NATURALIST'S CORNER

Nature in Winter

It's January, the heart of winter. We keep warm in our homes and dress for the cold. But what about the animals and birds of the New England forest?

The beaver starts to prepare for winter in late summer or early fall, cutting saplings and storing them underwater near its lodge. The lodge has lower and upper chambers. Beavers use the upper chamber as a living space; the lower is their exit to the pond. In winter, when the pond freezes over, beavers can exit under the ice and use the cache of saplings to survive.

Most mammals grow a winter coat to keep them warm during winter. The coat of the white tail deer changes color through the seasons, transitioining from reddish brown in summer to gray in winter. Their summer coat consists of short fur. The winter coat is longer with grayish fur, and its hollow strands provide insulation during the cold winter months.

There are many other species that prepare for winter's cold. The animals that change how they look in winter from brown to white are some of the most interesting. The snowshoe hare is built for winter. Its large feet, especially the rear ones, are adapted for travel on snow, enabling the hare to run without sinking to escape predators. It, too, changes from brown to white as winter approaches. The hare's color changes begin in late fall, with patches of white that help it to blend in with dried leaves and other vegetation on the forest floor. By the time winter arrives, the hare's coat is all white. I remember tracking snowshoe hare in winter at Noble View. These days, we rarely see its tracks.

One of my favorite animals in winter is the long tail weasel, the shark of the forest. It is a very energetic and effective hunter. The weasel changes its brown coat as winter approaches. Decreasing daylight triggers the autumn molt. As nights grow longer and days shorter, the weasel's pineal gland secretes melatonin which alerts the central nervous system to stop producing melanin, a dark pigment found in hair follicles. Thus, new hair turns white. This same process underlies the seasonal color change of the snowshoe hare.

When the snowshoe hare and the weasel are white, they are "invisible" in a snowy forest. Weasels are known in winter for their white fur with a black tip at the end of the tail. The black tip tricks predators such as hawks, owls, and foxes by keeping them focused on the tip and so away from its vital parts. I hope you get a chance to see this ghost of the winter forest. It is a rare sight!

One of the most interesting birds of the New England winter forest is the ruffed grouse. It prepares for winter by growing snowshoes. Yes, snowshoes! Its feet are adapted for traveling on snow. In the fall, small comb-like projections grow on either side of the toes, doubling the surface area of its feet, creating mini snowshoes that provide support on the snow. The combs are shed in the spring. Grouse take advantage of deep snow conditions by burrowing in for the night. The insulating qualities of snow provide warmth. Perhaps you have been startled by flushing grouse during a morning snowshoe hike, or have seen their tracks and wing imprints in the snow.

Exploring nature in winter can be a rewarding experience, especially the silence of a winter forest filled with snow. Enjoy nature in winter!

~Dave Gallup