

A Monarch's Journey



photo by Jim Hudgins/USFWS

Mini Fact:

Monarchs feed on the **nectar**, or sweet liquid, of flowers.

Are you noticing a lot of monarch butterflies outside? Every fall, hundreds of millions of monarch butterflies fly thousands of miles to their winter homes in California and Mexico. No other butterfly migrates this way, flying back and forth like birds do.

It is a mystery how the butterflies know where to go each year. Other butterflies don't teach the monarchs where to fly. It's every monarch for itself.

Flying to warmth

Like their tropical ancestors, modern monarchs cannot survive the cold. Each fall, North American monarchs must fly to warmer climates.

Most monarchs spend the winter in one special area in the Mexican mountains, the **oyamel** (oh-yah-MEL) fir forests. The branches provide a protective covering that helps keep the monarchs from getting too hot or cold.



Monarchs cluster in trees in Mexico.

The shape of the branches and needles allows thousands of butterflies to cluster together for protection.

Monarchs in the far north begin migrating in early August. The closer to Mexico they

are, the later they take off. Monarchs begin arriving in their winter refuges in late October.

What is migration?

When animals **migrate** (MY-grate), they move from one area to another during certain times of the year. Then they move back to their original homes when the seasons change again. This travel can help them find food or escape extreme temperatures.

Super flier

Many tropical butterflies can fly long distances. But none of them can fly as far as the monarch. It can fly as far as 2,000 miles on its journey to Mexico.

The monarch also flies higher than any other large insect on the planet. It can fly up to 10,000 feet above the Earth's surface.

Monarchs ride up into the atmosphere on **thermals**. A thermal is a current of hot air rising above the Earth. Monarchs soar up in the thermals the same way birds such as hawks do. The monarchs then glide out on the wind toward their destination.



photo by Lisa Hupp/USFWS

Gliding allows monarchs to fly for two to three months. They need to flap their wings only about every 20 to 30 feet, saving wear on their wings.



Metamorphosis

Butterflies go through **metamorphosis** (meh-tuh-MORE-fuh-sis). They go through these stages as they grow up:

1. Egg
2. The larva, or caterpillar
3. The **pupa** (PYOO-puh), or changing insect, is protected by a cocoon or **chrysalis** (KRIS-uh-liss).
4. The adult.



photo by Jen Lapis/USFWS

A monarch caterpillar

Important milkweed

The only thing monarch larvae can eat is **milkweed**. The females lay their eggs on these plants. But people destroy milkweed plants by mowing them or spraying herbicides. In Mexico, people cut down the oyamel fir trees for firewood and building materials.

If the monarch loses its only host plant and its main winter home, it will be in serious trouble. You can help by planting milkweed in your yard or school grounds. Research and plant flowers butterflies like for food.



photo by Jim Hudgins/USFWS

Resources



On the Web:

- fws.gov/savethemonarch

At the library:

- “Senorita Mariposa” by Ben Gundersheimer
- “Great Migrations: Butterflies” by Laura Marsh

Try 'n' Find

Words that remind us of monarchs are hidden in this puzzle. Some words are hidden backward, and some letters are used twice. See if you can find:



BUTTERFLY,
CATERPILLAR,
CHRYSLIS, EGG,
FOREST, GLIDE, LARVA
METAMORPHOSIS,
MEXICO, MIGRATE,
MILKWEED, MONARCH,
NECTAR, OYAMEL, PUPA,
REFUGE, THERMAL,
WINTER.

N	S	O	E	G	G	Y	L	F	R	E	T	T	U	B
E	D	E	E	W	K	L	I	M	E	D	I	L	G	P
C	V	M	E	X	I	C	O	L	A	R	V	A	U	M
T	F	O	R	E	S	T	H	E	R	M	A	L	W	P
A	P	Z	W	S	I	L	A	S	Y	R	H	C	Z	Z
R	S	I	S	O	H	P	R	O	M	A	T	E	M	A
E	T	A	R	G	I	M	L	E	M	A	Y	O	P	Q
K	Z	Z	W	R	A	L	L	I	P	R	E	T	A	C
E	G	U	F	E	R	W	B	M	O	N	A	R	C	H
M	A	P	U	P	H	H	R	E	T	N	I	W	Q	Z

Cook's Corner

Vermont Maple Apple Rice Pudding

You'll need:

- 1 1/2 cups cooked plain white or brown rice
- 1/2 cup real maple syrup
- 3 large eggs, beaten
- 2 cups low-fat milk (scalded is best)
- 1 teaspoon vanilla

- 1 teaspoon cinnamon
 - 1/2 cup peeled, chopped fresh or dried apple pieces
- (You could use raisins instead of apples.)



* You'll need an adult's help with this recipe.

What to do:

1. Combine all ingredients in a greased quart casserole.
2. Bake at 350 degrees for 40 minutes or until a knife inserted in the center comes out clean. Serve warm with whipped cream. Serves 6.

1. To journey or go place to place (6-letter verb)

□ □ □ □ □ □

2. One of four parts of a year: spring, summer, fall, winter (6-letter noun)

□ □ □ □ □ □

3. A tall, woody plant with a trunk and branches (4-letter noun)

□ □ □ □

4. A group of the same type living close together (6-letter noun)

□ □ □ □ □ □

1. Those orange butterflies can _____ many miles each day.
2. After spring, Jenna's favorite _____ is summer.
3. John looked at the birds and butterflies near a big _____.
4. Susie watched a _____ of butterflies floating in the sky.

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Study the definition. When you know the missing word, fill in the letter boxes and the sentence blanks.

Answers: Travel, Season, Tree, Colony.

Mini Jokes



Mikey: What is a king's favorite butterfly?

Myka: A monarch!

Eco Note



The number of monarch butterflies that over-wintered in Mexico dropped by about 53% in 2020, according to the Center for Biological Diversity. Scientists believe the drop in numbers was partly because of poor weather conditions during the spring and fall migrations. In December, the U.S. Fish and Wildlife Service will announce whether the monarch will be protected by the Endangered Species Act.

adapted from the Center for Biological Diversity



For later:

Look in your newspaper for articles about the butterfly migration.

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