



Science Behind the Scenes Video Script Bighorn Sheep

Welcome to Rocky Mountain National Park. I'm Judy Visty one of the park's Natural Resource Management Specialists.

Today I'm going to take you Behind the Scenes to share one of the park's many interesting science stories.

Bighorn sheep are closely associated with Rocky Mountain National Park. These majestic animals are usually thought of as creatures of high elevations and steep terrain.

Perhaps surprisingly, one of the places they frequent in the park is here at Sheep Lakes two miles west of the Fall River Visitor Center.

The sheep come here because the edges of these small lakes contains clay that has concentrated amounts of important nutrients, including calcium, potassium, manganese, copper, zinc, and selenium. The clay is a natural salt lick.

The immediate area around Sheep Lakes is closed to foot travel from April to mid-August. In order to give you a close-up view, we are going to visit today when there are no sheep in the vicinity. However this is not something you will be able to do on your own.

Think of this clay as vitamins for sheep. It contains nutrients that contribute to the overall health of the animal and may have specific functions in the nervous and cardio-vascular systems.

It's especially important to adult ewes, that is, female sheep, that have recently given birth and need to replenish their supply of minerals such as calcium. It's likely also critical to the young lambs. A study in Wyoming showed that selenium was essential to proper muscle development. Without it the young lambs developed a crippling muscle disease and typically did not survive their first year.

It's relatively common to see sheep at Sheep Lakes during the summer months.

By that I mean they're spotted three or four days a week. In natural areas like Rocky Mountain National Park, where everything you see is real and unstaged, there are no guarantees of animal sightings - but that only adds to the excitement. Every park visit is different than the last; and every animal sighting is a unique surprise.

Coming down to Sheep Lakes is actually not quite in character for bighorn.

Let me show you where they prefer to be.

The favorite habitat of bighorn sheep is on steep slopes, slopes that range from 28 to a nearly vertical 85 degrees. Bighorn sheep with their stocky but muscular build can usually outrun their predators such as coyote and mountain lions in this rocky terrain ... terrain that makes a human breathe quite hard - raising our heart rate.

In contrast sheep are stressed by situations in which they must leave the "escape terrain," cross highways, and be in unpredictable situations with vehicles and people. In fact, in a study in southern Colorado, where the sheep had attached heart rate monitors, they found that the sheep's heart rate jumped from 80 to 190 beats per minute when they were startled by a vehicle.

The fact that sheep visit Sheep Lakes at all, suggests just how important the nutrients are for them. This road was built before full recognition of how serious an obstacle it is bighorns.

In order to help the sheep cross the road, park staff and volunteers - which together make up the Bighorn Brigade - are posted along the road during the summer months. If the sheep move down the hillside and appear to be approaching the road, the Brigade will stop traffic. They also prevent visitors from approaching so closely to the sheep that they are interfering with their normal behavior.

Note that road side parking is not allowed at Sheep Lakes during the summer months. Brigade staff can direct you to a designated viewing area.

Even with all these protective measures, it's likely that the sheep do not visit Sheep Lakes as frequently as they would in the absence of cars and people.

In a sense, bighorn sheep are one of the wildest animals in North America because they are one of the most sensitive to the presence of human beings. Other hooved animals like elk and deer have adapted to the presence of people and their numbers over the last few decades have increased all throughout the United States. In contrast, sheep populations' numbers continue to decline. Compared to 1915 bighorn sheep habitat and movement outside the park are much more restricted.

Because of concerns about the long-term viability of bighorn sheep at Rocky Mountain National Park, the Park Service is using some of your fee entrance money to pay for research that may help us better protect the sheep in the future.

One of these studies is looking at the paths that sheep take as they come down the hillside and approach Sheep Lakes to see if changes in road alignment or even an overpass would help the sheep visit this area in the future.

Another study involving radio- collared sheep is looking at population, trends, health, and sheep movements within the park.

Remember - you can do your part. If you visit Sheep Lakes during the summer months, obey the roadside signs and the instructions of the Bighorn Brigade staff.

The Brigade staff can answer your questions including "when were sheep last seen at Sheep Lakes." Rangers provide free talks daily about bighorn sheep.

It has been my pleasure to share with you the Science behind the Scenes story at Rocky Mountain National Park.

The National Park Service cares for special places saved by the American people so that all may experience our heritage. Have a great visit!

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Park information is available at 970-586-1206 or on-line at www.nps.gov/romo

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