

Making Ripples

by Amanda Bancroft

Porcupines are one of the most ironic of our native rodents. They pack 30,000 quills surrounding an unexpectedly adorable face. They give off warning signs to deter us from getting close, but get millions of views online from videos about the happy noises they make while eating. They may impale predators as often as themselves. With so many surprises to love and loathe about porcupines, they are charismatic characters sure to win over your heart (from a distance).

There are 29 species of porcupines worldwide, but here in Arkansas, we will be lucky to experience a rare glimpse of just one: the North American porcupine (*Erethizon dorsatum*). The name porcupine comes from Latin, meaning “pig spine” or as it is sometimes called today, “quill pig.” But they aren’t pigs, they’re rodents with incisors that allow them to gnaw on various kinds of wood. They make joyful noises while they eat your canoe paddle, axe handle, or door. Maybe they get excited about these items the way humans do about chocolates that come in a variety of shapes. It’s likely that wooden objects touched by humans contain sweat, enticing the porcupine with the promise of salt.

Only beavers are larger rodents than porcupines, and while both are known to eat wood, porcupines consume a generalist diet of fruit, leaves, roots, and springtime buds. In winter they may eat mostly pine needles and bark. Occasionally, they’ll enjoy a few bugs or a small lizard, even though they are herbivores. To sharpen their teeth, they have been known to chew on bones and derive minerals like calcium from doing so.

Besides their quills, which ought to be enough of a deterrent, porcupines are also decorated in warning coloration. They look mostly brown, but similar to skunks, they have contrast between black and white that helps identify them to nighttime predators. Porcupines are mainly nocturnal. They can also emit a foul odor and make aggressive sounds with their teeth, and rattle their quills by shaking to repel an attacker. If all that fails, they may slap a predator’s face with their spiny tails, but are unable to throw or shoot quills.

Given all of that, it’s easy to assume that nothing eats porcupines. Not so! They have many predators besides humans, including coyotes, black bears, and great horned owls. Even cougars, a major predator of porcupines, have met their death after complications from hunting. This is noted in the 2016 Canadian Field-Naturalist article “Cougars killed by North American Porcupines.” Apparently, cougars tolerate the quills but sometimes die because of injury!

Counterintuitively, death doesn’t usually occur from infection. The porcupine has natural antibiotics in its quills which prevent bacteria from growing in a wound, a necessary adaptation because it often impales itself when falling out of trees. This happens because porcupines are tempted by juicy buds or fruits on thin branches that are hard to reach safely. So if you do get injured from quills, know that the porcupine empathizes with you.

Breeding can be especially awkward when the typically solitary male and female come together – very carefully! Strangely, a female porcupine sitting in a tree with her mate doesn't enter estrus fully until the male urinates on her from a perch higher up in the tree. Mating takes place on the ground, where porcupines spend most of their time in general.

Gestation is a remarkably long (for rodents) 210 days. Females give birth to only one offspring, and rarely have twins. Cute baby porcupines are called porcupettes. The mother and her young together as a family group are called (appropriately) a “prickle of porcupines.” The baby's quills are soft at birth, and harden after a few days. A porcupine's quills are sharper than a hypodermic needle and contain overlapping backwards-facing scales that make them difficult to remove once embedded in an attacker's skin. Porcupines grow new quills to replace ones they lose. The young may stay with their mother for up to a year, and can live for decades in the wild (average 5-7 years). It's not impossible to meet a porcupine in the woods that's as old (or even older) than you!

Amanda Bancroft is a writer, artist, and naturalist living in an off-grid tiny house on Kessler Mountain. She and her husband Ryan blog about their adventures and offer tips to those wanting to make a difference at www.RipplesBlog.org.