

Xerces Monarch and Pollinator Kits: California

Thanks for your interest in creating habitat for Monarchs and other pollinators in California. This handout is intended to accompany the Interest Form (<https://forms.gle/PRY2wyg7AZm11Dkb8>), in order to provide you with more information about the kits. Please read it over carefully before completing your form. If you have questions, please email us at: centralvalleypollinators@xerces.org. You can also find more information about our Habitat Kit Program on our website: (<https://xerces.org/pollinator-conservation/habitat-kits>).

Many insect pollinators are declining in California, including bees and butterflies. The Western monarch population has declined 99.9% since the 1980s, likely due to multiple factors including habitat loss and degradation, pesticides, and climate change. One important step we can take to protect these important animals is to increase the amount of habitat available to these species. To this end, The Xerces Society is offering habitat kits that contain climate-smart native plants to project partners who are willing to provide the time, labor and land to develop habitats that support monarchs and other pollinators in California.

This year, we are offering several different kit types. Please take a minute to look through the different kit descriptions as well as the associated geographic regions, so you can determine which kit would be most appropriate for your project.

Kits available for the Sacramento Valley, the San Joaquin Valley, the Central Coast and Coastal Foothills, and the Sierra Nevada Foothills include (pick-up in Lockeford, CA):

Wildflower Grassland Kit. This kit contains 1600 small herbaceous transplants ('plugs'), including milkweed and other plants used by monarchs and pollinators, as well as some native grass seed. Each kit will cover ~0.3 acre if planted on 3 ft. spacing. Minimum order of 1 kit / project. Additional kits can be requested for larger projects.

Hedgerow Kit. This kit contains 17 woody and herbaceous transplants (including milkweed), which will provide 100 ft of hedgerow when planted on 6 ft spacing. Minimum order of 5 kits / project. Additional kits can be requested for larger projects.

Riparian Wildflower Kit. This kit contains 1600 small transplants ('plugs'), including milkweed and other plants used by monarchs and pollinators, and native grass seed. This kit contains plants that do well in riparian areas and can tolerate some seasonal flooding. Each kit will cover ~0.3 acre if planted on 3 ft. spacing. Minimum order of 1 kit / project. Additional kits can be requested for larger projects.

Riparian Hedgerow Kit. This kit contains 17 woody and herbaceous transplants (including milkweed), which will provide 100 ft of linear habitat when planted at 6 ft intervals. This kit contains plants that do well in riparian areas and can tolerate some seasonal flooding. Minimum order of 5 kits / project. Additional kits can be requested for larger projects.

Kits available for Southern California (pick-up in Valley Center, CA):

Southern California Kit. This kit contains 32 plants, including 4 shrubs, 8 milkweed plants, and a mix of native grasses and forbs. Each kit will cover ~300 ft². Minimum order of 3 kits / project. Additional kits can be requested for larger projects.

Please note that we are not able to provide partial kits, or smaller quantities per project than listed above. If applying for kits for multiple projects, please fill out a separate application for each project.

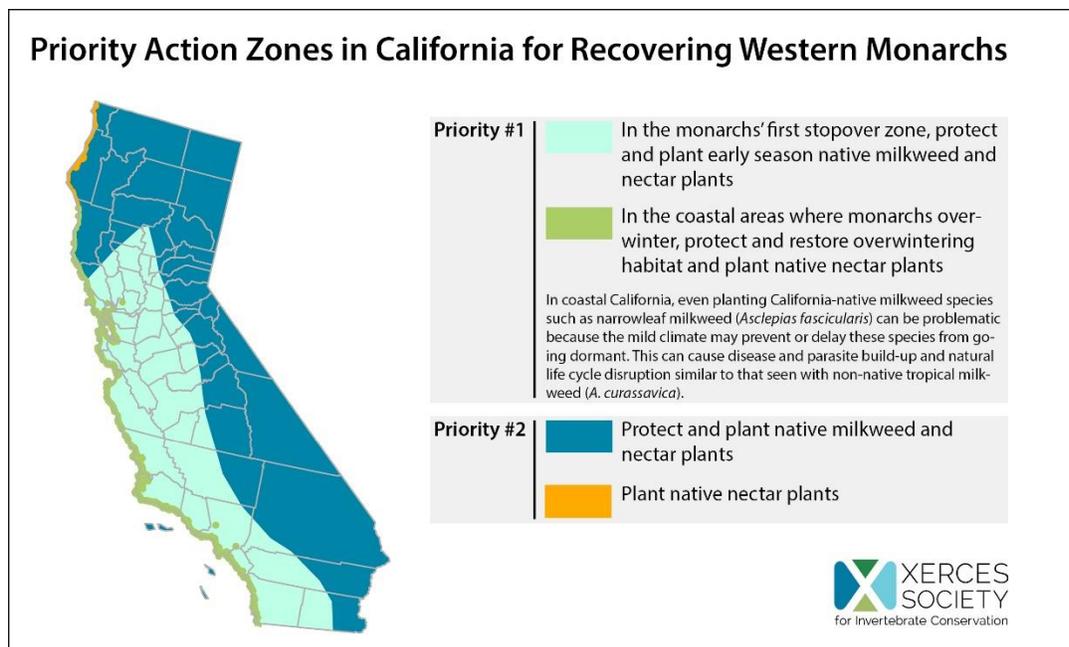
A note to our RCD partners: Xerces will be counting these acres as part of our Wildlife Conservation Board (WCB) grant deliverables, therefore, RCD's receiving these kits will not be able to count acres for their own WCB deliverables.

Who are the kits for?

Kits are intended to be used to create or enhance monarch and pollinator habitat on working lands or public lands, with landowner or land manager collaboration. *The kits are not intended to be used in home gardens.* We have kits available for the Central Valley, Sierra Nevada Foothills, Central Coast and Coastal Foothills, or Southern California (see map on last page). We particularly encourage kits from the Priority 1 Monarch Conservation Area, as habitat restoration work in this region should be especially beneficial to monarchs. However, projects in the Priority 2 area will be considered as well. Participants must be able to use the entire kit/ minimum order in one project but it can be divided up within the area. For example, several plantings within one county park, or several areas on a farm or ranch.

We encourage private landowners of working lands to partner with their local Resource Conservation District (RCD) on their projects.

If you have questions about your project's suitability or requests for technical guidance on your project, please email us at: centralvalleypollinators@xerces.org



If you are interested in receiving a kit(s), please complete the interest form by EOD April 30, 2021. Partners will be notified by June 1, 2021 if they will be receiving a kit. Kits will be available for pick-up in late October/early November of 2021.

Please note that you are responsible for picking up your kit(s) when ready in Oct/Nov.

- The Wildflower Grassland Kit, Hedgerow Kit, Riparian Wildflower Kit, and Riparian Hedgerow Kits must be picked up from the USDA Plant Materials Center in Lockeford, CA.
- The Southern California Kits must be picked up from Moosa Creek Nursery in Valley Center, CA.

What's in the kits? Below are the species lists, region information and additional technical information for each kit. Exact species and numbers are dependent on nursery availability and may change.

Kits that are within 5 miles of the coast will not include milkweed, but will have the same total number of plants. For more information on why planting milkweed near the coast is not recommended, please see <https://monarchjointventure.org/resources/faq/i-live-near-the-california-overwintering-grounds.-should-i-be-planting-milk>.

Table 1. Tentative plant list for Hedgerow kits and Riparian Hedgerow Kits (pick-up in Lockeford, CA). Kits within 5 miles of the coast will not contain milkweed. Exact species composition dependent on nursery availability. Most species will be included as tree-band sized transplants.

Plant Species # rhizomes; all others transplants	Riparian Hedgerow Kit: Sacramento Valley/Central Coast/Sierra Foothills	Riparian Hedgerow Kit: San Joaquin Valley	Hedgerow kit: Sacramento Valley	Hedgerow kit: and Joaquin Valley	Hedgerow kit: Central Coast/Sierra Foothills
Indian hemp (<i>Apocynum cannabinum</i>)	X	X	X	X	X
Manzanita (<i>Arctostaphylos densiflora</i> McMinn)			X	X	X
Indian milkweed (<i>Asclepias eriocarpa</i>)					X
Narrowleaf milkweed (<i>Asclepias fascicularis</i>)	X	X	X	X	X
Showy milkweed# (<i>Asclepias speciosa</i>)	X		X		X

Coyotebrush (<i>Baccharis pilularis</i>)			X	X	X
Mulesfat (<i>Baccharis salilicifolia</i>)	X	X			
California lilac (<i>Ceanothus</i> 'Concha' or 'Frosty Blue')			X	X	X
Buttonbush (<i>Cephalanthus occidentalis</i>)	X	X			
California buckwheat (<i>Eriogonum fasciculatum</i>)			X	X	X
Toyon (<i>Heteromeles arbutifolia</i>)			X	X	X
Deer grass (<i>Muhlenbergia rigens</i>)	X				
Hollyleaf cherry (<i>Prunus ilicifolia</i>)					X
Golden currant (<i>Ribes aureum</i>)	X	X			
Arroyo / Sandbar willow (<i>Salix lasiolepis</i> or <i>exigua</i>)	X	X			
Goldenrod (<i>Solidago velutina</i> ssp. <i>californica</i>)	X	X	X	X	X
Purple needlegrass (<i>Stipa pulchra</i>)			X		X
Alkali sacaton (<i>Sporobolus airoides</i>)		X		X	
Pacific aster (<i>Symphyotricum chilense</i>)	X	X	X	X	X

Table 2. Tentative plant list for the Wildflower Grassland Kit and Riparian Wildflower Kits (pick-up in Lockeford, CA). Kits within 5 miles of the coast will not contain milkweed. Kits that include showy milkweed will receive rhizomes of that species. All other species will be included as transplants. Exact species composition dependent on nursery availability.

Plant Species *seed, # rhizomes; all others transplants	Wildflower Grassland Kit: Sacramento Valley	Wildflower Grassland Kit: San Joaquin Valley	Wildflower Grassland Kit: Central Coast/Sierra Foothills	Riparian Wildflower Kit: Sacramento Valley/ Central Coast/Sierra Foothills	Riparian Wildflower Kit: San Joaquin Valley
Yarrow (<i>Achillea millefolium</i>)	X	X			
Indian milkweed (<i>Asclepias eriocarpa</i>)			X		
Narrowleaf milkweed (<i>Asclepias fascicularis</i>)	X	X	X	X	X
Showy milkweed# (<i>Asclepias speciosa</i>)	X		X	X	
Bur marigold (<i>Bidens laevis</i>)				X	X
Western goldenrod (<i>Euthamia occidentalis</i>)				X	X
Red fescue* (<i>Festuca rubra</i>)				X	
Coyote mint (<i>Monardella villosa</i>)			X		
California phacelia (<i>Phacelia californica</i>)	X	X	X		
Goldenrod (<i>Solidago velutina</i> ssp. <i>californica</i>)	X	X	X	X	X
Purple needlegrass* (<i>Stipa pulchra</i>)	X		X		

Alkali sacaton* (<i>Sporobolus airoides</i>)		X			X
Pacific aster (<i>Symphyotricum chilense</i>)	X	X	X	X	X
Western vervain (<i>Verbena lasiostachys</i>)	X	X	X	X	X

Table 3. Tentative plant list for the Southern California Kits (pick-up in Valley Center, CA). Kits within 5 miles of the coast (1 mile south of Santa Barbara) will not contain milkweed. All other species will be included as transplants. Exact species composition dependent on nursery availability.

Common Name	Scientific Name
Narrow leaf milkweed	<i>Asclepias fascicularis</i>
Indian milkweed	<i>Asclepias eriocarpa</i>
McMinn manzanita	<i>Arctostaphylos densiflora</i> 'Howard McMinn'
California lilac	<i>Ceanothus</i> 'Skylark' / 'Wheeler Canyon'
Buckwheat	<i>Eriogonum fasciculatum</i>
Coast sunflower	<i>Encelia californica</i>
Deerweed	<i>Lotus scoparius</i>
Bush monkeyflower	<i>Mimulus aurantiacus</i> / <i>puniceus</i>
Willow leaf monardella	<i>Monardella linoides</i>
Black sage	<i>Salvia mellifera</i>
Purple needle grass	<i>Stipa pulchra</i>

Figure 1. Kit Regions and pick-up locations for the California Habitat Kits

