

Protecting Monarch Groves

Conserving Coastal Habitats of the Western Monarch Butterfly

Our goal is to foster stewardship of western monarchs and the overwintering groves on which they rely.

We will gather information on the location and condition of groves and develop guidelines for their management.



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The coast groves in California where monarchs cluster for the winter are a vital link in the butterfly's annual cycle.

The monarch butterfly is unique among insects for its long-distance seasonal migration and its spectacular winter gatherings. The California coast is the only place in the United States that hosts the awe-inspiring sight of monarchs gathering, often by the thousands. Here select tree groves provide the necessary shelter for the butterflies to overwinter, creating a unique feature of the coastal ecology.

However, the future of this phenomenon is threatened. Since 1997, annual Thanksgiving counts of overwintering monarchs have been conducted by volunteers. These counts show a nearly 90% drop in the

number of butterflies returning to their historic overwintering sites.

For example, at Natural Bridges State Beach near Santa Cruz, the number of butterflies gathering each winter dropped from an estimated 120,000 in 1997 to just 1,300 in 2009. Other areas have followed a similar trend, with only a handful of monarchs returning to sites that historically hosted tens of thousands of butterflies. These declines highlight the need to gain a clear understanding of the status of these monarchs and their habitat, and to take appropriate conservation actions.

Our goal: To foster stewardship of western monarchs and their vital overwintering habitats.

The Xerces Society is working with the Monarch Joint Venture, a coalition of federal and state agencies, scientists, and nonprofit conservation organizations that are coordinating efforts to conserve monarchs across

the United States. With the support of these partners, we are engaging citizens and land managers to protect and restore essential habitat for western monarch populations.

Partnership for Monarchs

This work is funded in part through the support of the Monarch Joint Venture, the Hind Foundation, the Strong Foundation, and Xerces Society members.

For more information about this work, please feel free to contact Scott Black, Xerces Society executive director, at 503-232 6639 or sblack@xerces.org.

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The Xerces Society
for Invertebrate
Conservation

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Our Strategies to Protect California's Monarch Groves

1 Assess current conditions of overwintering sites and compile all available information.

Up-to-date information on monarch overwintering site location and population status and trends is vital for land managers and conservationists to prioritize actions for protection and management of monarch overwintering sites. The Xerces Society has conducted a literature review and is working with key monarch researchers, conservationists, and staff from state and federal agencies to compile all sources of geographic and status information into a single, easily useable database. We are also creating new layers of spatial information, so that maps of all overwintering sites can be housed in a single location. Once complete, this resource will enable conservationists to identify gaps in information and prioritize sites for conservation attention.

2 Develop and distribute management guidelines to assist land managers in protecting monarch overwintering groves.

We are working with key western monarch researchers to develop a set of up-to-date management guidelines for overwintering sites, providing valuable advice for managers working to maintain and restore the butterflies' important habitat areas. These guidelines will address specific active management techniques and provide recommendations on monarch reserve design and management. Once complete, they will be distributed to overwintering site managers.

3 Complete a review of laws regulating management of overwintering sites.

We are working with lawyers and law students at the Lewis & Clark Law School to complete an analysis of the patchwork of city, state, and federal laws that apply to monarch overwintering sites, providing a needed resource to understand this network of statutes. This analysis will clarify the legality of a variety of ongoing monarch site management activities. This review will also highlight where regulations and policies could be changed to better protect overwintering sites and will point out where municipalities have successfully implemented monarch conservation legislation.

4 Develop a habitat assessment protocol to better understand the threats to monarch overwintering sites.

In year two of this project, we will work with monarch researchers to identify critical habitat attributes, and to create and pilot test an easy-to-use habitat assessment tool for overwintering sites. Once complete, we will train Xerces Thanksgiving count volunteers to use this standardized protocol to assess the quality of the overwintering sites they visit. This will enable monitoring of overwintering sites from year to year using a pre-existing volunteer workforce. The results of their assessments will allow individuals to prioritize monarch overwintering sites for conservation attention.

5 Conduct targeted outreach.

We are reaching out to a wide variety of audiences—from citizens to federal agencies—in person and through print, online, and key media outlets, broadening our audience and building support for conserving monarch overwintering sites.