



WILD CLASSROOM

Conservation in the Classroom

The Connection Between Forests and Climate Change

December 8, 2022

1:30 pm ET / 10:30 am PT

Recommended grade levels: 4–8

Watch live on [Conservation in the Classroom](#).

View recording on the [Wild Classroom YouTube channel](#).



Josefina Braña Varela

Vice President and Deputy Lead,
Forests

Forests are vital to the health of our planet and play a critical role in fighting climate change. They help regulate Earth's temperature and nature cycles by storing greenhouse gases that would otherwise collect in our atmosphere. However, when forests are not properly cared for and are degraded and deforested, they can contribute to climate change rather than reduce its impacts. Join us for a livestream event with Josefina Braña Varela to learn about the connections between forests and climate change and what she and her team are working on to protect forests.

BELL RINGER WARM-UP QUESTIONS

Help prepare your learners by introducing the topic with these warm-up questions.

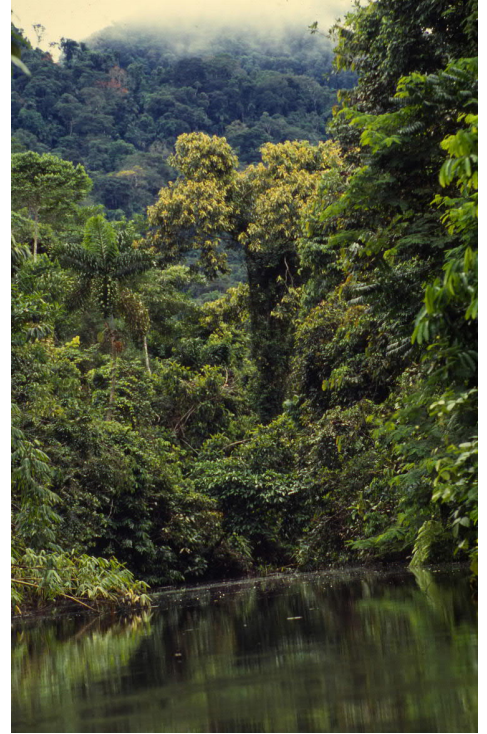
Define

List three things that forests provide to humans and/or animals:

- 1.
- 2.
- 3.

Consider

Forests are known for their great biodiversity and ability to support thousands of species. Why are forests such ideal environments for plants and animals to live in?



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Explain

Forests have properties that help fight climate change. Based on your understanding of climate change and its causes, what do you think those properties are?



Planning to watch the event live? Write your question(s) for the presenter here:

INFORMATIONAL RESOURCES

Use these resources to provide background information to your learners

- Web article: [Six things to know about forests and your health](#)
- Web article: [WWF's Josefina Braña Varela on the importance of protecting our forests](#)
- Webpage: [Forests](#)
- Webpage: [How consumers can keep forests thriving](#)
- Webpage: [Why land matters in the fight against climate change](#)
- Web story: [An area roughly the size of California lost to global deforestation from 2004-2017](#)
- Web story: [The Amazon in crisis: Forest loss threatens the region and the planet](#)
- Web story: [Standing tall](#)
- Video: [Women-led effort to restore Brazil's Atlantic Forest](#)



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ACTIVITIES

Check out these lesson plans to supplement the content from the event.



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[Our Planet: Our Forests](#)

The “Our Forests” episode of the Netflix series *Our Planet* takes a look at forests around the world and the benefits they provide. View with our supporting guide for follow-up discussion prompts and activity ideas.

Grades 5–12

[Living Planet Report](#)

The youth edition of the *WWF Living Planet Report 2022* explains key findings about the state of the planet and its biodiversity. Through colorful graphics and case studies, students will learn how forest habitats and species are being impacted by human activities, including climate change.

Grades 6–12



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[Trees: Nature's Superheroes](#)

Rewatch a past Conservation in the Classroom livestream event with Linda Walker, senior director of the WWF Forests Program, during which she speaks about how trees contribute to the well-being of humans and animals.

Grades 3–8

ASSESSMENTS

Conclude your lesson with these resources and fun assessment tools.

Kahoot!

- [Importance of forests](#)
- [Threats to forests](#)
- [Climate change 101](#)
- [Adapting to a changing climate](#)

Answer key for Quick Quiz (next page)

- 1) Forests provide resources—including food, wood, medicine, water, and clean air—to people all over the world. Forests also draw water out of the ground and pump it into the air, which creates rain clouds.
- 2) Tropical
- 3) C. Photosynthesis
- 4) Carbon
- 5) Forest degradation occurs when the health of a forest declines and makes the forest less able to provide for the species that depend on it. If a forest is unhealthy, species lose their habitats, which can cause their populations to decline and/or force species to relocate. This will then lead to food webs breaking apart, weakening the ecosystem, and species being pushed closer to extinction.





WILD CLASSROOM

The connection between forests and climate change

Answer the following quiz questions and writing prompts after watching the Conservation in the Classroom event.

Quick Quiz

- 1) In what ways do people depend on forests?
- 2) Which type of forest holds the most carbon—temperate, tropical, or boreal?
- 3) Which natural process allows forests to remove carbon from the environment and keep air clean?
 - A. Making rain clouds
 - B. Deforestation
 - C. Photosynthesis
 - D. All of the above
- 4) When trees are cut down, _____ is released into the air, which speeds up the effects of climate change.
- 5) When forests are degraded, how are biodiversity and ecosystems impacted?



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Short answer writing prompts

6) Forests provide habitats to more than three-quarters of the world's life on land, and they are home to 750 million individuals (including 60 million Indigenous people). However, even animals and humans who do not live near forests depend on these areas.

How might forests benefit people and animals who **do not** live close to them?



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8) Forests are considered to be **carbon sinks**, meaning that they take in more carbon than they release. Carbon sinks are the opposite of **carbon sources**, which produce more carbon than they absorb, such as coal burning.

Why is it important to have more carbon sinks than carbon sources? What will happen if this balance is thrown off and there are more carbon sources than carbon sinks?

9) Forests are vulnerable and face many threats, including climate change, deforestation, and degradation. Between 2004 and 2017, over 160,000 square miles (about the size of California) of forests were lost.

Name one thing organizations like WWF are doing to help protect forests from these threats. What is one thing that you can do to help where you live?



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