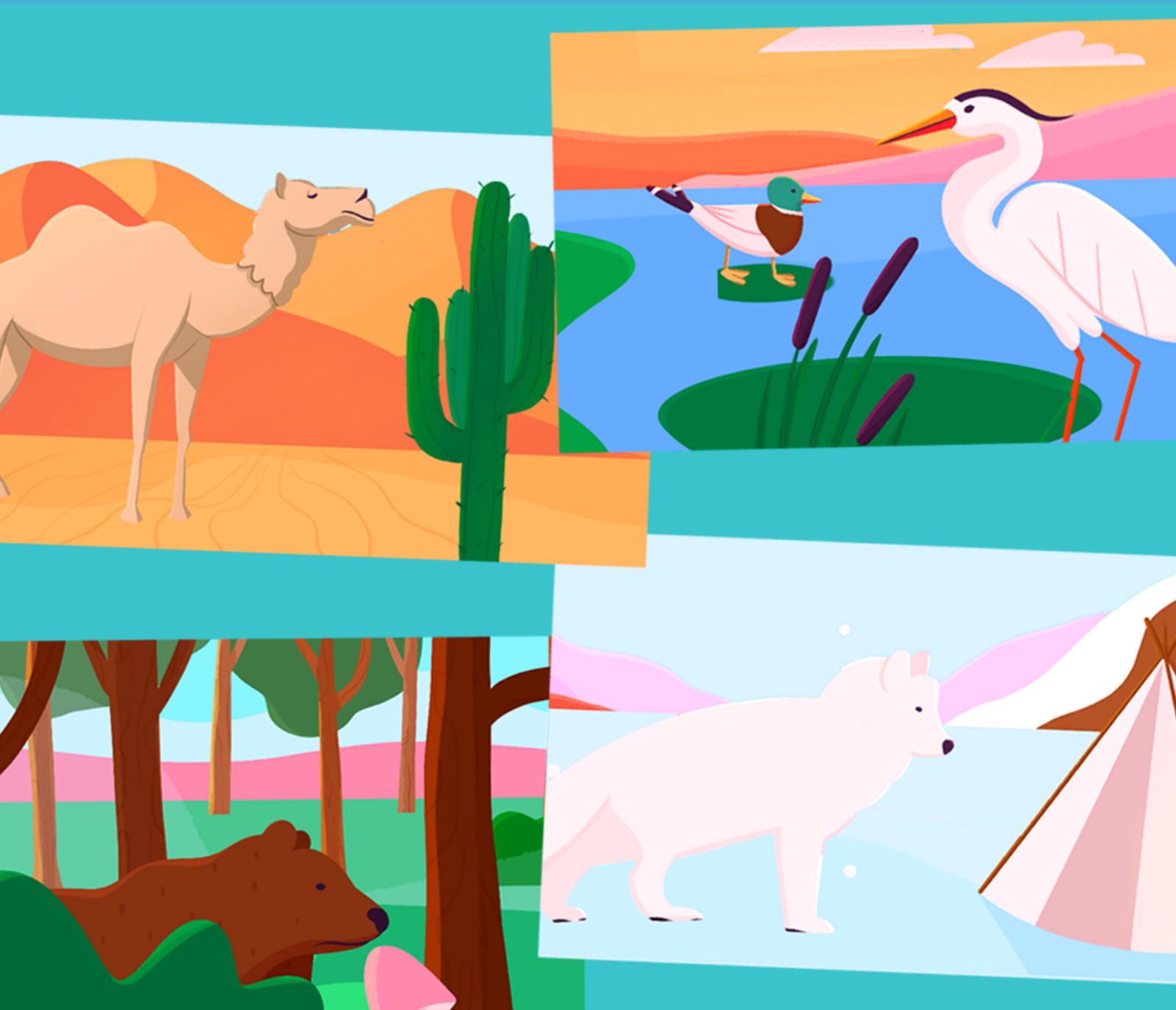


BBC Teach: Ecosystems and Biomes

The Wildlife and Ecosystem of Tropical Savannas



About this video



BBC TEACH: ECOSYSTEMS AND BIOMES

The Wildlife and Ecosystem of Tropical Savannas

We visit tropical savanna grasslands in Africa to look at the plants and animals living in the ecosystem.

Key question:

What are the unique features of the tropical savannas and how do animals and plants thrive in this ecosystem?

Key vocabulary:

tropical savanna

plants

animals

grasses

adaptations

Learning intention:

This video and series of activities investigate the wildlife and ecosystems of tropical savannas.

Before watching



Make Predictions: Brain Dump

Also known as 'free recall', this quick retrieval strategy will help you understand how much your students already know about tropical savannas.

Before watching the video, ask students to write down everything they know about tropical savannas. You could ask students to record this information in their workbooks on a divided page, or on post-it notes that can be then placed on a whiteboard or shared space in the room. Invite students to look at the responses of other students.

You may also wish to give them stimuli, such as stills from the video to activate thinking.

Questions to prompt thinking

- What do you think are the characteristics that make tropical savannas very special ecosystems?
- How do the animals survive the long hot dry season and the intense wildfires?
- What type of plants have adapted to live in this habitat?
- How do humans make use of the tropical savannas and what is the impact?

Prepare for Viewing

Before showing the video to the students, share the purpose for viewing, and ask them to consider the following question while viewing the video: ***What are the unique features of the tropical savannas and how do animals and plants thrive in this ecosystem?***

This question should be discussed before the students complete the suggested post-viewing activities.

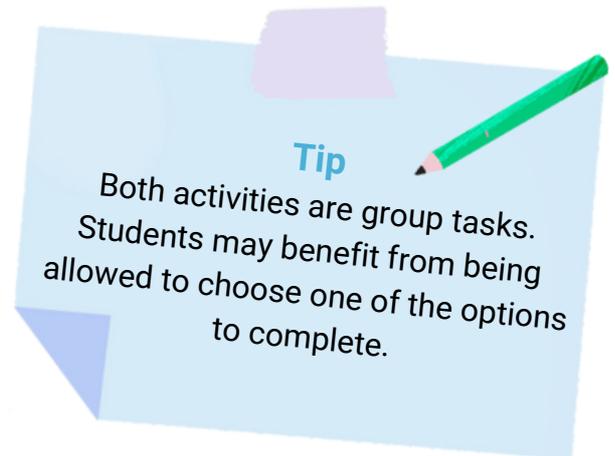
After watching

Below are two activities to extend the learning from the video and to check for understanding.

Research Task 1: Field Work Research on Tropical Savannas

Tropical savannas are vast grasslands dotted with trees that spread across Africa, northern Australia, and parts of South America and India.

In this activity, students will work as conservation ecologists to research, identify and describe a variety of plants and animals found in the tropical savanna.



Student Directions

- Working in groups, choose an area from the places mentioned above to research detailed, relevant information regarding the flora, fauna and human uses, as well as the impact of human activities such as the ones mentioned in the video.
- You will need to create a presentation, using any format you prefer, describing the ecosystem of the tropical savanna and how people, **plants** (grasses), and **animals** adapt to the conditions.
- You will need to create fact files for the **plants** and **animals** including scientific and common names. If you choose Africa, expand on the Baobab tree.
- Include a list of biotic and abiotic factors, and explain the ways abiotic factors shape the environment and thus, the organisms found there.
- Use basic geographical vocabulary to refer to the key physical features which describe the landscape such as soil, vegetation, seasons, weather, and climate.
- Lastly, mention briefly which **animals** are endangered and explain the reasons for this issue.

The following details should be included, ensuring that factual information from the video is used.

- How would you describe the vegetation in **tropical savannas**?
- How have **animals** adapted to this biome and what are their characteristics?
- What are the natural factors that impact the tropical savanna?
- What are the challenges from human activities and what kind of impact do these have?

After watching

Extension activity

Research another type of **tropical savanna** found in other parts of the world. Make a list of differences in terms of location, extent, climate, precipitation, flora, and fauna as well as human uses.

Support (to help struggling learners):

Have students list the ways some **animals** in the video (e.g., lion, mongoose) depend on each other to survive. They can make a poster of their ideas and present them to their peers, which can lead to further discussion about the interdependence between different species.

After watching



Research Task 2: Sustainable Management of the Tropical Savannas

Savannas are also called tropical grasslands and are found close to tropical rainforests. Human intervention has positive and negative consequences for this environment and the people who live there.

In this activity, students will be in groups, taking on the role of conservation biologists for their local conservation organisation and produce a presentation detailing the human uses of the tropical savannas, why it occurs, where it occurs, and the consequences.

Student Directions

- Working as a class initially, make a list of the human uses, then choose three per group to expand on and present to the rest of the class. The main problem in **tropical savannas** is desertification which is due to uncontrolled exploitation and global warming.
- Research thoroughly using reliable online sources, scientific articles, books, videos, and anything else that can help in this research.
- You are also going to devise an action plan for **tropical savannas** worldwide in which the main objectives are to reduce desertification. Propose sustainable solutions to the issues and look to reduce the effects of climate change. Conservation through sustainable management is the key to protecting these areas for future generations.

The following details should be included, ensuring that factual information from the video is used.

- What is the impact of the exploitation of **tropical savannas**?
- What can be done to prevent the extinction of **wildlife, trees, and plants** in the short term?
- How can humans manage the issues of exploitation in order to help **animals and plants** to continue to survive and thrive long-term in their environment?
- What are the possible solutions to the encountered problems?

After watching

Extension activity

Students can expand on the threats that the animals are facing from human exploitation and the impact that it has. They should make a list of the animals that are under threat or endangered and propose ways to protect them.

Support (to help struggling learners):

Students brainstorm ideas on the source of exploitation that has the most impact and justify their answers by creating a poster with pictures. They can present this to the rest of the class.