

Monarch Butterfly Unit

Adaptable for 2nd-3rd Grade



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Lesson 1:

Basic Needs and Endangered Animals

Learning Goals: I can identify the basic needs of animals.
I can explain the primary reasons that animals become threatened or endangered.

Part I: Basic Needs

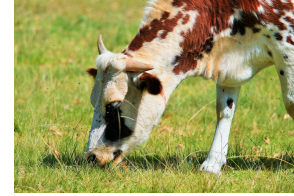
**What do animals need to
survive?**

Do animals need these things:



yes

no



Check your answers!

yes

no

water



food



air



space



shelter



Animals need certain things in their habitat to survive:

1. Food



2. Water



3. Shelter



4. Air



5. Space



- Move around
- Find food
- Have babies
- Play

Now Let's Practice!



Animal Dance Break!



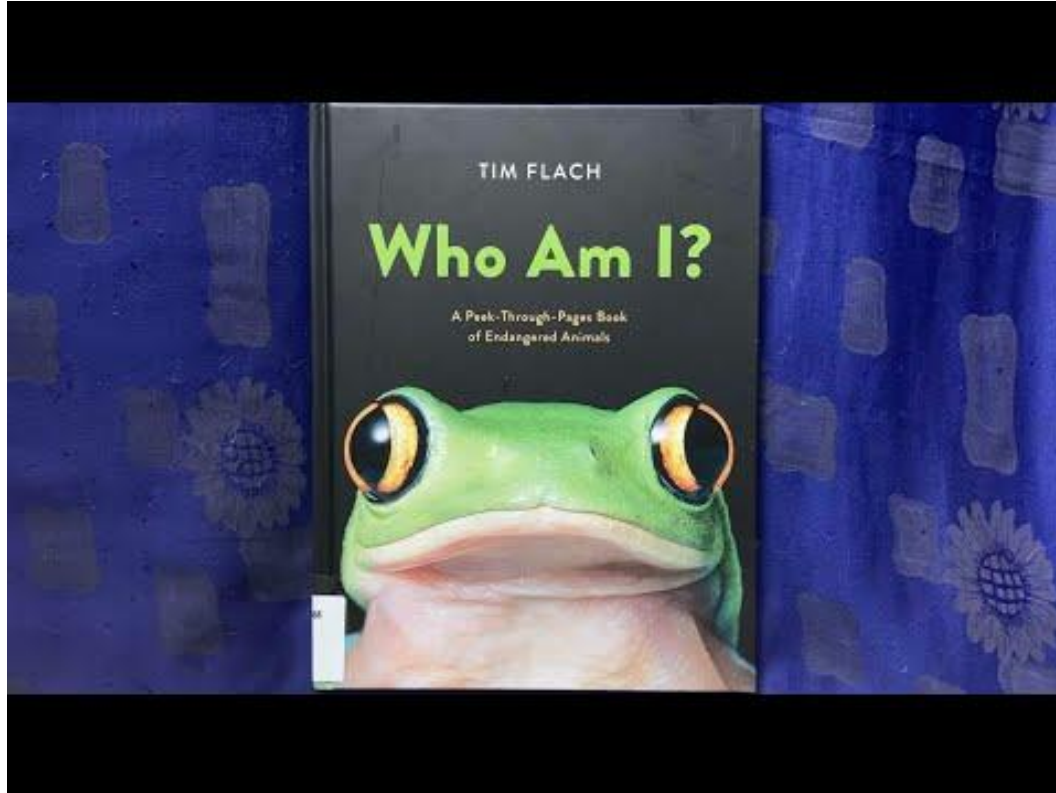
Part II: Endangered Animals

We know what animals need.

What happens if they don't get what they need?



Who Am I? by Tom Flach



Did you know?



Over 40,000 species of animals around the world are threatened with extinction!

What does “endangered” mean?

any type of plant or animal that is in danger of disappearing forever (**extinct**)

Take a look at
some
endangered
species that live
at the OKC Zoo!

Asian Elephant
📷 Jennifer D.



African Spurred Tortoise
📷 Andrea J.



Endangered Animals (OKC Zoo)



African Painted Dog



Black Rhino
📷 Lena K



Sumatran Tiger
📷 Dr. Jenn



Western Lowland Gorillas
📷 Jennifer D.



Whooping Crane



Red Panda

Endangered Animals (OKC Zoo)



Addra Gazelle
📷 Andrea J.



Radiated Tortoise
📷 Emma W.



Chimpanzee
📷 Jennifer D.

Endangered Animals (OKC Zoo)



Guatemalan Beaded Lizard
📷 Rae K.



Okapi
📷 Jennifer D.



Orangutan
📷 Andrea J.

Endangered Animals (OKC Zoo)

In July 2022, the International Union for the Conservation of Nature ([IUCN](#)), declare the migratory monarch butterfly endangered.

The OKC Zoo is working with partners to help them and you can help too!



Monarch Butterfly



Lesson 2:

Monarch Butterfly Life Cycle

Learning Goal: I can identify and put in order the stages of the monarch butterfly life cycle.

Introduction

1. What do you already know about butterflies?
2. What do you know about a butterfly's life cycle?
3. Do you know the link between a caterpillar and a butterfly?

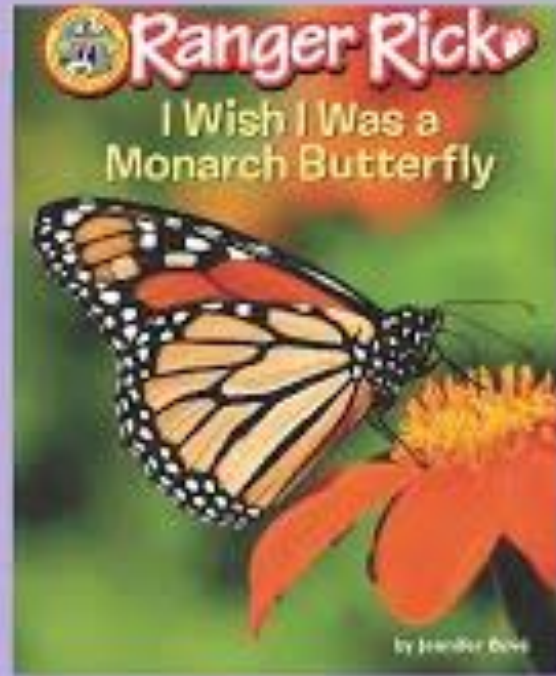
We will focus on a special group of butterflies called **monarch butterflies**.

Introduction

What do you notice about the way the monarch butterfly looks?



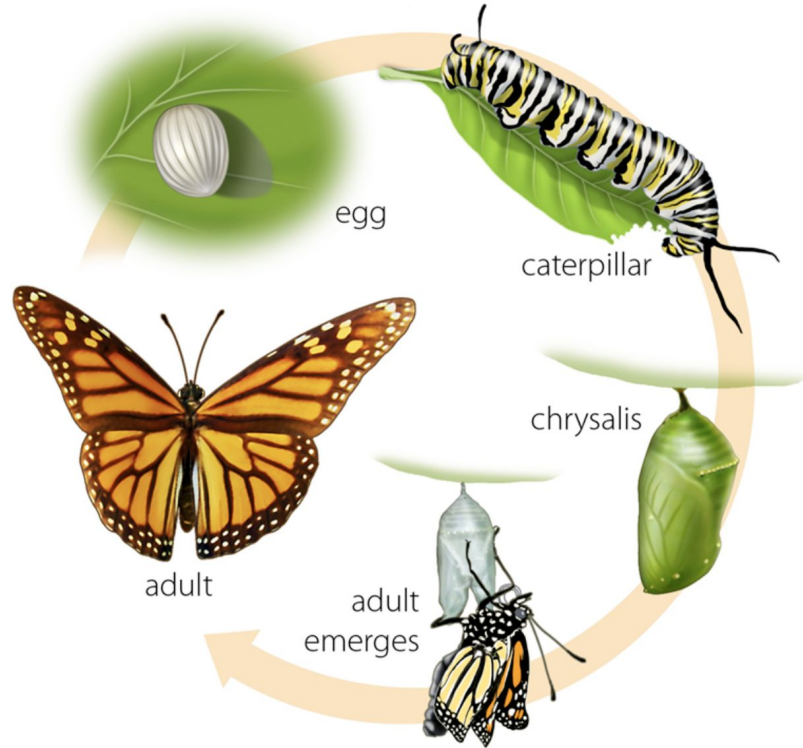
I Wish I was a Monarch Butterfly by Jennifer Bové



Vocabulary

- **life cycle**- a series of changes that happens to all living things as it grows and develops
- **caterpillar**- the young version of a butterfly or moth, also known as larva
- **chrysalis**- the hardened protective case around the caterpillar before it emerges into a butterfly, also known as pupa
- **milkweed**- plant with milky juices and clusters of flowers; milkweed is important to the monarch butterfly's life cycle

Monarch Butterfly Life Cycle



The Amazing Monarch Life Cycle



Movement Break



Life Cycle- Egg

- Monarch butterflies lay their eggs on the undersides of **milkweed** leaves.
- They will lay one egg per leaf but will lay between 300-500 in its lifetime.



Life Cycle- Caterpillar

- The egg will hatch into a **caterpillar**.
- The caterpillar has yellow, black, and white stripes.
- Notice the two sets tentacles at both ends.
- The caterpillar eats milkweed nonstop for two weeks.



Life Cycle- Chrysalis



- The caterpillar changes into a **chrysalis**.
- The monarch stays in the chrysalis for 9-14 days.
- The chrysalis will darken when it's time to become a butterfly.

Life Cycle- Adult

- The monarch's wings are wrinkled when it comes out of the chrysalis and take time to straighten out.
- The new butterfly will hang for several hours before flying off.



Time-lapse of life cycle

Take a look at the complete life cycle of a Monarch butterfly.



Lesson 3:

Migration of the Monarch Butterfly

Learning Goal: I can describe the migration patterns of the monarch butterfly.

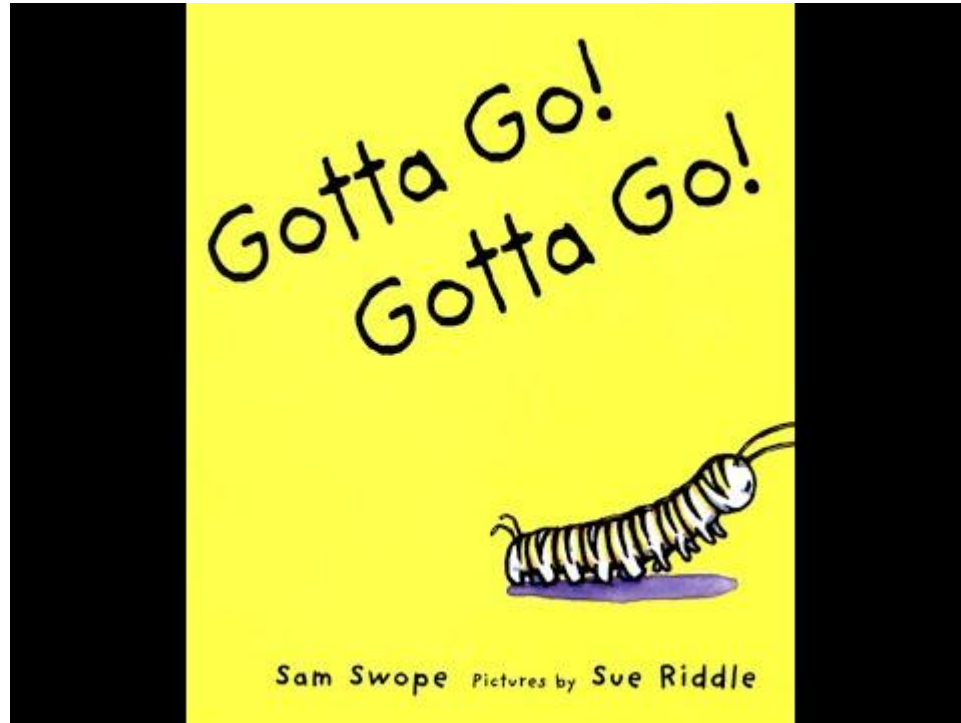
Vocabulary

migration- the traveling of long distances in search of a new habitat

habitat- home of an animal or plant

roost- when butterflies group together for warmth

Gotta Go! Gotta Go! by Sam Swope



Hurry and the Monarch by Antoine Ó Flatharta



Important things to know...

- Monarch butterflies fly south for winter to find warmer weather. This is called migration.
- They can fly almost 100 miles in one day and like to travel together.
- Monarchs will cluster together, sometimes thousands, in one tree.





Monarchs roost
together to stay
warm.

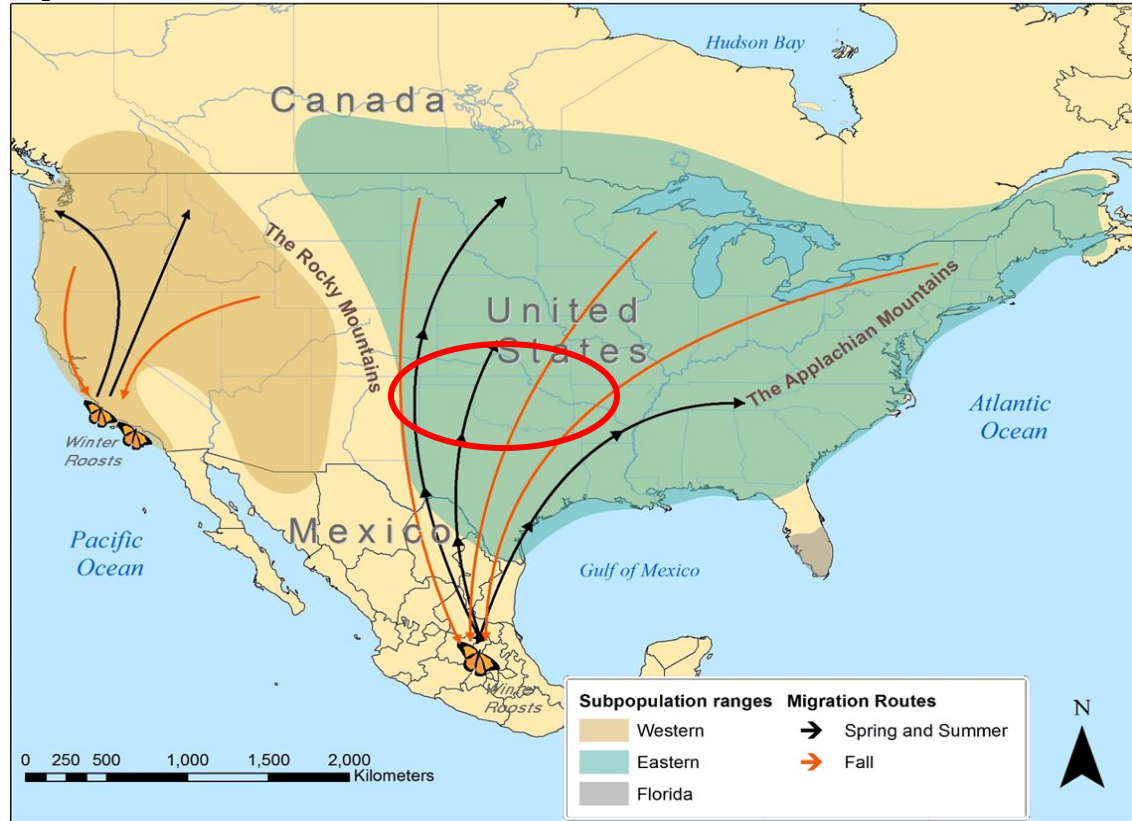


Movement Break



Migration Map

Notice when butterflies migrate, they travel right through Oklahoma!



Graphic provided by Dr. Geest (OKC Zoo)

Website resource

Click below to go to an interactive map showing the migration patterns of the Monarch butterfly:

[Interactive Migration Map](#)

News 9 Story



Tagging monarch butterflies in Oklahoma

MONARCH BUTTERFLIES FROM OKC ZOO COMPLETE
1,295 MILES JOURNEY TO WINTER HOME IN MEXICO!



Lesson 4:

We need Monarchs!

Learning Goal: I can identify ways monarch butterflies help our world.

Flowers and Their Pollinators



Did you know...

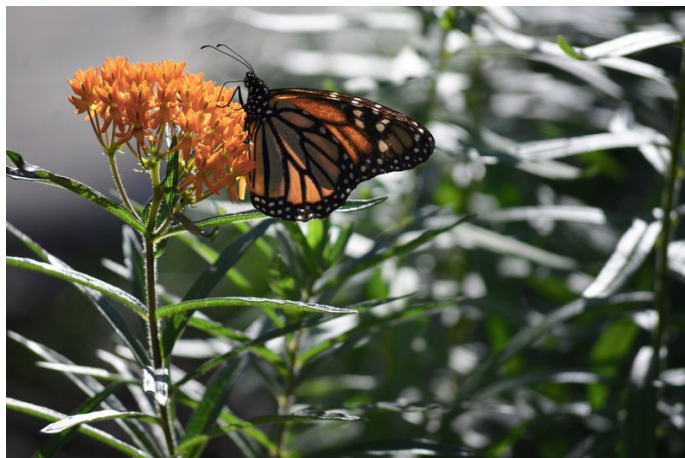
Monarch butterflies are **pollinators**.

This means when they stop on a flower to sip on the nectar, the pollen sticks to their bodies. Then the butterfly moves to another flower. The pollen brushes off onto the new flower. This helps flowers make seeds, which grows in new plants. Bees are pollinators, also!



Pictures provided by OKC Zoo

Busy
spreading
pollen!



📷 Emily G.

Did you know...

Monarch butterflies help other animals live.

They are an important part of the **food chain** for many animals. That means animals like birds, other insects, and small animals eat them to survive.

Movement Break



Did you know...

Monarchs are also a symbol of **inspiration** for some partly because of their remarkable migration journey. They can symbolize endurance, change, hope, and life.



Examples of monarch merchandise

Lesson 5:

Monarch Conservation

Learning Goal: I can identify and sequence the stages of the monarch butterfly life cycle.

What's happening?

For the past few decades, people have noticed that the number of Monarch butterflies has decreased (gone down).

Why do you think the monarch butterflies are disappearing?

Why are they disappearing?

- **Loss of habitat**
 - Trees in Mexico are being cut down.
 - Habitats are being destroyed in America.
- **Loss of food resources**
 - Milkweed and nectar plants are disappearing because of development and chemical use.
- **Climate change**
 - Extreme weather causes the Monarch's migration to get off track.

What is conservation?

Conservation means to protect our environment and the wildlife that lives in it.

We can work together to conserve the population of the Monarch butterfly.

What can we do to save them?

Movement Break

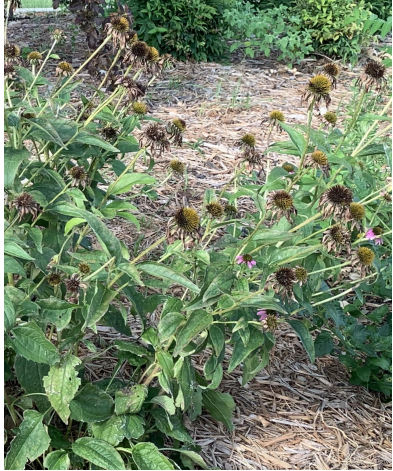


Juniper's Butterfly Garden by Autumn Heigle



OKC Zoo Pollinator Plants

One way we help is to make sure they have enough to eat by planting pollinator plants. The OKC Zoo has planted many of these special plants across their grounds. Take a look at these pictures taken at the zoo!



Pollinator Gardens in Oklahoma



Nicoma
Park
Elementary

Take a look at some pollinator gardens across Oklahoma!



Davis Elementary

Pollinator Gardens in Oklahoma



Yukon, OK



Special Care, OKC



See more examples at
[Okies for Monarchs.](#)



Okies for Monarchs

The OKC Zoo helped found and is involved with [Okies for Monarchs](#). This organization is dedicated to helping Monarch butterflies live for a long time.



OKC Living Classroom Grant

The Oklahoma City Zoo is helping schools plant their own gardens.
Check out the grant process and apply today!

[OKC Living Classroom Grant Program](#)



Credits

Title Slide Photo provided by the OKC Zoo taken by Jennifer D.

Lesson 1-

- Pixabay-T-Chart Pictures
- Teaching Independent Learners- Basic Needs practice video
- Jack Hartmann- Animals in Action
- EDU Kid Space- *Who Am I?* By Tim Flach
- Endangered species pictures- OKC Zoo

Lesson 2-

- Ms. Lindsey's Book Nook- *I Wish I was a Monarch Butterfly* by Jennifer Bové
- Glogpedia- Monarch life cycle graphic
- Science Up!- Monarch life cycle video
- Patty Shukla Kids Music- butterfly stages video
- Pic4Learning and Unsplash- Life cycle pictures
- Joshua Russo- time-lapse life cycle

Credits

Lesson 3-

- Detroit Zoo- *Hurry and the Monarch* by Antoine Ó Flatharte read aloud
- Children's Storytime- *Gotta Go! Gotta Go!* By Sam Swope read aloud
- Dance 'n Beats- dance video
- Dr. Emily Geest (OKC Zoo)- migration map graphic
- Rawpixel- roosting pictures
- News 9- Monarch migration package
- Cgee-hamline.org- interactive migration map

Lesson 4-

- SciShow Kids- Pollinators! video
- Danny Go!- animal dance video
- OKC Zoo- "Busy Spreading Pollen" pictures



Credits

Lesson 5-

- Jack Hartmann- Animal Dance & Freeze
- Okies for Monarchs- pollinator garden pictures and video
- OKC Zoo- *Juniper's Butterfly Garden* by Autumn Heigle
- OKC Zoo- Grant program link

