

The Jeff Corwin Experience: Marsupials

Teacher's Guide

Grade Level: K-8

Curriculum Focus: Life Science

Lesson Duration: Two class periods

Program Description

Travel down under – and then farther south to Tasmania – for a look at pouched mammals. Examine kangaroos, koalas, Tasmanian devils, wallabies, and wombats in their native habitats. And learn what distinguishes marsupials from the higher mammals.

Video Index

Segment 1: Welcome to Australia (10 min.)

Description

Travel to Australia and meet a wide array of marsupials: the tiny bilby with large ears, the bridle nail-tail wallaby, and the koalas.

Pre-viewing question

What is a marsupial?

Answer: Some students may know that a marsupial is a mammal whose young spend its early months in a pouch on the mother's abdomen.

Post-viewing question

Have Australia's efforts to conserve koalas been successful?

Answer: Yes; koalas were introduced to Kangaroo Island in 1923, when they were identified as an endangered species. Since then, their numbers have increased. Between 15,000 and 30,000 koalas live on the island now.

Segment 2: Entering Tasmania (10 min.)

Description

Explore the remote island of Tasmania. Observe the quoll up close. Watch a wombat dig its wide underground tunnel. Find out about the wombat's habits.

Pre-viewing question

What do you know about the animals living in Tasmania?

Answer: Answers will vary.

Post-viewing question

Why is the quoll extinct on the mainland of Australia?

Answer: When the Europeans came to Australia, they brought foxes and cats, which became the quoll's predators. The quoll could not adapt to the presence of new predators, so the species died out. Today Tasmania is the only place where quolls live.

Segment 3: Exploring the Forests of Tasmania

Description

Meet some rare animals in Tasmania. Observe the Tasmanian pademelon, and watch a mother eastern grey kangaroo communicate with her joey, and see Tasmanian devils devour their kill.

Pre-viewing question

What does the name "Tasmanian devil" tell you about this animal?

Answer: Answers may include that the Tasmanian devil is probably a fierce animal.

Post-viewing question

What does the ear-bobbing behavior of the eastern grey kangaroo mean?

Answer: Ear bobbing is a form of communication: A mother reassures her joey, who responds by acknowledging that it received the signal and it's okay.

Lesson Plan

Student Objectives

- Learn about marsupials in Australia and Tasmania.
- Write a creative story about these animals.
- Draw an illustration to go with the story.

Materials

- *The Jeff Corwin Experience: Marsupials*
- Computer(s) with Internet access
- Paper and pencils
- Colored pencils, crayons, and markers

Procedures

1. Begin the lesson by asking students what they know about marsupials. Make sure they know that marsupial are mammals and that the females have pouches they use to care for their young. The newborns undergo much of their development inside their mother's pouch.



2. Ask students about marsupials they are familiar with. Most will mention kangaroos. Explain many other kinds of marsupials exist, and they will be learning about them.
3. Tell students to watch *The Jeff Corwin Experience: Marsupials*. Ask them to keep track of the variety of marsupials featured in the program, listed below.
 - bilby
 - bridle nail-tail wallaby
 - koala
 - quoll
 - wombat
 - pademelon
 - eastern gray kangaroo
 - Tasmanian devil
4. After students have finished watching the program, point out that these animals are rare, and they live only on the isolated continent of Australia and surrounding islands. To highlight the animals' unique qualities, ask students to write a story about at least two. The stories can be imaginative, but they should include the following information:
 - A description of an animal's appearance
 - A description of its environment
 - A description of at least one habit
5. Encourage students to use vivid language to make their stories interesting, and have them draw a picture of each animal's appearance and where it lives.
6. Give students time in class to work on their stories and drawings. If they finish early, suggest that they work with a partner and exchange stories. Students can discuss the content of the stories and offer feedback about how to improve them.
7. During the next class period, ask volunteers to share their stories. Then discuss characteristics of marsupials and how species are different. Help students take note that having a pouch is the major characteristic that female marsupials share. Their appearance and habits vary considerably.
8. Conclude the lesson by displaying the stories in the classroom so that visitors can read them. Encourage students to share what they have learned about marsupial species with their families and friends.

Assessment

Use the following three-point rubric to evaluate students' work during this lesson.



- 3 points: Students were highly engaged in class discussions; wrote an interesting and imaginative story about marsupials; and drew an interesting picture to accompany their story.
- 2 points: Students participated in class discussions; wrote a satisfactory story about marsupials; and drew a satisfactory picture to accompany their story.
- 1 point: Students participated minimally in class discussions; did not complete their story about marsupials; and did not complete the accompanying picture.

Vocabulary

bilby

Definition: A small, large-eared marsupial that lives in dry areas of Australia and builds underground dens

Context: Foxes and wild cats have hunted the bilby extensively, and it is in danger of extinction.

eastern gray kangaroo

Definition: A type of marsupial known as a macropod, with hind legs bigger than front legs; a powerful jumper

Context: The eastern gray kangaroo mother and her young communicate by bobbing their heads.

koala

Definition: A type of marsupial that has gray and white fur, large ears, sharp claws, and eats mostly eucalyptus leaves

Context: Now thriving, the koala was brought back from the brink of extinction after 1923.

marsupial

Definition: Any of an order of mammals that have a pouch on the abdomen of the female serving to carry the young

Context: Although all female marsupials have a pouch, they look different and have unique habits.

quoll

Definition: A small marsupial with dark fur, white spots, and a long tail that lives in an underground den during the day and hunts at night

Context: Today quolls live only on Tasmania; they were hunted to extinction in Australia by foxes introduced by European settlers.



Tasmanian devil

Definition: A burrowing marsupial of Tasmania about the size of a small dog, with powerful jaws, a mostly black coat, and that eats other animals

Context: The Tasmanian devil is now extinct in Australia, but it thrives in Tasmania, where it makes strange noises.

Academic Standards

National Academy of Sciences

The National Academy of Sciences provides guidelines for teaching science in grades K–12 to promote scientific literacy. To view the standards, visit this Web site:

<http://books.nap.edu/html/nses/html/overview.html#content>.

This lesson plan addresses the following science standards:

Grades K-4

- Life Science: Organisms and environments

Grades 5-8

- Life Science: Populations and ecosystems; Diversity and adaptations of organisms

Mid-continent Research for Education and Learning (McREL)

McREL's Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education addresses 14 content areas. To view the standards and benchmarks, visit

<http://www.mcrel.org/compendium/browse.asp>.

This lesson plan addresses the following national standards:

- Life Science: Understands relationships among organisms and their physical environment
- Language Arts – Viewing: Uses viewing skills and strategies to understand and interpret visual media; Writing: Gathers and uses information for research purposes

Support Materials

Develop custom worksheets, educational puzzles, online quizzes, and more with the free teaching tools offered on the Discoveryschool.com Web site. Create and print support materials, or save them to a Custom Classroom account for future use. To learn more, visit

- <http://school.discovery.com/teachingtools/teachingtools.html>

