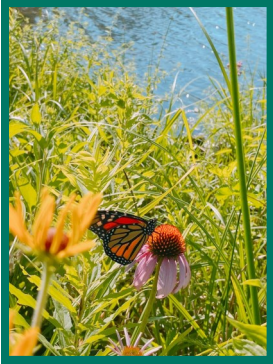
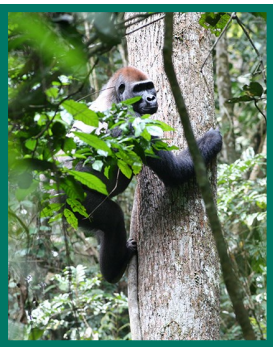


The Scoop on Gorilla Poop



An **ecosystem** is a community of living and non-living things. For example, in a forest ecosystem, you would find trees, dirt, water, insects, birds, and mammals. All of these things depend on each other to survive. Trees grow in the dirt and soak up water through their roots. Insects build their homes in the bark of the trees. Small mammals, like mice, eat those insects and seeds from trees. Birds, like owls, hunt mice for food and build nests in trees. Animal poop and dead plants **decompose**, or break down, to feed the dirt and start the whole process over again. Ecosystems can be as small as a puddle or as big as the whole planet!

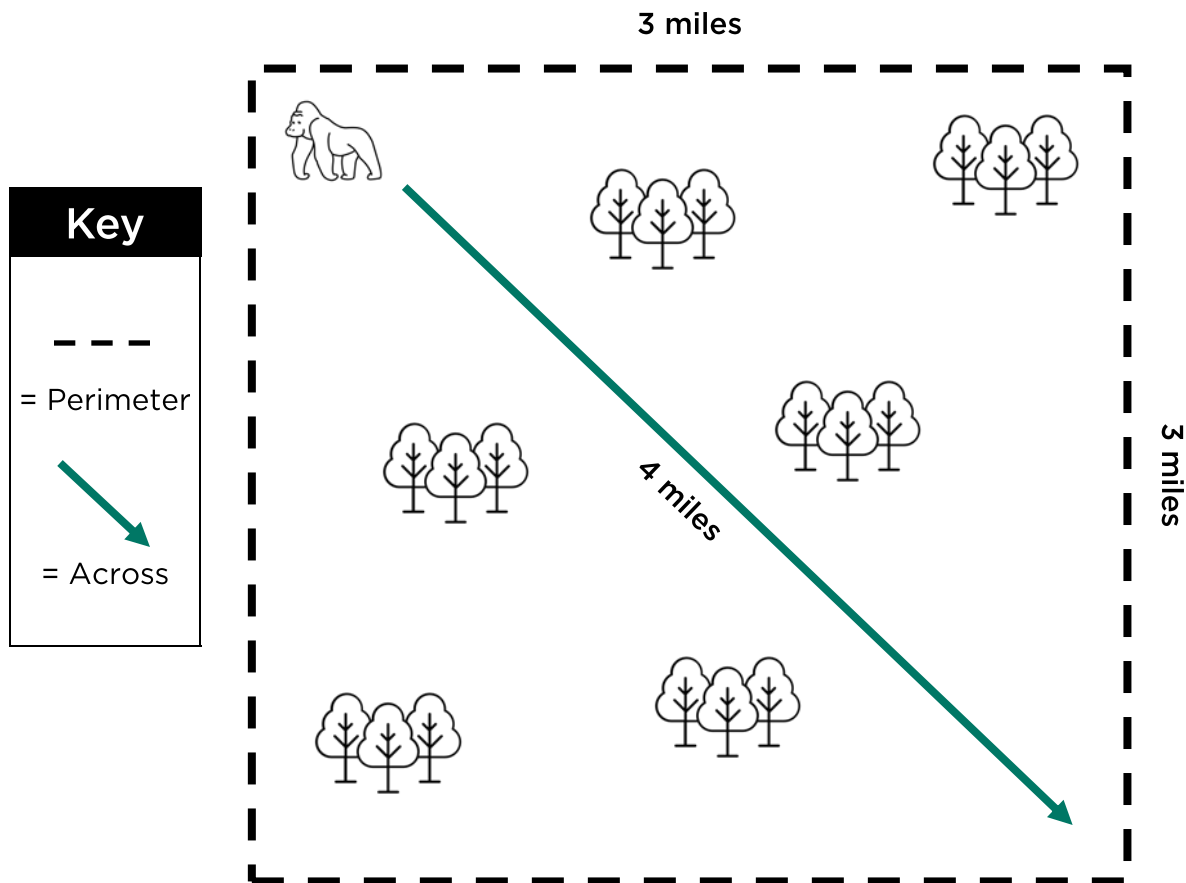


Western lowland gorillas live in the tropical rainforest. One of the most important things they do is spread seeds throughout the rainforest so that new plants can grow. Gorillas eat lots of fruit. As they move through the rainforest, the fruit seeds get spread when the gorillas poop. Gorillas poop a few times per day. As they move through the rainforest, they spread the seeds in areas with plenty of light and space for the seeds to grow. By moving the seeds, the gorillas help the forest stay healthy!

The Scoop on Gorilla Poop

Each gorilla troop lives in a large home area. The troop travels about one mile each day gathering food and eats from about 100 different types of trees. This makes for a lot of gorilla poop!

Directions: Imagine you are a gorilla and you live in the home range pictured below. For the next few days, you will walk along the **perimeter**, or edge, of your home range. Answer the questions on the next page to learn how your poop helps the forest grow!



The Scoop on Gorilla Poop

Questions

- 1.) If you walk 1 mile per day, how many days will it take for you to walk along the top edge of your home range? _____ days
- 2.) If you poop 3 times per day, how many total times will you poop over 4 days? _____ times
- 3.) It takes you 3 days to walk along the north edge of your home range, 4 days to walk along the west edge of your home range, 5 days to walk along the south edge of your home range, and 6 days to walk along the east edge of your home range. How many total days does it take to walk around the whole perimeter of your home range? _____ days
- 4.) If you poop 3 times per day and there are 25 seeds in every poop, how many total seeds do you poop in one day? _____ seeds
- 5.) It is about 4 miles across your home range. If you poop 4 times per mile, how many times will you poop as you travel across your home range? _____ times
- 6.) If there are 10 gorillas in your troop, and you all poop 4 times in one day, how many total times does your whole troop poop in one day? _____ times

Western lowland gorillas are in danger of going extinct. Human activities, such as cutting down forests and mining are destroying gorillas' habitats.

- ➡ **Challenge Question:** What do you think would happen to the tropical rainforest ecosystems if gorillas went extinct? _____
-

The Scoop on Gorilla Poop



Work Space

The Scoop on Gorilla Poop

Answer Key

1.) If you walk 1 mile per day, how many days will it take for you to walk along the top edge of your home range? **3** days (1 mile per day; 3 miles total)

2.) If you poop 3 times per day, how many total times will you poop over 4 days? **12** times (3 times x 4 days = 12 times)

3.) It takes you 3 days to walk along the north edge of your home range, 4 days to walk along the west edge of your home range, 5 days to walk along the south edge of your home range, and 6 days to walk along the east edge of your home range. How many total days does it take to walk around the whole perimeter of your home range? **18** days (3 days + 4 days + 5 days + 6 days = 18 days)

4.) If you poop 3 times per day and there are 25 seeds in every poop, how many total seeds do you poop in one day? **75** seeds (3 times x 25 seeds = 75 seeds)

5.) It is about 4 miles across your home range. If you poop 4 times per mile, how many times will you poop as you travel across your home range? **16** times (4 miles x 4 times = 16 times)

6.) If there are 10 gorillas in your troop, and you all poop 4 times in one day, how many total times does your whole troop poop in one day? **40** times (10 gorillas x 4 times = 40 times)

➡ **Challenge Question:** What do you think would happen to the tropical rainforest ecosystems if gorillas went extinct? **Answers may vary: Tropical rainforests will see less new plant growth.**