



The View From Heifer Hill—December 2021

A Beaver's Legacy

Natural selection has been hard at work for millennia, painstakingly modifying organisms for success. Disastrous mutations have been weeded out while those that enhance survival are passed along. The result is a planet-load of plants and animals, each a marvel. Still, each time genes are reconfigured to create a new life, it's a bit of a gamble. Most of us are dealt a hand that lets us play. A few quickly fold. Every once in a while, someone is dealt a royal flush. I thought about this as I set out recently to look for a beaver in a new pond. The snow and the light put me in mind of an evening in late November two years ago when I found a different beaver's last set of tracks. Despite her bad luck that night, I have a feeling Willow had been dealt an exceptional hand.

Willow was one of the few wild animals lucky enough to live to an advanced age. She was blind in one eye, had difficulty chewing, couldn't keep weight on, and minced slowly down steep hills. I had known her for twelve years and suspected she had reached the maximum lifespan for a beaver, somewhere just north of 20 years old. She outlived at least four mates in the years I had known her. Her last trail intersected with that of a bear. On that night, her luck ran out.

When Willow was in her prime, she and her mate shared their lodge with four kits from three generations. Elsewhere in this small watershed, two other beaver colonies went about their work. Now, eight years later, there are only two beavers in the same area. I'm not sure why there has been

so much attrition, but I suspect the local predators have become savvier.

One of the surviving beavers is Dew. She is the nine- or ten-year-old daughter of Willow. She has outlived two mates, including Henry, the handsome fellow who had been Willow's mate at the time of her death. Dew also survived an attack by the bear in 2020. Has she inherited her mother's aptitude for survival?

In 2018, the aged Willow gave birth to a kit, a surprise child. I called this kit Gentian for the flowers that bloomed along the shore of her pond. In the two years I spent with her as a youngster, Gentian became very accustomed to my presence. Unlike the other beavers I have known, she has never been interested in me or the apples and beaver nuggets I bring as treats. The last time I saw her was in the spring of 2020 when she set out to find her way in the world.

I had a feeling that the beaver I set out to find this week was Gentian. I had come by a few times before and the beaver ignored me. An unfamiliar beaver would have come over to investigate before giving a tail slap and disappearing. Those visits had been after dark, though. I hoped that with some light remaining, I could watch this beaver's behavior. If she paid me no heed, I'd be pretty sure who she was.

When I arrived, the beaver was on top of the island of branches she had stored for winter

food. Though she was just twenty feet away, she continued eating when I greeted her and unpacked my supplies. Surely, this is Willow's youngest daughter. Eventually, she swam upstream. I followed and watched for half an hour as she ate twigs and roots. I began to get chilled and was preparing to leave when Gentian came gliding back down the black ribbon of the brook. As she passed, she veered into a finger of open water just below me. She enlarged the opening by pushing up with her back from below—a losing fight to keep winter at bay. Then she dove and continued her way downstream.

You often can't tell by looking which plants or animals have the edge needed to overcome hardship or to thrive in a new environment. This is why ecologists don't recommend harvesting all ash trees ahead of the emerald ash borers' arrival. You never know which tree might carry a gene for resistance. Did Willow really inherit a physiological or behavioral trait that led to her longevity? If her daughters also live long on this wild brook, I will be a believer. May you be as lucky.