A Look at Nature
"Lions and Tigers and Bears, Oh My!"

These animals are the stuff of stories and legends. Their size and potential ferocity make an encounter something not to be forgotten. Their heyday on the planet was from 13 thousand to 15 million years ago. This was the age of the megafauna in North America; mastodon, mammoth, ground sloth, and giant bison. With so much to eat, carnivores were also plentiful; saber tooth tiger, dire wolf, cheetah, and giant short-faced bear. Most became extinct possibly due to the change in climate at the end of the ice age, along with over hunting by humans that arrived via the Bering Straight. Other carnivores, including gray wolf and grizzly bear, were exterminated more recently from Colorado. Black bears and mountain lions are the only large carnivores we can see locally that remain from the age of large mammals.

We are probably more familiar with black bears. Humans tend to provide them with ample opportunities for food through trash, bird feeders and food left out for dogs or raccoons. Hence, most of our encounters are around our homes. Black bears are not always black; in fact most are brown and a few even blond (these being the bears that have the most fun). While they are considered carnivores, they will eat a wide variety of food and their mainstay is vegetation, including grass, berries and other fruit. Social insects (ants, bees and termites) are also important food resources at certain times of the year. We don't see them during the winter as they hibernate in a rock crevice or an excavation under a shrub or tree. While in hibernation, female bears will give birth, generally to a pair of cubs. Litters are normally produced every other year.

Bears are secretive, but signs of their activity are present for the inquisitive eye. Their scats will be human sized and often filled with grass in the spring and berries in the fall. Large overturned rocks and ripped up tree stumps indicate places where bears were looking for insects. If you are walking through a forest that recently was burned by a fire, look for trees that have had their bark ripped or shredded. Here, bears have been searching for the many insects that invade dead wood. In the fall look for stripped branches on chokecherry and other fruiting shrubs. You may also see the claw marks on trees, particularly aspen, that have been climbed by a bear.

Some of the best research on northern Front Range black bears was conducted by Hank McCutchen in Rocky Mountain National Park during the late 1980s. I went up to Rocky to visit with Hank along with my good biologist friend, and bear and lion researcher, Michael Sanders. Michael and I drove along Trail Ridge Road looking for Hank's government vehicle along the side of the road, and then walked out on the tundra for over a mile until we spotted him with his antenna and radio receiver. Hank was tracking a female bear and was getting a pretty good signal from down below in Forest Canyon. He informed us that all of Forest Canyon was the territory for a single breeding female bear. If you have ever stopped at the Forest Canyon overlook on Trail Ridge Road and peered into the canyon, you realize that this is no small territory. It is equivalent to saying that Jasper Creek, from Hessie to Devil's Thumb Lake, is the territory of one female bear.

Hank's research has provided additional information that makes one wary about the future of bears in our area. The average weight of female bears was only 130 lbs. Bear reproductive success in the Park was among the lowest on record in North America; bears did not reproduce until they were about 7 years old, average litter size was 1.7 cubs, and the survival rate of cubs to the age of one was 43%. The northern Front Range is considered poor bear habitat. One of the key elements we are lacking, and which is found throughout much of the rest of Colorado, is Gambel oak which produces lots of great bear food in the form of acorns. The

lack of forest fire during the past 150 years has made the quality of vegetation and food poorer from a bear's point of view. And some of the richest remaining bear habitat, such as aspen groves and riparian areas, are the most heavily used by people.

From my point of view, an ecological "bottleneck" for bears might be an extended drought, say one of 5+ years. During a drought the bears are less likely to produce any young. And the remaining adults are more likely to hang around people's homes looking for food. They will become "problem" bears and have a higher likelihood of being removed or put down by the Division of Wildlife. So fewer cubs are produced and fewer adults survive. Their ability to survive in our marginal habitat will be interesting to watch.

Mountain lions are not seen as much as bears. They are extremely secretive and able to blend in with the land. Let me give you an example of how well they can blend in. Michael Sanders, who I mentioned earlier, was sent an 8"X10" photo of a woman holding her child in the parking lot of a state park in California. Michael showed me the picture and kept saying to me, "keep staring at that photo." And eventually what he wanted me to see became clear; just behind the woman was a shrub, and in that shrub you could see the face of a mountain lion. No one knew the lion was there until after the film had been developed. I am sure many of us have been that close to a lion without knowing it.

Lions are found throughout the mountains, and occasionally the plains, but favor where deer, their favorite prey, are most plentiful. In Boulder County they are more common at elevations lower than Eldora, but are present here in the summer when deer return, and may be found at other times as they have taken a liking to other food sources, including raccoons, house cats and domestic dogs. Elk can also be prey, and in some places make up almost a quarter of their diet. For survival, it is estimated that a lion needs to kill one deer every two weeks. Male lions can weigh over 150 lbs. Like bears, they have very large territories and travel long distances in search of food. They tend to be most active at dawn and dusk, but studies have shown their main period of activity can shift to night when near human settlements and campgrounds.

While lions are secretive and prefer secluded areas, the past decade has seen an increase in sightings. Some of them appear to be getting "comfortable" living around our growing human population. It is speculated that mature adults will retain territories centered on the more secluded canyons in the county. It is probable that juvenile lions are primarily the ones frequenting our homes and settlements; they are simply acting like teenagers.

So when you are out hiking in the woods, have a healthy respect for our largest carnivores. In most cases you will not see them, though they may have been watching you.

Dave Hallock