

Exploring Forest Disturbances and Climate Change

Target group: Recommended for children of 10–15 years old.

Time: ~1 hour.

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Introduction

This workshop invites students to explore forest disturbances and climate change through the work of women scientists from around the world.

Learning objectives:

- Learn about women scientists and their contributions.
- Understand forest disturbances and their link to climate change.
- Develop observation and critical thinking skills.
- Reflect on equality and diversity in science.

1. Meet the Scientists – 20 minutes

Activity 1 (15 minutes)

Introduce students to 2–3 scientists (you can project it or provide handouts). Some examples:

[Wangari Maathai](#) (Kenya) – Environmental activism and forestry. Founder of the Green Belt Movement. Planted millions of trees and empowered women.

[Suzanne Simard](#) (Canada) – Forest ecology. Discovering how trees communicate through underground networks. Helps us understand forest resilience and cooperation.

[Catherine Nakalembe](#) (Uganda) – Remote sensing, agriculture, climate. Using satellites to monitor crops and environment. Helps detect climate impacts on land and forests.

[Sandra Díaz](#) (Argentina) – Biodiversity and ecosystems. Work on how biodiversity supports ecosystems. Connects forest health with human wellbeing.

In groups of 3-4 people, choose one scientist and answer:

- *What does she study?*
- *Why is her work important?*
- *What challenges might she face?*
- *What would you ask her if you met her?*

Activity 2 (5 minutes)

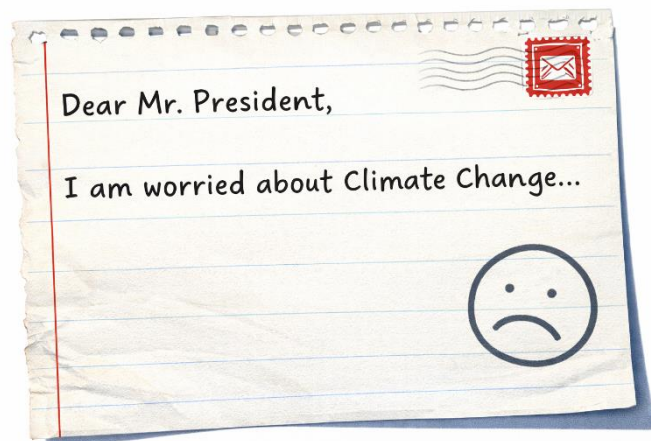
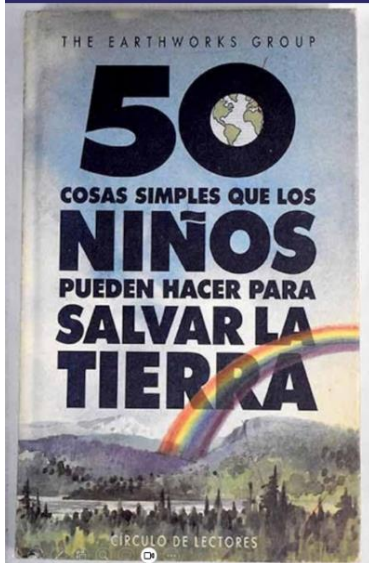
Introduce yourself and your research/work

Tips: tell a story, don't list facts.

Example: What sparked my curiosity for science?

The moment when I became aware of and concerned about the climate situation on Earth.

A story...



My interest for science...



Now that students have learned about scientists, they will explore similar phenomena in their own environment.

2. Investigating Forest Disturbances – 15 minutes

Starting with an open question: *Why are forests important for climate?*

Activity: students explore signs of forest disturbances such as

- Drought effects
- Tree damage or disease
- Insects (e.g. bark beetles)
- Changes in biodiversity

How could this observations be linked to climate change?

Example to explore tree damage:

Find differences

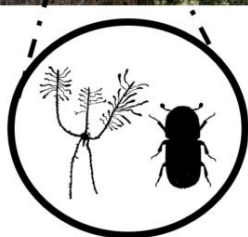


In the forest



Example of how to identify bark beetle activity

How to identify bark beetle activity?



3. Critical Thinking: Women in Science – 20 minutes

To finish: Encourage students to reflect on gender equality and diversity in science.

Guided Discussion

- *Do you think women have had equal opportunities in science?*
- *What barriers could exist? (e.g. access to education, recognition, funding)*
- *Why is diversity important in science?*

One word activity:

Give each student a small piece of paper or sticky note. For each question, students write one word that represents their answer. Students place their notes on the board.

Then: (1) Observe the answers; (2) Group similar ideas; (3) Discuss patterns and differences.

4. Optional – Sharing activities

Share results on a classroom wall or school platform

Use a hashtag (e.g. #WomenInForestScience)