

## **A Look at Nature** **“Scat”**

This will not be an article about chasing some animal away, which may be the first thing that the title brings to mind. No, the meaning of the word “scat” that I have in mind is more related to the theme of the newsletter, namely outhouses. Only nature’s creatures generally don’t use anything constructed. But they will leave behind their calling card, and scat is one of the names given to it. In fact, there is a whole field of research dedicated to studying animal droppings, called scatology, proving once again that you can add the phrase “ology” to almost anything and turn it into a science.

Many animals are very secretive and we only rarely get a chance to see them. Scat is another way, much like tracks in mud or snow, where animals leave behind a trace of where they have been. You may also be able to tell what they have been eating, which provides some clue to what animal left it behind.

Much like animal tracks, scats have characteristic shapes that help us identify what animal it was. And naturalists like to use comparisons with things we know to help remember the shapes. For instance, elk scat is often shaped like a Tootsie-Roll (the candy). Deer scat will be smaller than elk, and often have a little pointed tip on one end, so we say they look like a Hershey’s Kiss (more candy). It is said that rabbit scat is shaped like M&Ms, while pikas’ are little BBs.

Of course, shape and texture will change with diet and amount of moisture. Elk scat in the spring tends to have more moisture and be all stuck together, while in winter, when they may be eating a lot of aspen bark, their droppings will look more like those of a porcupine and look full of wood chips. Obviously they have been reading literature about the benefits of roughage. Black bear scat will often be all grass in the spring and full of berries in the fall.

Wild dog and cat scats are some of the more difficult to distinguish as to what species it is. Of course first you have to make sure it is not from a domestic dog. Lots of hair and small bone fragments are good clues that it was a wild animal. Dog (coyote and fox) scat tends to be tapered at each end, while cat (bobcat and mountain lion) tends to have well defined blocky segments and no tapering at the ends. Cats often try to cover their scat (much like a house cat), so there may be scratch marks on the surrounding ground.

One of the more amazing scat stories comes from the bushy-tailed wood rat, better known as the pack rat. They can sometimes be detected by the presence of varnishlike coatings on rocks from long-used urinating stations, or from large accumulations of droppings, often the result of many generations. Probably more than any other wild species, they have the habit of using long-term “toilets.” Researchers have been able to trace the remains of some of these “toilets” back 10,000 years, meaning generations of pack rats have lived at the site for that long. And since not all of the vegetative material ingested is dissolved, the changes in the plant communities of the general area can be deciphered.

Of course, scat is not just a waste product. As the old saying goes, “one animal’s scat is another animal’s treasure,” or something like that. Animals find resources in what has been left behind. Butterflies, in particular, can be found congregating around fresh scat. Last summer, while hiking back through Woodland Flats, I came across close to 20

butterflies centered on what appeared to be fresh mountain lion scat. The feeling is that the butterflies can absorb salts and other minerals from the droppings.

Naturalists have liked to use scat as a tool when interpreting nature to people. One of the better stories I have heard was about Clait Braun, a long-time biologist for the Colorado Division of Wildlife. He was with a group and they came across some elk scat. Someone asked if he could tell the sex of the elk (bull or cow) from the scat. Clait proceeded to bend over, pick up a piece of scat, put it to his mouth and take a bite. "Cow", he proclaimed. The people were both shocked and amazed. What everyone had missed is that before bending over he had had his hands in his jacket pocket, where he happened to have some soft brown colored candy, about the shape of elk scat. And that is what he took a bite of. He was well prepared for his audience that day.

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