I can identify the basic needs of animals.

Lesson 1: Wild About....





an Johnsan

Lesson 1:

Introduction to Conservation

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





Think about this question: What do animals need to survive?





Animals need certain things in their habitat to survive.

3. Shelter

1. Food 2. Water







5. Air to breath!



4. They need space for:



- moving around
- ⊷ finding food
- having babies
- ⊷ shelter
- ⊷ Play





Think about this...

We know what animals need.

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







Wild About....

Endangered Animals



I can explain the primary reasons that animals become threatened or endangered.











<u>Endangered animals</u> are animals that are at a very high risk of becoming extinct in the wild."











What causes an animal to become endangered?

 Humans clearing the animal habitats to build cities.
 "Deforestation"





2. Animals being over hunted

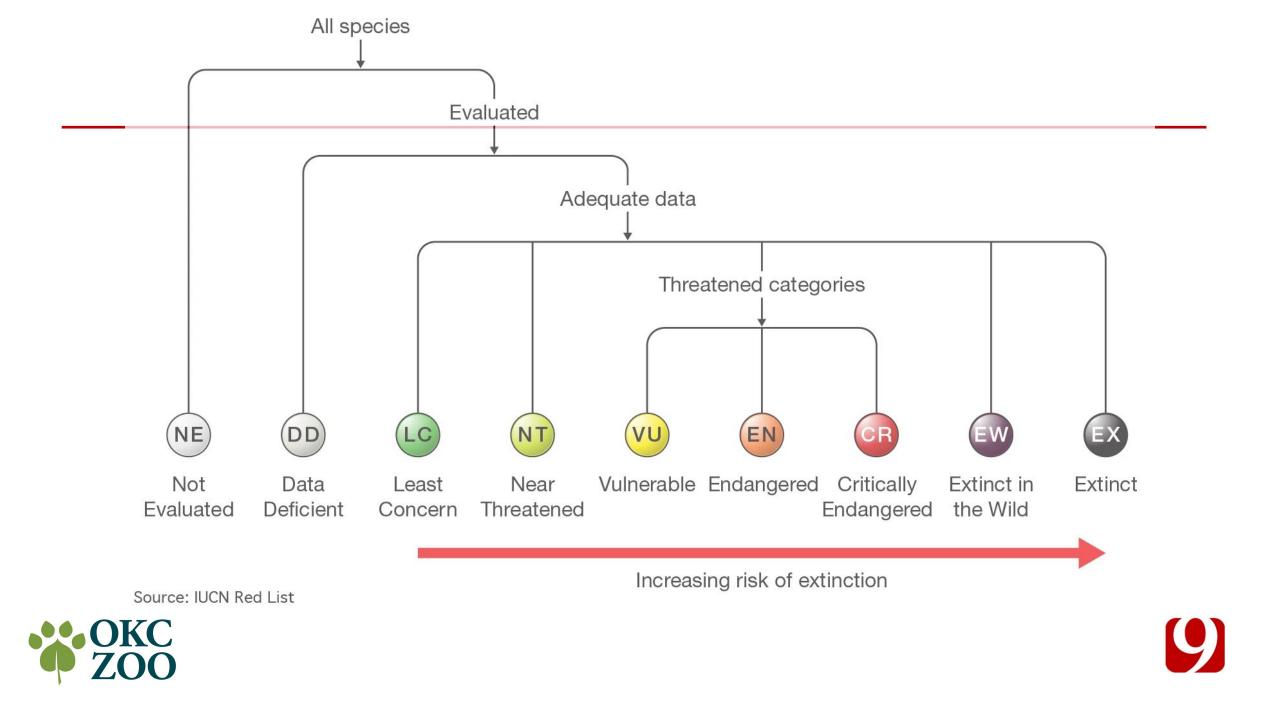
3. Pollution

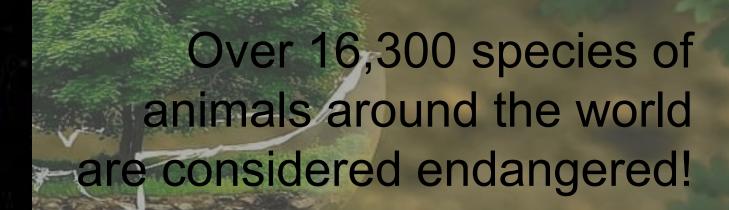


4. Disease



5. Not enough food







There are over 1,300 endangered or threatened species in <u>the</u> <u>United States</u> today.







Do we have any endangered animals in Oklahoma?

According to the Oklahoma Wildlife Conservation, there are 10 animals in Oklahoma that are endangered.













Can you identify these endangered animals?



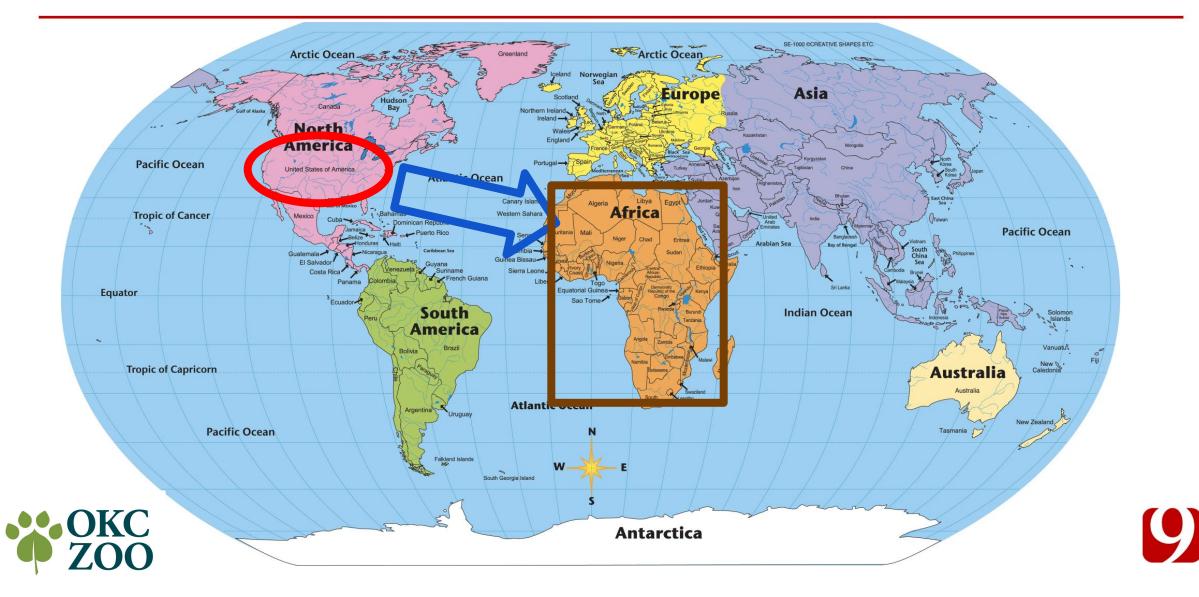
I can compare/contrast Africa and North America and recognize some endangered animals from Africa.







Let's explore somewhere new today!

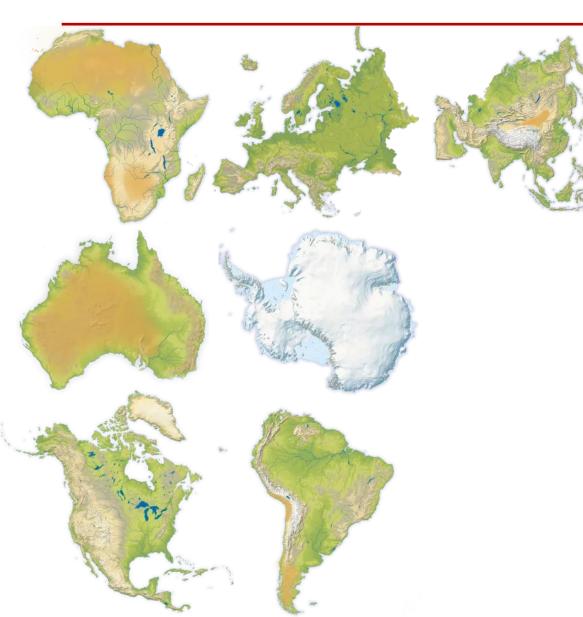


Think about this question: What do you know about Africa?



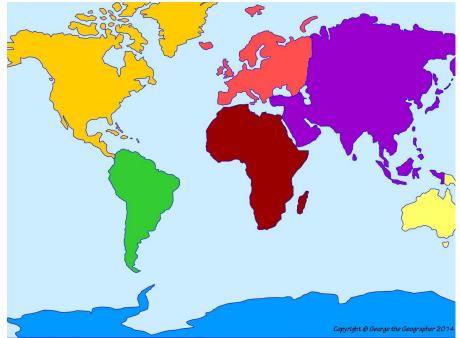


Africa is a **Continent**



<u>Continent</u>: a BIG area of land separated by water or other natural features.

Can you list all seven continents in the world?

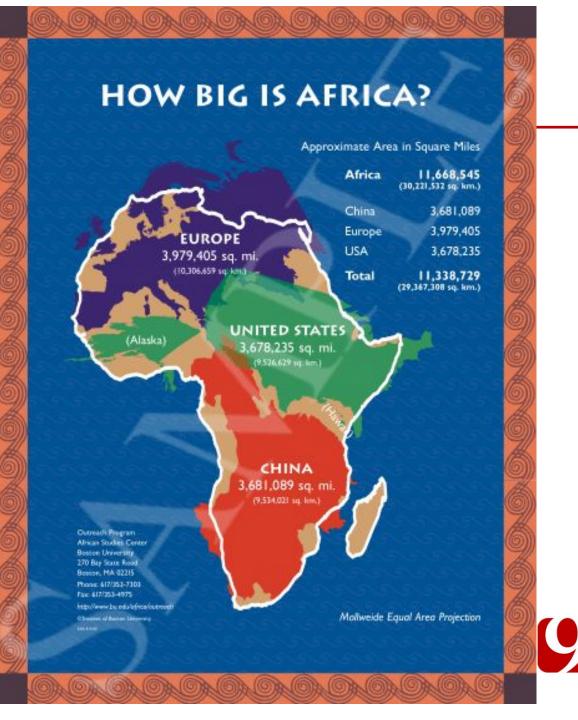


Africa is REALLY big

- Africa is the second-largest continent.
- Africa is 11,608,000 square miles! It's so big, the continental United States, Alaska, China and Europe can fit inside the entire continent!
- There are 54 countries on the continent of Africa.
- As of 2014, Africa had a population of 1,072,254,100 people.

OKC





Africa is a TROPICAL continent

Climate & Vegetation

- Majority of Africa is between the Tropic of Cancer and the Tropic of Capricorn
- The equator runs through the middle of the continent
- Africa = warm temperatures



Indian Ocean

Ascession (St. Belenal

South

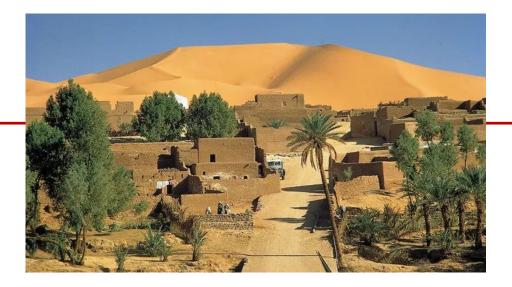
Atlantic Ocean This is the part of the Earth that is closest to the sun.

It can be very warm during the day and very cold at night.









Temperatures are highest in the Sahara Desert and lowest across the south and atop mountains.



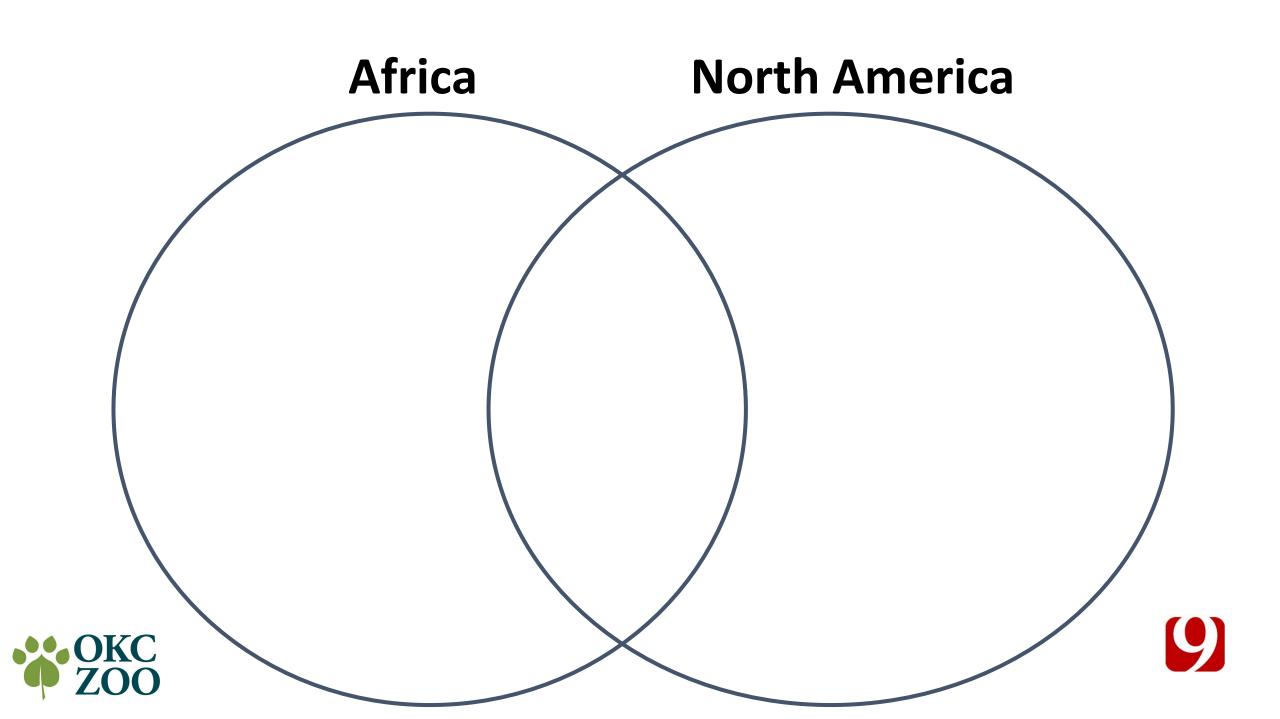












I can recognize some endangered animals from Africa.



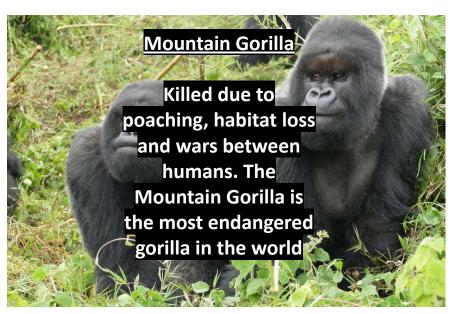


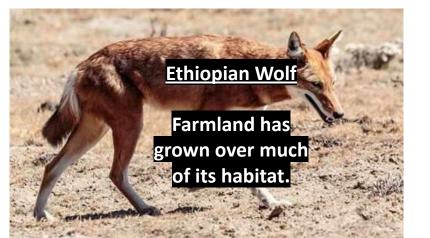
Part 2





Many of Africa's plant and animal species are in danger of dying out.





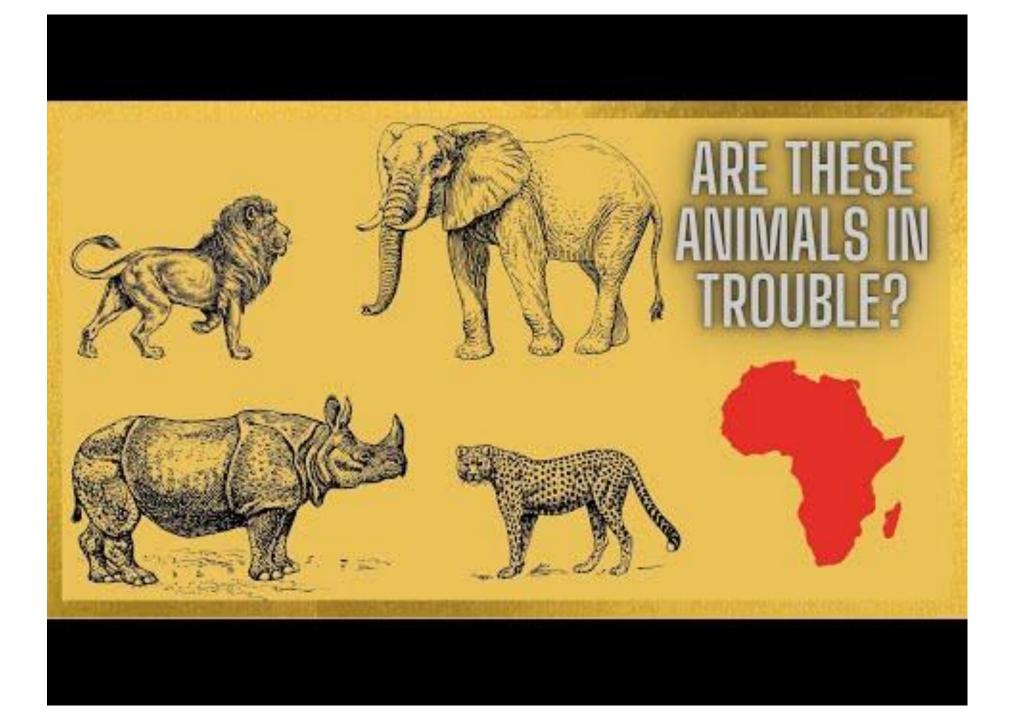
African Elephant

African Elephants are often killed for their tusks.



Pygmy Hippopotamus

There are fewer than 2,000 left in the wild! Their habitat is getting destroyed and they are hunted for their meat.





I can classify different species of gorillas and identify potential threats to their population.

Lesson 3: Wild About...

Gorillas

Part 1







Think about this question: What do you know about Gorillas?







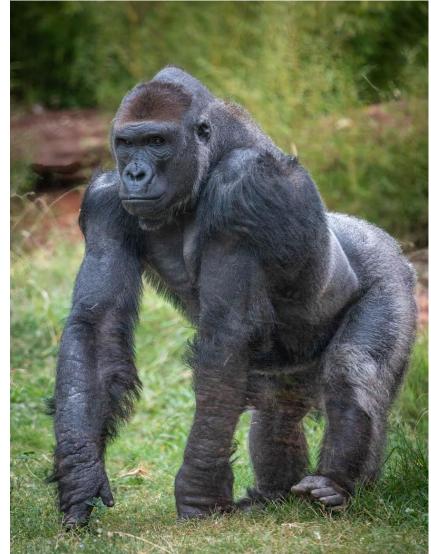
OKC ZOO



True or False? Gorillas live in trees.











Unlike most other primates, gorillas do not live in trees. They will climb trees to pick fruit but they spend most of their time on the ground.





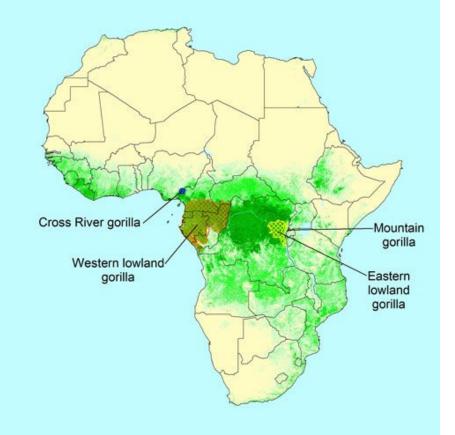
Gorilla Habitat



Every evening mountain gorillas construct a new nest, even if it is only a few feet from the nest they used the night before. They live in groups called "troops"



<u>Watch Impamo the</u> <u>Mountain Gorilla Build a</u> <u>Nest</u>



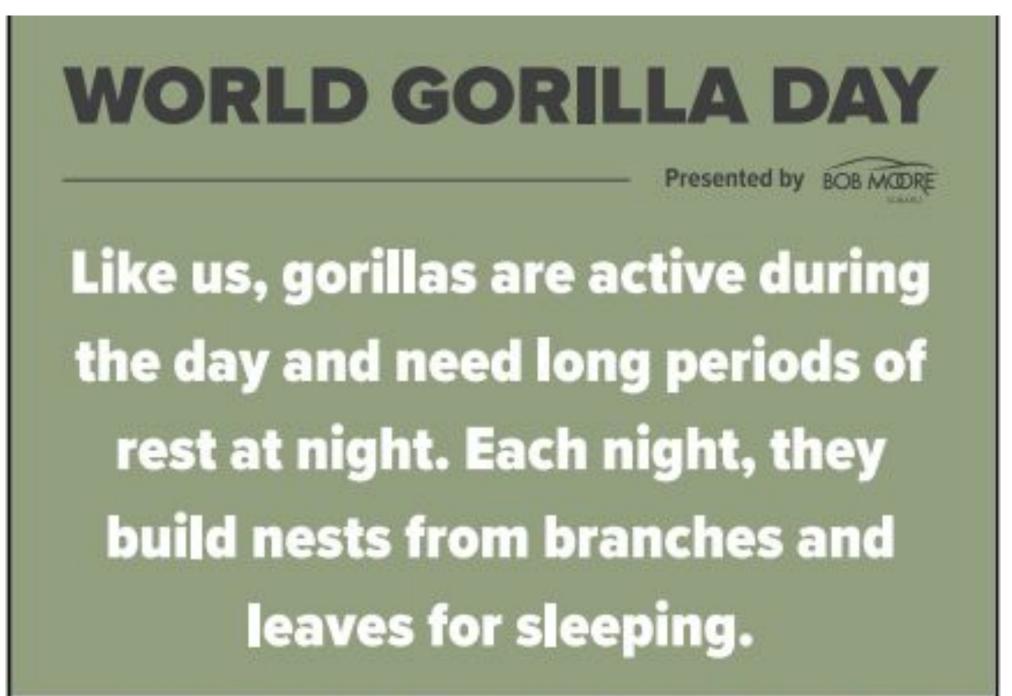
Western Lowland Gorillas live across the countries of Gabon, Central Africa Republic, Cameroon, Angola, Equatorial Guinea, and Congo

Mountain Gorillas live on the green, volcanic slopes of Rwanda, Uganda, and the Democratic Republic of Congo



- Western lowland gorillas prefer the **tall, lush tropical forest** of west and central Africa.
- As their name implies, mountain gorillas live in **forests high in the mountains,** at elevations of 8,000 to 13,000 feet.









Fun Facts About Gorillas

- Gorillas are the largest type of ape.
- An ape is a mammal in the group of primates, which includes chimpanzees, gibbons, gorillas and orangutans.

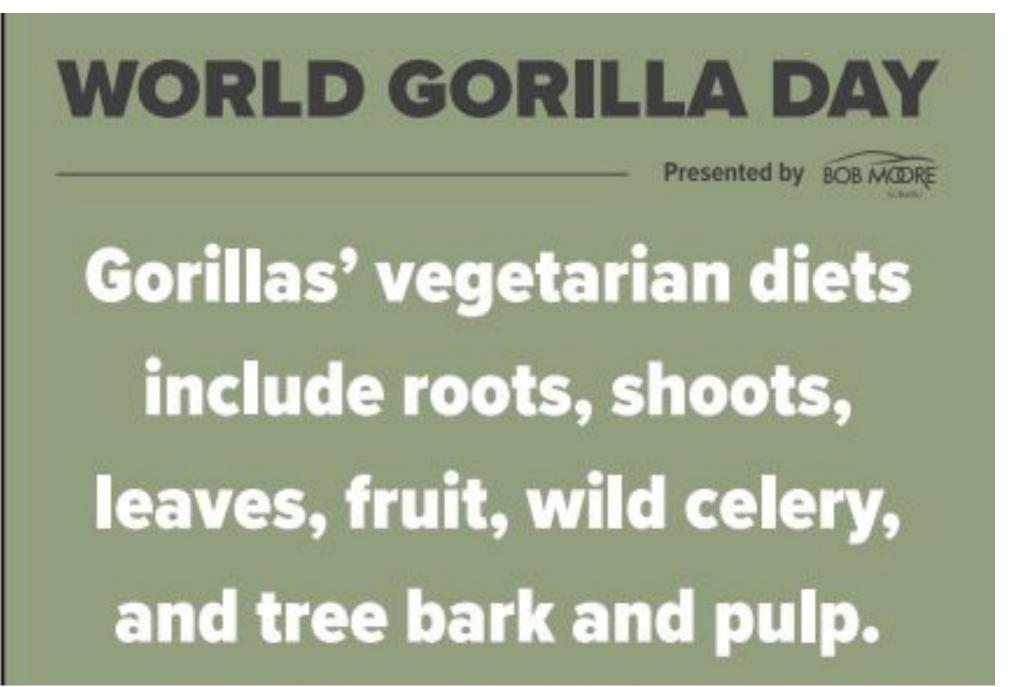




- An adult male gorilla is called a silverback. Can you guess why?
- Gorillas do not have tails.
- Gorillas are <u>diurnal</u> which means they are active during the day.











Fun Facts About Gorillas

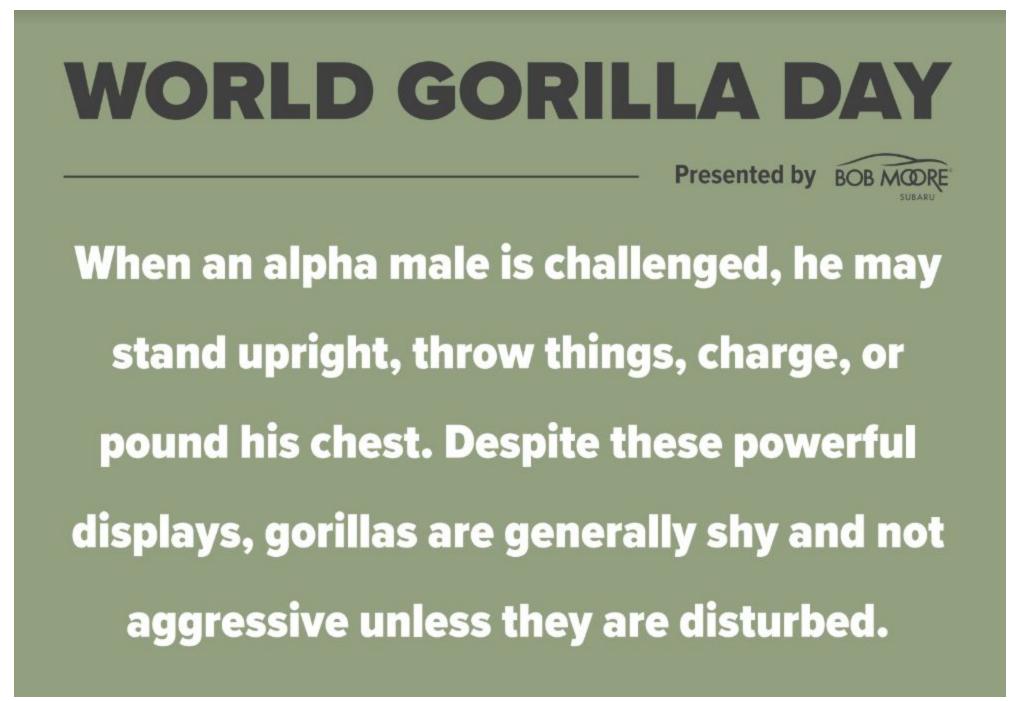


- They may look mean, but they are shy and peaceful unless they feel threatened.
- The males defend their families by roaring, beating their chests to scare off threats, charge, knock over or bit at the danger.

- Gorilla spend most of their time on the ground.
- In the middle of the day, they take a nap or play.
- They eat fruit, leaves, plant stems, seeds and termites. They eat in the mornings and evenings.
- They spend up to 14 hours a day eating!

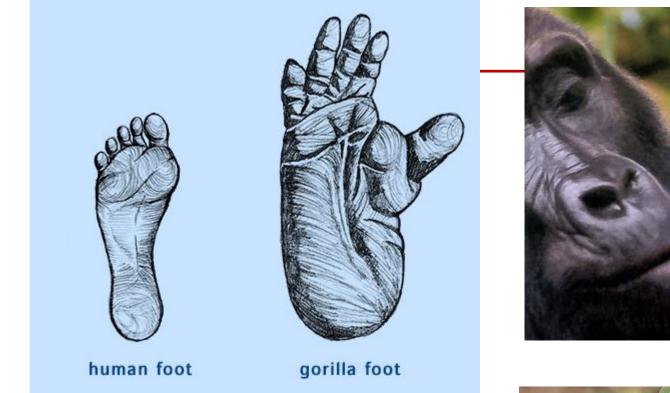












They use their fingernails for opening, scraping, cleaning and scratching.

Gorillas have a thumb and a big toe. Gorillas are able to use their big toe to pick up objects with their feet and hold onto things. They also have fingerprints, just like we do!



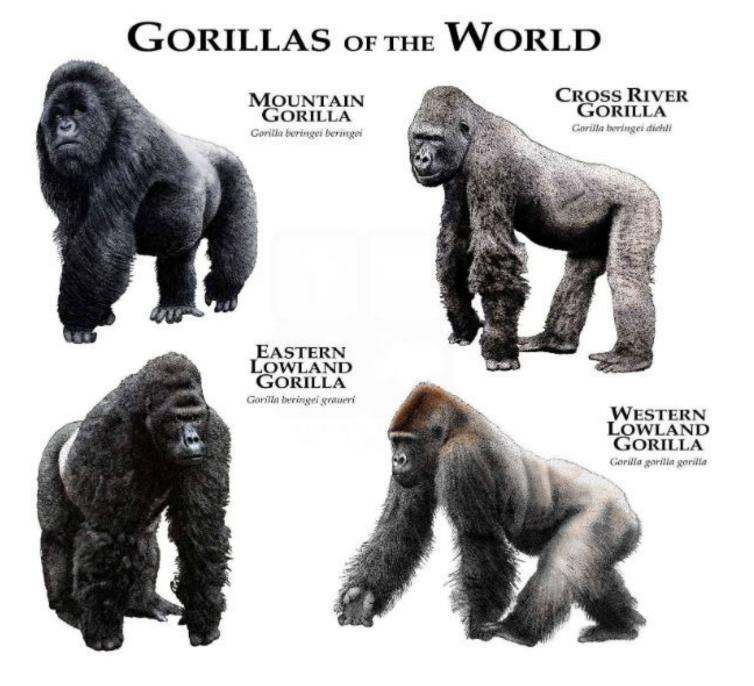






After this video, we will play a Kahoot! to test your knowledge. Make sure you pay close attention!







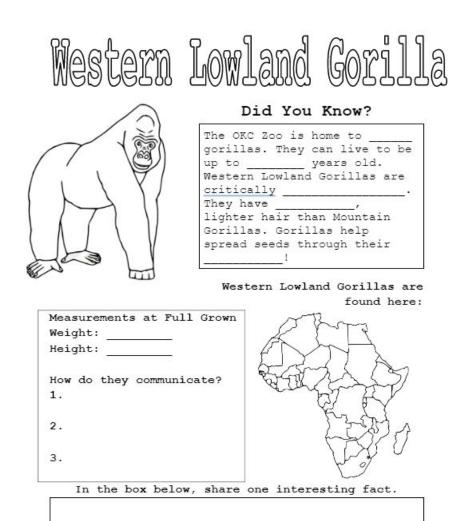


Mountain Gorilla Facts





Western Lowland Gorillas Fact Sheet



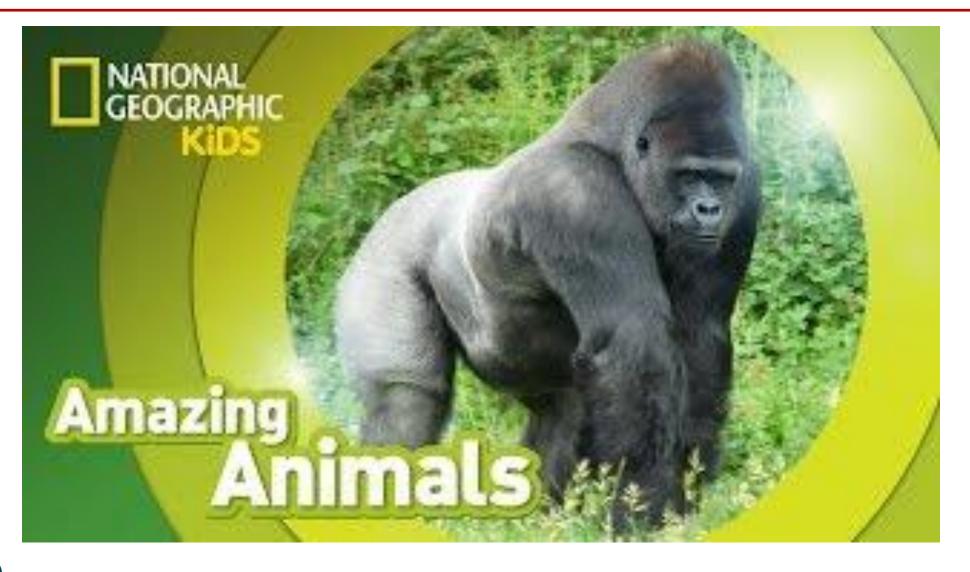
Follow along carefully for some important information that you will be using on your fact sheet.

Most information will come from the next few slides. The rest, you will need to find at:

nationalzoo.si.edu/animals/western-lowland-gorilla



Let's Learn More About Gorillas







Lowland Gorillas and Mountain Gorillas



d

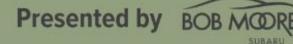
Why Are Gorillas Important?

- Gorillas live in the second-largest tropical rainforest on earth, it plays a critical role in our world.
- The Rainforest acts as the "lungs of the planet", which cleans the air of Carbon Monoxide, and replaces it with clean oxygen that we need to breathe.
- Gorillas are important to the rainforest because they help spread the seeds of very important plants through their poop. (Yes, their ?? ! They eat lots of fruits. As they move through the rainforest, the fruit seeds get spread when the gorillas poop. This actually helps the forest grow and stay healthy.)









Western lowland gorillas are critically endangered. Their exact numbers are not known because they inhabit some of the densest and most remote forests in Africa.





Threats To Gorillas



Poaching- gorillas are being illegally hunted for their meat.



<u>**Habitat Loss-**</u> brought on by climate change, mining, logging, farming, and road construction







<u>Disease-</u> gorillas can get various human diseases that can result in their death. They are also at risk of injuries.

<u>Snares-</u> gorillas can get caught in traps sometimes set for other animals. As a result, they are badly injured or killed. Some gorillas have learned how to take apart snares.





I can describe the conservation efforts that protect the gorilla population.





Gorilla Conservation Part 2





Presented by BOB MORE

In human care, gorillas have displayed significant intelligence and have even learned simple human sign language.













OKC ZOO

Let's meet some Western Lowland Gorillas that live right here in Oklahoma, at the OKC Zoo!





Let's Meet The Bachelor Troop

The bachelor troop is a troop of young silverback gorillas. They are not the head of a troop. They are similar ages, grow up together, and form strong, lifelong friendships. There are three silverback gorillas in the Bachelor Troop at the OKC Zoo.







George is the oldest of the three males. He has the reddest and largest *sagittal crest*. He has thick silver fur on the upper part of his legs and his left ear has a tear in it. George was born at the OKC Zoo on January 25, 2004 and has a half-sister in the family troop named Emily. His favorite thing to do at the zoo is play with the feeder tires that are filled with grapes or popcorn.









Bo has less hair on his arms and head. Because of this, he appears the most muscled. His arms have little hair compared to the other 2 males and his head and face hair is very short and not as red. He does not have a big *sagittal crest*. Bo is more dominant (bossy) than George and Bakari. He is VERY vocal and loud and grumbles loudly for his food. Bo was born March 14, 2006 at the San Diego Zoo. Bo's mom is Ndjole who is in the Family Troop. His favorite thing to do at the OKC Zoo is toss around large plastic barrels.







Bakari has a long face compared to the other two and a bigger *sagittal crest* than Bo's. The length of his nose to his nostrils is much longer than either of the other two males. Bakari's nostrils are rounder than the typical heart shape. His hair appears smoother than George's. Bakari is the youngest of all three, he was born August 13, 2006 at the Cincinnati Zoo. He is the biggest of the bachelor troop. His favorite food is green beans and he likes to use blankets to make his sleeping nest.



Let's meet the Family Troop.

The family troop at the OKC Zoo has seven gorillas in the troop. There are two males and five females.







Togo is the silverback leader of the family troop. He was born September 23, 1988 at the Toledo Zoo in Ohio. He has three kids in the family troop: Rubi (top), Finyezi (middle) and Azinza (bottom). His favorite food is fresh browse limbs (made from elm and mulberry). He is a great leader for the family troop and keeps everyone in line.







Emily was born April 30, 1985 at the OKC Zoo. Mikella (botom left) and Rubi (middle) are her daughters. Emily is the best forager in the group and is quick to grab all of her favorite snacks. She plays an important "mom" role in the troop, raised Finyezi (right) as her own, and is the dominant (bossy) female.

9





Ndjole was born March 6, 1996 at the San Diego Zoo in California. She spends most of her day hanging out with Finyezi. She has the darkest color of hair in the group, her hair is all black. She loves to carry branches around on her neck so she always has a to go snack. Her oldest son is Bo (middle bottom), who lives in the Bachelor Troop. Finyezi (top middle) is also her





Mikella was born December 14, 2003 at the OKC Zoo. Emily is Mikella's mom, and Mikella has one child, Azinza (bottom right). Her caregiver said she is an amazing mom! Mikella is the most vocal in the family troop, and makes lots of exciting food grumbles when she eats. Her favorite activity is to use a stick to get her favorite snack (craisins) out of a feeder board.







Rubi was born March 24, 2015 at the OKC Zoo. She is the oldest sister of Finyezi and Azinza and she loves to wrestle and play with them. Her favorite thing to do is play with paper bags with food inside.









Azinza was born December 13, 2017 at the OKC Zoo. Her mom is Mikella and her dad is Togo. She loves to play with boxes and get inside of them. She is very smart. Azinza comes from a long line of gorillas born at the OKC Zoo!







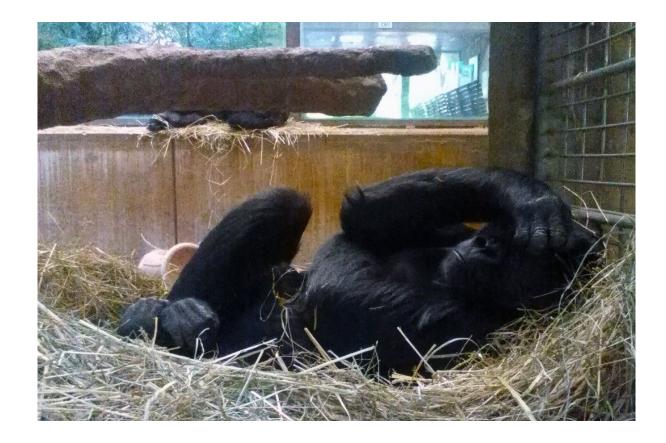
Finyezi is the baby of the troop! He was born June 18, 2018 at the OKC Zoo. His favorite thing to play with are party streamers and hang out with his mom, Ndjole.



A Day in the Life of a Gorilla at Smithsonian's National Zoo

Are you curious about how gorillas spend their days at the Zoo? <u>Click here</u> to see what it's like being a gorilla at the Smithsonian's National Zoo!









Facts About Zoo Gorillas

- There are about 350 gorillas that live in the zoos of the United States and Canada.
- Only western lowland gorillas are in zoos.
- Eastern lowland gorillas and mountain gorillas are so rare, scientists believe they should be left in the wild.

- Gorillas can live to be about thirty-five years old in the wild and about fifty years old in the zoo.
- The Zoo helps people learn to respect gorillas and understand why they need to be protected.



Helping People. Saving Gorillas.





Optional Resources/Activities





Gorilla Live Cams

Interested in watching gorillas live? Choose a link below and start watching!

Atlanta Zoo Gorilla Live Cam

San Diego Zoo Gorilla Live Cam

39 acre gorilla habitat in Africa LIVE CAM





Banana Jungle Online Game

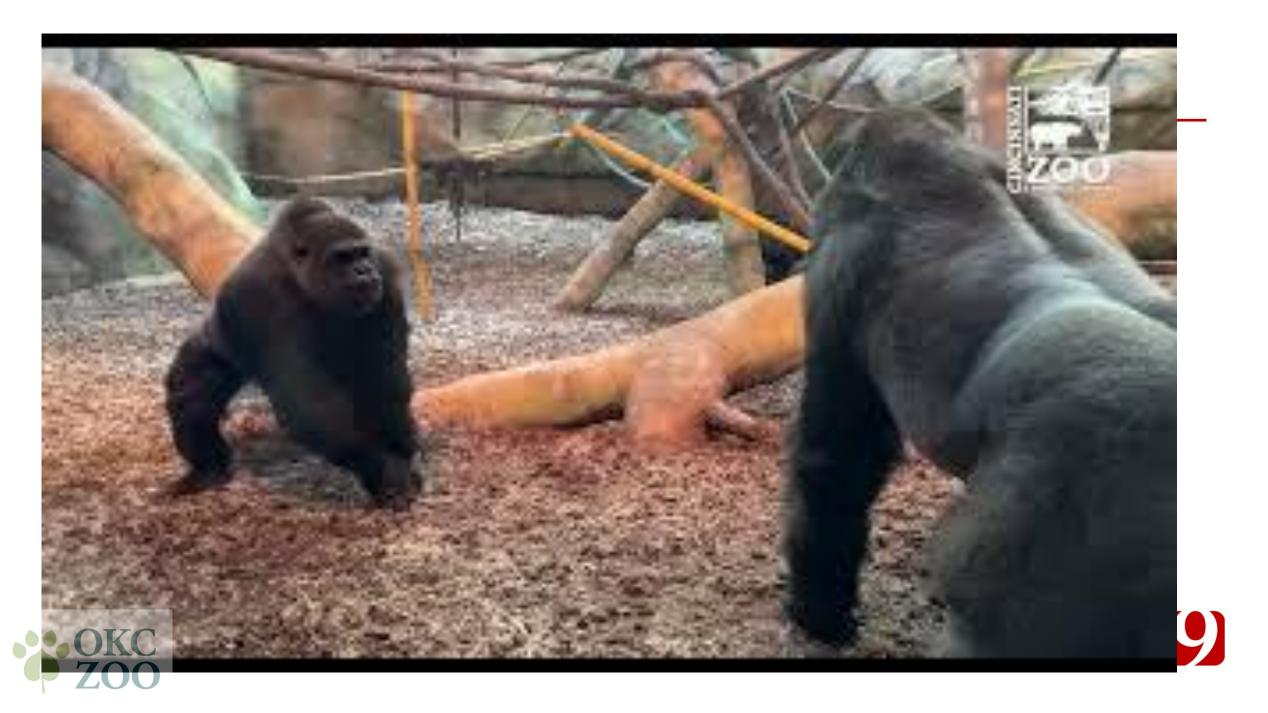
Play as a cute gorilla and help it run through the woods as far as possible collecting bananas along the way.

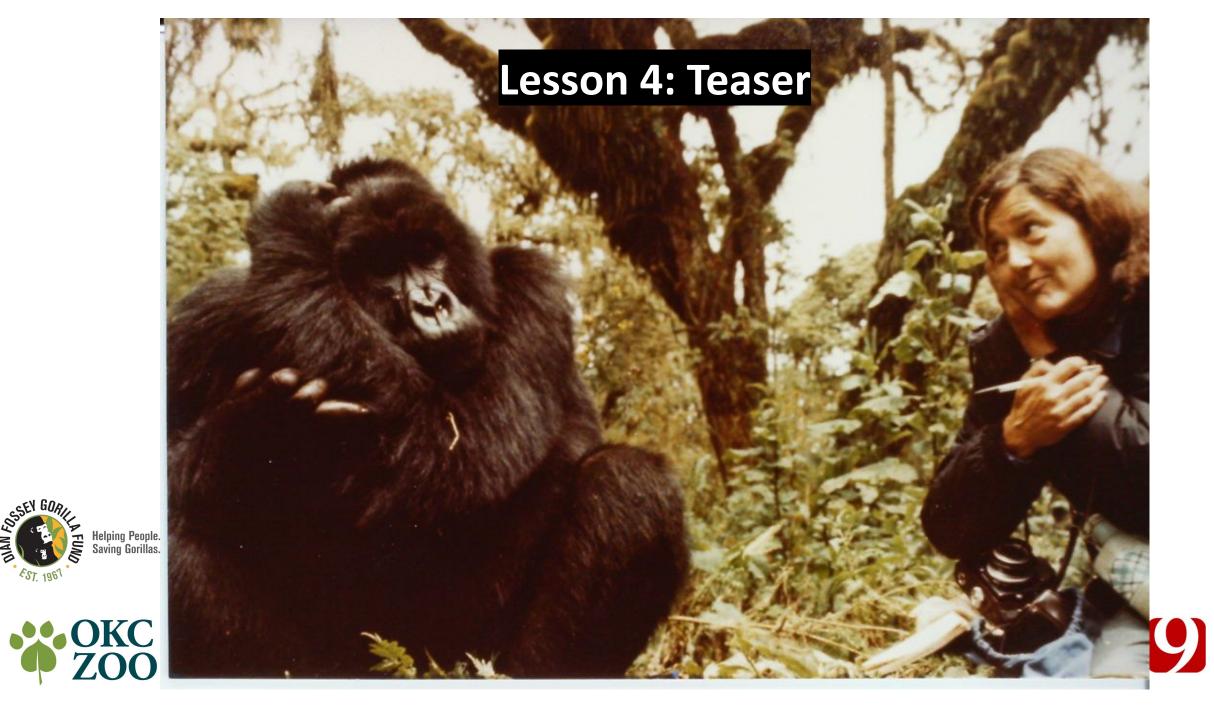
<u>Banana Jungle Game</u>





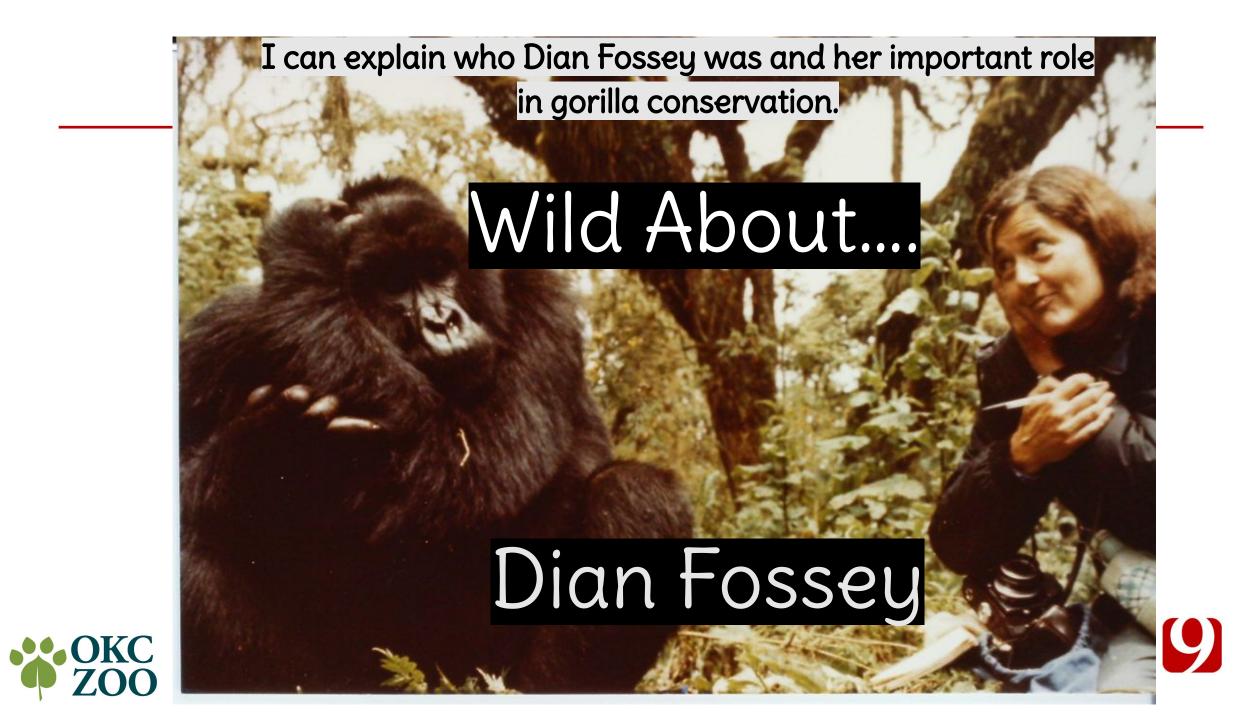






SSEY GORI

EST. 1967



Dian Fossey Narrates Her Life With Gorillas







Who Was Dian Fossey?





- Dian Fossey was born January 16, 1932 in San Francisco, California.
- She discovered her love for animals at a very young age.





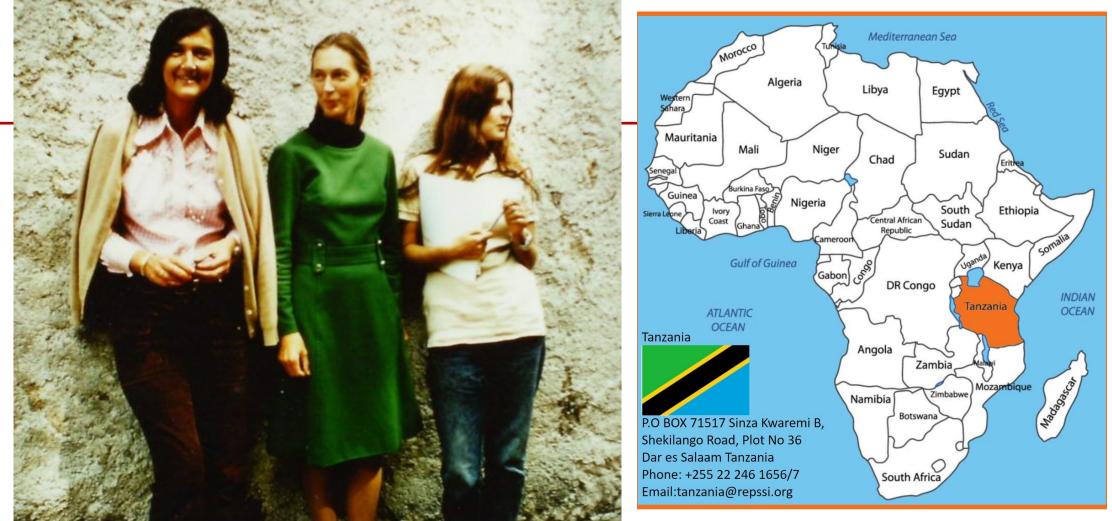
Who Was Dian Fossey?

- After completing school, she worked at a hospital as an occupational therapist.
- Dian continued to live on a farm and take care of the livestock.
- She quickly realized she missed working with animals and decided to visit Africa in 1963.
- During her visit, she met Dr. Louis Leakey who inspired her to spend her life studying gorillas.
- This would also be her first time seeing mountain gorillas.









Notable women scientists (from left): Dian Fossey, Jane Goodall, Birute Galdikas. All three women studied apes in the wild. When Dian returned to Africa to study the gorillas, she stopped in Tanzania to meet Jane and watch her work with the CKC



Dian Returns To Africa

 In 1966, Dian Fossey returns to Africa, but this time to stay and study the mountain gorillas forever. She met many friends that helped her set up her camp and carry her gear.



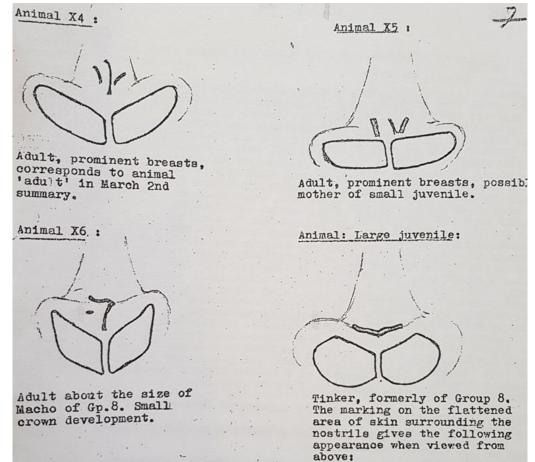
 She quickly set out to start tracking the gorilla troops. All of Dian's hard work paid off! After only a 10-minute walk, Dian saw a male gorilla by himself.





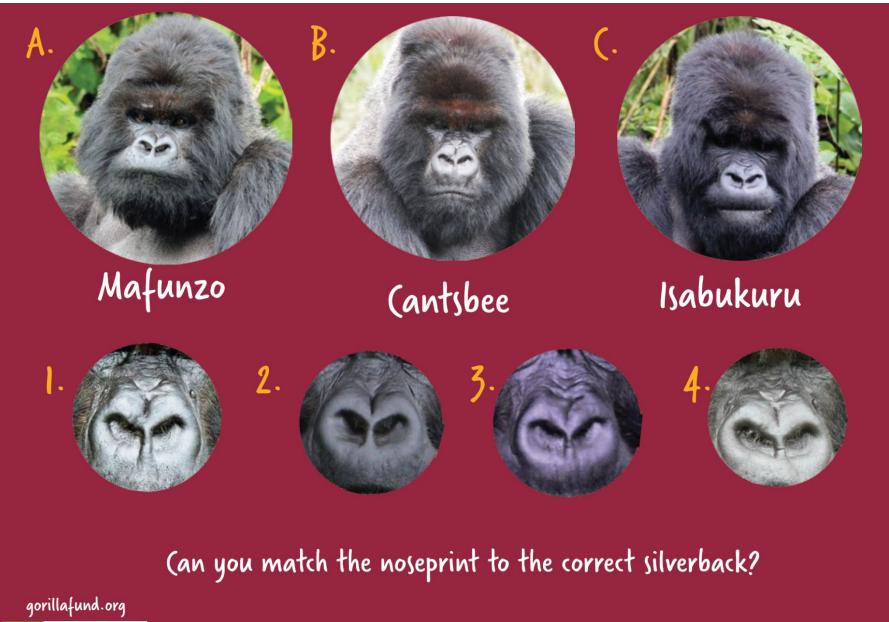
Dian Gets To Know The Gorillas

During her time studying the mountain gorillas, she got to know three troops! Dian kept track of each gorilla by learning their "nose prints". She also sketched the gorillas from a distance and began to recognize each one.







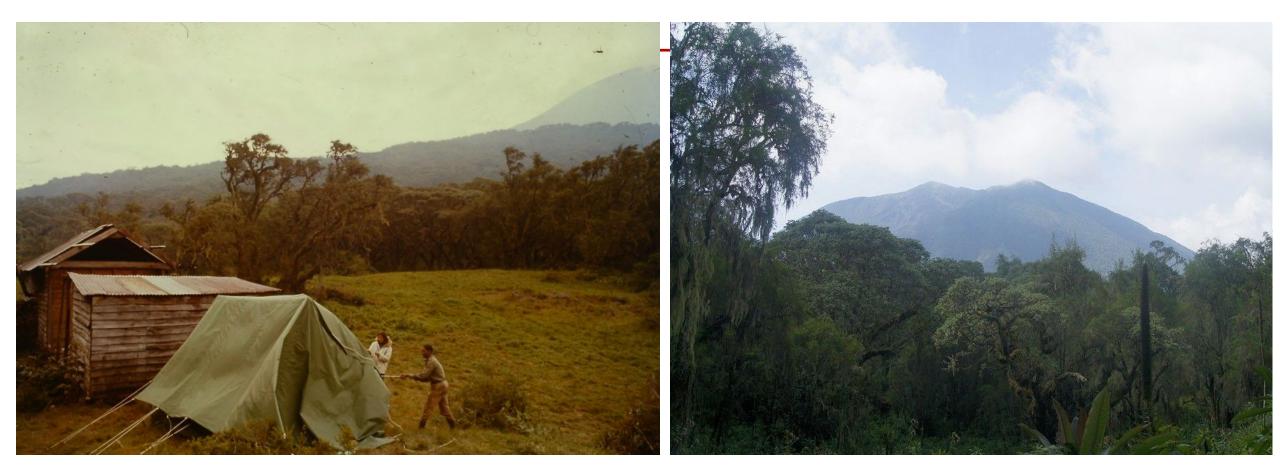


9

Click me for the answers!









In September 1967, Dian set up her research camp and named it "Karisoke Research Center". She faced many challenges setting up her camp, the biggest challenge was gaining the trust of the gorillas in the area. Dian was able to form relationships with the gorillas by mimicking their behavior. She was able to gain their trust, and sit near them and observe them for 18 years.



Karisoke Research Center Today

Today, Karisoke does daily monitoring and protection of the mountain gorillas. It also provides the community with valuable education programs. Each morning, trackers locate their assigned gorilla group based on where they built their night nests. There are also teams dedicated to anti-poaching and checks for snares.





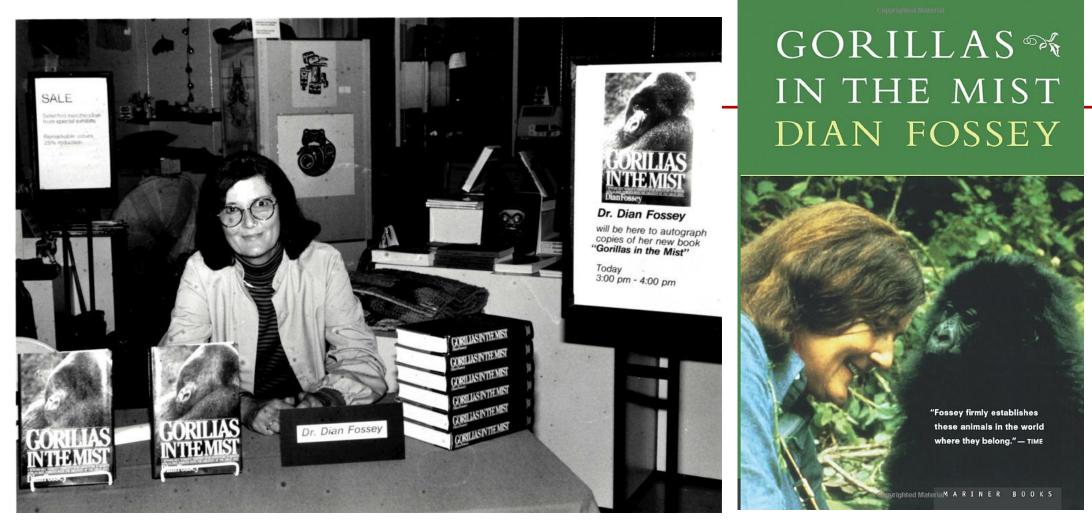


Meet Dian's Favorite Gorilla



Meet Digit! He was 5 years old when Dian first encountered him in 1967. Digit had a damaged finger on his right hand and no other gorilla playmates his age in his group. Sadly, Digit was killed in 1977 by poachers. He died helping defend his group, allowing them to escape the poachers. This is when Dian began fearlessly fighting poachers.





Before her death in 1985, Dian Fossey had written several articles and a book, *Gorillas in the Mist* about her work with gorillas.





Dian Fossey's Tragic Death

Dian was mysteriously killed in 1985. Her death has never been solved. It is thought that she was murdered by poachers for revenge. She was buried next to her beloved gorilla, Digit.







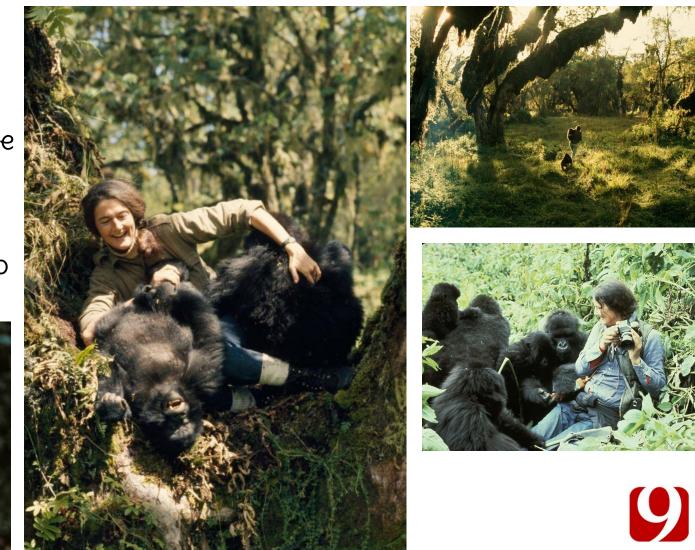
The Legacy of Dian Fossey

 Because of Dian Fossey, the gorilla population began to increase.

- Poaching of the gorillas decreased. The last confirmed poaching of mountain gorillas was in 1983.
- Dian brought international attention to the problems that gorillas faced.

OKC







<u>Click here</u> for an interview with the current CEO of Dian Fossey Gorilla Fund, Dr. Tara Stoinski.



I can explain the OKC Zoo's efforts and support of

conservation.

Lesson 5: Wild About....



The OKC Zoo and You!





By making small, but important, behavior changes we can make some huge and positive impacts!



Oklahoma City Zoo's Mission Statement

We connect people with our world's vanishing wildlife and wild places to inspire conservation action.

Oklahoma City Zoo's Vision Statement

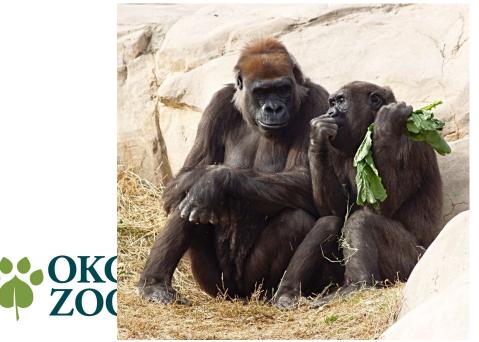
We envision a world where all people take action to conserve wildlife and wild places.





THE DIAN FOSSEY GORILLA FUND[®] INTERNATIONAL

- The Dian Fossey Gorilla Fund International is one of the OKC Zoo's legacy conservation partners.
- A Legacy Partner is a long-term partnership between the Zoo and a conservation organization.
- The money donated is used to support day-to-day operations of the Karisoke Research Center.











Since 2011, Roundup for Conservation has raised \$738,954!

OKC ZOO What is Roundup for **Conservation?**

NO UP FOR CONSERPT

ER

CHANGE

OKC

It is a program created to help wildlife and wild places! Zoo guests are encouraged to become everyday conservationists by simply rounding up their purchases to the next dollar amount when visiting the Zoo.

For example, if a guest's total purchase is \$10.73, one of our Zoo team members will ask if they'd like to round up to the nearest dollar. If the answer to the above question is YES, 27 cents will then be donated to the Zoo's overall conservation initiatives. It's really that easy!



Conservation Action Now Grant



The Zoo awards these competitive small grants each December in amounts up to \$2,500 each. The selected projects span the globe and are based on their proposed ability to address the following conservation ideals:

- <u>Conservation Education</u> building an awareness of a conservation program that can effect change.
- <u>Scientific Research</u> research projects that have a direct impact on conservation of an imperiled species or habitat in its native location.
- <u>Species Preservation</u> direct care or work with an imperiled species which results in an improved capability to preserve that species in its native habitat.















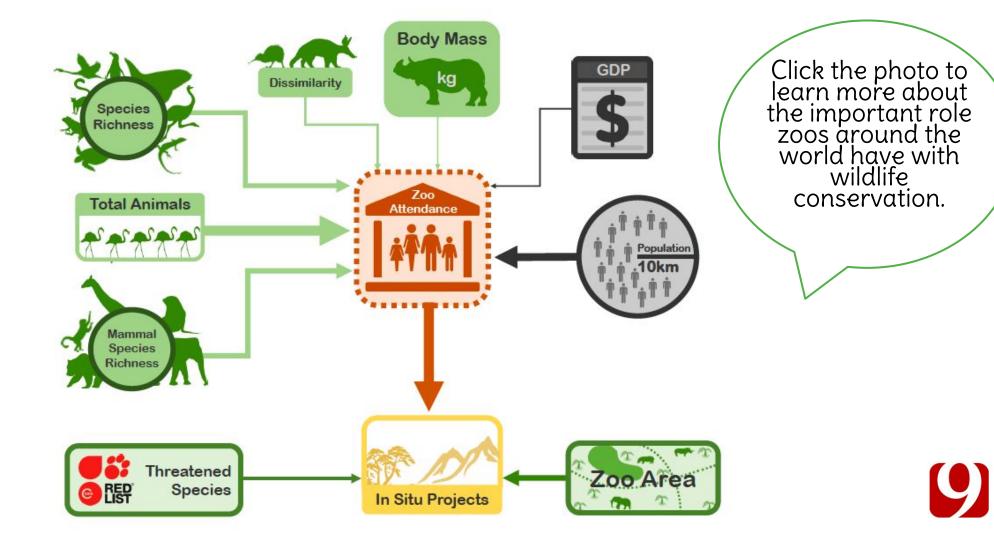


How Can the Zoo and You Be Conservationists?

How can I team up with the OKC Zoo and make a difference?



How Are Zoos Important to Conservation?





Recycle Your Old Small Electronics

Small electronics like cell phones have a direct effect on wildlife!

Coltan is a substance used because of its unique properties for storing electrical charge.

Most of the world's supply of Coltan is found in the Democratic Republic of Congo.

Mining for Coltan harms the gorillas' habitats. It also puts miners in close proximity to wildlife.

Bring old cell phones when you visit the Zoo so they can be disposed of in a safe way!

OKC



How Cell Phones Impact Gorillas

Coltan is a mineral used to manufacture cell phones, tablets, and small electronics.³

Coltan is mined by hand in the Democratic Republic of Congo, which is also the natural habitat of endangered gorillas.²

The deforestation and mining associated with coltan production has impacted and displaced gorillas, moving them closer to extinction.³

Recycling and extending the life of electronic devices reduces the demand for coltan mining.⁴

Recycle your phones at cell phone stores and approved locations.

Extend the life of your cell phone: commit to using it a few years longer and recycle it when you upgrade. Through simple actions, we can help protect gorillas and their habitat on World Gorilla Day and beyond.



Art Gone Wild



Art Gone Wild features original paintings created by different Zoo animals. Some of these amazing animals use paint brushes while others paint with their flippers, trunks, paws, tails and noses.





OKC ZOO





Conservation Wristbands

Show your love and support for the OKC Zoo with our one-of-a-kind conservation wristbands. All proceeds benefit the Zoo's conservation programs. From butterfly to bison and giraffe to gorilla, there are 10 different animal designs available.





OKC











Become a Zoo Member

Some Perks Of Being A Zoo Member:

- \star Free general admission for 12 months
- ★ You have your own entrance
- ★ All sorts of discounts: Wild Encounter experiences, VIP Tours, Safari Lights, Haunt the Zoo and many more!
- ★ More discounts! Summer camps, education classes, and so much more.

Becoming a Zoo Member has some fun perks! When you pay for your membership fee, some of the money is used to support the Zoo's Legacy Conservation Partners.







Feeling Inspired?

Create a poster to bring awareness to the importance of protecting the gorillas! Use the samples for ideas or let your creativity go wild!













The following slides are to inform educators about all of the resources available through the OKC Zoo.

Teacher Resources: Wild About....

OKC ZOO

The OKC Zoo and You!





The ZooFund for Kids

- Created in 1997, the ZooFund for Kids program is a grant program assisting schools by providing an opportunity for children to attend a Zoo education class and experience wildlife and nature.
- <u>Click here</u> for important application information.
- To apply, <u>click here!</u>







Zoo Classes 🦍

The OKC Zoo offers many exciting programs both on grounds and off grounds all around the state! We have a special collection of education animal ambassadors that enhance our programs. These animals have been specifically selected as education program ambassadors because of the relevance to our Zoo programs and their comfort with audiences. You can request animals, but there are no guarantees, as animals may not be available or may not relate to the program(s) chosen.

4th Grade

Habitat Challenge

Where animals live determine what they look like. Check out the adaptations they use for survival.

5th Grade

What's On The Menu?

Welcome to Nature's Restaurant! Pull up a chair and take a look atht menu. Find out which animals are prey and which are predators! How do animals stay off the menu?







The ZOObarus have enabled the OKC Zoo's education team to transport our animal ambassadors and educate children all over the state about wildlife and wild places!



ZOObaru Outreach

Programs designed to help students develop awareness and appreciation for the natural world. Students can see and touch real animals and make connections which foster commitments to environmental protection. Classes are 30 minutes and designed for 32 students or less.





Read for Adventure





Check out the book, and receive 4 FREE tickets to the OKC Zoo!









Check out "Juniper's Butterfly Garden" from participating libraries, and receive **4 FREE tickets to the OKC Zoo!** Vouchers expire 6/30/23















Educator Resource Bucket

Habitat Boxes

Sensory Bag
Animal Artifacts

Suitcase for

survival

Wild Oklahoma Kit

- Loaner educational materials available with various engaging thematic items.
- Free of charge

