



Ted Alejandro, County Superintendent

San Bernardino County

Superintendent of Schools

Transforming lives through education



Wednesday, April 22

2:00pm

Nature: "Giraffes: Africa's Gentle Giants" – 4th thru 8th grade

What does it take to relocate a herd of wild giraffes in Africa? One man, his family and a band of enthusiastic helpers will journey across the wild heart of Uganda and the mighty Nile River to move the world's rarest and most precious "cargo."

It's ironic that the life of one of the world's most identifiable and popular wild animals, the giraffe, is still something of a mystery. As these giants began to be studied, it was revealed that they don't need to drink in the desert because they can get enough water just eating leaves. Another important finding is the role giraffes play as pollinators and seed spreaders which is vital to maintaining healthy landscapes in many parts of Africa. Much of what we know about these creatures is due to the work of Dr. Julian Fennessy, Co-Founder and Co-Director of [Giraffe Conservation Foundation](#) (GCF), who has been studying giraffes for over 20 years.

Fennessy has exposed the shocking fact that giraffe populations in Africa are down by 40 percent in just two decades, prompting the featured mission in the film to move a herd of rare Rothschild's giraffes across the Nile River to a safer location.

Dr. Julian Fennessy, an Australian, earned his PhD studying the tall beasts in the Namibian desert. He runs the GCF with wife Steph out of the family home in Windhoek, Namibia's capital. They are parents to Molly, age seven, and Luca, age ten, who share the Fennessys' love of giraffes. They've learned the huge bumps on a giraffe's head, called ossicones, are different from horns or antlers. They spot an old bull their parents studied before they were born and their dad estimates he may be the world's oldest recorded wild giraffe at over 20 years old. But with only 90,000 left, his goal is to identify which giraffes need urgent help based on his ground-breaking theory that there are four or five unique giraffe species, not just one.

As the film chronicles, Fennessy has to go to Ethiopia's border with war-torn South Sudan to complete his collection of DNA samples from Africa's wild giraffe population before he can run a species analysis. Searching for Nubian giraffes by helicopter, he gets one sample before gunfire aimed at the copter ends a final day's search for more.

It was Fennessy's research that greatly contributed to the very recent genetic discovery which confirmed there indeed are four distinct species of giraffe: the northern giraffe, southern giraffe, reticulated giraffe, and the Masai giraffe. This breaking news comes just as the world is learning of the endangered status of the giraffe and the need to preserve all four species.

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RIVERSIDE COUNTY
OFFICE OF EDUCATION

JUDY D. WHITE, Ed.D.
County Superintendent of Schools

Because a population in Uganda, called Rothchild's giraffes, are the same type as the Nubian and are endangered due to poaching and oil drilling plans, Fennessy and the Uganda Wildlife Authority work out an ambitious plan to protect the species.

A team of Ugandan veterinarians and park rangers go through training in how to safely capture a herd of young, healthy females and a few males. They guide them into trucks, drive four hours to the Nile River, cross via a ferry, and then release them in a safer habitat to breed far from the oil drilling. The film captures all the drama of such a difficult and dangerous operation in Uganda's Murchison Falls National Park as the Fennessys and the team hopes a successful relocation will prompt more missions to protect these rare giraffes for generations.

After watching this episode, choose from the following questions and/or tasks to extend your learning

Question Box 1

- The giraffe is still something of a mystery, much of what we know about these creatures is due to the work of Dr. Julian Fennessy, how long has he been studying giraffes?
- Dr. Julian Fennessy walks us through the giraffe's unique anatomy by examining the bones of an enormous male specimen; tell some interesting facts that you learned about giraffes.
- What are the massive bumps on a giraffe's head called? What type of tissue are they made of?
- Why is it important for park rangers and veterinarians to capture young healthy females and a few males?
- Why is "relocation" of some giraffes important?
- "A Quadruple Take on the Giraffe: There are Four Species, Not One," what is the name of the four species of giraffes?
- Tell why this is a controversial decision?
- What is known as the traditional "Biological Species Concept"?
- Why is the Biological Species Concept an argument for keeping the traditional 9 species before the reshuffling in September, 2016?
- What is "phylogenetics"?
- What is the benefit of four distinct species?
- Describe Fennessy's adventure as he searches for Nubian giraffes by helicopter?
- Why does Fennessy go to Ethiopia's border?
- Describe in sequential order the events of the operation in Uganda's Murchison Falls National Park as the Fennessys and the team hope a successful relocation will prompt more missions to protect these rare giraffes for generations.

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Question Box 2

- Describe how it must feel to do a job that you feel makes a difference.
- Why is Dr. Fennessy's work important?
- What do you still want to know about giraffes?
- What would happen if we didn't study giraffes and learn about them?

Question Box 3 (Tasks)

- Make a travel brochure for a giraffe photo safari in Africa. Be sure to include information about the four different species of giraffes visitors can expect to encounter.
 - for google: <https://www.youtube.com/watch?v=0HPRs-D4vtw>
 - for microsoft word: <https://www.youtube.com/watch?v=2-wuhi2W-Yc>
- Size Comparison Activity:
Using 5 basic measurements of your body, compare your size to the size of the animal in the Nature episode. If you are watching multiple episodes this week, create a table to record all of your discoveries. Use the following measurements: height, weight, arm length, waist circumference, foot length. Some animals may not have the same features. Adjust as necessary. Extension: Using the length of the animal you are exploring; can you find something in your home, or that you are familiar with to make a comparison? *For example: A blue whale can be 80-110 feet long, that is more than two big yellow school buses.*

Question Box 4 (Enrichment)

- You are a scientist on an expedition to study the wildlife in Africa. Study the "livecam" located in the Tembe Elephant Park. Record what you observe by taking notes. You may have to visit the livecam multiple times. Be patient, your goal is to capture a gentle giraffe on video!
- <https://explore.org/livecams/african-wildlife/tembe-elephant-park>

Question Box 5 (Extend/Real-Life)

- Social-Emotional Connection: Working for a cause can be very rewarding and create a positive feeling for those who are involved. Think about something you can do for your family or community. Create a plan to give your time to help out someone even if it is someone in your immediate family. Think about how you will give your time to help them with something and write about your experience.
- Veterinarians help all kinds of animals, what schooling is necessary to become a veterinarian? What are some good colleges/universities for Veterinary Medicine?
- Check out these Wildlife Veterinarian Careers:
<https://www.thebalancecareers.com/wildlife-veterinarian-125820>