

# The View From Heifer Hill—September 2012

## Fretful

“I could a tale unfold whose lightest word  
Would [cause] . . .

Thy knotted and combined locks to part  
And each particular hair to stand on end,  
Like quills upon the fretful porpentine:”

—William Shakespeare, *Hamlet*



For the past few weeks, the apple tree in my backyard has been the center of the universe for the porpentine, Fretful. I occasionally paused beneath her and made what I hoped would be perceived as friendly overtures. She would chatter her teeth fretfully and continue her activities.

Last Sunday, when I saw Fretful wandering below the tree looking for drops, I sat down nearby and rolled some apples in her direction. Fretful continued her search without raising her head, but expressed her anxiety level by raising and lowering her quills. When she wasn't fretting, her quills lay like hair on a dog. When alarmed, all quills flared. As she moved about, sets of quills would rise and fall like sports fans doing the wave.

At last she caught the scent of my apples. Quills rose and fell as she stalked, pigeon-toed, to an apple ten feet from me. She settled down, clamped the apple between her sloth-like claws and the flat pads on the bottom of her feet, and with her incisors removed a few strips of peel before launching into the flesh beneath. Porcupines peel apples! As she peeled, she flapped the spurned parts off to the side with a surprisingly long tongue. Fretful chewed

with the same methodical industry as beavers, but punctuated by slurpings that made me wish I had saved some apple for myself.

Backlit and washed in a warm glow from the lowering sun, Fretful exhibited other porpentine characteristics I had not observed before. Long whiskers sprouted from above her eyes and bounced like shiny ornaments while she chewed. A halo of long guard hairs grew out beyond her quills, and, with the whiskers, must provide constant tactile information about her immediate environment.

When she finished, I expected her to wander off. To my surprise, she ambled over and sniffed my feet. She then explored the area around me. I wondered if each of my particular hairs stood on end as that battalion of 30,000 tiny spears passed within an inch of me. If Fretful had a moment's misgiving, I would have a most unpleasant date with a pair of pliers.

This encounter with Fretful sent me back to my favorite porcupine book, *The North American Porcupine*, by Uldiz Roze. Roze, a biologist who has studied and admired porcupines for more than a quarter century, interweaves biological information with tales of his many interactions with these animals. On the subject of quills, for example, he describes the mechanism that allows quills to become embedded in an adversary, but not, say, a branch a porcupine leans against. He found that when quills are in defense mode, the pressure of impact drives the bottom of the quills into the porcupine far enough to tear connective sheaths, allowing the quills to pull free. When relaxed, the sheath is folded so that pressure does not cause such tears. Roze then shares the story of the time a porcupine managed to swat his arm. The pain incapacitated him; he could not move his arm until the quills were removed. He was surprised to find that at least one quill had been driven in so deeply by the initial impact that it was completely buried. He decided to forego a surgical extraction, and observed the course the quill took as the pain moved down his arm. Nine days later the quill emerged on the other side.

While Fretful enjoyed my offerings, I noticed she had a distinctive odor, a sweet piney pungency. As the time I imagined that it might be a result of the challenges porcupines must have maintaining hygiene. According to Uldis

Roze, this odor is part of the porcupine early warning system. A set of short quills form a rosette around sebaceous glands at the base of porcupine tails. When raised, these quills squeeze the glands, which secrete the aromatic compound that announces danger. These quills are barbed in a pattern that wicks the oils up and increases the surface area that broadcasts the smell.

Fretful and I had another short visit the following evening, and then for several nights I did not see her; the apple crop was finally finished. This evening, however, I spotted her again. When she noticed me, she headed up the path in my direction. I handed her an apple and she sat down beside me to eat. I did not smell *eau de porpentine*; she must have been calm. When she had eaten her fill, about an hour and three apples later, she poked around some more and then headed into the woods, leaving behind a small pile of parings and precisely excised cores. I invite you to join me at this point in the narrative:

As I lie in the grass in the growing dark typing the conclusion to this column, I hear Fretful return from the woods. She walks past my back and then around to face me. I would be crazy to reach my nose toward her, I think. Surprisingly, I don't. Instead Fretful rises on her hind legs, places a forepaw on my shoulder, and reaches her face forward to mine. Fretful looks into my eyes for several seconds, and then, satisfied that all has been said and done, returns to the woods. And what is a person to do after receiving such a blessing? I have been taken into the confidences of the porpentine Fretful and life is complete.