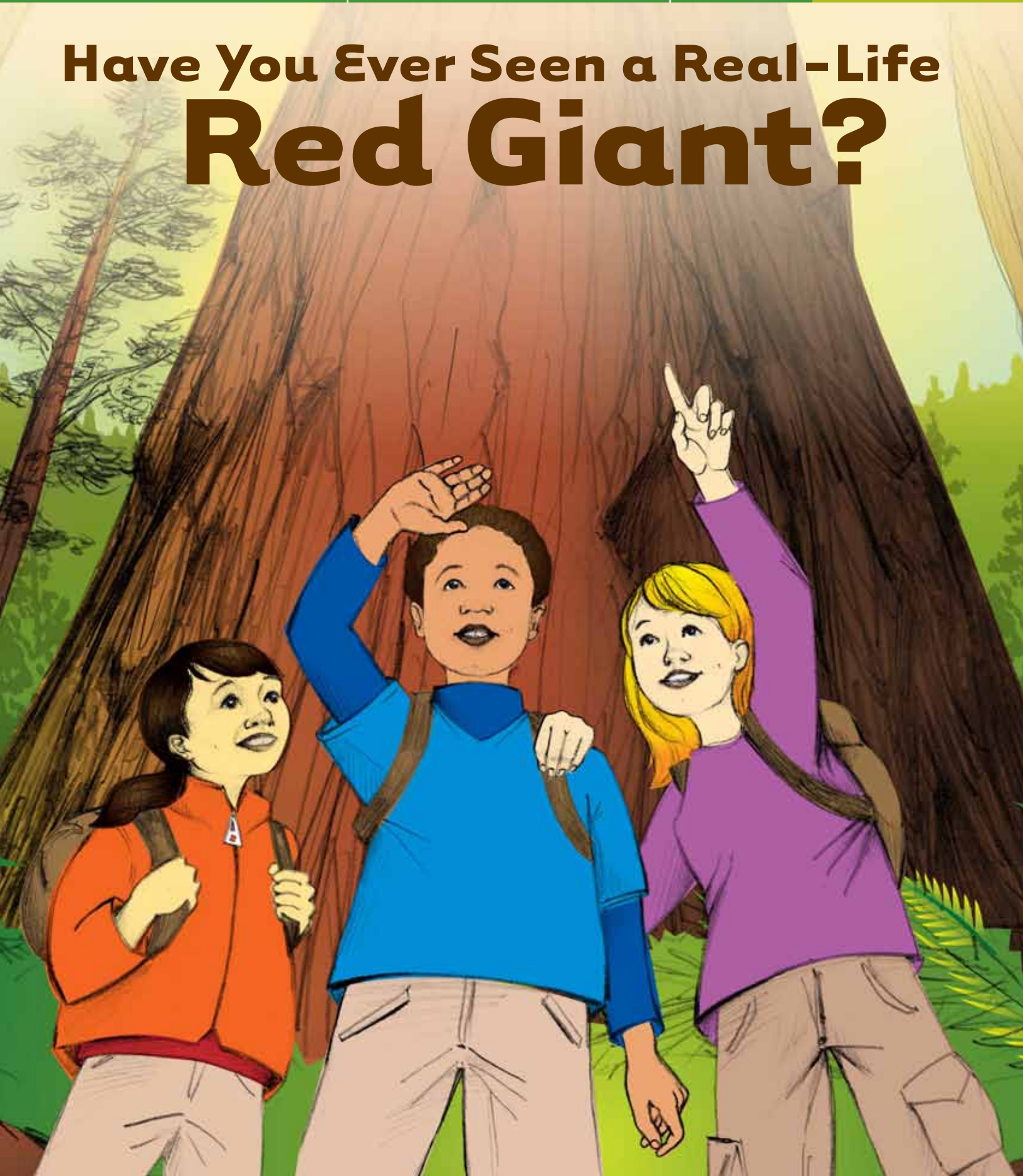


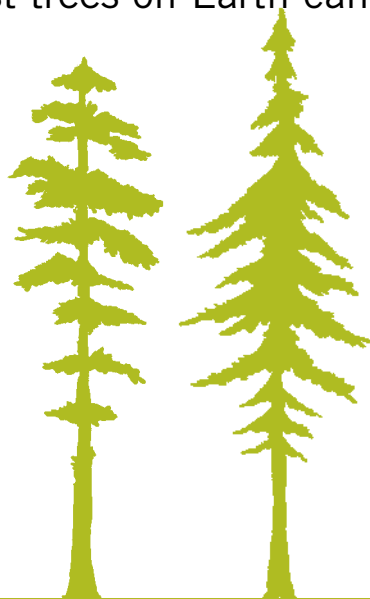


Have You Ever Seen a Real-Life **Red Giant?**





Imagine a giant tree as tall as a 25-story building with a body as wide as four school buses side by side. That's the size the biggest trees on Earth can get!



These trees — called giant sequoias — reach more than 250 feet tall with trunks up to 30 feet wide. They are known for their red-colored bark and wood.

Giant sequoias grow naturally in only a few small areas in the Sierra Nevada mountains of California. They were more common millions of years ago, but today there are just 77 giant sequoia **groves** in the whole world. These amazing trees have lived through many changes around them.

Apple Tree

10-Story Building

Giant Sequoia

Coast Redwood

How Do They Get So Big?

Giant sequoias get so big because they keep growing as long as they live — some of the big sequoias are 2,000 to 3,000 years old! Sequoias also have special characteristics or **adaptations** that help them grow very large.



Explore

Choose a tree near your home or school to compare to a giant sequoia. Take a picture of the tree and ask someone at a plant nursery or another adult to help you identify it. Look in books to see how tall and how old this type of tree gets. How does it compare to a giant sequoia? If you are lucky, maybe you'll see a giant sequoia nearby!

One adaptation is their special bark and wood. Giant sequoias make chemicals that give their bark and wood a bad taste. This helps keep away insects and pests. The giant sequoia's cousins — coast redwoods and dawn redwoods — also make similar special chemicals.

Another adaptation is their ability to live through wildfires. The older trees have very thick **fire-resistant** bark that keeps them from getting badly damaged. If they do burn, these trees can sprout new branches and keep living. Giant sequoias actually need fire to help their seeds sprout and to make room for young trees to grow.

Still another adaptation is a big root system that can collect lots of water. The largest giant sequoias need thousands of gallons of water each day to grow. Most of the water comes from melted snow that has soaked into the ground. The tree's roots extend over large areas to gather plenty of water.

Giant sequoias are also adapted to live where it is not too hot in the summer or too cold in winter. They grow naturally only in California's Sierra Nevada mountains because the temperature and climate are just right for them.





Explore

Take a walk around your neighborhood and look for tree and plant adaptations such as:

- spines or thorns for protection
- fruit or nuts for attracting animals to spread seeds
- fleshy stems or leaves for storing water.



Sequoias Need a Healthy

Environment

Giant sequoias are part of a forest **community**. They are strong trees that tower above the forest but, like all living things, they live with other plants and animals. They also need a healthy **environment** with the right amount of water, sunlight and fire.

The giant sequoia community includes other trees such as pines and oaks, wildflowers and other plants living in the shade of the big trees. This community also has many animals that help the sequoias live. Woodpeckers and other birds eat insects living in the trees. Chickarees (a kind of squirrel) gnaw on sequoia seed cones, and help to spread the seeds. Tiny soil creatures eat dead leaves and logs, and they help keep the soil full of **nutrients**.

Giant sequoias need a community and a healthy forest environment. Without these things, giant sequoias could not live as long.



Get Active



Learn More

Visit the Save the Redwoods League Web site at **SaveTheRedwoods.org**. Check out books from the library on giant sequoia trees, forests or adaptations.



Inspire Others

Write a letter to a friend or draw a picture about sequoias. Send your sequoia art, poetry, photos or memories to Save the Redwoods League, and we might post them on our Web site!



Visit a Park

Explore a park, nature area or botanical garden in your area. Find out what plants and animals are common there and whether there are any giant sequoias.



Reduce, Reuse, Recycle

Everything we use comes from nature. You can help trees and nature by using less and recycling what you do use.



Plant a Native Tree

Help your teacher or family find a good spot for a new tree. Choose a tree that is adapted to your area. Help plant the tree and water it.

Saving the Sequoias



Giant sequoias have lived for a very long time in the area that is now California.

The native people lived among these great trees, but did not cut them down. When gold was found in California in 1849, a large number of settlers came here. Some of them logged giant sequoias to make fences and roofs. But the giant trees often broke apart when they fell, making much of the wood not usable.

Many people were upset by the wasteful logging of these amazing trees and joined together to save those still standing. Over the years, Save the Redwoods League has helped to create parks and reserves to protect giant sequoias.

It is important to save giant sequoias not only because they are beautiful and amazing, but also because they are the biggest trees on Earth, and giant sequoia groves are rare in nature. Although they are tough trees, they can be damaged by changes around them such as nearby harmful logging, building and air pollution.

Save the Redwoods League knows that past **climate change** was a serious danger to giant sequoias. Many scientists worry that warmer temperatures will decrease the snowpack that sequoias need so much. The League is leading an effort to study redwoods and climate change so that we can keep protecting these amazing forests.

About Save the Redwoods League

Since 1918, Save the Redwoods League has protected redwood forests so that people can be inspired by these precious natural wonders—now and in the future. The League and its partners help people of all ages experience these majestic trees through the forestlands we have helped protect and restore, the many education programs we sponsor and our Web site.



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