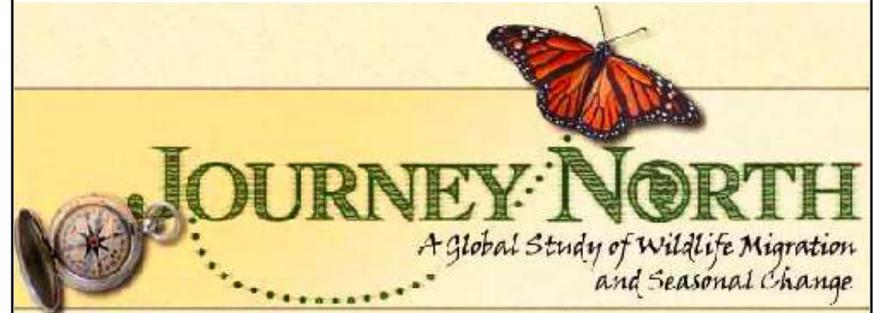




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When, Where and How to Watch Fall Monarch Migration



by Elizabeth Howard

Watch for monarchs that are...



1 Flying Overhead



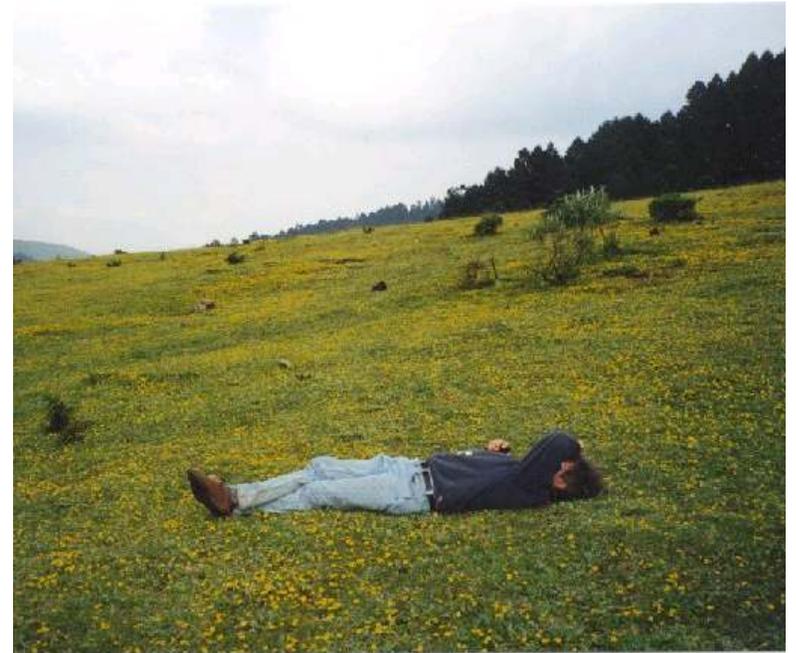
2 Feeding



3 Roosting

Method #1: Flying Overhead

Go outside, lie down on your back, and simply look up at the sky!



Here Dr. Bill Calvert is watching monarchs as they arrive at their winter home in Mexico.

Look toward the clouds, and use binoculars if you can.

"The butterflies travel way up high and are easier to see against a white backdrop," explains Dr. Calvert.



Be patient...You may not see *anything* for awhile!



While you're waiting for monarchs, you may see migrating hawks or dragonflies, ballooning spiders, flying ants or floating seeds. The skies are full of life in the fall! Many species travel at the same time that monarchs do.



You'll know a migrating monarch if you see one that seems to be flying with a purpose, and traveling in one direction.

This is called "directional flight." Directional flight is opposite of the way a monarch flies on a lazy summer day. When not migrating, monarchs fly every which way and change directions unpredictably. "They fly like they're dizzy," said a boy.

You may see only one butterfly, but it's a thrill when you see that it's traveling in the direction of Mexico!

"Every monarch was traveling in the same direction, as if they were following a road in the sky!" wrote an observer.

How long did you watch?

Whenever you count monarchs, also record how long you are watching.



Measuring the length of time you observe is just as important as counting the number of monarchs you see. Your observations will have more meaning because they can be compared from one time to the next and one place to the next.

Record how many monarchs you see *per minute* (or *per hour*) on a data sheet.



Fall Migration Observations

Record your observations on this chart. Calculate the migration rate as "monarchs per minute" and/or "monarchs per hour." Watch migration activity rise, peak, and fall as monarch habitat changes.

Date	Time Started	Time Finished	# Minutes Observing	Total # Monarchs	Monarchs per Minute	Monarchs per Hour

Print your own Journey North data sheet:
<http://www.learner.org/jnorth/tm/monarch/FallDataSummary.html>

An Example from Students

"We keep a tally count of the monarchs we see in 20 minutes," wrote an Oklahoma teacher. The 2nd and 3rd grade students observe monarchs each day from 2:15-2:35. The chart below is a summary of their fall sightings.

Fall Migration Sightings in Edmond, OK Russell Dougherty Elementary.	
Sep.11	We finally saw 1 monarch.
Sep.27	A total of 70 monarchs seen over the last week.
Oct. 6	71 monarchs seen in 20 minutes.
Oct. 7	87.15 monarchs seen in 20 minutes.
Oct. 8	123.4 monarchs seen in 20 minutes.
Oct. 9	26.6 monarchs seen in 20 minutes.
	A total of 1,344 over the last week.

Method #2: Count Nectaring Monarchs

One of the surest ways to see migrating monarchs is to plant a garden to attract them. Monarchs may drop from the sky for the food they need during migration.

"We planted our garden in the middle of a city and they found us!" wrote teacher Tom Murphy of Cannon Falls, MN.

Once again, record the length of time you are watching as well as the number of monarchs you see. It's also best to make your observations at the same time each day.



Method #3: Find a Monarch Roost

Monarch butterflies only migrate during the day. They come down to rest at night and cluster in roosts. Roosts may form for a single night or last for two weeks or more. They may have a handful of butterflies or far too many to count.

If you find a roost, try to estimate the number of monarchs that you see. Visit each night, record the number of days the monarchs stay, the wind direction and the weather. Observe and describe the butterflies' behavior and habitat carefully. Roosting is a mysterious behavior and much can be learned.



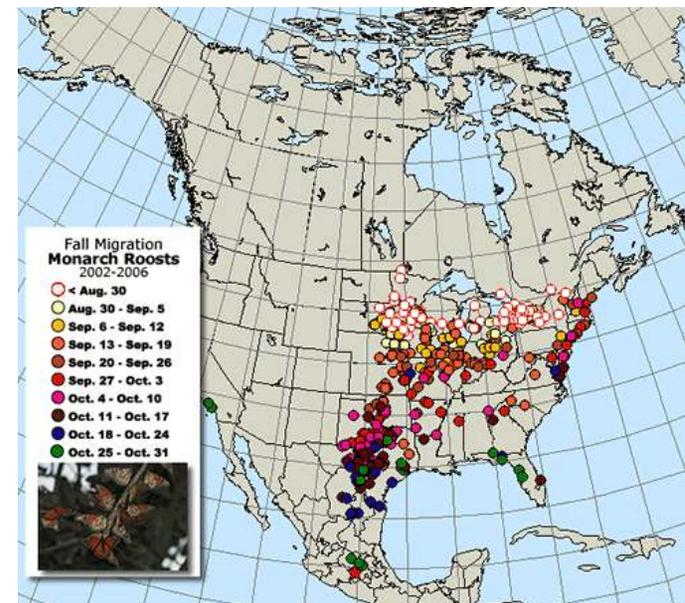
Where can you find migrating monarchs?

There are two populations of monarchs in North America. The breeding range of each is shown below. The population that migrates to Mexico crosses the area shown in red, so you can see migration anywhere in that region. However, the *number* of monarchs you see will vary depending on such factors as habitat, geography, food, wind and weather. Where would you like to watch migration after looking at this map? What questions does it raise?



When does the migration to Mexico take place?

This map shows when and where monarch roosts were reported in the fall from 2002 to 2006. The timing of migration is quite similar from one year to the next. When do monarchs begin to roost where you live? That's the best time to start watching for migrating monarchs.



Report Your Sightings to Journey North!

Your observations will help shed light on the many mysteries of monarch migration.