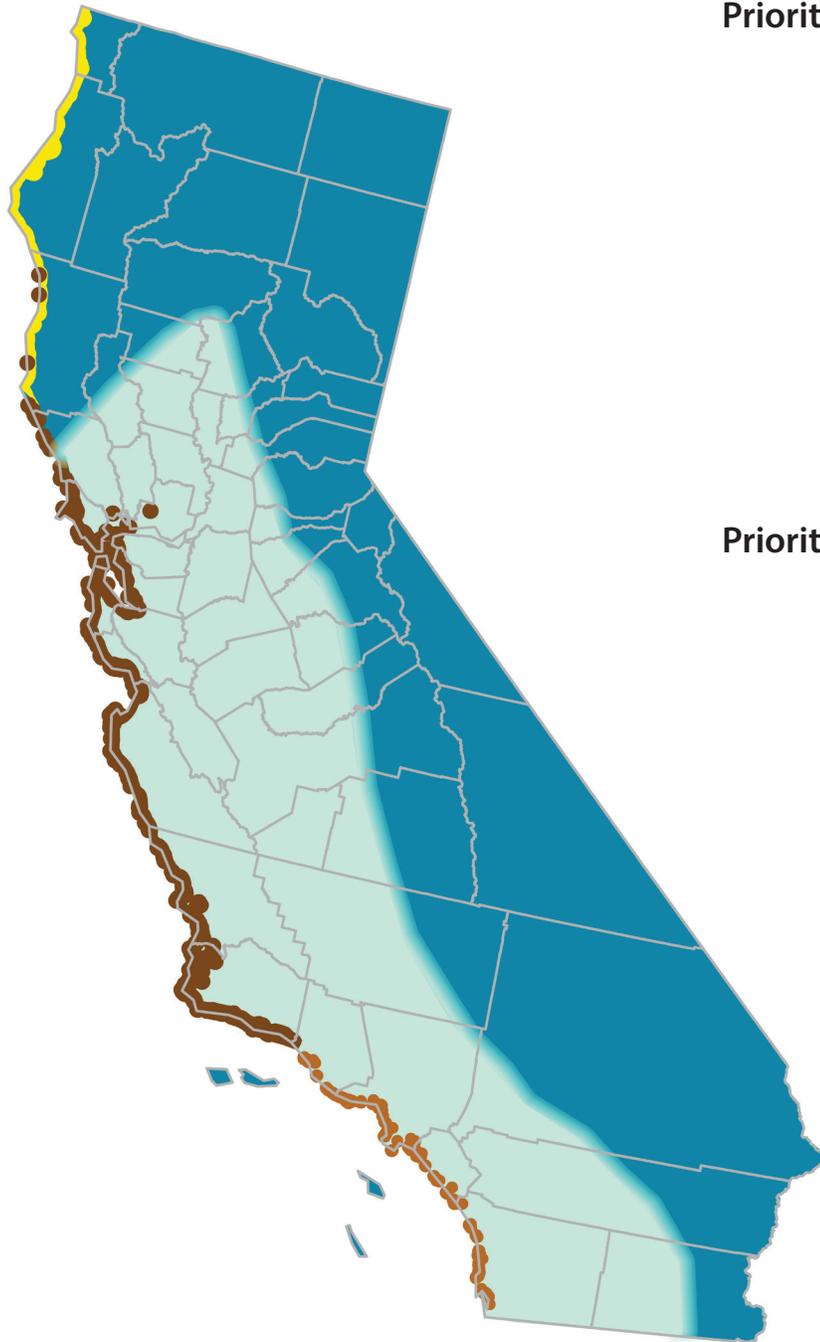


Priority Action Zones in California for Recovering Western Monarchs



Priority #1



Early breeding zone: Protect and plant pesticide-free early season native milkweed and nectar plants.



Central coast areas where monarchs overwinter: Protect and restore overwintering habitat and plant pesticide-free native nectar plants. Avoid planting milkweed within 5 miles of the coast.

Priority #2



South coast areas where monarchs overwinter: Protect and restore overwintering habitat and plant pesticide-free native nectar plants. Avoid planting milkweed within 1 mile of the coast.



North coast areas where monarchs do not overwinter: Plant pesticide-free native nectar plants.



Summer breeding zone: Identify and protect existing native milkweed and nectar plants. Plant pesticide-free native milkweed and nectar plants.

— County boundaries

Priority Restoration Zones in California for Recovering Western Monarchs

The western monarch population is at a critically low level. Work to improve monarch habitat in California is more important than ever.

Two of the highest priority actions that can be taken are:

- ↪ Protecting and restoring overwintering sites (found in the brown zones on the map) and
- ↪ Protecting and planting pesticide-free early season milkweed and nectar plants in the early season breeding area, the region where the first generation of monarchs go after leaving overwintering sites (shown in pale blue on the map).

Notes on Milkweeds and Overwintering Sites

Early season milkweed species include California milkweed (*Asclepias californica*), heartleaf milkweed (*A. cordifolia*), woollypod milkweed (*A. eriocarpa*), desert milkweed (*A. erosa*), and woolly milkweed (*A. vestita*). These species each have specific habitat associations and should be planted within their natural range using local plant materials. To see where these milkweeds occur and to determine where to plant them, consult the milkweed range maps available at:

- ↪ Western Monarch Milkweed Mapper, www.monarchmilkweedmapper.org/app/#/taxon/list
- ↪ CalFlora, www.calflora.org, or
- ↪ Milkweeds of California (fact sheet), xerces.org/publications/fact-sheets/roadside-habitat-for-monarchs-milkweeds-of-california.

To find local milkweed seeds or plants, consult the Xerces Society's Milkweed Seed Finder (xerces.org/milkweed/milkweed-seed-finder).

Avoid planting tropical milkweed (*A. curassavica*). Remove and replace tropical milkweed with monarch nectar plants or early spring milkweed species where appropriate. Why? Tropical milkweed remains evergreen through the winter and allows for the monarch disease *Ophryocystis elektroscirrha* (or OE, for short) to build up on the plant over time. OE reduces reproductive success and overall fitness of monarchs. Tropical milkweed can also interfere with monarch migration and reproduction.

To determine what nectar plants to protect and plant, consult this list of Monarch Nectar Plants for California (xerces.org/publications/plant-lists/monarch-nectar-plants-california).

To identify existing monarch breeding habitat that should be protected, find milkweed and monarch records using the Western Monarch Milkweed Mapper (www.monarchmilkweedmapper.org), an online community-science database of monarch and milkweed records in the western United States.

To determine what time of year to implement management actions such as mowing, burning, or grazing and when such actions will be least likely to impact monarchs, consult this guide to Timing Management in Monarch Breeding Habitat (xerces.org/publications/guidelines/timing-management-in-monarch-breeding-habitat).

To identify existing overwintering habitat, consult the map on the Western Monarch Count website (www.westernmonarchcount.org/find-an-overwintering-site-near-you/).