The View From Heifer Hill—October 2020

## The Beaver Lodge Oak

An oak tree grows outside the little barn I have taken to calling, tongue in cheek, my "club"the Beaver Lodge. This oak tree has become old enough in the last two years to start producing acorns, a rare and coveted crop for many of the creatures that live in these oak-poor woods. Each evening I empty, clean, and refill the club's pool for the orphaned beaver kits, Pumpkin and Curly. While I'm doing that, I enjoy watching the traffic of visitors to the oak. The flying squirrels soar through the beam of my headlamp, land on the oak, and then, lightning-fast, leap to the far side of the trunk. Once they confirm that no owl is in pursuit, they hop around to my side of the tree and peer down. Their enormous eyes reflect the beam of my headlamp. Once satisfied that I am just a spectator, they scale the tree and disappear into the shadowy heights.

The eyeshine of these squirrels is on the white end of the spectrum. On the path to the Lodge, goldenrods and asters are busy with the fall task of flowering. Among these flowers, I see the tiny, paired jewels—the eyeshine of many moths. I do not know which moth species they are, but I can report that the eyeshine appears to be a dusty shade of pink.

Eyeshine is caused by a reflective layer at the back of the eye of many nocturnal species, the tapetum lucidum, Latin for "luminous tapestry." In my last column, I featured a creature whose eyeshine was similar in color to that of the flying squirrels—Bertie the bobcat. Bertie was a bobkitten who had been hit by a car and suffered from head trauma, resulting in blindness. Bobcats have evolved to hunt in dim light. After a month of R&R, Bertie's sight returned, and she was released in her family's territory. The site was perfect habitat—a mix of cliffs and tumbled rocks in a large forested area. Nearby were meadows rich in small rodents.

Speaking of rodents and eyeshine, I know of two nocturnal rodent species that lack a tapetum lucidum, beavers and porcupines. Both of these species seem to rely much more on hearing and smell than upon eyesight. These species return us to autumnal nights at the oak tree outside the Beaver Lodge.

Porcupines are among the animals that cherish acorns as a source of fat and protein heading into the long winter. Big East, the reigning male porcupine in my neighborhood, has discovered this oak tree. Given his bulk, he cannot make it to the slender ends of branches to delicately harvest nuts as the flying squirrels do. He bends the twigs back, nips them off, and then eats the acorns before dropping the twigs. One night, I saw a little porcupette, a baby porcupine, in the oak tree. I suspect its mother was up there too. Later that night, from my bedroom window, I heard the squawks of a female porcupine rebuffing the advances of a male. It is porcupine mating season.

Beneath the oak, Curly and Pumpkin tumble out of the Lodge to apprehend the water flushing from their pool. I have spent many years watching beavers in wilder settings, but I have never seen the action from directly above. These solid little creatures are earthmoving machines. In the muddy pool, with hind legs churning like eggbeaters, they scoop up a load of mud in their front paws and shove it up onto the place where they think a dam should be.

The tilt of our planet's axis ensures the regular shift of lightness to dark and back again. When so much in the world is uncertain, and frighteningly so, this natural rhythm provides an anchor. Each season brings its joys. May you find yours in the colors of October days and the luminous tapestries of the lengthening nights.

