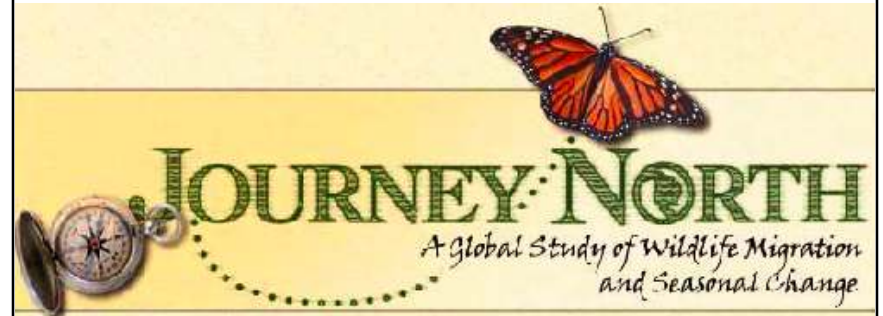




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<http://www.learner.org/jnorth/>
Layout by Margaret Black



Where Will the Monarchs Go Next?

Predicting Patterns of Migration

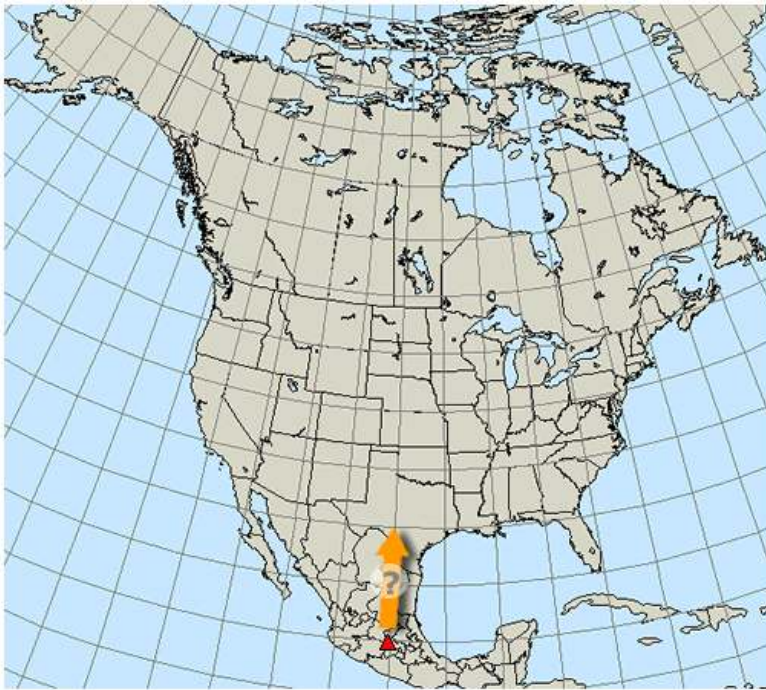


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by Elizabeth Howard

When the monarchs leave their winter home in Mexico in March the skies are filled with butterflies. Tens of millions set off on the spring migration within a few weeks! Where do they go? Why do they travel when and where they do?

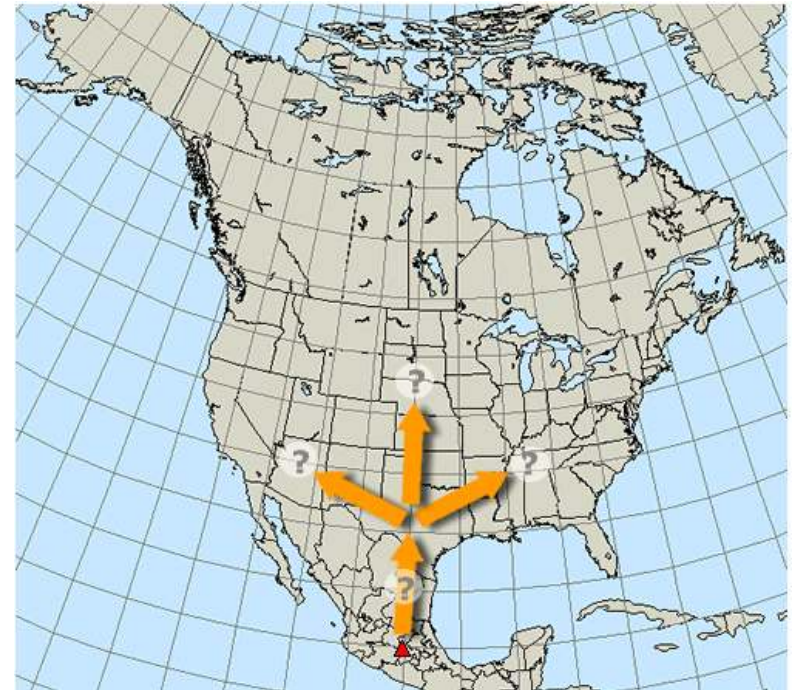
Scientists don't know exactly where the monarchs go as they cross northern Mexico. Our blank migration map reflects this mystery.



1

Few people report monarchs to us until the butterflies begin to appear in Texas.

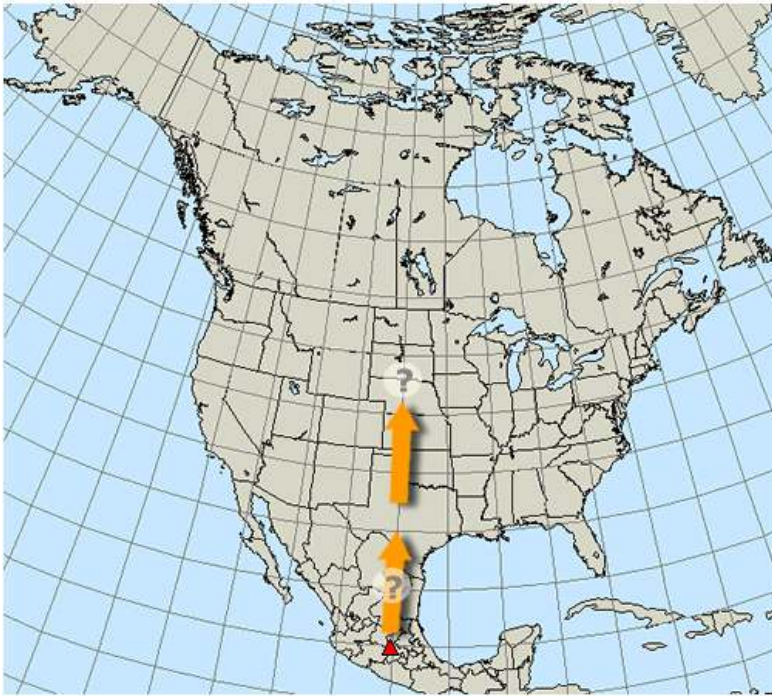
Many monarchs are in Texas by the middle of March. Now we can watch their movements carefully. Where do the monarchs go next? What drives the pace of the migration? Why do the monarchs travel when and where they do?



2

Let's focus on the first month of the migration (March 15-April 15). Which way will the monarchs travel as they leave Texas?

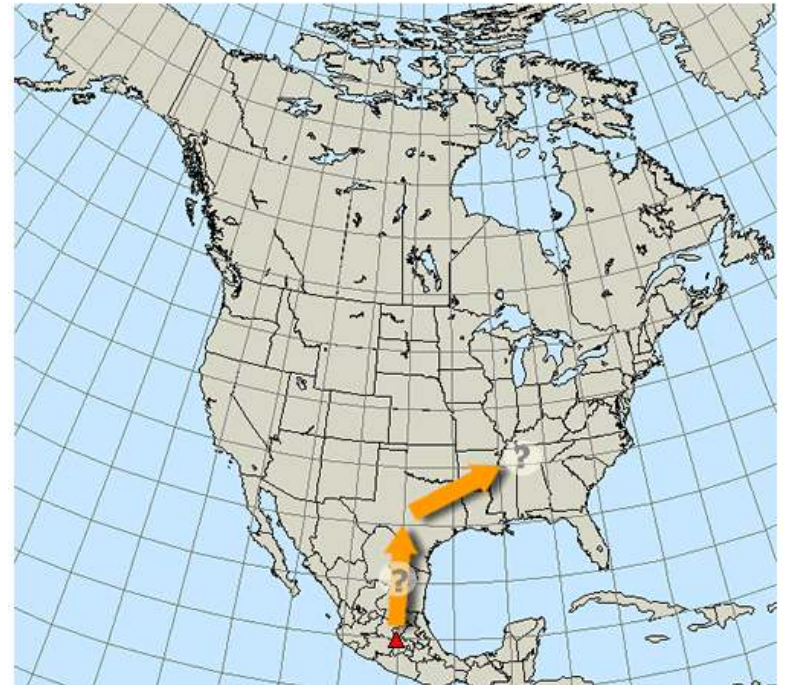
Will they go to the north?



3

By April 15th, how far will the monarchs have moved...

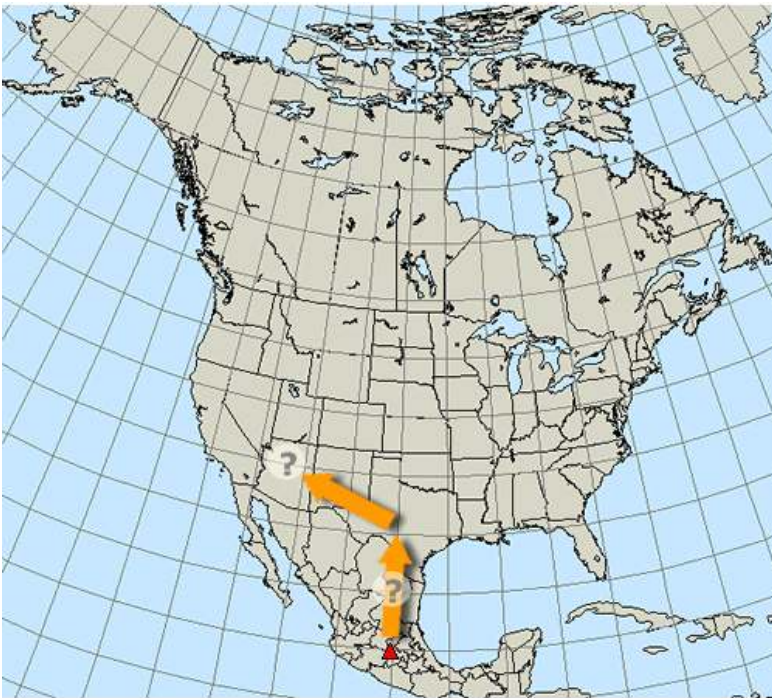
...to the east?



4

By April 15th, how far will the monarchs have moved...

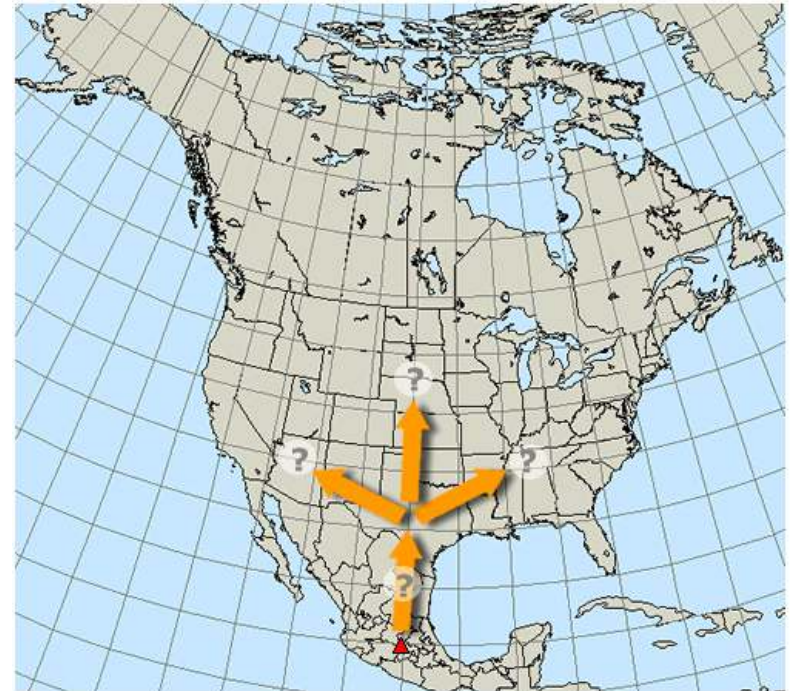
...to the west?



5

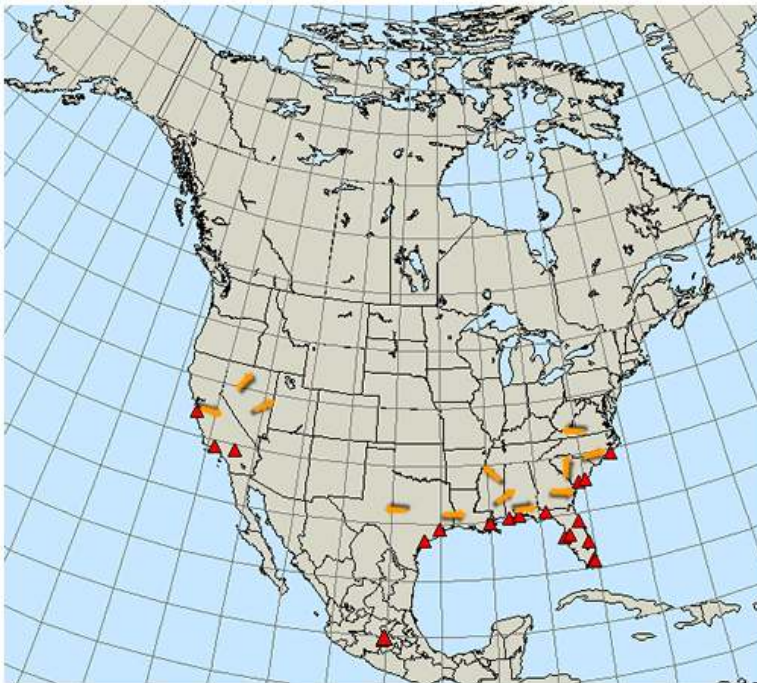
Will the migration branch out and move equally in all directions? By April 15th, how far will the monarchs have moved...

...to the north, east, and west?



6

And what about the monarchs that did not go to Mexico for the winter? They are shown as red triangles below. Where will these monarchs go in the next month? Will they migrate northward, travel in different directions, or just stay where they are?



To predict where the monarchs will be by April 15th, we have to consider what monarchs need.

- Before reading on, make a list of the needs monarchs have in the springtime.



Was milkweed at the top of your list? The monarchs must find milkweed so they can lay their eggs.

Do the monarchs follow the milkweed as it emerges in the spring? If so, when — and where — do you think monarchs will be able to find milkweed by April 15th?



Milkweed

Monarchs lay their eggs on milkweed. It's the only food their caterpillars will eat.

Let's see what happens this spring!

Meanwhile, explore the resources below and make your prediction on our handout.



http://www.learner.org/jnorth/tm/monarch/sl/6/Handout_PredictPath.html

Resources

Milkweed map

Spring 2007



This map shows where people have reported milkweed so far. In order to grow, milkweed needs many days of warm temperatures.

<http://www.learner.org/jnorth/maps/spring2007.html?layers=milkweed>

Climate Maps

1999-2007



This March 2006 temperature map shows a typical temperature pattern for the U.S. Do you think the pattern of the milkweed map will be similar?

http://www.cpc.noaa.gov/products/analysis_monitoring/regional_monitoring/1-month-archive.shtml