

# Best Management Practices

Monarch Habitat in Your Backyard



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Monarch butterflies are a familiar 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. However, monarch populations have declined over 90% in the past two decades, partially due to habitat loss.

Monarchs need milkweed. Milkweed is the monarch butterfly's host plant, in that, the female monarch will lay her eggs only on milkweed plants and the caterpillars feed on only milkweed leaves until they pupate. 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 has created this, and other Best Management Practices (BMPs) to help integrate quality pollinator habitat into everyday life as a homeowner. Missourians for Monarchs also realizes these BMPs will not work for everyone, but it is our intent to offer multiple practices to help homeowners create a space which can work for them.

One of the most important things you can do to help monarchs is plant 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 landscape. Keep in mind, you should always have a plan to sustain the monarch habitat area established to prevent invasive species overtaking the habitat.



*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.*

## MILKWEED SPECIES

Common milkweed  
(*A. syriaca*)



Butterfly milkweed  
(*A. tuberosa*)



Swamp milkweed  
(*A. incarnata*)



Purple milkweed  
(*A. purpurascens*)



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, and removing invasive plant species, etc.

The following information provides specific information about habitat requirements for 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).



## 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

To maximize the utilization of your habitat by monarchs, be sure to include more than one milkweed species. Additionally, having at least 10 plants, made up of two or more species is best; however, having a large number of plants (more than 10) of one species can still offer monarchs some much needed habitat.

The different milkweed 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.

## Well-drained (dry) soil conditions

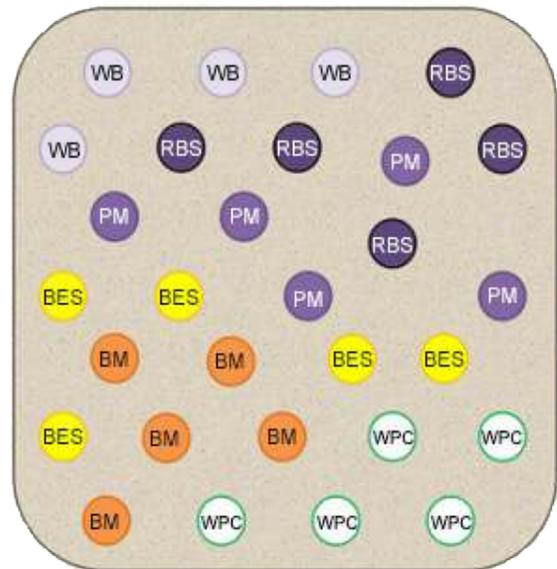
### Planting diagram

- 100 square feet, ex: 10 ft. x 10 ft.
- Two different milkweed species, 5 plants each
- 19 plants of 6 different biennial/perennial native species

### Legend

- (5 - PM) Purple milkweed
- (5 - BM) 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

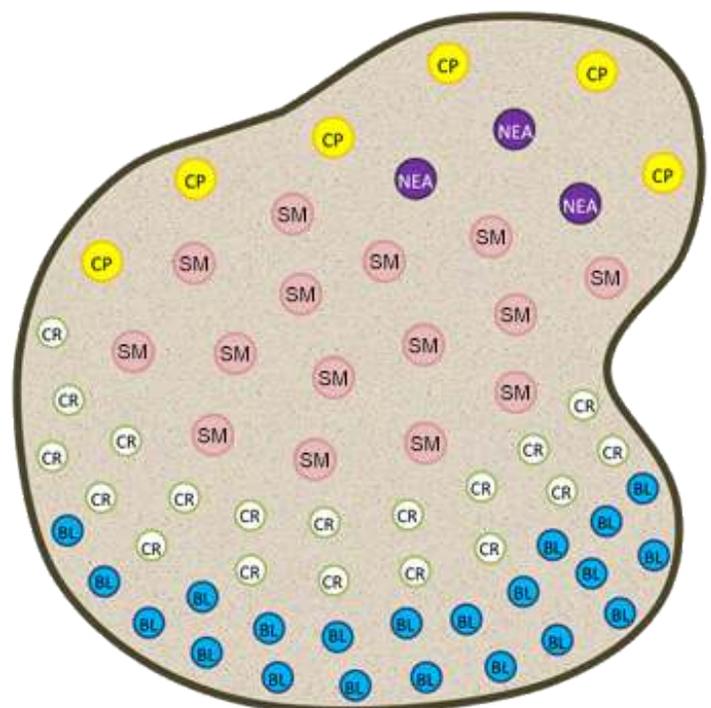
- 250 square feet, ex: 25 ft. x 10 ft.
- 15 of one milkweed species
- 49 plants of different biennial/perennial native species

### Legend

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

Total: 64 plants

24 spaced 24" apart across 150 square feet  
40 spaced 16" apart across 100 square feet





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.



The Missourians for Monarchs collaborative 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 385,000 acres of pollinator habitat by the year 2036.

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