



Collared Pika Classroom Kit

Teacher's Guide

Dear Educator,

Welcome to Ecology North's Collared Pika Species at Risk Education Guide. Developed with the support of Northwest Territories Species Conservation and Recovery Fund, this resource offers educators an interactive, fun, and easy-to-use tool for teaching about the collared pika.

Name: Collared Pika

Scientific Name: *Ochotona collaris*

Status: Special Concern in Canada



Who am I?

Collared pika is a small lagomorph, which is a category of animals that includes rabbits, hares and pikas, but NOT rodents.

NWT Curriculum Connections

- Experiential Science 10 (Unit 2): Climatology and Meteorology
- Grade 4: Life Systems, Habitats and Communities
- Grade 7: Interactions and Ecosystems

Appearance

Collared pikas have short ears, five toes on each front foot and four on each back foot. They have dark grey and brown fur with a white underbelly. Their name comes from the light grey colouring ('collar') around their neck.

Size

Avg. Weight: 110-220 g
Avg. Length: 17-19 cm

Diet

Leaves and stems from mountain avens, fireweed, lupines, grasses and shrubs.

Habitat

Collared pika live in cool and dry mountain boulder fields (or talus), near alpine meadows above the treeline. They form colonies in old rock slides or around large boulders where they nest in spaces between the rocks. In the Northwest Territories, you can find them in the Mackenzie and Richardson Mountains.

Predators

Ermine (weasel), marten, hawks, eagles and owls

Defence

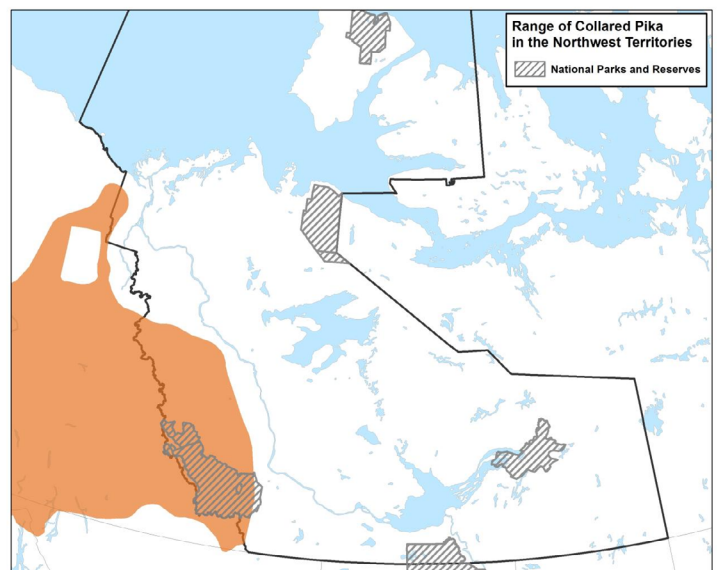
To avoid larger predators, they will give an alarm call to warn other pikas before diving under rocks. For small predators like ermine, they remain still and silent to avoid detection.

Behaviour

During the summertime, pikas gather grasses and other small plants from nearby meadows to dry and store for the winter. These "hay piles" are kept in burrows between the rocks, where the pika is protected from predators and harsh weather conditions. Other collared pikas living nearby will often try to steal each other's food. A collared pika defends its stash of food by making a distinctive high-pitched squeak and chasing other pikas away.

Fun Facts :

- 🐾 Collared pikas are sometimes called "rock rabbits."
- 🐾 Collared pikas are often heard before they are seen.
- 🐾 The collared pika call sounds like "meeeeeeeeeeep!"
- 🐾 Collared pikas are solitary and will chase away intruders near their home.
- 🐾 Collared pikas steal food from each other's winter caches to add to their own supply.
- 🐾 Collared pikas do not hibernate during the winter. They live in rock crevices beneath the snow, in an area called the "subnivean zone," where they find protection from harsh cold winds and hungry predators.
- 🐾 And no, collared pikas were not the inspiration for the Pikachu Pokémon. (Pikachu is actually based on a squirrel!)



Source: www.nwt-species-at-risk.ca



Why am I at risk?

Climate change is the greatest threat to the collared pika. Changes in temperature and precipitation are the main risks.

Collared pikas prefer cool weather so very hot summer temperatures can cause them to overheat. As the landscape changes, pikas could have a harder time finding food and places to live. Alpine species are especially vulnerable to climate change as they are forced to move to higher elevations and may eventually run out of habitat.

Precipitation (rain and snow) is also increasing, along with freeze-thaw events, which can trap their hay piles in frozen ice, making it hard for them to access their food.

Collared pikas live in remote areas and do not face many direct impacts from human activity. Our impact on pikas is mostly from human-caused climate change.

What can you do to help?

You can help the collared pika by learning about climate change and taking action.

Do more:	Do less:
<ul style="list-style-type: none">• Walk or bike to get around.• Eat food that is grown close to home.• Fix your things and use them as long as possible.• Use reusable food containers and water bottles.	<ul style="list-style-type: none">• Don't drive when you can walk or bike.• Avoid buying new stuff when your old stuff still works or can be repaired.• Avoid buying products that create plastic waste (plastic water bottles, food packaging, etc.)

Activity 1: Food

Students pretend to be pikas gathering food (hay piles) in rock shelters or talus (hula hoops). When the whistle blows, pikas emerge from their rock shelter (hula hoop) to gather hay. They must gather at least five haystacks for winter food needs and five for the summer. Students may only take one hay pile at a time, mirroring the collared pika's ability to carry food. Also, like the collared pika, students can steal hay piles from each other's caches. Blow the whistle again and see who has collected enough for the winter months (minimum five haystacks). Encourage students to meep like collared pikas.

Two students can act as "eagles" (predators), tagging pikas when they step outside their talus. When students are tagged they must sit and count to twenty before they begin gathering again.

During later rounds, hay piles can be pulled from student's hoops to illustrate how warmer winters are causing the snow to melt and refreeze, trapping their hay piles in ice and making them impossible to eat.

Materials:

- Hula hoops (one per child for small talus area)
- Laminated cards with pretend foods for hay piles. (10 per student, scattered around the play area)
- Whistle

Note: Spacious play area needed.

Activity 2: Habitat

In this activity, students are provided with a variety of art supplies and challenged to create a detailed collared pika habitat. They can use materials such as paper, cardboard, paints, markers, and natural elements like twigs and leaves to construct a realistic representation of the collared pika's environment. This project encourages creativity while also promoting understanding of the collared pika's habitat and ecosystem.

Discuss, Challenge, Explore:

1. In what ways is climate change affecting the mountain ecosystem?
2. What could the collared pika do to adapt to changes in their environment?
3. What can you do to help protect the collared pika?

Glossary

Burrows: a small tunnel or underground passage used for shelter, storing food, and resting.


Hay pile: a large stockpile of herbs and grasses collected by pikas to supply food through the winter months.

Subnivean: an insulated zone between layers of snow and the ground where small animals can travel and take shelter from cold, wind, and predators.

Lagomorph: an animal belonging to the taxonomic group "Lagomorpha," which includes rabbits, hares, and pikas.

Talus: A jumble of large rocks and boulders that forms on a mountain slope.

Other Resources

 www.nwt-species-at-risk.ca/en/our-species-risk/collared-pika



Scan or click here to read the Committee on the Status of Endangered Wildlife in Canada (COSEWIC)'s 2011 Assessment and Status Report on the Collared Pika

Scan or click to Watch:



Pikas in the Rockies stealing from their neighbours to survive
from CBC's *The Nature of Things*



Collared Pika - Wildlife Wednesday
from WWF-Canada

Have you seen me?

Report collared pika sightings to WildlifeObs@gov.nt.ca