

Two Ways to Deal with Winter

It's winter in Colorado. It is cold. Many of the plants that animals eat have died. Many animals leave for warmer lands where there is still food. Birds fly south. Elk and deer move down from the mountains to places where they can still find grass and other plants to eat. But high in the mountains, two animals are dealing with the chill, the snow, and lack of food in very different ways.

Marmots hibernate during the winter. Hibernation is a deep "sleep" that helps animals save energy when they can't find enough food.

Their body functions slow way down.

They don't breathe as often. Their hearts do not beat as often.

They appear nearly lifeless.

In the summer and fall, these animals get ready for winter by eating extra food and storing it as body fat. They fuel their bodies with this stored fat. Hibernation allows animals to stay in one habitat.

During hibernation, marmots' body temperature drops to about 38 degrees, just six degrees above freezing! If marmots get any colder, they will die. The temperature above ground is often well below zero degrees. To stay warm, they dig burrows 16 to 23 feet underground.

Pikas live high above timberline along with marmots. Pikas live in areas of loose rock called talus. They don't hibernate. They don't have a food shortage because they pick up grass and other plants all summer long and pile them up to dry. Since large animals such as deer and elk do not like to walk in loose rock, they do not eat the pikas' drying hay. By the end of summer, pikas have made enough hay to last them all winter. Once snow covers and insulates the talus slopes, pikas can move about through the loose rock and dine on the hay they worked so hard to make.

We use the word "sleep" sometimes to describe hibernation, but hibernation is different from regular sleep. During normal sleep, an animal moves a little, has an active brain, and can wake up very quickly. With true hibernation, there is no movement and it takes a long time for it to wake up enough to even walk around.

