



Porcupines

Although immediately familiar to most people, it is unlikely that most Rhode Islanders have ever encountered a porcupine in our state. While common in some parts of New England, the North American porcupine (*Erethizon dorsatum*) is one of the rarest mammals in Rhode Island and is the second largest rodent in the state, coming in just behind the beaver. Porcupines are most well known for their quills, however, they grow five different types of hair; a thick wooly under fur, long coarse guard hairs, stiff bristles on the underside of their tail which aid in climbing, whiskers (called vibrissae), and their famous quills, which are actually modified guard hairs.

LIFE HISTORY

Range and Habitat: In the Northeast, porcupines occur throughout northern New England, New York, and Pennsylvania. They occur throughout most of Canada, parts of the northern United States, in the West down through the Rocky Mountains and into the desert Southwest. They can live in a wide variety of habitat types. In the Northeast they are most frequently associated with mixed forests of deciduous trees and conifers. In Rhode Island, most recent records are from Cumberland, Smithfield, Exeter, and Hopkinton. In *The Mammals of Rhode Island* by John Cronan and Albert Brooks, the authors mention several records between 1960 and 1963 in the towns of North Smithfield, Scituate, and Glocester.

Behavior: Whether on the ground or in the trees, porcupines are slow and deliberate in their movements. For most of the year they lead a solitary lifestyle. Females have smaller home ranges than males, and will defend them from other females. Porcupines do not hibernate. During winter, several or more individuals may share a preferred winter den site. Winter dens can be amongst rock outcrops or ledges or in large hollow

tree cavities. In Rhode Island, all recorded den sites occur in crevices within rocky outcrops with stands of hemlocks and flowing water nearby. Well-used den sites are characterized by mounds of porcupine droppings at the entrance. Cold does not seem to bother them, as porcupines will sometimes be seen sitting in trees during the coldest weather and they do not make any attempt to line their dens with leaves or other material.

Food Habits: Porcupines are strict herbivores, feeding on the buds, twigs, leaves and bark of trees and other plants. They are also fond of nuts such as acorns and beechnuts, when in season, and eat fruits and berries, as well. They are excellent climbers and most of their feeding takes place in the trees and at night. In our area, hemlock is an important winter food item. The ground below a preferred feeding tree may be covered with branches, or “niptwigs,” cut by the porcupine.

IDENTIFICATION

- Black or brownish fur with longer, spiked guard hairs, often tipped in white.
- Relatively small head, round body and medium length tail.
- Length: 2-3 feet
- Weight: 10-20 pounds
- Lifespan: Up to 18 years

TO REPORT A PORCUPINE SIGHTING

or for more information please contact
 RIDEM Division of Fish & Wildlife:
 (401) 789-0281
 DEM.DFW@dem.ri.gov

Reproduction: Mating occurs in the fall, usually October or November. Males will seek out receptive females and as part of the courtship ritual will spray urine onto the female to induce her interest. At this time porcupines can also be very vocal, making a variety of grunts, barks, and screams. Once mating has occurred, the male goes his separate way and does not participate in raising the young. After an approximately 30-week gestation period, the female porcupine gives birth, usually to a single baby, called a porcupette. The porcupette is born with quills, which for the first several hours remain soft. The female does not make any elaborate den or nest. She will leave her young in a sheltered hiding place, going off to feed and returning occasionally. Young porcupines stay with their mother for about five months.

THREATS TO PORCUPINES

Porcupines have many natural enemies including bobcats, coyotes, foxes, wolves, and bears, just to name a few. Given their defenses however, few predators are likely to attempt to take one, at least a second time. In order to be successful, the attacker must be able to get at the head of the porcupine or get it turned upside down to expose the belly, which is not protected by quills. Fishers are formidable predators of porcupines. A persistent fisher will repeatedly attack the head and face of the porcupine. With an abundance of other small mammals, porcupines are probably not a significant prey species in our area. Humans pose the greatest threat, whether in the form of auto strikes or persecution in response to damage they have caused.

LIVING WITH PORCUPINES

While uncommon in Rhode Island, in areas with high numbers of porcupines, tree damage, especially removal of bark, can be significant. Porcupines can also cause significant damage to orchards or backyard fruit trees. They have a tendency not just to remove

the fruit but to cut the entire branch. Many herbivores, including porcupines crave salt, which is often lacking from their diets. It is for this reason that porcupines are known for chewing tool handles or other items handled by people.

REGULATORY STATUS

Possession of porcupines is prohibited by the RIDEM Division of Fish and Wildlife and there is no open season on porcupines in the state.

QUILL YOU BE OKAY?

Porcupines cannot throw or shoot their quills. Small muscles in the skin at the base of each quill allow the porcupine to erect its quills. When threatened, it will intentionally butt up to the predator so that it faces away.

They will use their tail to swat at a predator. The quills release from the porcupine's skin with pressure, poking back into the offending predator. New quills grow to replace those that are lost. It is estimated that an adult porcupine may have as many as 30,000 quills.

The hollow quills cover most of the body except the muzzle, legs, and belly and vary in length from a half an inch to 5 inches. The tip of each quill has many small backward facing barbs. Unless disturbed, the quills lay flat against the body.



Gary Eslinger/USEWS