

Protectors of the Redwoods

TEACHER: *What do you see in this photo?*

STUDENTS: *Trees*

How do you think this photo was taken?

Looking from the ground up; lying down on your back looking up; etc.

This photo was taken by a photographer who was standing on the ground looking up. Do you think the trees in this picture are tall or short? Why?

Tall – because the tops are very far away from the camera; the tops look like they are high in the sky; the tops of the trees are very small; etc.

These trees are very tall. In fact, they are some of the tallest trees on the planet. These trees only grow in special places. The trees in this photo are growing in a forest in northern California. Do you know what kind of trees are in the photo?

Maple, oak, pine, cedar, redwood, etc.

The trees in the photo are redwood trees. They are over 200 ft. tall! That is about as tall as 20 classrooms stacked on top of each other. Some redwoods can grow to be over 300 ft. tall (30 classrooms). Redwood trees are also very old. How long do you think a redwood tree can live?

50 years, 100, 500, 1,000, 2,000, etc.

Redwoods can live to be over 2,000 years old! They also have very large trunks. Some trees are as wide as a bus!

Because redwoods are so tall, big and beautiful, many people want to cut them down to use for building materials. The Native Americans in northern California have been building large canoes out of the redwoods for hundreds of years. Other people have used them to build houses, schools, railroads, and many other important things. Redwoods are amazing trees for building, but they take a very long time to grow back. Many of the redwoods that people have been cutting are hundreds or thousands of years old. In some places in California, so many of the trees were cut down, that whole forests disappeared. This is called "clear cutting." Clear cutting destroys the forest, and harms the land. When forests are cleared, the soil cannot stay in place. When it rains, destructive mudslides race down the hills and can wash away houses and roads. The trees also provide a home for many other plants and animals. When they are cut, the habitat for those plants and animals disappears, and they can no longer survive.

In the 1920's, the United States government created three redwood state parks, and a national redwood park in 1968. How do you think parks help to protect trees?

People can't cut trees at parks; people at the park can help care for the trees and protect them; etc.

The parks the government created helped to protect the trees from being cut. Park rangers could watch over the trees and make sure they were unharmed. However, not all of the redwoods were protected, and some logging companies continued to cut too many trees in a way that was harmful to the environment.

In 1997, a young woman, named Julia Butterfly Hill, decided that she wanted to help protect the old growth redwoods. She climbed up into a tree that was 150ft. tall, and stayed up in the branches, so the loggers wouldn't cut the tree down. With the help of her friends, she built small platforms, and made a home in the tree. She slept, ate and worked in the redwood. She even gave her tree a name. She called it, Luna. How long do you think Julia stayed in the tree?

A day, a week, a month, a year, etc.

Julia Butterfly Hill lived in the tree for over two years! She stayed in the tree by herself, and didn't come down, even when there were big storms, and the wind almost blew her off the branches. Julia loved Luna, and wouldn't come down until the loggers promised not to cut the tree. Finally, the logging company agreed not to cut Luna or any of the trees around Luna. Julia helped to save a small forest of redwoods from being destroyed, and helped to teach other people about the importance of protecting old growth forests all over the world.

Do you know other people who have helped to protect trees like Julia?

Wangari Maathai; the Chipko Movement (tree huggers); etc.

All over the world, people like Wangari Maathai of Kenya or the members of the Chipko Movement in India are realizing the importance of protecting trees and promoting healthy forests. We know that many important things are made of wood and paper all over the globe. People need to cut down trees to make these things. Cutting trees isn't always bad. People need to make smart decisions about which trees to cut and how many. We don't need to cut trees, like Luna, that are over 1,000 years old. They are natural treasures, and should be protected.

If you go to the store to buy something made of wood, how can you know if the tree was cut in a way that is good for the environment?

Ask the person at the store, look for a sticker, read the packaging, etc.

Sometimes it is difficult for you or your parents to know if the wood you are buying has been sustainably cut. At the store, look for a sticker that says, "FSC wood" (Forest Stewardship Council Certified). This sticker is usually found on wood you buy for building, but it can also be found on a box of pencils or a pad of paper. This sticker means that the wood was cut sustainably and will not hurt the environment. If you don't see a sticker, get an adult to help you read the packaging. See if it tells you where the wood came from. If it came from a tropical country, the tree was probably cut down in a rainforest, and may not be good for the environment. If the thing you want to buy

*has no packaging, ask someone in the store. Storeowners often know where their products come from and can help you make an informed choice.
Raise your hand if you think you can do these things the next time you go shopping for something made of wood or paper.*

(Give students a chance to raise their hands.)

Great! Now you too can be like Julia Butterfly Hill and help protect the many special trees that grow all around the world.

Kindergarten Standards:

NYS Common Core Kindergarten Social Studies Standards

- K.8.a Climate, seasonal weather changes, and the physical features associated with the community and region all affect how people live.
- K.9.a Children, families, and communities of today can be compared with those in the past.
- K.10.b An historic figure is a person whose actions made a significant long-term impact on a community, culture, or nation

Kindergarten ELA Power NYSCCLS (ICSD Power Standards in Bold)

Reading Standards for Informational Text: Kindergarten

- **Integration and Knowledge of Ideas**
 - 7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).**

Speaking and Listening Standards: Kindergarten

- **Comprehension and Collaboration**
 - 1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.**
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).**
 - b. Continue a conversation through multiple exchanges.**
 - c. Seek to understand and communicate with individuals from different cultural backgrounds.**
 2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
 - 3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.**
- **Presentation of Knowledge and Ideas**
 - 6. Speak audibly and express thoughts, feelings, and ideas clearly.**

Language Standards: Kindergarten

- **Vocabulary Acquisition and Use**
 - 6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.**

Next Generation Science Standards for Kindergarten

K-ESS2 Earth's Systems

- ESS2.E: Biogeology
 1. Plants and animals can change their environment. (KESS2-2)
- ESS3.C: Human Impacts on Earth Systems
 1. Things that people do to live comfortably can affect the world around

them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary to K-ESS2-2)

K-ESS3 Earth and Human Activity

- ESS3.A: Natural Resources
 1. Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)
- ETS1.A: Defining and Delimiting an Engineering Problem
 1. Asking questions, making observations, and gathering information are helpful in thinking about problems. (secondary to K-ESS3-2)