Land Animals: Brown Bears

Students create a food web with the Alaskan brown bear at the top.

GRADES
3, 4, 5

SUBJECTS
Biology, Geography, Physical Geography

CONTENTS
7 Images, 1 Video, 1 PDF

OVERVIEW

Students create a food web with the Alaskan brown bear at the top.

For the complete activity with media resources, visit:
http://www.nationalgeographic.org/activity/land-animals-brown-bears/

Program

DIRECTIONS

1. Show students photos of Alaskan brown bears.
Show students the photo gallery of Alaskan brown bears. Read aloud the captions for the class.

2. Introduce the concept of a food web.
Explain to students that because Alaskan brown bears eat so many different foods—both plants and animals—they are at the top of a complex food web. Tell students that food webs show the feeding relationships and flow of energy among organisms in a community. Show students the Brown Bear Food Web illustration. On the board, list any questions they have about the food web.

3. Watch the video.
Watch the Crittercam segments on the brown bear from National Geographic’s *Wild Chronicles*. Watch carefully for what the bear eats. Ask: *How many foods do you count?*

4. Divide students into small groups and distribute the worksheet.
Divide students into small groups, and give each a copy of the worksheet Land Animals: Food Web Cards. Ask students to cut and organize the cards into a food web. For the purposes of this activity only, a maximum of two animal consumers were selected for each food card. Have students brainstorm more consumer/producer relationships during a whole-class discussion.

5. Have students recreate the food web through role play.
Assign students particular roles in the web. Have each student wear the appropriate food card as a name tag. Have students organize themselves physically into the food web. Use string of one color to connect the brown bear with its main animal and plant foods. Use other colors to connect each of those foods to the organisms they feed on. Keep connecting consumers and producers until the food web is complete.

**Modification**

For advanced students, explain the meaning of the levels in the food web illustration:
Level 1 (top-level predator): Animals that are usually not preyed on by other animals as adults.
Level 2 (secondary consumers): Animals that eat animals; animals that eat plants and animals.
Level 3: (primary consumers): Animals that eat plants.
Level 4: (producers): Plants that change energy from the sun into nutrients through photosynthesis.

**Extending the Learning**

Have students research different kinds of bears and where they live. Pin images of the bears on a large world map. Or, give students blank outline maps of the world and have them mark the locations.

**OBJECTIVES**
Subjects & Disciplines

Biology
Geography
• Physical Geography

Learning Objectives

Students will:

• define the term
• describe the food web of a brown bear
• organize information to show relationships between consumers and producers in the bears’ food web

Teaching Approach

• Learning-for-use

Teaching Methods

• Discussions
• Hands-on learning
• Role playing
• Visual instruction

Skills Summary

This activity targets the following skills:

• Critical Thinking Skills
  • Analyzing
  • Understanding

National Standards, Principles, and Practices
NATIONAL GEOGRAPHY STANDARDS

- **Standard 8:**
The characteristics and spatial distribution of ecosystems and biomes on Earth’s surface

NATIONAL SCIENCE EDUCATION STANDARDS

- **(K-4) Standard C-3:**
Organisms and environments

Preparation

What You’ll Need

MATERIALS YOU PROVIDE

- Scissors
- String (several different colors)
- Transparent tape

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector, Speakers
- Plug-Ins: Flash

PHYSICAL SPACE

- Classroom

GROUPING

- Small-group instruction

RESOURCES PROVIDED: UNDEFINED

- Crittercam®: Bear Cub

RESOURCES PROVIDED: HANDOUTS & WORKSHEETS
RESOURCES PROVIDED: IMAGES

- Alaskan Brown Bears
- Brown Bear Food Web

BACKGROUND & VOCABULARY

Background Information

On land, Crittercam reveals the behavior of animals in places or at times when humans cannot easily see or follow them. The Alaskan brown bear is one land animal that Crittercam has been successfully used on. The brown bear eats a wide variety of foods, including both animals and plants.

Prior Knowledge


Recommended Prior Activities

- None

Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>food web</td>
<td>noun</td>
<td>all related food chains in an ecosystem. Also called a food cycle.</td>
</tr>
<tr>
<td>organism</td>
<td>noun</td>
<td>living or once-living thing.</td>
</tr>
</tbody>
</table>

For Further Exploration

Websites

- National Geographic: Crittercam—Interactive Missions