large nectar-rich clusters of flowers, particularly those in the aster (Asteraceae) and mint (Lamiaceae) families. Please choose the nectar plants that are most appropriate for your plant community. Include native grasses in your garden to provide habitat to butterflies which will protect them from sun, wind, and predators. There is a knowledge gap as to which plants monarchs utilize for nectar during the winter. If you observe monarchs sipping nectar on native plants, please write to khopper@seaturtles.org and let us know which plants they prefer.

COASTAL & INLAND			
Seasons	Scientific Name	Common Name	Bloom time
Fall	<i>Baccharis glutinosa</i>	Saltmarsh baccharis	June - October
	<i>Baccharis pilularis</i>	Coyote brush	August - November
	<i>Epilobium canum</i>	California Fuchsia	July - October
	<i>Ericameria arborescens</i>	Goldenfleece	July - September
	<i>Ericameria ericoides</i>	Goldenbush	August - October
	<i>Eriogonum</i> sp.	Buckwheat sp.	April - October
	<i>Euthamia occidentalis</i>	Grass-leaved Goldenrod	August - October
	<i>Grindelia hirsutula</i>	Hairy gumplant	April - October
	<i>Helianthus</i> sp.	Sunflowers	June - September
	<i>Monardella villosa</i>	Coyote mint	June - October
	<i>Solidago confinis</i>	Southern goldenrod	April - October
	<i>Solidago velutina</i> ssp. <i>californica</i>	California goldenrod	July - October
	<i>Symphytrichum chilense</i>	California aster	July - October
	<i>Verbena lasiostachys</i>	Western vervain	April - September
Spring	<i>Actostaphylos</i> sp.	Manzanita	January - April
	<i>Ceanothus thyrsiflorus</i>	Blueblossom	March - June
	<i>Cirsium occidentale</i>	Western thistle	April - July
	<i>Ribes californicum</i>	Hillside gooseberry	January - March
	<i>Ribes sanguineum</i> ssp. <i>glutinosum</i>	Pink-flowering currant	January - March
	<i>Salix</i> species	Willows	February - March
COASTAL ONLY			
Fall	<i>Abronia latifolia</i>	Yellow sand verbena	February - October
	<i>Abronia umbellata</i>	Pink sand verbena	January - November
	<i>Grindelia stricta</i>	Pacific gumplant	April - October
	<i>Solidago spathulata</i>	Dune goldenrod	April - November
Spring	<i>Erigeron glaucus</i>	Seaside daisy	February - July
	<i>Ribes divaricatum</i>	Spreading Gooseberry	March - May
INLAND ONLY			
	<i>Asclepias californica</i>	California milkweed	April - July
	<i>Asclepias eriocarpa</i>	Indian milkweed	June - August
	<i>Asclepias erosa</i>	Desert milkweed	April - September
	<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	July - September
	<i>Asclepias vestita</i>	Woolly milkweed	April - July