



The North American porcupine is common and abundant in Massachusetts. Porcupines are known primarily for their intimidating coat of quills. Due to their nocturnal and solitary habits they are infrequently seen, so their activities and habits are somewhat of a mystery to most. Porcupines reside mainly in the western and central parts of the state and occasionally observed in Middlesex County. They are rarely seen in the eastern and southeastern parts of the state due to the lack of extensive forest habitat that is needed to support their population.

#### DESCRIPTION

Porcupines are our second largest rodent (beavers are largest). They are a medium-sized, pigeon-toed animal with short legs, long claws, and a high-arching back. Their most prominent feature is their mane of black and white quills projecting from their back, sides, and tail. They also have soft, brown-black guard hairs throughout their body topped with white highlights and various hues of yellow. Males are larger than females, but otherwise the sexes look alike. Adults measure 25–31 inches in length, including a 5–11 inch tail. Their weight varies widely throughout the year, from an average of 12 pounds in the early spring to an average of 20 pounds in the fall.

## FOOD, HABITS, AND HABITAT

Porcupines are herbivores with a varying vegetation diet that changes with the season and location. During the summer they eat twigs, buds, leaves, roots, tubers, grass, berries, fruit, inner bark, and other vegetation. Apple trees are a favorite food source, as well as maple, oak, ash, and aspen. In autumn, porcupines eat hard tree mast such as acorns, hickory nuts, and beechnuts. They don't wait for their meal to fall to the ground; they climb into the tree, snip off a branch, and carefully extract the nut from the husk. Due to the location of the tastiest parts of the tree (the outer limbs) it's common for heavier porcupines to fall. In one study, healed fractures were found in 30% of porcupine skeletons. In the wintertime, porcupines mainly feed on conifer needles and tree bark, preferring hemlock and white pine, and hardwood trees with thin, smooth bark. During times of frigid cold, deep snow, and heavy rains they utilize den sites in rocky outcrops, rock piles, and hollow trees. To obtain trace minerals such as sodium and calcium and to sharpen their teeth, porcupines will often chew on bone. In springtime, when porcupines are the most sodium-depleted, they are drawn to salt-laden vegetation along the roadside. This is the time of year they're most apt to be hit by vehicles.

#### LIFE HISTORY

Porcupines are active year-round. They lead a mostly solitary life; only seeking another porcupine's company when it's time to breed. They reach sexual maturity around 2 years old. Following their breeding season in autumn, one "porcupette" is born after an extraordinarily long 210-day gestation period. The newly born weighs less than a pound and is covered in soft quills that will harden within days. It will be cared for only by the mother and is independent at five months old, just before its mother is ready to breed again. Surprisingly, the females leave their natal area (where they were born) to establish new territories. Perhaps due to the strains of a long pregnancy and lactation, females are highly territorial and are unlikely to share resources with others. Males are the ones who stay in their natal area, extending their territory as they mature, and are willing to share resources with subordinate males.

### TIPS FOR RESIDENTS

A porcupine quill piercing through skin is a cause for concern. Due to overlapping scales and a barb, penetrating quills are difficult to remove. Quills can travel through a pet's body causing great harm to internal organs. If your pet has embedded quills (usually the face and muzzle), try to keep your pet from pawing at them and contact a veterinarian immediately. Do not cut the end off of quills as this will make it easier for the quill to migrate into the body. Take care to ensure all quills are removed.

A porcupine can cause damage to orchards, tree plantings, wood lots, and gardens. Valuable trees can be damaged and eventually killed by porcupine removal of bark around the trunk, making the tree more susceptible to disease, insects, and birds. A porcupine's need for salt can lead to undesirable interactions with people. Porcupines will chew on plywood



structures, wooden tools, leather boots, and undercarriages of vehicles to satisfy this important biological need. To avoid or reduce damage and make your property less attractive to porcupines, consider the following options.

**REPELLENTS:** Commercial animal repellents have been used successfully to deter porcupines from damaging structures. Some repellents, however, may not be legal for use on porcupines or on products used for human consumption. It is illegal to use poisons to eliminate wildlife, even if the animals are in a building. Porcupines may only be sickened by poisons. Dead, poisoned porcupines may cause secondary poisoning of raptors, domestic pets, and other scavengers feeding on the tainted carcass.

**EXCLUSION:** Fencing can help prevent porcupine damage to trees and structures. Erect poultry fencing at least 18-inches high with an electric wire on top. Enclose small trees with wire baskets or install 30-inch smooth metal flashing from the ground up.

**TRAPPING:** Porcupines can sometimes be captured in wire cage traps. Apple slices, a salt-soaked cloth, sponge, or wood are effective bait. Before attempting to trap porcupines, be aware that in Massachusetts it is illegal to relocate wildlife. Do not trap porcupines unless you are willing to release them on your own property or to destroy them humanely.

**SHOOTING:** Shooting is quick, simple, and effective in rural areas where firearms discharge is safe and lawful. This method will be most useful when targeting a few persistent animals. There is a porcupine hunting season but they are not a particularly desirable game species.

# IF YOU ARE EXPERIENCING PROBLEMS WITH PORCUPINES OR HAVE QUESTIONS, VISIT MASS.GOV/MASSWILDLIFE OR CONTACT YOUR NEAREST MASSWILDLIFE OFFICE:

Central Wildlife District, West Boylston: (508) 835-3607

Connecticut Valley Wildlife District, Belchertown: (413) 323-7632

Northeast Wildlife District, Ayer: (978) 772-2145 Southeast Wildlife District, Bourne: (508) 759-3406 Western Wildlife District, Dalton: (413) 684-1646 Field Headquarters, Westborough: (508) 389-6300

Front Photo by David Scarpitti/MassWildlife, Back Photo by Bill Byrne/MassWildlife