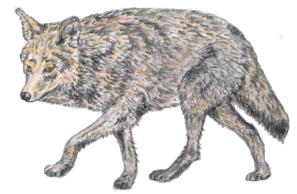


NATURE DETECTIVES



Winter 2018

Pikas Squeak and Scurry on Rocky Slopes

Guinea-pig-sized mammals called pikas scurry among tumbled rocks in high mountain meadows. Despite their little rounded ears and squeaky calls, pikas are not related to mice or guinea pigs. Pikas are the smallest cousins of rabbits and hares.



Although pikas are cute and pint-sized, these furry critters are tough and well adapted to their rocky alpine habitat. They thrive in cold, snowy and windy places at elevations higher than trees can grow.

Scientists are investigating what will happen to pikas as earth's changing climate causes different weather conditions in the alpine tundra. Hotter summer temperatures and less winter snow could be a double whammy against survival for pikas.

“Hay” Piles for Munching

Right now, it is winter and **this** pika is hungry. He scrambles up his tunnel through the snow pack to a stockpile of plant material he gathered during summer and early fall. His pile of twigs, grasses, leaves and berries is stashed under a rock overhang to help keep it dry. In this shelter, he munches on some dried leaves at the edge of his “haystack.” Between bites he watches for any weasel on the prowl for a pika meal.

Snoozing Below the Snow

Once pika's hunger is satisfied, he will return to his den in the talus. Talus is a rockslide full of rocks that bounced, rolled and slid down a mountain or got pushed by a glacier. The jumble of boulders and broken rocks creates protective overhangs and spaces for escape tunnels and dens. It's a perfect pika home site.



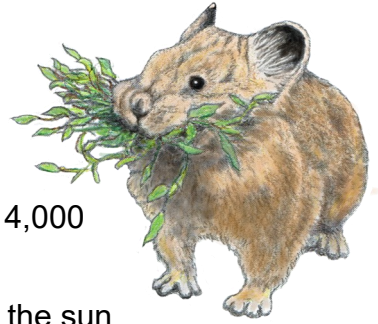
Winter Grazing

Pikas nap in winter but they do not hibernate. This pika will snooze and snack all season, insulated from the coldest temperatures by a deep snowpack.

On warm days, pikas nibble plants under the snow and graze lichens off rocks. Their front teeth are always growing and are worn down by all the tough chewing. Hay piles are insurance that pikas will have enough to eat all winter.

Make Haystacks While the Sun Shines

Pikas start gathering flowers, twigs, bark, pine needles and other plant material in the summer. By fall they kick into high gear to build as many as three or four hay piles. Some large haystacks would fill up the basket of a typical grocery cart. A pika may make 14,000 round trips to the meadow to gather just one hay pile!



As they harvest vegetation, pikas scurry to lay each mouthful out in the sun to dry. Dried plants are more edible all winter than a slimy pile of vegetation that molds instead of drying. Sun-dried plant materials are added to a hay pile one mouthful at a time. Pikas build their haystacks in the shelter of the talus.



Neighbors will steal each other's stored food so pikas mark their stockpiles with urine and feces. Like all rabbits, they have two types of feces. They eat some of their partially digested soft feces for the nutrition left in the oval-shaped pellets. They don't eat the tiny, hard balls of completely digested feces.

A Pika Colony Is Busy with Racing and Chasing

Individual pikas stake out a territory that has talus just right for runways and dens. A nearby meadow with flowers and shrubs for dining and harvesting is also a requirement.



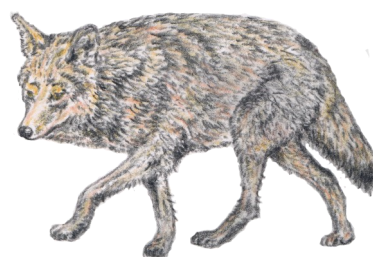
Pikas mark their territory with urine and feces just like they mark their hay piles. They also rub their chins on surrounding rocks to spread scent from their cheek glands. With sharp barks they warn others in the group to back off from their territory or from a hay pile. If barking doesn't work, they will chase off intruder pikas and sometimes fight them. The colony is noisy with warning squeaks and alarm calls and other chatter. Their various calls are loud for such a little critter.



Despite living near each other, pikas aren't social. The only time individuals tolerate each other is when males and females pair up during mating season. The chosen mate is usually a next-door neighbor because neighbors recognize each other's familiar scent and voice.

Safety in Numbers

Although pikas don't hang out with each other, individuals sound alarm calls to warn the whole colony when a predator appears. Pikas avoid being eaten by coyotes, pine martens, hawks and eagles if they can escape into their secure rocky runways in time. The first sharp-eyed pika to see an enemy squeaks a warning bark that is echoed by other pikas in the group as they all dash for safety.



Coyote



Weasel

The most dangerous pika predator is the weasel. Slim-bodied weasels slip easily through narrow spaces in the talus. The pika colony is typically silent as they scramble to escape an approaching weasel. No pika wants to draw the weasel's attention to its hideout with a squeak.

Camouflage may be a pika's best defense against becoming a predator's meal. Gray-brown pikas have a small round shape and are the color of lichen-covered rocks. One of their nicknames is *rock rabbit*. The tiny pikas are difficult to spot until they move or squeak. They only weigh as much as a half-cup of water!



Rock Rabbits Don't Hop

Pikas can scurry fast, but despite being in the rabbit family, they seldom jump. Their furry footpads help keep them from slipping on slick rocks as they run.

Pikas are most active around their territory in the mornings, late afternoons and early evenings during warm months. When they are not gathering plant materials or nibbling plants in the meadow, they spend time basking in the sun. They retreat to the cool shelter of the talus when the day gets hot.

New Members for the Colony

Female pikas usually give birth to three babies in a grass and fur lined den sometime between late spring and summer. The young are born blind and totally helpless. Dad pikas have no role in parenting, but the babies grow fast on their mother's milk. Their mom has to spend a lot of time in the meadow eating to have enough energy to feed her quickly growing offspring, but she sprints back to feed her babies every two hours. In one week the little pikas can walk and by six weeks young pikas are off and searching for their own space in the colony.

Young pikas born earliest in the summer have the best chances to secure a territory and make hay piles before cold weather arrives.

If pikas avoid disease, starvation, predators, overheating or freezing, they may live five to seven years.



Young pika looking for its own space

“Ears” to You!

On the pika drawing, cover its ears with your fingertips and imagine it with long ears – now it looks like a rabbit! Ears allow all species of rabbits to hear well, but their ears also help regulate their body temperature. Rabbits can't pant or sweat so their ears help them shed heat and keep cool. Jackrabbits that live on hot, open prairies have the longest ears in North America. Pikas live where it is cold, and their small ears reduce heat loss to help keep their bodies warm.



We don't have long ears, but our arms are long. Think about being outside on a cold day. Hugging your arms close to your body helps you to stay warm. If you get hot, you might spread out your arms or even wave them to cool off.

Hearing Danger

For small animals like pikas, hearing is important for avoiding predators. They need to listen for sounds all around them. Most animals with large ears can flex their ears in different directions to hear sounds better. Even though pika ears are small, they still have pretty big ears for such a little animal.

Try this: cup your hands behind your ears with your fingers facing forward. Listen to sounds in front of you, and then move your hands around to see what sounds you capture with your animal ears.



Yellow-bellied marmot

Neighbors May Be Alarming

Pikas share their talus habitat with other mammals such as marmots. Each species has its own alarm calls, but the neighbors in the talus also pay attention to each other's calls to avoid being surprised by a weasel or other predator.

To read more about weasels and marmots in Boulder County go to the Nature Detectives page at <https://www.bouldercounty.org/open-space/education/nature-detectives/>. Find the **Nature Detectives Library** half way down the page and search for *weasel* to see the 2006 article, *Who Are You Calling a Weasel?* And search for *marmot* to see the 2016 feature, *Sweet Dreams, Yellow-bellied Marmot*.



We Eat Dried Plants Too

Pikas dry their food so it doesn't rot and will last through the winter. Look in your kitchen to see if you can find herbs like parsley, sage, rosemary or basil. Most likely these are dried and don't look much like the plants they came from.

What other things do you eat that are dried?
What are other ways to preserve food?



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