

NATURE DETECTIVES

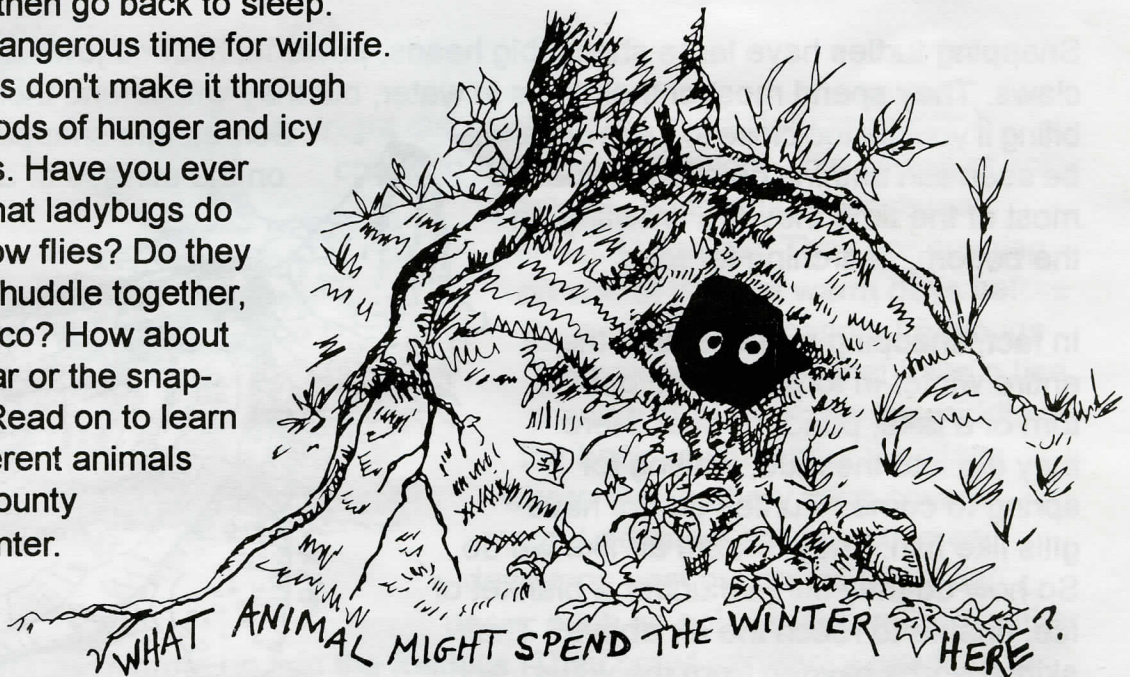
Winter 1997/98

What Do They Do In Winter?

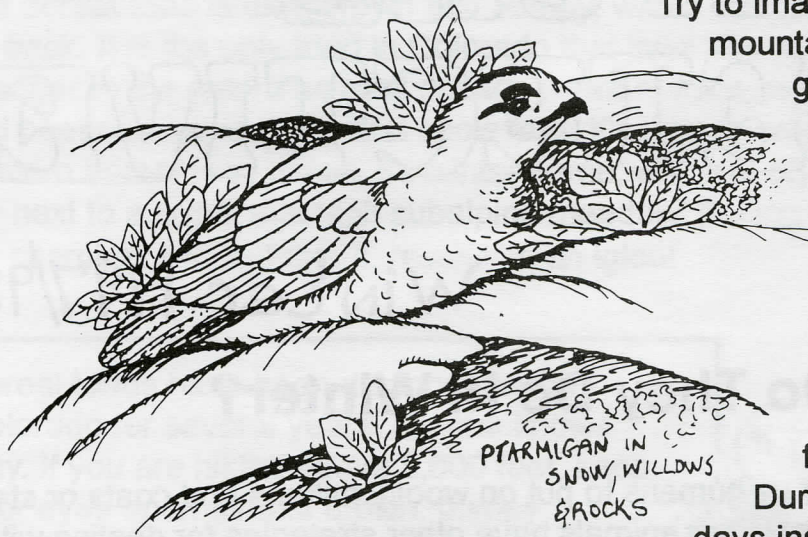
Brrr, it's cold outside! Time for us humans to put on woolly mittens and coats or stay inside our cozy, heated homes. Other animals have other strategies for dealing with winter. Some animals migrate to warmer places for the winter. But what about the ones who stay put? Some store food for winter and grow more fur or downy feathers for warmth. Some move underground where the temperature rarely drops below freezing. Some eat and eat all summer and fall, growing very fat, then sleep in dens all winter. This deep sleep is called hibernation. A hibernating animal's body temperature drops to just above freezing. It's breathing and heart rate slow way down. Very few animals go into true hibernation. A modified version of hibernation is called torpor. An animal in torpor will wake periodically and may even move about searching for food, then go back to sleep.

Winter is a dangerous time for wildlife.

Many animals don't make it through the long periods of hunger and icy temperatures. Have you ever wondered what ladybugs do when the snow flies? Do they dig burrows, huddle together, or fly to Mexico? How about the black bear or the snapping turtle? Read on to learn how five different animals of Boulder County spend the winter.



Time for snowshoes, white-tailed ptarmigan!



Try to imagine spending all winter in the mountains, higher than trees can grow. Could you survive the snow and icy wind, the sub-zero temperatures?

White-tailed ptarmigans can. In fact, these birds use snow to keep warm! Ptarmigans tunnel into soft patches of snow, creating snug burrows insulated from the cold air.

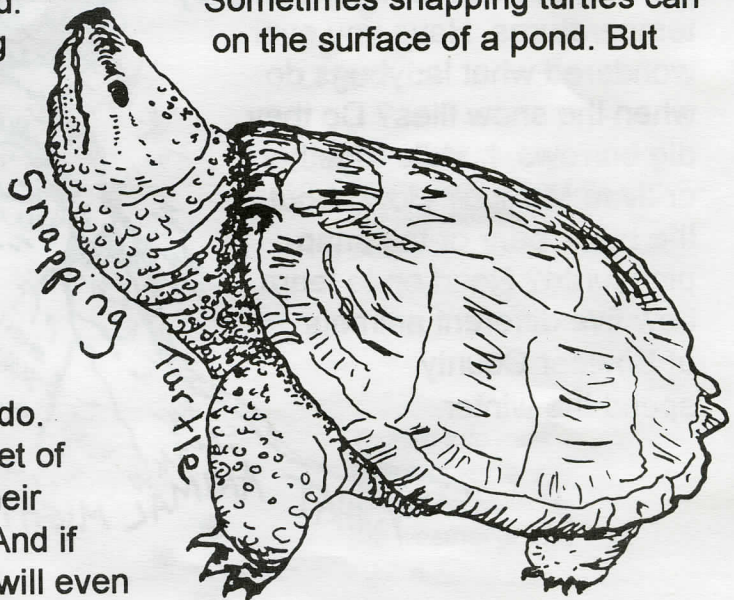
During blizzards they may spend days inside these snowy shelters.

On calm, sunny days they venture out to feed on willow buds and twigs. But they're hard to see, because each winter their feathers turn from brown to white. Not only that, they grow their own version of snowshoes! Their claws get longer and an extra layer of feathers covers their feet. In winter, they are feathered from beak to claw -- even their nostrils are lined with feathers!

Snapping turtle's life under the ice . . .

Snapping turtles have large shells, big heads, powerful hooked jaws and sharp claws. They spend most of their lives in water, but they will defend themselves by biting if you get too close to them on land. Sometimes snapping turtles can be seen sun bathing on a log or floating on the surface of a pond. But most of the time they are crawling on the bottom, searching for food.

In fact, snapping turtles spend the entire winter in torpor on the bottom of a lake, pond, or river. Here they dig into the mud, waiting for spring to come. Turtles do not have gills like fish. They breathe air like we do. So how do they survive under a blanket of ice, unable to reach the air above? Their skin absorbs oxygen from the water! And if there's no ice covering the pond they will even venture to the surface to breathe.

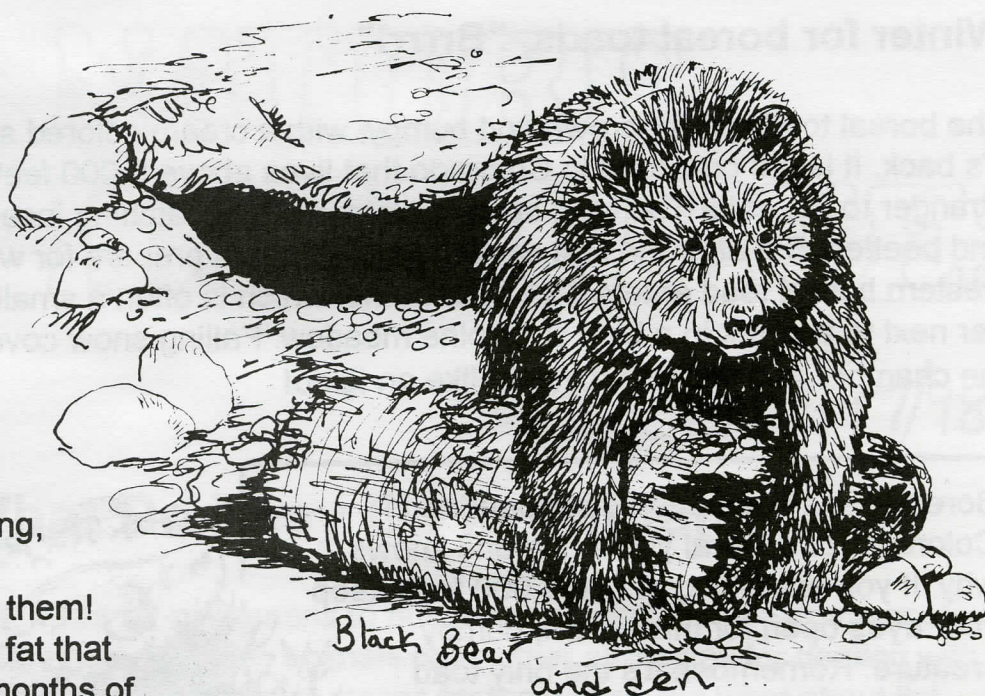


Bundle up black bear!

By November, black bears are ready to settle in for a long winter "nap." This nap, called torpor, lasts six months. Bears in torpor can survive more than 200 days without eating, drinking, or eliminating bodily wastes—they recycle them! Bears survive on the fat that they've stored over months of eating berries, plants, and small animals.

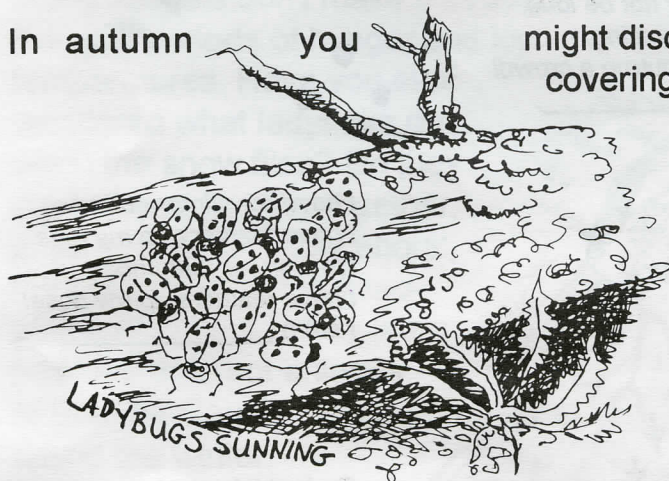
Black bears are different from other mammals that truly hibernate -- the body temperature of the black bear drops only a few degrees. Better not rouse the black bear during torpor -- they are easily awakened and ready to run instantly!

Mother black bears give birth to cubs during this semi-hibernation. They nurse their cubs in the den until springtime. When the snow melts bears wake up with growling stomachs ready to leave the den in search of food once again.



Where do you go, ladybug?

In autumn you



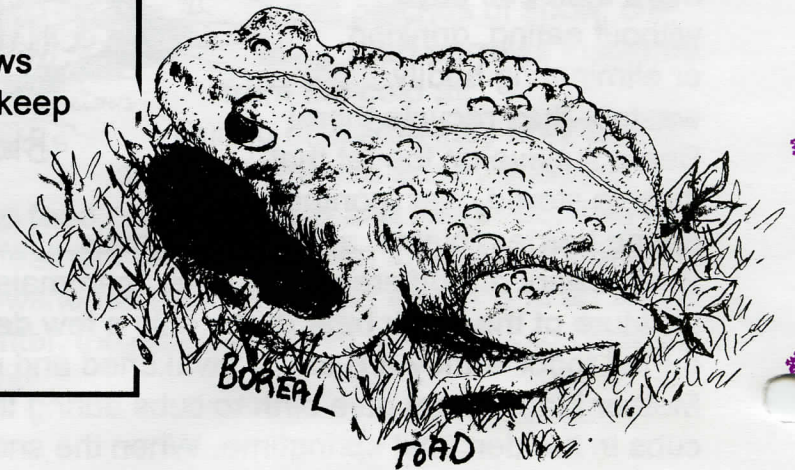
might discover a large reddish-orange patch covering a rock or fallen log. This splash of color is actually hundreds of ladybugs massed together. They are sunning on one of the last warm days before their winter hibernation. Ladybugs are beetles, insects that have a line running straight down the middle of the back which marks the place where two leathery wing covers meet. Ladybugs are insectivores, devouring vast quantities of garden pests, such as aphids. When the weather

turns cold, ladybugs migrate up into the foothills. They crawl into rocky crevices to spend the winter huddled together out of the wind and snow.

Winter for boreal toads, "Brrrr!"

The boreal toad is dark brown and bumpy, with a cream colored streak running down it's back. It is the only toad in Colorado that lives above 8,000 feet, so it is no stranger to the cold! The toad spends warm months catching insects, snails, spiders and beetles. But after the first snow falls, it's time to prepare for winter hibernation. A western boreal toad enters it's winter home, which is often a small rock-lined chamber next to a creek in a high subalpine meadow. Falling snow covers the opening to the chamber and isolates it, much like an igloo!

Boreal toads have been disappearing in Colorado for several years. No one knows why. If you are hiking above 8,000 feet, keep your eyes open for this brown, bumpy creature. Remember, it's the only toad found this high! If you do find one, write down the place where you saw it and contact the Division of Wildlife. Boreal toads are endangered in Colorado!



Can You Guess Who I Am?

*I might be getting thin
but you better not be loud
I'm semi-hibernating,
but I can still outrun a crowd!
I am a _____.*

*Some people think we're lichen
when we sun up in the hills.
We crawl into the crevices,
which snowflakes quickly fill
I am a _____.*

*I hop into the rocks
and get covered up with snow.
I'm ready for the winter
and asleep I quickly go
I am a _____.*

*I have my winter outfit on
I have feathers on my toes
I'm warmer than most,
I have feathers up my nose!
I am a _____.*

*Tucked into mud
with a cover of ice,
I won't be seen 'til
the weather is nice
I am a _____.*