



## Why do Monarch Butterflies Migrate?

Monarch butterflies migrate across North America and back in what is known as a two-way migration. Beginning in Mexico and Southwestern regions of the United States these butterflies will travel north and settle in southern Canada before travelling back to overwinter in the warm southern regions. While only one generation of monarchs to migrate south from northern United States and Canada it will take 3 to 4 generations to travel back north as they reproduce throughout their trip.

The migration of these butterflies is driven by the environmental changes, indicating when it is time to migrate based on the rising or falling temperatures. These butterflies cannot survive the cold weather and travel great distance across North America to stay in the sun.

The Monarch butterfly begins its journey from the south to north as the seasons begin to change and more milkweeds begins to grow. Monarchs will travel north, laying their eggs on milkweed, with each generation traveling farther. As the season change they will begin their journey south to their overwintering grounds in Mexico and the southern United States.

## When do Monarch Butterflies Migrate

#### Spring Migration [March, April, May, June]

The Monarch butterfly migration begins with the spring migration between the months of March, April, May and into June with the first generation of butterflies being born in the south, beginning their journey north.

#### Summer Breeding [June, July, August]

Throughout June, July and into August the first and second generation of butterflies reproduce and continue their journey to the northern United States and Canada. The third generation is born toward the end of July and remain close to conserve energy and protect their babies from the summer heat.





#### Fall Migration [August, September, October, November]

Unlike the previous generations, the fourth generation waits to reproduce, flying thousands of miles throughout August, September, October, and November back to the southern regions where these butterflies spend the winter.

#### Overwintering [December, January, February]

The fourth generation will reside in these southern regions for the winter and will not begin to reproduce until March when temperatures begin to warm and milkweed become more available.

The amazing thing about this migration cycle is that these butterflies have never been to the locations that they are traveling, but generation after generation continue to travel to the same places.

## **Where do Monarch Butterflies Migrate**

#### **Travelling South**

Monarchs from Eastern North America, East of the Rocky Mountains, take shelter from the winter in the Sierra Madre Mountains of Mexico. They will cluster in Oyamel forests across the mountain hillsides. The monarch butterflies cluster to stay warm and can collect in numbers of tens of thousands on a single tree.

Monarchs from Western North America, West of the Rocky Mountains, escape the cold northern winters in sunny California. These butterflies settle near Santa Cruz and San Diego along the Pacific coast. Both regions have very similar climate conditions with temperatures ranging between 0-15 degrees Celsius.

#### **Travelling North**

Throughout the spring and summer season the Monarch butterfly will travel towards the northern United States and Canada as the temperatures in these regions warm and more milkweed begins to grow. Their time at these summer breeding grounds is short-lived before they begin their journey south again.





#### **How do Monarch Butterflies Migrate**

Monarch butterflies are forced to migrate due to their inability to survive in cold climates. Environmental signals let them know when they should begin their journey as the climate begins to change.

Through their migration some Monarch butterflies can travel up to 300 miles, moving between 50-100 miles every day! This journey across North America can take up to two months to complete. These butterflies take advantage of wind currents and thermals to guide them through their journey. While researchers are still unsure what exactly guides these butterflies, it is believed to be a combination of the position of the sun and the pull of the earth.

Monarchs will only travel throughout the day and cluster together in the evenings to stay warm. The butterflies will collect in the canopies of trees and will often stop in the same locations throughout their journey year-after-year. In the mornings the butterflies will bask in the sun to warm up before continuing their voyage.

#### **Monarch Migration Map**







## **Monarch Migration Map**





