
Project Caribou

An Educator's Guide to Wild Caribou of North America

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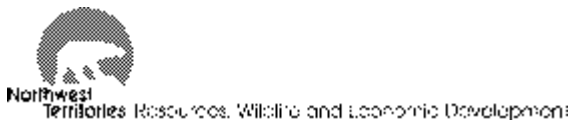
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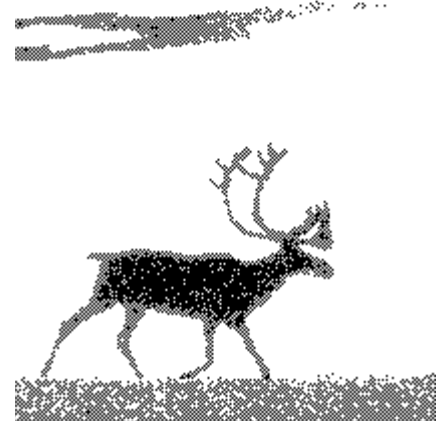
For more info: www.projectcaribou.org

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Environment Canada (Canadian Wildlife Service—Yukon)

Beverly and Qamanirjuaq Caribou Management Board



Age

Grades 4 – 10

Subjects

Biology

Skills

Evaluation, application, synthesis

Duration

One 45-minute period

Setting

Classroom

Materials

- Bingo cards made from master sheet and answer sheets (supplied in this guide)
- Bowl or bag to hold the bingo questions
- Beans, tokens, or squares of paper for marking bingo squares

Caribou bingo

(Adapted from a game developed by Margeurite Kuiack for the Yukon Southern Lakes Caribou School Program)

Objectives

Students should be able to:

1. Demonstrate their general knowledge of caribou.
2. Play a simple bingo-style game.

Note: This activity would be best used at the end of the unit as it ties everything together.

Method

Students play a variation of the bingo game that will help them demonstrate their general knowledge of caribou.

Background

This is a fun game that is intended as a simple review of the information included in this educational kit.

Procedure

1. Make up the bingo cards for your class. You can download these at the **Project Caribou** web site (www.projectcaribou.net) or create them manually as follows: Photocopy a number of Card sheets on page 54 equivalent to your class size. Photocopy the Card Answer sheets (half as many as your class size) on pages 55 and 56. Cut up the answers so that they can be pasted onto the bingo cards randomly under the appropriate columns. (You may wish to get a student to do this).
2. Distribute prepared bingo cards to the students.
3. Cut out the bingo questions and put them into a bowl or bag. Stir them up. You may wish to give one student the task of selecting and/or reading the questions.
4. Instruct the students in the game rules: There are five categories. For each round, a question from one category will be read. The answers to the questions can be found on selected bingo boards. If your board contains the correct answer to the question read, place a marker (bean or other token) on that square. Questions will be read until someone calls "bingo!" You may call "bingo!" when five squares in a row (straight across or diagonal) are covered with markers.
5. It is up to the teacher to decide whether to have students give the correct response after each question or to wait until the end of the game.
6. The game is over when a student calls "bingo!" You may wish to play several times.

Variations

1. Make up your own questions and answers which reflect caribou characteristics in your area.
2. Have the students make up their own caribou bingo game.
3. Play "blackout bingo": students cannot call "bingo!" until every square on their game cards is covered.

Extensions

Think of some other simple games that may be adapted to the caribou theme.

Evaluation

This game is intended as an evaluative tool. The students can switch game boards and play the game several times so all have the chance to be 'winners.'

Adaptations for different ages

Primary: This game can be simplified, using questions and answers geared to the students' age level.

Senior: Play the game with more complex questions geared to the students' age level.



Card sheet

| Caribou Bingo | | | | |
|---------------------------|----------------|----------------------------------|------------------------------------|----------------|
| People and Caribou | Habitat | Adaptations and Behaviour | Conservation and management | Hazards |
| | | | | |
| | | | | |
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Card Answer sheet 1

| People and caribou | Habitat | Adaptations and behaviour | Hazards | Conservation and management |
|--------------------------------|------------------------|----------------------------------|-----------------------|--------------------------------------|
| <i>Insulation</i> | <i>Calving grounds</i> | <i>Chionophile</i> | <i>Wolves</i> | <i>Traditional knowledge</i> |
| <i>Hollowed caribou hooves</i> | <i>Beringia</i> | <i>Ungulates</i> | <i>Golden Eagle</i> | <i>Indicator species</i> |
| <i>Warble flies</i> | <i>Barren-ground</i> | <i>Velvet</i> | <i>Black flies</i> | <i>Satellite and radio-collaring</i> |
| <i>Fish hooks</i> | <i>Crustose</i> | <i>Pelage</i> | <i>Nose bot flies</i> | <i>Co-management</i> |
| <i>Fish</i> | <i>Fungi</i> | <i>Cratering</i> | <i>Brucellosis</i> | <i>Licences and quotas</i> |

Card Answer sheet 2

| People and caribou | Habitat | Adaptations and behaviour | Hazards | Conservation and management |
|---------------------------|-----------------------|----------------------------------|-----------------------------|------------------------------------|
| <i>Pemmican</i> | <i>Low snowfall</i> | <i>Dew claws</i> | <i>Habitat encroachment</i> | <i>Aerial surveys</i> |
| <i>Babiche</i> | <i>Fall migration</i> | <i>Lichen</i> | <i>Oil and gas</i> | <i>Analyze their droppings</i> |
| <i>Inukshuks</i> | <i>Key habitats</i> | <i>Rut</i> | <i>Roads</i> | <i>Poaching</i> |
| <i>Gold Rush</i> | <i>Ecosystem</i> | <i>Tendons</i> | <i>Stress syndrome</i> | <i>Harvest study</i> |
| <i>Trophy hunters</i> | <i>Tundra</i> | <i>Females have antlers</i> | <i>Bioaccumulation</i> | <i>Composition count</i> |

Categories, questions and answers

People and caribou

Q. Northern native people used caribou skins to make clothing because it provides excellent what? A. *Insulation*

Q. Some native groups imitated the sound of the caribou's clicking using decorative rattles made out of what? A. *Hollowed caribou hooves*

Q. Which caribou parasite is considered a delicacy by some Inuit? A. *Warble flies*

Q. Caribou bones were used by arctic peoples to make ornaments, needles and what else? A. *Fish hooks*

Q. In some Inuit and Dene cultures it was bad luck to eat caribou and what on the same day? A. *Fish*

Q. Caribou meat that is pounded and mixed with berries and grease is called what? A. *Pemmican*

Q. Rawhide that is stretched into strips and dried is called what? A. *Babiche*

Q. What is the name of the stone figures built by Inuit that resemble human figures? A. *Inukshuks*

Q. In the late 1800s/early 1900s, caribou were harvested by professional meat hunters to feed people participating in what? A. *Gold Rush*

Q. People who hunt for recreation and not subsistence are sometimes called what? A. *Trophy hunters*

Habitat

Q. Barren-ground caribou give birth in special areas called what? A. *Calving grounds*

Q. What is the name of the area of Yukon and Alaska that remained ice-free during the last ice age? A. *Beringia*

Q. The family of caribou that travel long distances to calving grounds north of tree line are called what? A. *Barren-ground*

Q. Lichens that are flat and attach themselves to rocks are called what? A. *Crustose*

Q. Lichens are made up of two kinds of plants, algae and what? A. *Fungi*

Q. Caribou need winter habitat that has what characteristic? A. *Low snowfall*

Q. As cold weather approaches, caribou band together and begin their annual what? A. *Fall migration*

Q. Areas that are of prime importance to the survival of caribou herds are called what? A. *Key habitats*

Q. Caribou share their habitat with a large variety of creatures. All together they make up a what? A. *Ecosystem*

Q. The treeless area in the far north of Canada is known as what?
A. *Tundra*

Adaptations and behaviour

Q. What is the word that means "snow-loving animal?" A. *Chionophile*

Q. Caribou and other members of the deer family belong to a group of animals called what? A. *Ungulates*

Q. The layer of fuzzy skin covering the caribou's antlers is called what?
A. *Velvet*

Q. The hair that covers the body of the caribou is called what? A. *Pelage*

Q. When caribou dig through the snow with their wide hooves in search of lichens it is called what? A. *Cratering*

Q. The caribou's two small toes are called what? A. *Dew claws*

Q. What is the caribou's main winter food? A. *Lichen*

Q. The mating season of caribou and other ungulates is called the what?
A. *Rut*

Q. The 'clicking' sound made by the caribou's feet is caused by bones and what? A. *Tendons*

Q. What makes caribou different from other members of the deer family?
A. *Females have antlers*

Hazards

Q. Which animals are the major predators of most caribou herds?
A. *Wolves*

Q. Which bird of prey will hunt for newborn caribou calves? A. *Golden Eagle*

Q. What is a bloodsucker that persistently torments caribou during the summer? A. *Black flies*

Q. The larvae of which parasite is sneezed out of caribou's noses?
A. *Nose bot flies*

Q. Which bacterial disease causes caribou to abort or give birth to weakened calves? A. *Brucellosis*

Q. A large housing subdivision built in an area that is used during the winter by a caribou herd might be called what? A. *Habitat encroachment*

Q. What kind of development is proposed for the calving grounds of the Porcupine caribou herd? A. *Oil and gas*

Q. Which linear constructs may affect the movements of migrating caribou herds? A. *Roads*

Q. If caribou are chased by snow machines or aircraft, the resulting violent exertion may cause what? A. *Stress syndrome*

Q. What is it called when contaminants such as metals like cadmium, aluminum and mercury build up in animals? A. *Bioaccumulation*

Conservation and management

Q. What is one name for values and practices gathered by northern people through centuries of observing caribou behaviour? A. *Traditional knowledge*

Q. Large mammals like caribou that can give information about the health of other members of their ecosystem are called what? A. *Indicator species*

Q. What kind of research method allows scientists to track the movements of individual caribou year-round? A. *Satellite and radio-collaring*

Q. What is it called when several agencies, organizations or governments work together to manage wildlife? A. *Co-management*

Q. What are some ways that wildlife managers can restrict the number of caribou being hunted? A. *Licences and quotas*

Q. What is one way that biologists count the number of caribou in a herd? A. *Aerial surveys*

Q. What is one way that biologists can study caribou food habits? A. *Analyze their droppings*

Q. What is it called when an animal like caribou is hunted illegally? A. *Poaching*

Q. What is it called when biologists use questionnaires and do interviews with hunters? A. *Harvest study*

Q. What is it called when biologists try to estimate the numbers of bulls, cows and calves in a herd? A. *Composition count*