

Rainforests

Rainforests are among the oldest and most complex ecosystems on Earth, with some existing for over 100 million years. They develop in regions close to the equator where temperatures are consistently high and rainfall exceeds 2,000 millimetres annually. The Amazon Rainforest, sprawling across nine South American countries, is by far the largest, but significant rainforests also exist in the Congo Basin in Africa and across Southeast Asia.

Rainforests are structured into four distinct layers: the emergent layer, the canopy, the understory and the forest floor. Each layer supports a unique community of plants and animals that have adapted to the specific conditions found there — from epiphytes that cling to branches in the canopy to decomposers that recycle nutrients on the dark forest floor.

Scientists estimate that rainforests harbour approximately 50% of all known species despite covering less than 6% of Earth's surface. Many of these species remain undiscovered. Rainforests are also vital to global climate regulation. Through photosynthesis, vegetation absorbs vast quantities of carbon dioxide, making these forests significant carbon sinks that help mitigate the effects of climate change.

Deforestation, driven by agriculture, cattle ranching, logging and infrastructure development, poses an enormous threat. It is estimated that an area of rainforest equivalent to several football pitches is lost every single minute. Habitat destruction leads to species extinction, disrupts indigenous communities and weakens the planet's ability to regulate its own climate.



Questions

1. How long have some rainforests existed?
2. Where are the three main areas of rainforest in the world?
3. Name the four layers of a rainforest in order from highest to lowest.
4. What are epiphytes?
5. What do decomposers on the forest floor do?
6. What percentage of known species do rainforests harbour?
7. What is a carbon sink?
8. Give two causes of deforestation mentioned in the article.
9. Name two consequences of deforestation described in the text.
10. The article says many rainforest species remain undiscovered. Why do you think this might be, and why does it matter?

