
Project Caribou

An Educator's Guide to Wild Caribou of North America

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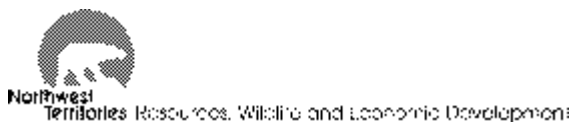
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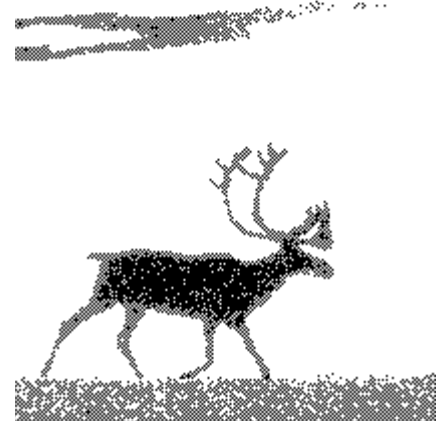
For more info: www.projectcaribou.org

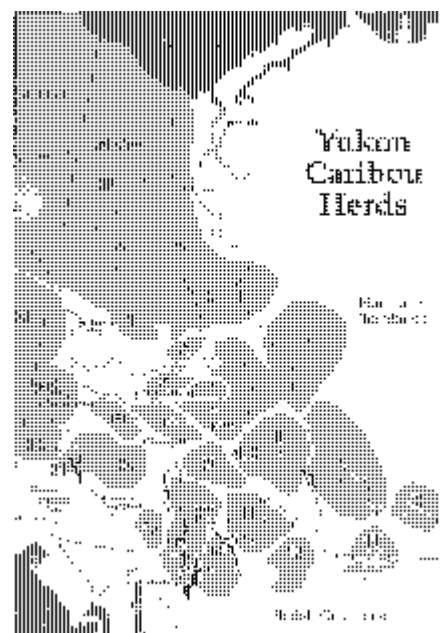
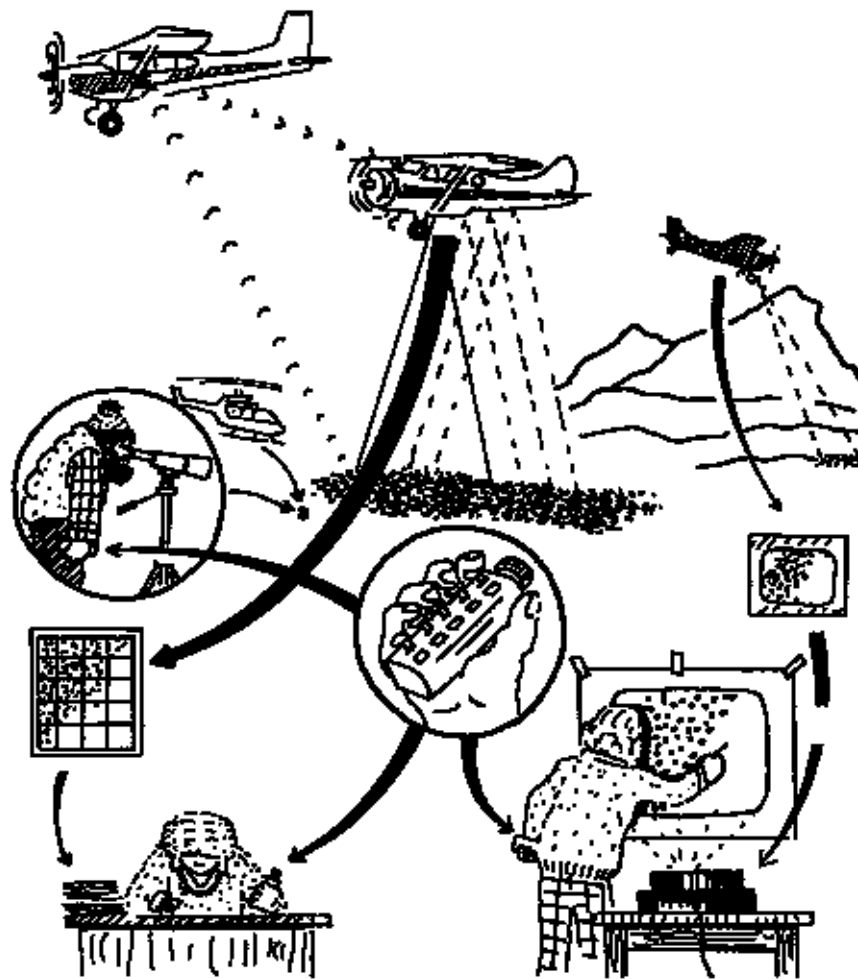
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Beverly and Qamanirjuaq Caribou Management Board





What is a caribou herd?

Objectives

Students should be able to:

1. Describe how caribou herds are identified.
2. Understand why caribou and other animals move in herds or large groups.
3. Experience a simulation of a caribou herd in migration.

Method

Students will study a caribou herd (preferably local) to find out how it is defined, map its range, view videotapes and/or listen to audiotapes of a caribou herd in migration.

Background

Caribou need to be able to do two things at once: they need to eat, and they need to keep watch for predators. Like many other animals, caribou fill this need by gathering in herds. When caribou are in a group, several animals will be looking up and around while others are eating. They sniff the air regularly and can recognize predators by scent. They can alert other caribou to danger.

Barren-ground caribou form different kinds of herds at different times of the year. Prior to calving, pregnant cows will band together in small groups called "maternity bands." After the young are born, the mothers and calves may form "nursery bands." Larger and larger groups of caribou may move together through the summer as a strategy to reduce harassment by insects. When cool August nights mean fewer insects, these large groups break up and animals wander in smaller groups until fall. By early September larger groups again start to reform and continue through fall migration. In winter bull caribou may avoid groups of cow caribou and their calves, because they know that predators like wolves are drawn to the vulnerable young caribou. Also, they may be challenged for feeding territories by the cow caribou, which still have their antlers.

There are other advantages to travelling in herds. By travelling together to calving grounds in large groups, pregnant cow caribou in the barren-ground herds reduce the risk of predators killing their calves by sharing the risk with thousands of others. The animals in the centre of the caribou herd are better protected from predators that may attack unprotected animals or stragglers. In the same way, forming a tightly knit herd may help caribou protect themselves from aggravating clouds of insects.

Woodland caribou are much more solitary. Prior to calving, pregnant cows may separate to give birth and raise their calves in secluded patches of forest. Caribou are most scattered across the range in summer. They do, however, band together in the fall when males are courting females,

Age

Grades 8 – 12

Subjects

Biology, Geography, Math, Language Arts

Skills

Mapping, writing, mathematical calculations

Duration

One or two 45-minute periods

Setting

Indoors

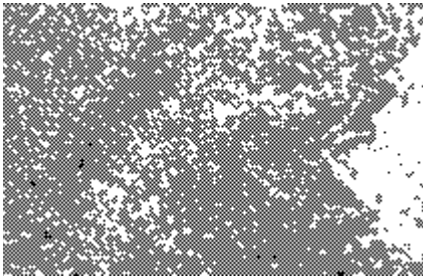
Materials

- Map of the region of the study herd
- Map of the range of the study herd including calving and wintering areas. Contact a local biologist for help obtaining these.
- Audiotapes and videotapes of caribou herds in migration

Adaptations for different ages

Primary: After showing a video or playing audiotapes of caribou, have students act out being a herd. You may wish to do this activity outside where the students can run around, asking the herd to 'migrate' in various directions or adding a tag element by making several students 'wolves'. Remind the students about the noises made by a herd, including grunting and clacking noises.

Senior: Divide students into small groups and have each group research and contact biologists that study a particular herd and ask about management.



A huge caribou concentration in the northern Yukon

especially just before winter. Cows, calves and teenage caribou of both sexes travel in small bands throughout the winter, while mature bulls separate until late winter when, for a very brief time, most members of the herd gather together in search of the fresh green plants appearing where snow has melted.

Biologists and managers need to understand what defines a caribou population and where it is located in order to effectively study and manage it. Caribou herds are often named for where their calving grounds are, or for the geographical area where they are found. The Porcupine Caribou Herd, for example, is named for a river that the herd crosses during its annual migration.

Procedure

1. Begin with a general discussion of herds and groups, the advantages of travelling in a herd and how herds are named.
2. Have the students look at regional maps of the study herd. Discuss features after which the herd could be named.
3. Hand out range maps and have the students draw the range as indicated on their base maps.
4. Have the students calculate the total area of the range and divide by the total number of caribou in the herd to come up with a caribou/area in km² figure. You may wish to have the students compare this figure to that of other herds (which they may have to calculate). Are they similar? What might cause the differences?
5. Finish this activity by listening to tapes of herds and/or watching videotapes of caribou herds in migration. Ask the students to imagine what it would be like to be in the middle of a caribou herd. Then have them write about their impressions as a short descriptive paragraph or poem.

Variations

Have students make up range maps for a fictional caribou herd, describe the herd's characteristics, and give it a name. They may also make a density calculation for their herd.

Extensions

1. Do the aquatic extension of the Project WILD activity "Muskox Manoeuvres".

Evaluation

Discuss with students:

1. Some of the advantages of travelling in a herd.
2. Why and how caribou herds are named.
3. How population density of a caribou herd is calculated.