The View From Heifer Hill— May 2019

Dressed to Kill

I had an unusual visitor this week. There was no knock on the door, just the sound of bunk . . . bunk . . . bunk as he descended the stairs. He paused on the lowest step and scanned the room. I said hello when he looked at me. The weasel, a dainty little beauty in bright white fur, ignored my greeting and set off on his busy search for mouse morsels. This weasel has become a conspicuous neighbor since the snow melted, and a source of inner discord because I love the weasel and his prey. The first couple of times I saw the weasel, a flash of white against the dark, damp, April earth, I hoped he would decide to hunt elsewhere if I followed him from hiding spot to hiding spot lecturing him about the benefits of a vegetarian diet. Instead, he realized that I was just a large harmless creature that could be ignored. Now when I see him outside, I rush out to shoo the squirrels away, and then I watch the weasel show. The weasel lopes gracefully from the space under a boulder to the gap beneath a fallen tree, exploring every nook that might shelter a mouse or vole.

To be hunters of small things in small spaces, weasels must be low and lean, a body plan that also means they lose heat quickly. To compensate, they must fuel their metabolic furnaces with frequent high-protein meals. Among the adaptations that make them successful hunters are large brains that help them find and catch prey in novel places and kill prey several times their size. Another is their cryptic coloration. Both of our local weasel species, the long-tailed and the shorttailed (aka ermine), turn from brown in summer to white in winter. This camouflage not only helps these active hunters avoid detection by their prey, but it also helps them avoid detection by the larger predators that would prey on them. The color change is regulated by genes, which vary from weasel to weasel, and is triggered by day-length. Most weasels in our



area transition from white to brown in late March.

In January, a different weasel visited my yard. I know this was a different weasel because she wore a



coat colored for summer—milk chocolate above and white below. She was nearly as conspicuous against the snow as the white weasel was in late April. I am glad to have this evidence that the weasel gene pool has this variant. As climate change brings us shorter winters and less reliable snowfall, a weasel that doesn't turn white will be more likely to survive.

The range of weasels, especially the long-tailed weasel, extends into southern regions where it seldom snows, and in these places weasels remain brown year-round. There is a belt between the north and south in which some weasels change color and some do not. The ratio of white to brown must shift each year with the duration of the snow time.

It seems probable that we have locked in enough climate change already that white winter weasels will disappear from our region someday. I hope that the same genetic flexibility will allow white weasels to repopulate a snowy landscape in the future when our seasons are restored. You and I are living in that brief window of time during which the actions of our species will determine whether or not such a future will be possible.

The exquisite little ermine in my living room left his shelter beneath the couch and loped over to the woodstove, did a lap in the kitchen, and then hopped up onto the aquarium where a couple of mice were being detained. He posed there, frustrated, and then headed back up the stairs and out through whichever little mouse tunnel let him in.

