



Monarch Butterfly



What is the monarch butterfly?

The monarch butterfly is a large butterfly with a 3-to-4-inch wingspan. This species is bright orange and has black veins and black wing edges with double row of white spots. Monarch larvae (caterpillars) are banded black, yellow, and white with a pair of black “horns” protruding from each end. The bright coloring serves as a warning to predators that eating them can be toxic.

The caterpillars feed on milkweed and obtain a toxin from the plant that makes both the larvae and adult butterfly toxic to most predators.

Monarchs are unique in that there are multiple generations of monarchs produced during the breeding season, with most adults living approximately 2-5 weeks; overwintering adults enter reproductive diapause (suspended reproduction) and live 6-9 months.

What is their “status”?

In a 12-month finding published in the Federal Register on Dec. 17, 2020, the Service determined that the monarch butterfly warranted listing as an endangered or threatened species under the Act, but that listing was precluded by higher-priority listing actions.

Where in South Dakota do they call home?

This species is commonly found throughout eastern South Dakota (SD) and less common west of the Missouri River. The butterfly is not present in SD year-round. Certain generations of monarch’s migrate between the United States, Mexico, and Canada—a journey that for some individuals can cover over 3,000 miles.

Where am I most likely to see this butterfly?

The monarch butterfly is found in open areas, including pastures, prairies, marshes, weedy places, and roadsides. Basically, you could see this species anywhere milkweeds would grow starting in May or early June through August. Also, again during fall migration in September and October, often in wooded areas where they roost for the night, often in groups.

The caterpillar feeds exclusively on the leaves of milkweeds. The adult butterfly feeds on a wide variety of flower nectar, especially common milkweed, swamp milkweed, gayfeather, thistles, Joe-pye weed, asters, and sunflowers; also, garden flowers such as marigold, cosmos, and zinnia.

What are the threats?

- Loss of milkweed plants and native flowering forb species from the landscape.
- Herbicide use and certain insecticide use.
- Habitat conversion to cultivated agriculture.
- Grazing that decreases plant health, amount of forbs, and increases non-native species.
- Degradation of overwintering sites (not in SD).

What are the opportunities?

The SD Natural Resources Conservation Service (NRCS) provides technical and/or financial assistance to landowners to address threats to this species that may occur on their land. Stop in and ask the local NRCS office to assist you with preparing land management plans which will achieve your objectives and help this butterfly.



Monarch butterfly caterpillar





Several specific actions landowners can take are:

Habitat Establishment / Restoration:

Providing habitats with milkweeds and commonly used native forbs can help this butterfly.

- Develop low production cropland to native grasses and wildflowers.
- Develop habitat patches as native grasses and wildflowers.
- Provide milkweed by skipping corners or odd areas when applying herbicide and insecticide.
- Limit herbicide and pesticide application to only those areas that absolutely require treatment. Eliminate herbicide application if possible. Check local laws, as some county noxious weed lists include milkweed.
- Provide wet, muddy areas as a water and mineral source.

The NRCS can help develop plans for both grazing lands and habitats in agro-ecosystems that provides this butterfly’s habitat needs.

Maintain and Improve Healthy Grazing lands:

Grazing maintains grassland habitats. However, preferred plants may disappear if grazing does not occur in a manner that sustains the native prairie plants.

The NRCS can help develop a sustainable prescribed grazing system addressing both livestock and butterfly needs. This could include additional livestock water and/or fence.

What plants does the butterfly use?

The monarch can use both native and introduced plants. For a range seeding, wildflower should comprise a maximum of 10 percent of the seeding.

If the purpose is for a pollinator habitat, then there is no maximum amount of wildflowers that can be included in the seeding mixture.

Consult your local NRCS office for seeding rates, plant site suitability, and other plant information (USDA program restrictions may apply).

To learn more contact your local NRCS office, or go to sd.nrcs.usda.gov.

Table 1.0 commonly used native forbs. Plants with a very high monarch value are shaded in green and should be selected for seed mixes.

Common Name (Last name, First name)	Scientific Name
aster, Geyer’s	Symphotrichum leave var. geyeri
aster, heath	Symphotrichum ericoides
aster, New England	Symphotrichum novae-angliae
beebalm, wild	Monarda fistulosa
black-eyed Susan	Rudbeckia hirta
blazing star, meadow	Liatris ligulistylis
blazing star, rough	Liatris aspera
boneset, common	Eupatorium perfoliatum
boneset, false	Brickellia eupatoriodes
compass plant	Silphium laciniatum
coneflower, purple	Echinacea angustifolia
culvers root	Veronicastrum virginicum
cup plant	Silphium perfoliatum
gromwell, false	Onosmodium bejariense
gayfeather, dotted	Liatris punctata
gayfeather, thickspike	Liatris pycnostachya
goldenrod, gray	Solidago nemoralis
goldenrod, late	Solidago gigantea
goldenrod, Missouri	Solidago missouriensis
goldenrod, showy	Solidago speciosa
goldenrod, stiff	Oligoneuron rigidum var. humile
hyssop, lavender	Agastache foeniculum
ironweed, prairie	Vernonia fasciculata
Joe-pye weed, spotted	Eutrochium maculatum
milkweed, butterfly	Asclepias tuberosa
milkweed, common	Asclepias syriaca
milkweed, swamp	Asclepias incarnata
milkweed, whorled	Asclepias verticillata
prairie clover, purple	Dalea purpurea
prairie clover, white	Dalea candida
sunflower, false	Heliopsis helianthoides
sunflower, Maximillian	Helianthus maximiliani
sunflower, prairie	Helianthus petiolaris
sunflower, sawtooth	Helianthus grosseserratus
sunflower, stiff	Helianthus pauciflorus
verbain, blue	Verbena hastata
verbain, hoary	Verbena stricta

