



Giant sequoias are the most massive trees in the world and live naturally only in scattered groves in the Sierra Nevada mountains of California. *What Are the Biggest Trees on Earth?* introduces students in sixth through eighth grades to giant sequoias and offers ideas for exploring and taking action to protect these unique trees. This teacher's guide suggests ways to use the booklet in your classroom.



Pre-Study

Determine what students already know about giant sequoias by asking:

- Have you ever seen a real giant sequoia or a picture of one? What were your impressions of it?
- What do you know about giant sequoias?
- How might giant sequoias be able to grow so large?

Apple Tree 

10-Story Building 

Giant Sequoia 

Coast Redwood 

Instruction

After reading the booklet, help students find answers to their questions about giant sequoias. Go to SaveTheRedwoods.org, or visit the school or local library.

Introduce the vocabulary words appearing in bold in the booklet (listed below) by playing a “puzzle” game. Choose a word below and write dashes on the board equal to the number of letters in it. Split students into teams and have each team take turns guessing a letter, progressing until a team can solve the “puzzle.” When solved, discuss the meaning of each word. Repeat for each word. Offer a prize to the team that correctly identifies the most words.

species a group of organisms with shared characteristics; members of a species can mate and have offspring

massive enormous; having a lot of mass or matter

evergreen a plant that does not shed its leaves for winter; this means the plant can make food all year

ecosystem a community of living and non-living things that interact with each other

temperature measure of hotness or coldness

moisture measure of wetness

fire-resistant hard to burn

decomposer any tiny organism (bacterium or fungus) that lives in soil and helps break down dead plants and animals; decomposers turn this dead organic matter into nutrients other organisms can use

climate change changes in Earth's weather patterns over time. Scientific research has shown that human-induced climate change is caused by a buildup of carbon dioxide and other gases in the air, which traps more of the sun's heat.

Teachers, please send us feedback about our materials.

E-mail Education@SaveTheRedwoods.org, or join us on [Facebook.com/RedwoodEducation](https://www.facebook.com/RedwoodEducation).

Activities

Community Field Guide. As a class, create a field guide to a native community in your area by first listing plants and animals in that community, and then having students or pairs make a page for each organism. Pages should include an illustration of the organism, information about what it needs to live and whether anything threatens its survival. [Science, English Language Arts, Social Science]

Microparks. Invite students to make a micropark (a type of map) of your schoolyard or nearby park. Ask them what natural and human elements they see around them. Using 10-foot pieces of string to delineate the park boundaries, have them put objects inside to represent the landmarks, plants, animals and other elements. Discuss their observations: How might these microparks compare to a similar park in the sequoia forest? [Science, Mathematics]

Risking It. Ask students to read the novel *Operation Redwood* by S. Terrell French. As a class, discuss whether they think Julian's actions were justified. Invite them to write about something that they care enough about to take similar risks. [English Language Arts, Science]

Sequoia News. Create a class newsletter or blog about giant sequoias, with groups of students planning and developing different pieces. The newsletter or blog may include articles about giant sequoias and their history, maps of the sequoia region, editorials about why they are important to protect, sequoia illustrations, comic strips, etc. [Science, History, Social Science, English Language Arts]

Restoration Project. Contact your local parks department or state natural resources agency about involving your students in a habitat restoration project such as removing non-native plants from park lands or planting to restore creek beds. [Science, Social Science]



Resources

Visit our Redwoods Teacher Tool Kit at **Education.SaveTheRedwoods.org** for these great additional resources:

- Photo Libraries
- Redwood Transect (a field-based activity)
- Reading List



Wrap-Up

Use the following questions for discussion or as writing prompts to help students articulate what they have learned:

- How are giant sequoia forests and our local natural community the same? How do they differ?
- How might people in [your town] and giant sequoias be connected?
- How important do you think it is to protect giant sequoias?
- How can you, your family or our class help sequoias? Encourage students to pledge to help sequoias:

SaveTheRedwoods.org/pledge.

Standards

Sample standards addressed by the booklet and the suggested activities include:

Common Core State Standards
(CoreStandards.org)

English Language Arts
Grades 6-12: *Reading Standards for Informational Text, Writing Standards.*

Mathematics
Grades 6-7: *Ratios and Proportional Relationships, Expressions and Equations, Geometry.*
Grade 8: *Quantities, Creating Equations.*

California Standards

Science
Grade 6: *Ecology 5a, 5b, 5e.*
Grade 7: *Evolution 3e, Earth and Life History 4e, 4g, Structure and*

Function in Living Systems 5f.
Grade 8: *Chemistry of Living Things 6a.*

History-Social Science
Grade 8: *U.S. History and Geography: Growth and Conflict 8.8.*

National Standards

Science
Grades 5-8: *Content Standard C Life Science.*

History
Grades 5-12: *Era 4: Expansion and Reform, Standard 2E.*

Geography
Grades K-12: *Physical Systems Standard 8.*



WALK AMONG GIANTS™

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