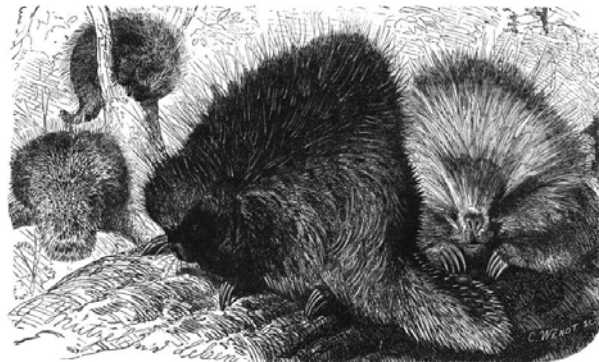


# Porcupine

*Erethizon dorsatum*



*The porcupine (Erethizon dorsatum) is best known for the sharp quills that cover its body. A slow moving, medium-sized mammal, the porcupine has poor eyesight and relies on its sense of hearing and smell, as well as its quills to avoid predators. The quills are a formidable defense, and only the fisher is consistently quick and agile enough to avoid them. The quills are barbed, which hinders removal, and they slowly work their way from the outside of the animal to the inside, and then back out again. An animal hit in a vital area can die. As a result most wild animals avoid the porcupine.*



## Vermont Wildlife Fact Sheet

### Physical Description

The porcupine is a medium sized animal that grows to a length of 18 to 23 inches and weighs from ten to 28 pounds. In the northeast, it is brown and black in color with the back, sides, and tail covered in sharp quills. There are no quills on the porcupine's face, its underbelly, or the insides of its legs. It has powerful legs and large flat feet, with strong curved claws on each toe. The porcupine is short and stout, which gives it a walking, armored ball appearance. It is slow moving, but agile enough to climb trees.

The more than 30,000 quills covering the rear portion of the porcupine's body are specially shaped for quick release. The quills are up to three inches long, and have small barbs on the end, so that when they stick in a predator's skin, they need to be pulled out, or they will slowly work their way further into the skin. The quill can go in about one inch a day if it is not pulled out, and if it eventually hits an

internal organ, it could be fatal. A porcupine can remove other porcupine's quills by grasping them with their incisors and using its front feet.

The porcupine's eyesight is poor, but it has an excellent sense of smell and hearing. Like other rodents, it has two large front teeth that grow continuously throughout its life. It can produce a wide array of vocalizations, including shrill screeches, coughs, groans, chatters, whines, and low grunts.

### Life Cycle

The porcupine is a solitary for most of the year. However, between September and December, it seeks out other porcupines for mating. The courtship ritual includes a variety of strange vocalizations from both the male and female as well as a great deal of nose rubbing. Rival males may fight one another to determine who will mate with a female.

After a gestation period of seven months, one baby is born

between April and June. Twins are uncommon. The young porcupine, or porcupette, weighs approximately one pound and is born precocial, eyes open. Its teeth are well-formed, and its sense of smell and hearing will soon develop. The porcupette sports a full set of quills that are soft at birth, yet harden within an hour. At two weeks, it feeds on green plants with only occasional nursing, and is fully weaned at three months of age. The porcupette is independent by the age of six months and reaches sexual maturity around a year and a half.

### Food Items

Porcupines are herbivores, feeding on vegetation and the bark of trees. It can do considerable damage to a commercial forest stand if its population becomes too high. Their diets vary from winter to summer based on food availability. Porcupines forage on shrubs, crops, wild flowers, clover, leaves, acorns, tender

twigs, roots, seeds, buds, and leaves in spring and summer. In winter, they eat needles and the bark of trees, such as hemlocks, birch, beech, aspen, elm, oak, willow, spruce, fir, and pine. They have a natural desire for salt, and will search for salt at natural salt deposits and along roadsides. They will also gnaw on the dropped antlers of deer for minerals. They have also developed a taste for plywood, apparently fond of the taste of glue. Other man made items they often chew on include canoe paddles, axe handles or any item that has been soaked in human perspiration over time.

## **Habits & Habitat**

The porcupine is generally found in coniferous forests, but may also frequent mixed or deciduous stands in search of food. Each adult porcupine has a home range of six to 14 acres in size, depending on food availability. The porcupine tends to stay in the same home range and reuses the same den year after year. It is solitary by nature but may den with other porcupines in the winter.

The porcupine does not hibernate, but will stay in dens during bad weather. It may build a nest but also might den in a hollow log or tree, rock ledge, abandoned burrow of another animal, under a stump or blown down tree, or even under a building. It is primarily nocturnal, mostly active at night, but does forage during the day. When not seeking cover from the weather or fishers, the porcupine spends most of its time in the trees feeding and resting.

When confronted, the porcupine will place his nose between his front legs and spin around so that its tail end is facing the predator. If it is attacked, the porcupine will strike its assailant with its tail and the easily detachable quills will become embedded in the skin of the attacker. A common misconception is that the porcupine has the ability to eject or throw its quills, but this is not true. The quills are designed to release when coming into contact with another animal.

## **Abundance**

Porcupines are common in Vermont. Their population size can vary depending on food availability and habitat.

## **History**

Historically, the porcupine has always been present in Vermont. Throughout the changing landscape during the past 150 years, it has proven to be an adaptable species that can inhabit nearly any forest environment.

## **Resource Utilization**

Many people view the porcupine as a nuisance or pest as they can do considerable damage by their habit of gnawing on wood product. They can also damage crops and kill trees. Some people however, consider them edible and kill them for food. The quills are often used in a variety of artwork and jewelry, particularly in Native American communities.

## **Management Efforts**

Current porcupine populations within the state of Vermont are stable. There is no active plan designed for this species, but continued monitoring is conducted to ensure that their population remains healthy and abundant in Vermont.

*Illustration by Gustav Mützel*