February Hare

My only companion on many evenings is a lopeared rabbit whose chief merit is extreme cuteness. Roo seems content just to sit, flop, or hop about in my proximity, thoroughly domesticated. He has no notion that, not far beyond the walls of this warm illuminated structure, his cousins, wearing winter white, hop through a snowy glade in the moonlight.

I seldom see them, but there is no mistaking their presence. When I go to the snowy glade I find their tracks; those distinctively widespread toes of the snowshoe hare. One afternoon recently, I decided to see what the tracks would tell me about their activities. The tracks in the glade showed that the hare were feeding on birch and cherry twigs, and the twig tips and needles of white pine. They were not heading down into the tents formed by small spruce trees, spots where I always imagined snowshoe hare lurking. Instead they seemed to linger in areas where they could see all around them. The glade was full of tracks, but they did not go south beyond the glade or to the west where the spruces grew tall. They did head into the dense young forest of spruce and fir to the north, however, and so did I. When I started out I was just following tracks through the familiar woods. Somewhere along the way, however, I realized that I was completely disoriented. I had entered a low, close, dark world—the bustling metropolis of the snowshoe hare. I began to think, that, like Alice, I had followed the white rabbit down a hole and into Wonderland. The tracks no longer seemed random and confusing. Instead they demarcated a network of paths that led between areas of concentrated activity. Red-backed voles, a couple of flying squirrels, and a coyote also recorded their activities. The freshest tracks of all, almost as fresh as my own, were made by a fisher that loped down the rabbit hole just as I clambered out of it. Two hours had passed and darkness had fallen when I found myself back in the open and on a familiar trail just below my house.

Snowshoe hares are not, technically, rabbits. They are in a different family. Hares have longer legs and ears, as a rule, and their young are born fully furred, eyes open, and ready to hop. Rabbits give birth to hairless, helpless young. In our region, snowshoe hare have a strong affiliation with spruce-fir forests and need snow

to thrive. Not only does snow give them an advantage over predators when they deploy their snowshoes to escape, but they depend on snow for camouflage. Their coats change color with the day length. A white hare in a year with no snow might as well be ringing the dinner bell for predators.

We may not have snowshoe hare at the Bonnyvale Center, down in the valley, but this year we have a cottontail rabbit! The eastern cottontail is in decline in our area, and I have seen cottontail tracks only a few times here over the past fifteen years. When I first found this rabbit's tracks, they seldom ventured far from a brush pile. Within the last week this bunny has been extending its range. I can now follow its tracks thirty feet up a hill to a couple of apple trees and a thicket of grape vines. After following snowshoe hare tracks, I expected that the cottontail would also choose to rest in a place that offered some concealment, but good visibility and multiple escape routes. I was surprised to find many tracks leaving and entering a tunnel beneath a woodpile. No tracks indicated another exit. On a few occasions I have seen fox tracks pass through the small world of this cottontail, but so far the cottontail's survival strategies have succeeded.

Cottontails do not change color in the winter. They need to be in dense cover to hide. I have read that cottontails (and other rabbits) use "flash marking" to foil pursuit. Here's how it works: predators home in on the rabbit's tail—that flash of white with each bound. The rabbits, however, quickly switch direction and then freeze. The predator goes to the spot where the last flash was seen, and is bewildered. My colleague, Deb Smith, watched this happen when a cat was stalking a cottontail in a meadow. From her vantage she could easily see where the rabbit had hunkered, but the cat just stood where it had last seen the rabbit's tail, clueless.

We have just entered that time of year when the stories in the snow might require some censorship. It is the season of romance for foxes, bobcats, coyotes, raccoons, squirrels, and Roo's relations. Hares and rabbits take reproduction very seriously, as we all know. Not surprisingly their courtship ritual is among the most zealous. Perhaps you have heard the expression "mad as a March hare?" In our area, rabbits and hares often

begin courting a bit before March. Any night now, the boxing matches and posturing will commence, as males establish their position in the hierarchy, and females express their lack of interest. Sometime in the next month, however, the females will change their mind. Here is how their courtship is described, though I don't know how closely a particular pair follows the script: the male will rush at the female, and if she is interested she will leap over him, while urinating. The pair will continue this frolic, leaping over each other, urinating, chasing, and boxing, with occasional pauses to mate. I once found tracks in a little meadow that could only have been made by snowshoe hare indulging in such a bunny bacchanal.

Sometimes I think Roo has a pretty good life—fresh vegetables delivered year round, warm, dry accommodations, and hardly anyone wants to eat him. Still, if he knew about the white hares gamboling in the moonlight just beyond these walls, I wonder what he'd think of his bargain.