mystery science

Grades K-5
Mini-Lesson: “Why does it matter if an animal is endangered?”

VIDEO TRANSCRIPT

Hi, it's Danni! One of my favorite field trips growing up was to Florida's Big Cypress National Preserve. See all the water? We hiked through it to get around. Some spots came up to my waist. It seemed so still, but there was wildlife all around us. It was incredible to realize all these animals live in the same place. Someone named Olivia has a question about the many animals found on Earth. Let's give Olivia a call now.

[Video Call]

- Hi, Danni!

- Hi, Olivia!

- I have a question for you. Why does it matter if an animal is endangered?

- That's a great question.

You may have seen our other videos about how we know if an animal is endangered and why some animals become endangered. Endangered means that kind of animal is in danger of going extinct. There would be none left of that kind. Before I go on, I'm curious, what do you think? Why does it matter if an animal goes extinct? Now would be a good time to pause a video and discuss. Okay, are you ready? It's sad to think about these amazing animals not existing anymore and it's a big change to imagine. Maybe you wondered what else might change. Wildlife experts wonder that too. They often look at how extinction might affect more than just

that animal. To show you what I mean, let's check out two animals that might seem very different. Southern sea otters and American alligators. These animals live in different places. American alligators live in the southeastern United States including the preserve I visited and southern sea otters live along the coast of central California, including places like this. It's a kelp forest. Instead of trees, there are giant seaweed called kelp. Sea otters aren't the only ones here. It's full of life. Snails living on the swaying kelp and crabs hide at the kelps base. Baby sharks hatch here and whales come to rest. There's one with her baby. Fish, small, and large, find food in a kelp forest. Some animals eat kelp like these purple sea urchins. They don't seem to move much but check out this sped-up video. They're actually big eaters. Animals that eat kelp like sea urchins are food for other animals like sea otters. One sea otter can scarf down dozens and dozens of urchins in a day. In the past, sea otters nearly went extinct but people worked together to stop overhunting and protect the otters. Still, some kelp forests that used to have southern sea otters don't anymore. Without hungry sea otters around, not as many sea urchins get eaten. That seems like good news for the sea urchins. But remember what those sea urchins eat. It's kelp. In some places, sea urchins have eaten kelp faster than it can grow. And if kelp gets eaten faster than it grows, well eventually there's no kelp forest. Take a look. This doesn't seem like a place where snails and crabs can make homes, or where baby sharks can hatch, or where whales can protect their young, or where all those fish can find food. If southern sea otters went extinct, it would affect the kelp, these animals, and the other living things that make up a kelp forest. Some might have a harder time surviving. So, we looked at southern sea otters. Now what about American alligators? Of all those animals at Big Cypress National Preserve, would any have a hard time surviving without alligators? Well, here's the preserve again and here it is in the dry season. Notice the difference. Places that had lots of water don't anymore but some small ponds remain. Fish need ponds like these to stay alive.

Turtles and frogs make their homes there too. Birds weigh in the water, snapping up fish, and other food, and raccoons hunt at the water's edge. The pond helps animals stay alive and healthy in the dry season, and it's thanks to alligators. See, this pond is an alligator hole. Alligators use their strong bodies to wiggle through the mud sometimes, down to the rock below. They clear away muck, making holes wider and deeper. As other areas dry up, water stays in these deeper holes. Alligators use these ponds to survive the dry season and their ponds help other animals survive too. If American alligators went extinct, so many living things would be affected. For many years, American alligators were endangered but people took action. They passed laws about alligator hunting and protected places alligators need to stay alive and healthy. Since then, the number of American alligators has increased. By helping American alligators, people are also helping fish, turtles, frogs, birds, and many other living things and by helping southern sea otters, people are also helping kelp, snails, crabs, sharks—the list of living things just keeps going. That's one reason it matters that animals are endangered. When one kind of animal goes extinct, it can affect many others. But by doing what we can to help endangered animals, we help many other living things too. We've talked about some endangered animals but there's so much more to explore. Find out about the endangered animals where you live. What do they need to stay alive and healthy? What can we do to help them? Keep learning and keep caring. That's all for this week's question. Thanks, Olivia, for asking it! And thanks to everyone who asked questions about endangered animals. We hope you'll keep asking them. You help us all stay curious about this amazing planet, Earth.