

OUR FORESTS

Key Takeaways:

- We've lost half of our forests worldwide due to deforestation, primarily to create farms and ranches as well as roads, railways, and other infrastructure.
- Forests also are being degraded and fragmented, mainly because of illegal logging.
- Loss and degradation of forests not only causes a loss in species but also changes the world's climate.
- Forests are resilient and are capable of bouncing back if given the time and space to do so.
- While acting as the lungs of the Earth, forests help purify our air and water while also soaking up large amounts of carbon, preventing it from entering our atmosphere and contributing to climate change.
- Forests provide animals and people with homes, food, and fresh water. Humans additionally rely on forests for resources to produce a number of products including clothing, medicine, and paper.
- Tigers are essential members of their ecosystem, and their numbers have declined dramatically due to human causes.



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Tiger cubs with mother, Kanha National Park, India.



OUR PLANET
NETFLIX



GUIDED DISCUSSION PROMPTS

Use these prompts to generate a class or small-group discussion based on the Our Forests episode or on videos on ourplanet.com.

- 1** The episode provided many examples of the interdependence between forests and animals. Discuss these examples and how the animals and forest depend on each other. Why are they important? And what would happen if the animals or the forest were to disappear?

Example from the episode:

In India, macaque monkeys and hornbills eat and disperse seeds, helping trees germinate and spread. In a similar scenario, ring-tailed lemurs in Madagascar are the only species capable of eating and dispersing seeds of certain species of trees that would not survive otherwise.

- 2** There are a variety of relationships that exist between different animal species (competitive/predatory/mutually beneficial). Share an example from the episode of an interaction that one forest-dwelling species has with another. What is the type of relationship between these species? How do these species need each other? How is the interaction/relationship related to the availability of the natural resources around them? What kind of ripple effect would occur if any of these species were to disappear or go extinct?

Examples from the episode:

The grazing of elephants helps shape forests, which in turn helps the African wild dogs by clearing way for their prey to emerge.

Pine nuts from pine trees in Russia help sustain species like wild boar through the winter, which in turn provide a source of prey for larger predators like the Amur tigers.

Immature leaf bugs feed on tree sap, then excrete it as "honey dew," which smaller lemurs eat.

In western Alaska, bald eagles engage in a fierce competition for salmon. Spawning spots are known to all nearby predators, so as rivers freeze, the competition becomes even more intense. Females, being larger, can usually fight off males, while young bald eagles are stuck fighting for scraps.



GUIDED DISCUSSION PROMPTS

3 Tigers are solitary animals that require vast amounts of forest landscape as their territory to roam. In order to protect one tiger, we must conserve around 25,000 acres of forest. With poaching and deforestation threatening their survival, what are possible solutions to bring tiger populations back from the brink of extinction?

Example from the episode:

Fewer than 600 Amur tigers remain in the wild. However, that number is a significant increase from what it was several decades ago. This is a result of Russia becoming the first country in the world to grant these tigers full protection by monitoring tiger populations and reserving areas for them to roam. The footage of Amur tigers from this episode contains the most intimate pictures of them ever taken. These rare glimpses reveal that their future relies on having forests in which to hunt.

4 Fires are a natural and beneficial element of many forest landscapes—they help return nutrients to the soil and allow the growth of new flowers and trees that wouldn't have germinated if not for the fire. However, fires are problematic when they occur in the wrong place, at the wrong frequency, or at the wrong severity. Each year, millions of acres of forest around the world are destroyed by fire. How is climate change contributing to the frequency of these damaging fires? What are the impacts and who is affected?

Example from the episode:

Older redwoods have adapted to survive fires, thanks to their fire-resistant bark. However, many species of trees are incapable of naturally recovering and are destroyed in these irregular fires caused by threats like climate change. These forest fires alter the structure and composition of forests and also open them up to invasive species, threaten biological diversity, alter water cycles and soil fertility, and destroy the livelihoods of the people who live in and around the forests.

5 How do changes to the environment, such as deforestation, affect the physical or behavioral traits of species? Species become extinct because they can no longer survive and reproduce in their environment. If species cannot adjust to change that is too fast or drastic, the opportunity for the species' evolution is lost. Name a species from the episode that would be forced to adapt at the risk of going extinct. What choices do they have? What could be done differently to assure a future for forests and these forest-dwelling species?

Example from the episode:

Fossas, Madagascar's largest predators, rely on the dry, deciduous forests of the island as their primary habitat. One-third of the fossa population has disappeared in the past 20 years due to deforestation.

6 Consider all of the ways forests have touched your life today.
What have you used that came from a forest resource? Try to generate as many ideas as possible, including furniture, building materials for floors or walls, doors and window frames, fruits, paper, tissues, toilet paper, clean air, pencils, rulers, toys, musical instruments, medicine, soccer balls, bicycle tires, etc.

7 What can we do to help forests and the species that depend on them? What small changes could we make in our everyday routines that could greatly impact the future of forests?

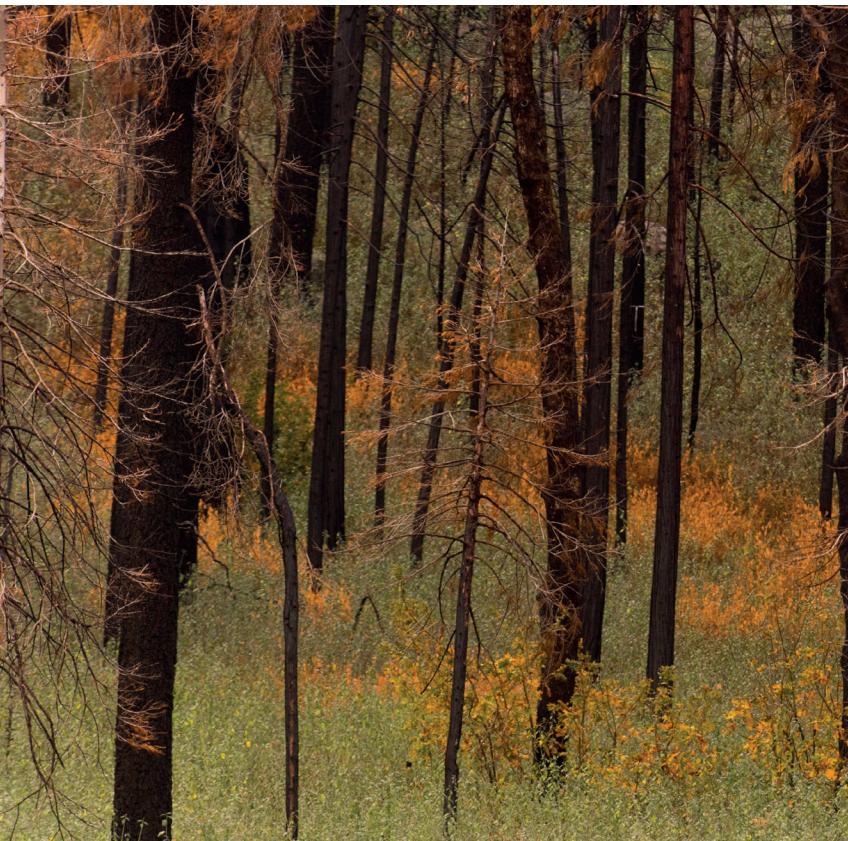


ACTIVITIES

| ACTIVITY IDEA | SUBJECTS |
|---|----------------|
| Participate in a STEM challenge to understand the importance of apex predators like tigers in their ecosystem.— The Missing Piece | STEM |
| Perform an audit in your school or classroom to discover just how many everyday products come from forests, and sign the FSC pledge.— Trees and Tigers | Social studies |
| Read of the challenges tigers come across regularly, and compose a journal entry from their point of view.— A Look Through a Tiger's Eyes | Language arts |
| Get to know your local forest by exploring with a notepad and/or camera and trying to identify as many species as possible using the SEEK iNaturalist app. | Science |
| Take the What Tree Are You? quiz and compare your results with those of a friend. Compose a writing sample stating whether you agree or disagree with your results based on the similarities outlined between you and the tree you were matched with. | Language arts |

What We Can Do:

- Spread the word—talk to your friends and family about the importance of forests.
- Encourage smart shopping—be sure to look for the FSC logo on wood and paper products.
- Plant trees—start an effort within your school or community.
- Enjoy the forests—spend time in forests and appreciate the health benefits they have to offer, but always remember to leave them how you found them!



Additional Resources:

- [Uporny's story](#)—a colorful, illustrative reading that tells the story of one remarkable tiger's journey
- [Forests, pine nuts, and tigers](#)—details the connection between the loss of the Amur (Siberian) tiger and our increasing demand for pine nuts
- [Want to help save the world's forests? Look for the FSC label when you shop](#)—why the FSC label matters for forests, people, and wildlife
- [Forests, climate change, and the role green giants play](#)—understand the complex relationship between forests and climate change
- [What's a boreal forest? And the three other types of forests around the world](#)—explains the difference between boreal, tropical, subtropical, and temperate forests
- [Forests biome WWF webpage](#)—why the health of forests is declining and why we need to act now
- [Tiger species WWF webpage](#)—the threats facing this important species and what we can do to help
- [Our Planet official webpage](#)