

Backyard Habitat for Monarch Butterflies

 mdc.mo.gov/your-property/wildlife-your-property/backyard-wildlife/backyard-habitat-monarch-butterflies

Habitat Requirements

Size

Suitable Monarch habitat can be easily integrated with 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. See the attached reference for shade tolerance of recommended plants.

Drainage and Soil Type

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

Shelter

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. All monarch life stages need shelter from predators and the elements. Planting milkweeds and nectar plants close together contributes to this shelter for monarchs and other wildlife.

Food

Milkweed Plants

To maximize the utilization of your habitat by monarchs, it is desirable to 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. Milkweeds of different species mature and flower at different times during the season. By increasing the number of milkweed species in your habitat you will increase the likelihood that monarchs will utilize your property for a longer period during the breeding season.

Nectar Plants

Monarchs, other butterflies, and numerous pollinators need nectar. By providing nectar sources that bloom sequentially your Monarch habitat can provide resources for monarchs throughout the breeding season and the migration in the fall. A Monarch habitat should contain at least 4 biennial or perennial native plants that provide nectar for butterflies.

Native Plant Species Recommended for Missouri

See the table below of recommended native wildflowers for monarchs usually available as plants or seeds. Plants are recommended in flower gardens to obtain the fastest results.

Perennial Plants for Monarch Butterflies

Scientific Name	Common Name	Light Preference	Bloom Period	Flower Color	Height	Moisture	Space
<i>Aster novae-angliae</i>	New England Aster	sun - med shade	Sept - Oct	purple	40 - 60"	avg - moist	24 - 36"
<i>Aster laevis</i>	Smooth Aster	sun - light shade	Sept - Oct	blue	20 - 30"	dry - avg	16 - 20"
<i>Aster azureus</i>	Sky Blue Aster	sun - light shade	Sept - Oct	blue	18 - 36"	dry - avg	12 - 18"
<i>Asclepias syriaca</i>	Common Milkweed	sun - light shade	June - Aug	lavender	48 - 60"	average	36 - 60"
<i>Asclepias incarnata</i>	Marsh or Swamp Milkweed	sun - med shade	Aug & Sept	rose-purple	48 - 60"	avg - moist	24 - 36"
<i>Asclepias purpurascens</i>	Purple Milkweed	sun - med shade	May - June	rose-purple	24 - 48"	dry - avg	18 - 24"
<i>Asclepias tuberosa</i>	Butterfly Weed	sun - light shade	June & July	orange	24 - 36"	average	18 - 30"
<i>Coreopsis palmata</i>	Prairie Coreopsis	sun - med shade	June - July	yellow	18 - 24"	dry - avg	18 - 24"
<i>Coreopsis tripteris</i>	Tall coreopsis	sun - light shade	July - Aug	yellow	40 - 110"	dry - avg	18 - 24"
<i>Dalea candida</i>	White Prairie Clover	sun	June - July	white	18 - 26"	dry - avg	16 - 20"
<i>Echinacea purpurea</i>	Purple Coneflower	sun- med shade	June - Aug	pink/purple	30 - 40"	avg - moist	18 - 24"
<i>Eryngium yuccifolium</i>	Rattlesnake Master	sun - light shade	July - Aug	white	30 - 48"	average	16 - 24"
<i>Eupatorium perfoliatum</i>	Boneset	sun - light shade	July - Sept	white	36 - 48"	avg - wet	24 - 36"
<i>Heliopsis helianthoides</i>	Ox-eye Sunflower	sun - light shade	June - Sept	yellow	24 - 48"	dry - moist	18 - 30"
<i>Liatris aspera</i>	Rough blazing star	sun - light shade	Sept	purple	24 - 48"	dry - avg	12 - 16"
<i>Liatris</i>	Prairie blazing star	sun	July - Aug	purple	30 -	dry -	12 -

<i>pycnostachya</i>					48"	moist	20"
<i>Lobelia siphilitica</i>	Blue Lobelia	sun - light shade	Sept - Oct	blue	18 - 30"	avg - moist	10 - 16"
<i>Monarda fistulosa</i>	Wild bergamot	sun - light shade	June - July	lavender	36 - 48"	average	16 - 24"
<i>Physostegia virginiana</i>	Obedient plant	sun - light shade	July - Sept	pink/white	36 - 60"	avg - moist	16 - 20"
<i>Rudbeckia hirta</i>	Black-eyed Susan	sun - light shade	June	yellow	24 - 36"	average	16 - 24"
<i>Silphium integrifolium</i>	Rosinweed	sun - med shade	July - Aug	yellow	60 - 90"	dry - avg	24-36"
<i>Silphium laciniatum</i>	Compass Plant	sun	July - Aug	yellow	48 - 96"	average	18 - 30"
<i>Silphium perfoliatum</i>	Cup plant	sun - light shade	July - Sept	yellow	72 - 96"	avg - moist	24 - 36"
<i>Solidago nemoralis</i>	Gray Goldenrod	sun - light shade	Aug - Sept	yellow	18 - 30"	dry - avg	16 - 24"
<i>Solidago rigida</i>	Rigid Goldenrod	sun	Sept	yellow	30 - 48"	average	16 - 24"
<i>Solidago speciosa</i>	Showy Goldenrod	sun - light shade	Sept - Oct	yellow	24 - 48"	dry - avg	18 - 24"
<i>Veronicastrum virginicum</i>	Culver's Root	sun - light shade	June - Aug	white	36 - 48"	avg - moist	16 - 20"

Local sources for seeds and plants of these native species can be found at grownative.org

Information on suitable non-native species can be found at www.monarchwatch.org

Planting Diagram Examples

Dry Soil Conditions (Well-drained Soils)

Requirements

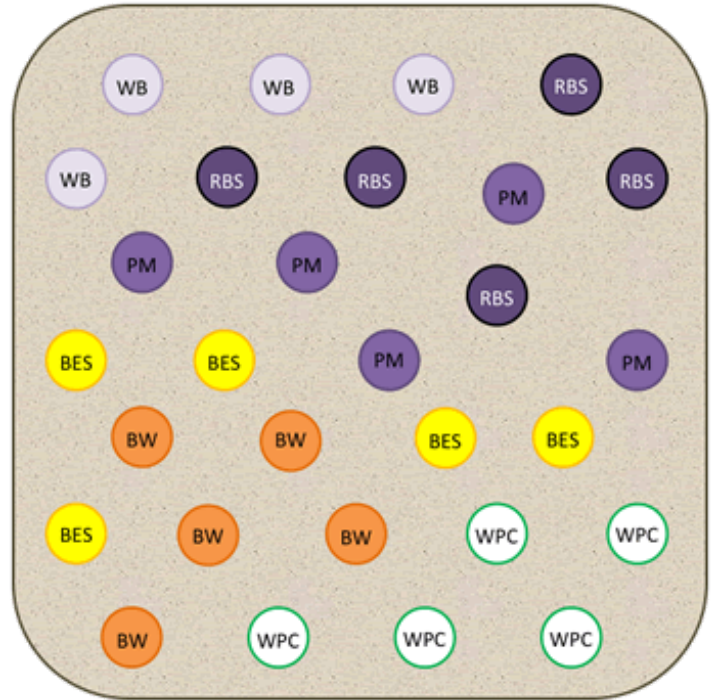
- Minimum 100 square feet
- Minimum 10 milkweeds of two or more species
- Minimum 4 biennial or perennial native species for nectar

Dry Condition Planting Diagram

- 100 square feet
- 5 each of two different milkweeds
- 19 plants of four different biennial/perennial native species
- Total: 29 plants all spaced 18" apart

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



Wet Soil Condition (Poorly Drained Soils, i.e. Raingarden)

Requirements

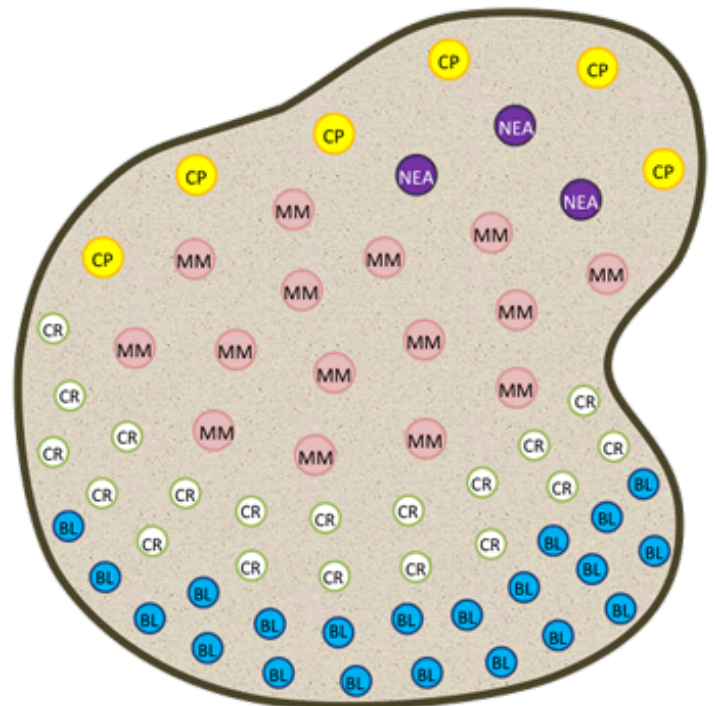
- Minimum 100 square feet
- Plant more than 10 plants if using only one species of milkweed
- Minimum 4 biennial or perennial native species for nectar

Wet Conditions Planting Diagram

- 250 square feet
- 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

Plant Legend

- (15 - MM) Marsh Milkweed
- (3 - NEA) New England Aster
- (6 - CP) Cup Plant
- (21- BL) Blue Lobelia
- (19 - CR) Culver's Root



Note: Plants are arranged tallest to shortest, with shortest in front. These diagrams are just one of hundreds of plant combinations that can be used from

the above table.

Management

You should have a plan to sustain a Monarch backyard habitat area. 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, and incorporating additional features.

Information provide in part by Monarch Watch. Contact Monarch Watch to find out how to be certified as a Monarch Waystation.

Key Messages:

Conservation makes Missouri a great place to hunt and fish.