

# Geography in the News

## November 2024

### Is nature's carbon sink failing?

Geography in the News aims to stimulate discussion about the relevance of geography to our lives and its importance in helping us to make sense of the world around us. We have selected a relevant news article with links to our A Level specification and suggested questions you can discuss with your class.



**Article:** This issue relates to an article written by biodiversity reporter Patrick Greenfield for The Guardian. It provides an opportunity to revisit the specialist concepts of thresholds, feedback, and equilibrium.

#### Introduction

This article explores the potential declining ability of carbon sinks to sequester carbon and how this could accelerate global warming.

- [Click here to access the article](#)

#### Discussion prompts

- Explain why the ability of forests and soils to absorb carbon might be declining.
- Using the concept of positive feedback, explain how a declining terrestrial carbon sink could worsen climate warming.
- Suggest how a declining natural carbon sink could affect efforts to meet global climate targets.
- Assess the human and environmental factors that might be causing nature to become less effective at sequestering carbon.

#### Specification links

- 6.3 A balanced carbon cycle is important in sustaining other earth systems but is increasingly altered by human activities.
- 6.7 Biological carbon cycles and the water cycle are threatened by human activity.
- 6.9 Further planetary warming risks large-scale release of stored carbon, requiring responses from different players at different scales.

#### Key terms

- **Decarbonisation:** the reduction or elimination of carbon dioxide emissions.
- **Fragile ecosystem:** an ecosystem which is easily disturbed.
- **Resilience:** the ability of a system, community or individual to adapt or recover from disturbances and challenges.
- **Tipping point:** a critical threshold when a system changes rapidly from one stable state to another stable state. The tipping point event may be irreversible.