

Name: \_\_\_\_\_

Class: \_\_\_\_\_

# Saving Snow Leopards

*Counting these cats is a mountain adventure.*

By Pamela Crowe

2015

*Snow leopards are a type of big cat found in the high mountains of Asia. These amazing animals are in danger of going extinct, or no longer living on Earth. In this informational text, Pamela Crowe describes the work that scientists are doing to study and conserve, or protect, snow leopards. As you read, take notes on what scientists want to learn about snow leopards.*

- [1] At the age of 16, Kyle McCarthy cradled in his arms the limp body of a sedated<sup>1</sup> snow leopard. He had helped his father, Dr. Tom McCarthy, track the big cat among boulders in Mongolia.<sup>2</sup> Dr. McCarthy put a radio collar on the sleeping animal for research<sup>3</sup> purposes. Then they set the cat free, unharmed.

"You can't hold a snow leopard and not feel like that's probably one of the peaks in your life," says Kyle. "The animal is so powerful when it's awake, so beautiful, and so rarely seen."



*"Snow Leopard Seated with Branches" by Eric Kilby is in the public domain.*

That snow leopard determined Kyle's career. He became a wildlife biologist<sup>4</sup> like his father and, years later, traveled to Kyrgyzstan in central Asia to help save the snow leopard from extinction.

## "Mountain Ghost"

The snow leopard is rarely seen by humans. This mysterious cat lives in 12 Asian countries among the world's tallest mountains.

- [5] The snow leopard is smaller than the tiger, the lion, and the leopard of Africa and Asia. It weighs as much as a cheetah, but is shorter and stockier. The cat's compact shape and thick fur help keep it warm in glacier-chilled air. Dark markings dapple its light-gray coat, camouflaging<sup>5</sup> it in rocky terrain.<sup>6</sup> Big paws make padding over

1. given a drug that causes sleeping
2. Mongolia, Kyrgyzstan, and Tajikistan are countries in Asia.
3. **Research (noun)** careful study of something in order to find out information about it
4. **Biologist (noun)** a type of scientist who studies living things
5. to hide by coloring or covering to look like the surroundings
6. land or ground

snow easier. An extra-long tail provides balance on steep, rugged ground.

You might think the snow leopard would be safe living in such harsh,<sup>7</sup> remote<sup>8</sup> places. But it faces multiple<sup>9</sup> threats from humans. The cat has lost important stretches of habitat. (A habitat is the place that fills an animal's needs—mainly food, shelter, and mates.) Mining,<sup>10</sup> wars, and overgrazing by farm animals have all led to this loss of habitat.

### ***Protecting the Herd***

The loss of habitat has caused a food shortage. Snow leopards eat wild goats and sheep. When farm animals eat too much vegetation, wild plant eaters can't find enough food to stay healthy. Females don't have enough babies. Over time, the numbers of wild goats and sheep go down, and snow leopards have less to eat. Then the big cats eat livestock,<sup>11</sup> and the herders kill the leopards to protect their livelihoods.<sup>12</sup>

Agencies<sup>13</sup> are working to save the cats and help herders at the same time. Some agencies give herders wire mesh and wood to keep snow leopards from entering their stables at night. Some pay herders for the animals they lose to snow leopards. In exchange, the herders stop killing snow leopards and leave more room and plants for the wild goats and sheep.

Are the conservation programs working? Researchers estimate that only 3,500 to 7,500 snow leopards are alive today. But they need more reliable<sup>14</sup> ways to count leopards before they will know.

- [10] That's where scientists like Dr. Kyle McCarthy are needed. He traveled to Kyrgyzstan to test ways of estimating snow leopard numbers. He camped in the mountains with Dr. Jennifer McCarthy (his wife) and other co-workers. They saw no leopards, but they hadn't expected to. Instead, they looked for evidence the cats left behind. "You have to find something related to them: poops, scrapes (claw marks), and pee," Dr. Kyle McCarthy says.

The group collected scat (poop) for DNA analysis. Along with the waste material of digestion, scat contains cells from the animal's own body. DNA is material inside those cells that, like fingerprints, can identify an individual animal.

The team also used automatic cameras. The scientists placed motion-and-heat-sensitive cameras along a mountain ridge. When a snow leopard neared one of these "camera traps," the camera snapped its picture.

Each snow leopard's spot pattern is different. Researchers compared patterns in the photos to identify cats. The

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7. **Harsh** (*adjective*) rough or difficult
  8. **Remote** (*adjective*) far from towns or areas where humans live
  9. **Multiple** (*adjective*) many
  10. The act or business of digging up coal and other minerals in a mine.
  11. **Livestock** (*noun*) cows, horses, sheep, or other animals raised or kept on a farm
  12. means of earning or getting what is needed to live
  13. A company or organization that does business in support of other companies or people.
  14. able to be trusted or believed

cameras had taken photos of 15 different snow leopards at two study sites.

### ***A Close Encounter***

Shannon Kachel, Dr. Kyle McCarthy's graduate assistant, has searched for snow leopards in Tajikistan, where he almost saw one. "I was hiking along a ridgeline in the late afternoon and came around the corner of a rock outcropping to find a steaming, fresh kill site with snow leopard signs all around," Kachel says. "I could see and hear where the cat had knocked some rocks loose as it ran away from me, but even though I waited until it was nearly dark, I never saw the cat."

- [15] Most people will never see a snow leopard, yet it has a right to exist,<sup>15</sup> Dr. Kyle McCarthy says. "It's too magnificent<sup>16</sup> to think about losing."

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15. **Exist (verb)** to stay alive; live

16. **Magnificent (adjective)** very beautiful

## Text-Dependent Questions

**Directions:** For the following questions, choose the best answer or respond in complete sentences.

1. Which TWO alternate titles best expresses the main idea of the passage?
  - A. Dr. Kyle McCarthy's Important Job
  - B. Amazing Facts about Snow Leopards
  - C. Have You Ever Seen a Snow Leopard?
  - D. Scientists Want to Protect Snow Leopards
  - E. Snow Leopards: Scarce and Scary!
  - F. How to Spot Snow Leopards
  
2. According to the section "Protecting the Herd," which best describes the relationship between herders and snow leopards?
  - A. Herders are frightened by snow leopards so they hunt them to keep their family safe.
  - B. Herders hunt snow leopards because they are worried about their own animals.
  - C. Snow leopards are scared of humans so they are rarely seen by herders.
  - D. Snow leopards eat many of the plants that herders grow on their farms.
  
3. Snow leopards are called "mountain ghosts" because —
  - A. they are white like ghosts.
  - B. there are legends about them.
  - C. they are difficult for people to locate.
  - D. they are very frightening to come across.
  
4. How did Kevin McCarthy's early experience change his life?
  - A. It taught him important skills for hunting wild animals.
  - B. It helped him become closer to his father, who is famous.
  - C. It made him want to become a scientist who studies snow leopards.
  - D. It made him decide to become a veterinarian who saves snow leopards.
  
5. As it is used in paragraph 9, "estimate" means that scientists —
  - A. are making a careful guess about the number of snow leopards.
  - B. have no doubts about where and how to find snow leopards.
  - C. are very sure how many snow leopards are left in the wild.
  - D. have a clear plan for counting snow leopards.

6. In the section, "Protecting the Herd," what do researchers want to learn about snow leopards?

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## Discussion Questions

**Directions:** Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. Dr. Kyle McCarthy was inspired by his father to study snow leopards. Who is someone who inspires you? Why do they inspire you?
2. The article describes how snow leopards are in danger of going extinct, or no longer living on Earth, because they have lost their habitat. What is already being done to stop this from happening? What else do you think we should do to stop this from happening?
3. It is very rare to see a snow leopard. In fact, Dr. Kyle McCarthy's team did not see one during their whole trip to Kyrgyzstan. Why do you think that researchers still want to study snow leopards, even though they may not get to see them? Can you think of other things that you may not be able to see, but are still interested in learning more about?