

# Best Management Practices

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Monarch Habitat in Your Backyard





Monarch butterflies are a ubiquitous sight in natural areas throughout the United States. Perhaps the most well-known and beloved butterfly in North America, the monarch is renowned for their seasonal migration that spans thousands of miles. The monarch is a harbinger of spring, but populations have declined over 90% in the past two decades. Monarchs cannot survive without milkweed. Their caterpillars eat milkweed as they grow, and milkweed is the only host plant on which female monarchs will lay eggs. Without milkweed, monarchs are unable to complete their life cycle, and populations continue to diminish as a result.

The Missourians for Monarchs Collaborative understands this important issue, and the following is a list of Best Management Practices (BMPs) that can help integrate quality pollinator habitat into everyday life as a homeowner. Missourians for Monarchs also realizes that not all of these BMPs will work for everyone, but it is our intent to offer multiple practices to help homeowners create a space that works for them.

One of the most important things you can do to help monarchs is planting milkweed. This can be done in your backyard, or you can even organize an effort with your local elementary school and other public spaces to integrate milkweed into their landscaping.

You should always have a plan to sustain a monarch habitat area. First, determine if your site has good soil drainage. Milkweed and other nectar plants can be established in wet soil and dry soil conditions, but you must choose species accordingly. Specific actions you take will depend on the features of your habitat; however, some general examples include mulching, thinning, fertilizing, amending the soil, removing dead stalks, watering, eliminating insecticide use, removing invasive plant species, etc.

The following pages will provide specific information about size, site exposure, drainage, soil type, shelter and food aspects of monarch habitat. For more information on matching site selection and species in MO, visit Missourians for Monarchs' partner Grow Native! at [www.grownative.org](http://www.grownative.org).



*Information provided in part by Missouri Department of Conservation and Monarch Watch. Contact Monarch Watch to find out how to be certified as a Monarch Waystation.*



Following these BMPs can help improve your property for monarchs, pollinators and other grassland dependent wildlife like quail and grassland songbirds while improving water quality and holding soil in place. If you would like to discuss your plans with a resource professional, please contact your...

local Private Lands Services biologist with the Missouri Department of Conservation:  
<https://mdc.mo.gov/regional-contacts?county=103&=Go>

Your local county Natural Resources Conservation Service Field Office:  
<https://www.nrcs.usda.gov/wps/portal/nrcs/site/mo/home/>

Your local U.S. Fish and Wildlife Service Missouri Private Lands Office:  
<https://www.fws.gov/midwest/partners/index.html>;

Your local Soil and Water Conservation District Office:  
<https://mosoilandwater.land/> for assistance from a resource professional.

# Habitat Requirements

## ***Size***

Suitable monarch habitat can be easily integrated into an existing flower garden. There is no minimum area requirement for your habitat; however, a truly effective monarch habitat will be at least 100 square feet. The total area may be split among several sites at your location and there is no upper limit for the size of a monarch habitat.

## ***Exposure***

Monarch plants need lots of sun; therefore, monarch habitats need to be located in an area that receives at least six hours of sun a day. Always check the shade tolerance of plants you include in your garden.

## ***Drainage & soil type***

Milkweeds and nectar plants will do best in relatively light (low-clay) soils. Good drainage helps avoid root rot and provides good aeration of the roots. Areas with poor drainage may need more tolerant species such as a swamp milkweed and New England aster.

## ***Shelter***

All monarch life stages need shelter from predators and the elements. To assure that the maximum number of monarchs survive in your habitat, the plants should be relatively close together. However, they should not be crowded – be sure to follow the planting recommendations specific to each plant.

## ***Food - Nectar plants***

Monarchs need nectar. By providing nectar sources that bloom sequentially, your garden can provide resources for monarchs throughout the breeding season and the migration. A monarch habitat should contain at least four biennial or perennial native plants that provide nectar for butterflies.

## ***Minimum requirements***

- 100 square feet
- 10 milkweed plants of two or more species; plant more than 10 plants if only planting one species of milkweed
- Four biennial or perennial native species for nectar



# Milkweed

To maximize the utilization of your habitat by monarchs, include a number of milkweed species. It is best to have at least 10 plants, made up of two or more species; however, a large number of plants (more than 10) of one species is sufficient. Milkweed of different species mature and flower at different times during the season. By increasing the number of milkweed species in your habitat, you increase the likelihood that monarchs will utilize your property for a longer period during the breeding season.



Common milkweed  
*Asclepias syriaca*



Purple milkweed  
*Asclepias purpurascens*



Butterfly milkweed  
*Asclepias tuberosa*



Swamp milkweed  
*Asclepias incarnata*

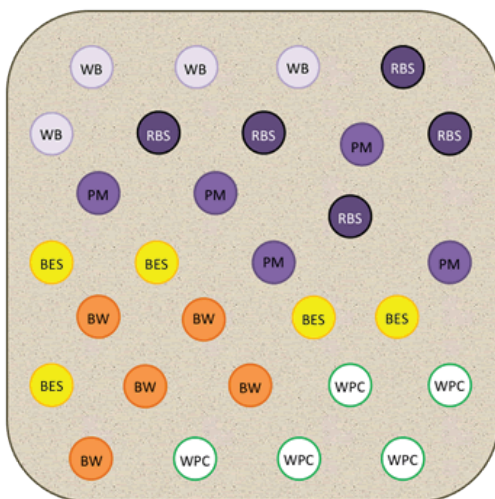
## Well-drained (dry) soil conditions

### Planting diagram

- 100 square feet,  
ex: 10 ft. x 10 ft.
- Two different milkweed species, 5 plants each
- 19 plants of four different biennial/perennial native species

### Legend

- (5 - PM) Purple milkweed
- (5 - BW) Butterfly milkweed
- (5 - WPC) White prairie clover
- (5 - RBS) Rough blazing star
- (4 - WB) Wild bergamot
- (5 - BES) Black-eyed Susan



**Total: 29 plants all spaced 18" apart**

## Poorly-drained (wet) soil conditions

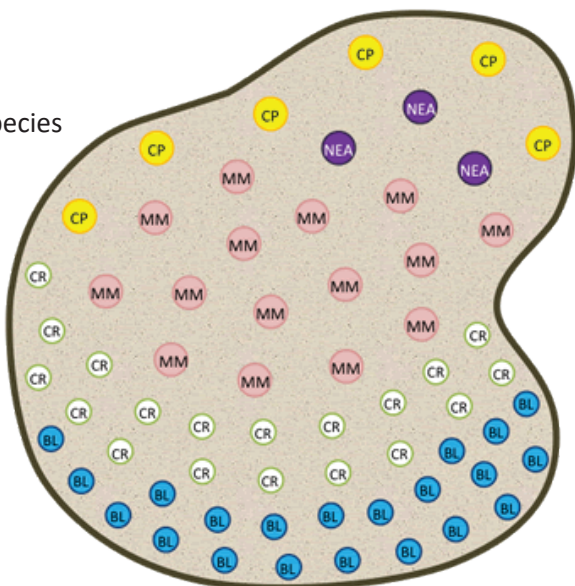
### Planting diagram

- 250 square feet  
ex: 25 ft. x 10 ft.
- 15 of one milkweed species
- 49 plants of different biennial/perennial native species

**Total: 64 plants, 24 spaced 24" apart across 150 square feet, 40 spaced 16" apart across 100 square feet**

### Legend

- (6 - CP) Cup plant
- (21 - BL) Blue lobelia
- (19 - CR) Culver's root
- (15 - MM) Marsh milkweed
- (3 - NEA) New England aster





The Missourians for Monarchs Habitat Initiative is a partnership between producers, federal, state and local conservation organizations to sustain habitat for monarch butterflies and pollinators through voluntary citizen involvement. The collaborative agrees to create at least an additional 19,000 acres of pollinator habitat annually for the next 20 years.

Learn how you can benefit monarch butterflies & pollinators not only on agricultural land, but also at home, school & other sites: [moformonarchs.org](http://moformonarchs.org)