



MONARCH
JOINT VENTURE

Gardening for Monarchs



The Importance of Monarch Conservation: The monarch butterfly is a flagship for broader conservation issues. With a tremendous geographic range and amazing migration, monarchs draw attention from all over North America. By protecting the habitats that monarchs use, many other plants and animals benefit.

Habitat Needs

Habitat conservation can start in your backyard. Planting a butterfly garden with milkweed and other wildflowers provides a haven for monarchs and other pollinators to thrive! Good monarch habitat must meet the needs of all four monarch life stages (egg, larva, pupa, adult). Female monarchs lay eggs on milkweed host plants because their caterpillars only eat milkweed leaves. Once the caterpillar is fully developed, it often leaves the host plant to find a safe place to pupate, or form its chrysalis. After the adult butterfly emerges, it drinks nectar from a variety of flowering plants. As monarchs migrate, they need nectar plants to fuel their long flight and store fats, or lipids, to survive the winter. Monarch-friendly gardens should contain a diverse set of wildflower species, including milkweed, to support both breeding and migration. We strongly encourage the planting of native species over non-natives (such as tropical milkweed) in areas near the overwintering sites in California, or in the southern U.S. where it can persist year-round.

Picking a site

- **Choose a sunny spot.** Many native grassland plant species prefer full sun, and butterflies use sunlight to warm up. Add rocks to create basking areas for butterflies. Modifications can be made for shady areas.
- **Include windbreaks.** Butterflies are lightweight, so providing a wind break helps them feed or lay eggs more efficiently. A fence, shrub or wall can be a wind-break and can also be a good place for a monarch to pupate.
- **Prepare the soil.** Remove lawn or other unwanted plant cover, and rake or lightly till the soil to prepare it for planting. Bring in more soil if needed.
- **Take note of your soil type and moisture.** If you know the soil type, research it or talk to your local nursery to get recommendations for those conditions. Minimally, assess overall moisture in the soil and adjust your plant selections accordingly.
- **Include woody structures and vegetation.** Brush and wood piles, as well as woody plants, provide key overwintering and nesting habitat for a wide variety of insects. Keeping old plant stems in your habitat provides habitat for stem-nesting bees.



Pollinator habitat with MJV signage



Marking out a habitat project before planting the plugs



Monarch butterfly nectaring on New England Aster



Stem nesting small carpenter bees



Planning a Garden to Provide for Monarchs and Other Pollinators

Plan and Visualize. First, assess soil type and moisture to determine what plants may grow best at your site. Consider what soil preparations and equipment are needed. Then, draw a map of your site to determine placement and number of plants needed. Grouping plants by species can provide large splashes of color that are attractive to pollinators. It is best to have the tallest plants towards the back. Make sure you add in any other desired features like a water feature, path, or bench!



Purchase native plants. Native plants are those that occur naturally in a particular ecoregion, and will thrive in those specific conditions. It is important to select a variety of plants with diverse bloom times, from early spring through late fall. The MJV Milkweed and Wildflower Vendor Map can help locate nurseries near you.



Decide: plants or seeds? Potted plants or plugs are effective for small garden areas or enhancing an existing garden. Young plants may require extra care in year one. Since the roots are well-formed, blooms may be present in the first year. Seeds are cost-effective and work well for large areas, but it will take longer (1-2+ years) for the site to flourish. A combination of plants and seeds may be a good option.

- Plants or plugs:** Dig a hole just large enough for the root mass, place it in the hole, and fill the empty spaces with soil. Lightly pack, and then water well. You can add mulch around the plants to retain moisture and prevent weed growth.
- Seeds** Native seeds only need to be lightly raked in or shallowly planted, ensuring direct seed-to-soil contact. In some regions, native species require cold, moist stratification, or exposure to winter-like conditions, so planting or spreading seed in the late fall or winter helps ensure germination.



Watering Newly planted prairie plants need regular moisture to establish their root systems. Water regularly in dry conditions, at least for the first few months after planting. Once established, most native plant gardens do not need regular watering.

Weed control Weeding helps reduce competition with native species and keeps noxious and invasive species away. It is best to remove weeds manually, but spot treatment with herbicides may be necessary for problem areas or species.

Share Registering the new garden site helps map conservation projects, and showcasing the habitat with signage provides education. More information on pollinator habitat certification programs can be found on our website. Observe the garden's progress and share observations to community science programs and community members.

More Tips for a Thriving Garden

- Select seed sources that originate close to the area where you want to plant.
- Avoid plants that are treated with systemic insecticides.
- Select plants that bloom throughout the growing season & aim for species diversity with a variety of flower structures, sizes, and colors.
- Include larval host plants for other butterflies and moths, and don't forget the milkweed!
- Provide winter shelters for insects by leaving plant stalks, bare soil, leaves, and dead trees/wood piles.
- Red, orange, yellow, and purple flowers are pollinator favorites.