

# MONARCH CONSERVATION

## MILKWEED AND NECTAR PLANTS FOR MONARCHS

Milkweed (*Asclepias spp.*) is essential to the lifecycle of the Monarch butterfly. This North American native plant is the only host species for Monarch caterpillars. When milkweed is eaten by the caterpillars, toxins in the plant are taken up, conferring a terrible taste and deterring predators. Along with the vibrant patterning on the adult Monarch's wings, toxicity is a strategy supporting the survival of this iconic butterfly.

While milkweed is obligatory for Monarch caterpillar survival, adult Monarchs require nectar from a variety of plants as they migrate north. Native plant species local to specific regions provide the greatest benefit to Monarch butterflies and other native pollinators.

By planting native plants like milkweed and nectar producing species, you are providing habitat for not only this iconic butterfly but also for other critically important native pollinators, including bees, bats, birds, flies, moths, wasps, beetles, and more!



## HOW YOU CAN HELP

Create habitat for Monarchs and native pollinator species. Plant native milkweed and native nectar plants suitable for your location.

**Use Alternatives to Toxins**  
Avoid the application of harmful insecticides or herbicides.

**Get involved**  
contact your city council, mayor or state governor to request protections for pollinator species.

## LOOKING FOR MORE WAYS TO HELP POLLINATORS?

visit us at [www.endangered.org](http://www.endangered.org)  
contact us at [action@endangered.org](mailto:action@endangered.org)



# THREATS TO MONARCHS

There are two populations of Monarchs in the United States: Eastern and Western. In the 1990's, the Eastern population was close to 1 billion and the Western population numbered nearly 1.2 million. Both populations have seen major declines.

Eastern numbers are now down to 225 million, representing a total loss of over 77%. Western Monarchs are at record lows with only 30,000 counted during winter 2018, a 99% drop.

## HABITAT LOSS



Loss of habitat is the leading cause of species decline globally.

Western Monarch overwintering sites are impacted by residential development in California.

Eastern Monarch overwintering sites in Mexico are damaged by illegal logging and deforestation.

Industrial scale agriculture and development reduces milkweed and nectar plant migratory and breeding habitat.

Non-native, tropical milkweed planted in the landscape negatively impacts Monarch health and survivorship.

## PESTICIDES AND HERBICIDES

Insecticides and herbicides are used intensively on crops like soybeans and corn in the United States. This practice is harmful to Monarchs and other beneficial pollinators.

Neonicotinoid insecticides are particularly detrimental to Monarchs because of their systemic nature, toxicity and persistence in the environment.



## CLIMATE CHANGE

Monarchs rely on temperature cues for migration and reproduction.

Extreme weather events can severely impact overwintering Monarchs. Their concentration in large numbers in relatively small areas makes them especially vulnerable to storms amplified by climate change.

Monarchs are sensitive to phenological changes - alterations in seasonal timing of plant emergence, growth and flowering. These systemic changes can alter migration and impact food availability.



# POLLINATOR PROTECTORS

## AMAZING NATIVE POLLINATORS



Many people picture honeybees when they think of pollinators. While honeybees play a major role in pollination of commercial agricultural crops, honeybees are non-native bees, introduced to the United States during the colonial era, in the early 1600's.

In the U.S. and Canada there are roughly 3,600 native bee species, ranging from bumble bees to sweat bees; mason bees to carpenter bees. Native bees are typically solitary and non-aggressive. These bees pollinate native trees, shrubs and flowering plants, playing important and often under recognized roles in ecosystems.

Other significant pollinators native to the United States include: bumblebees, flies, butterflies, moths, wasps, beetles, birds, and bats. This rich diversity of pollinators is deeply linked to native plant communities. Species of native plants and pollinators have co-evolved together, making linked conservation of native pollinators and native plants particularly critical.



## POLLINATOR PROTECTORS

Endangered Species Coalition works with communities to create pollinator habitat. Pollinator Protectors started with a handful of plantings in California in 2015; currently ESC supported plantings grow in over 1/3 of U.S. states.

ESC provides small grants for the purchase of native plant material. We collaborate with our member groups, local Native Plant Societies, and other experts, identifying locally appropriate plant species beneficial to pollinators.

Planting locations range from schools to churches; from National Wildlife Refuges to nature centers, greenways and farms. This diversity of collaborators supports education opportunities and creates habitat for pollinators.



# NATIVE PLANTS AND POLLINATORS

## ENDANGERED NATIVE PLANTS

As of 2020, 946 plants are listed as threatened or endangered under the Endangered Species Act. Yet, the decline of native plants is often overlooked, a symptom of a phenomenon known as 'plant blindness'.

Native plants are integral to wildlife habitat, providing shelter and food sources for pollinators and a diversity of species.

Raising awareness about and visibility of our amazing and essential native plants is critical to habitat preservation and restoration.



## HOW YOU CAN HELP

**Create habitat**  
for native local and migratory pollinator species. Plant native nectar and pollinator plants suitable for your location. Add natural plant features, such as borders and hedgerows, to create connectivity for plants and animals

**Use Alternatives to Toxins**  
Avoid the application of harmful insecticides or herbicides. Ask retailers to provide alternatives.

**Get involved**  
contact your city council, mayor or state governor to request protections for pollinator species. Write letters to the editor expressing the importance of pollinator and plant conservation.

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## ENDANGERED NATIVE POLLINATORS

The Endangered Species Act lists 71 threatened or endangered pollinators. Research from 2019 indicates that up to 40% of insects globally are in decline, primarily caused by habitat loss.

Many pollinators are migratory, including Monarch butterflies, rufous hummingbirds, and lesser long-nosed bats. Migrants face threats as they travel long distances to breed, access food and search for habitat. Threats include invasive plants, land use change, climate change and more.

We can help migratory and local pollinators by increasing habitat, mitigating climate change, and taking other urgent steps for biodiversity conservation..

