

3.4 WHEN WAS THE FIRST FIRE IN THE WORLD?

Aim

To better understand the role fire plays in carbon cycling in the biosphere.

Description

Of the four elements, fire is perhaps the most misunderstood. Despite its dangers, it is essential to life on Earth. We invite you to explore how fires have shaped life as we know it.

Linked units

- Unit 2: History of fire.
- Unit 3: Fire Ecology 1
- Unit 4: Fire Ecology 2
- Unit 5: Be Prepared 1 – Preparedness
- Unit 6: Be Prepared 2 - Landscape Management

Type of results

- Scheme/illustration
- Theatrical session
- Classroom discussion

Material you may need

- Computer with internet and/or access to a library
- Projector

Scope of impact

- Classroom

Activity: Understanding how wildfires have shaped our environment.

Of the four elements, fire is the only one that is not a substance. It is a chemical reaction that quickly transforms the environment. Let's understand how it first appeared on the planet and how it has shaped its evolution ever since.

Tasks

1. In small groups in the classroom, brainstorm about the first wildfire in the world. What are the three fundamental variables for a fire to happen? How is that linked to wildfires naturally happening on Earth? What environmental conditions were necessary for the first wildfire to happen on the planet? (group)

2. The groups should now research the history of wildfires and how it has shaped the planet. The work of Stephen Pyne is a good starting point. Once you have done that, it is time for the challenge, which is divided into three parts. (1) Create a scheme or illustration regarding wildfires' roles in nutrient cycling in the biosphere. (2) Create a scheme or illustration showing how humans have disrupted this cycling process in the biosphere. (3) Based on the schemes/illustration you have just created and your previous research, answer the following questions; you can be imaginative on how to display the answers: (a) Did you find any information on the first wildfire ever recorded? (b) What type of evidence (sediment deposits, fossils etc.) suggests the geological era it first occurred? (c) Is there a good and a bad type of wildfire? (d) If so, why and how are they different? (e) Should all wildfires be suppressed? (f) How do you think humanity needs to improve regarding its relationship with fire and wildfires in the landscape? (group)

3.4 WHEN WAS THE FIRST FIRE IN THE WORLD?

Professions related to the topic

- Biologist
- Ecologist
- Forest engineer
- Geologist
- Historian

3. The results of the research can be presented in many different ways. Editing a video, doing a poster, visual presentation, creating an interactive narrative between fire, wildfires and the planet, etcetera. (group)

4. Share your research results with your classmates and discuss them. In light of all the evidence that was presented, what do you think is the key function of wildfires on the biosphere? How have humans impacted this role? What technological and behavioural adjustments are necessary to have good wildfires and avoid bad ones? (group)