Ventura County Pollinator-Friendly Landscaping Guidelines

A pollinator garden is a garden that supports a wide range of pollinating animals (insects, birds, or bats) with resources throughout the year. Pollinators have three basic habitat needs: a diversity of flowering native or naturalized plants (food), nesting or roosting sites (shelter) and water.

Milkweed and Monarchs



Tropical milkweed (Asclepias curassavica) can disrupt the Western monarch's migration cycle by allowing them to stay and breed throughout the winter. If you live within three miles of the coast, plant fall-, winter-, and spring-blooming native plants which provide nectar resources for monarchs and other pollinators.

When tropical milkweed remains year-round it fosters the transmission of the protozoan *Ophryocystis elektroscirrha (OE)*, which is a debilitating parasite to monarchs.

If you have tropical milkweed, it is especially important to keep it cut back from October-February to within 6" of the ground. It will be necessary to prune frequently (every 3 weeks) as it quickly re-grows. And make sure to remove any new plant growth at the base of the plant.

Replace your tropical milkweed gradually with native milkweed species such as narrowleaf milkweed (*Asclepias fascicularis*), Woollypod milkweed (*Asclepias eriocarpa*), or California milkweed (Asclepias californica).



Food for Pollinators

Pollinators need flowers all year long.

Different types of pollinators emerge from their nests at various times of the year and have timed their emergence with the bloom of native flowers. To encourage the greatest

numbers and diversity of pollinators, follow these basic principles:

- Plant a diversity of native plants (70% or more native plants within your planting palette is ideal) for pollinators. See the resource portion of this pamphlet for a list of native plants good for local pollinators. If planning a new landscape, consider retaining large mature native trees and shrubs that may already exist.
- Plan for a succession of flowers throughout the entire year, with at least three different types of plants that bloom during the same season. Include plants with different flower colors, sizes, shapes, and plant heights to attract a diversity of pollinators.
- If you select a cultivar or native hybrid, select species that have flowers that are as close to their original native form as possible.
- Plant your pollinator garden in a sunny site. Generally, plants will flower more and provide greater amounts of nectar and pollen when they receive more sunlight.
- \bullet Group flowers of the same kind in large drifts (minimum of 5 plants or $1 m^2$ in size) to attract and help pollinators efficiently forage.
- Provide water. Use bird baths, small sloped dishes, or create temporary puddles that allow pollinators to drink and extract minerals and salts from the soil. Be sure to monitor water sources as they can provide habitat for mosquito populations.

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Garden Maintenance for Pollinators

- When pruning, retain at least 18-inch stems on plants with pithy or hollow stems (e.g., elderberry, sumac, blackberry, wild rose) to support wood nesting pollinators.
- Maintenance activities in the garden should be avoided while plants are flowering.
- Leave a minimum of 25% of the plantings undisturbed during maintenance activities so that pollinators have shelter and resources.
- Avoid the use of pesticides or other toxic substances, particularly neonicotinoids (check the label). Neo-nicotinoids are absorbed by plants and can be present in pollen and nectar, making them toxic to pollinators.
- When the application of pesticides is absolutely required, apply them in the following manner:
 - Restrict application to the minimum dosage, least-toxic product and, to the maximum extent feasible, use substances that are biodegradable and derived from natural sources.
 - Remove flowering weeds in treatment area prior to spraying so pollinators are not attracted.
 - Avoid spraying midday or when wind is greater than five mph. Spray in early morning or evening when conditions are calm and not foggy.
 - Do not spray when rain is predicted within the next 48 hours. If rain does occur, do not spray until 48 hours after rain has stopped.
 - Do not apply chemicals when plants to be treated are in bloom.



Shelter For Pollinators

Wind Break: Bees and butterflies prefer sunny, open areas that are sheltered from prevailing winds. Windbreaks create warm 'micro-habitats'

within the garden for all pollinators. Hedges are better than fences at protecting gardens from wind. Use flowering hedges, or hedges of native hedgerow shrubs. If you use a fence, ensure it is a porous structure like slatted fences to buffer wind effectively. Solid structures create wind turbulence behind them. Strategically place wind buffers alongside plants that are flowering at that time of year. For example, plants that flower during the winter months should be buffered from the prevailing winter wind direction.

Nesting Habitat: There are several ways that your garden can provide nesting habitat for pollinators.

- Expose up to 5% of your landscape area as bare ground (no mulch or weed fabric) for ground nesting pollinators. Select sunny locations with well drained soils or leave 6-12 inches around the base of plants without mulch.
- Avoid tilling, flood-irrigating areas, or applying plastic or recycled material mulch on bare areas exhibiting signs of burrowing insects.
- Leave leaf litter on soils during winter months.
- Incorporate shrubs with hollow stems (e.g., elderberry, sumac, raspberry blackberry, wild roses) in your landscape. Alternatively, appropriately place artificial tunnel nests for pollinators.
- Allow snags and dead trees to stand, so long as they do not pose a risk to property or people.
- Provide native host plants for butterflies or moths. Ideally provide at least 5 host plants for landscapes greater than 5500 ft² and a minimum of 3 host plants for smaller landscapes. See resource section for Ventura host plant lists.
- Incorporate different canopy layers by planting trees, shrubs, and different sized perennial plants for roosting, nesting, and protection against weather and predators.

Additional Resources for Pollinator-Friendly Gardening

*Website links were collected 1/2021

Pollinator Garden Design

Calscape, California Native Plant Gardening Guide: https://calscape.org/planting-quide.php

California Native Plant Society, Native Planting Guides: https://www.cnps.org/gardening/choosing-your-plants/native-planting-guides
Audubon Society, Bird-Friendly Yards: https://www.audubon.org/news/how-make-your-yard-bird-friendly-0

Pollinator and Host Plants for Ventura County

Xerces Society, Plant lists for California and Southern Coast: https://xerces.org/publications/plant-lists

Calscape, California Native Plant Society: https://calscape.org

Audubon Society, Native Plants Database: https://www.audubon.org/native-plants

Nesting and Overwintering Habitat

Xerces Society: https://xerces.org/sites/default/files/publications/18-014.pdf

Tips to Protect Pollinators from Pesticides

Xerces: https://xerces.org/sites/default/files/2019-10/16-024 01 XercesSoc Guidance-to-Protect-Habitat-from-Pesticides web.pdf

California Pollinator Identification

UC Berkeley Urban Bee Lab: http://www.helpabee.org/common-bee-groups-of-ca.html
Calscape, Butterflies and Moths: https://calscape.org/loc-/cat-Lep/ord-popular?srchcr=sc5ef3ba3058a1f
Owlcation, Caterpillar Identification Guide: https://owlcation.com/stem/caterpillar-identification-2

