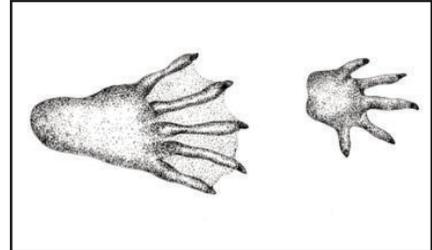
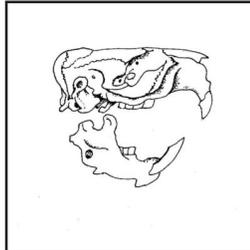
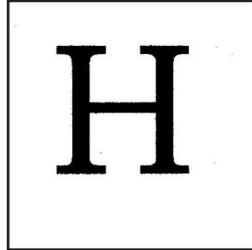
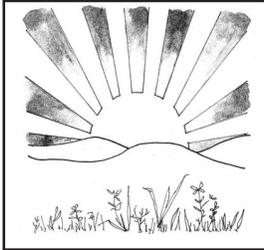




# Porcupine

Family Erethizontidae  
*Erethizon dorsatum*



Think you're having a bad day? Imagine getting too close to the business end of a porcupine. Latin for **porcupine** is *porcus spina*, which means **swine-thorn**. Thorn is the key word here. Also known as a quill pig it should come as no surprise that this rodent is "loaded for bear."

Porcupines are slow-moving rodents that love tree bark and salt. Often found high in the branches of a forest, they are docile and go un-noticed most of the time. But if they are threatened, beware. **Porcupines come equipped with weapons.**

Along with quills, porcupines are probably best known for their diet. Strict **herbivores**, porkies adjust their diet to the season.



In warm weather they feed on a variety of succulent vegetation; grasses, sedges, flowers, leaves, twigs, roots, buds, catkins and seeds. **But in winter their preferences are decidedly woody.** Feeding on evergreen needles, twigs and small limbs, they are especially fond of hemlocks - our state tree. They also eat the inner bark of many other species. They don't necessarily distinguish between tree wood or wooden objects built by people. They'll chew wooden buildings, telephone poles or picnic tables as easily as a cherry tree.

They also love salt and will seek out objects that have human sweat dried on them, like tool handles, ropes or leather gloves. Unfortunately, road salt appeals to them too and can bring them too close to busy traffic.

**Porcupines can damage a tree by chewing on it**, but the tree bark usually grows over the wound and the tree will recover. However, if a tree is girdled it usually dies. **Signs of porcupine activity** might include upper branches with newly exposed wood that looks light against the bark or a shed deer antler with the tips chewed off. (Pictured next page).

**Clearly at home in the trees**, porkies waddle on the ground. They walk in a **plantigrade** fashion with the entire foot, including the heel, touching the ground. Their tracks show a dragging of the feet as they move. **They climb by digging their sharp claws into the bark** and gripping it with rough, leathery soles. They descend trees by bracing their strong tail against the tree trunk.

**Most porcupines live in the forested mountains** of northcentral Pennsylvania and the woodlands in our northwest and northeast corners. Few are found in the southwestern or southeastern parts of the state. They prefer **den sites like rock crevices, caves or hollow trees**.

Porcupine dens are easy to identify since they often use their den's entrance as their latrine. A large pile of droppings is a good sign that a porcupine has moved in. A winter den is used for protection from snow, wind and predators and more than one porcupine may use the same den. **Porcupines do not hibernate**. But they will sleep for days at a time in their den or in the top of a conifer tree until a cold snap passes. During summer days they prefer to rest in large conifer trees. Porcupines are **crepuscular** - most active at dusk, night and dawn.

**As rodents, porcupines are the exception** when it comes to raising young. Most rodents produce a lot of litters, reproducing quickly. **Porcupines rarely give birth to more than one pup or porcupette each year**. Their breeding behavior in the fall is unusual. They rub noses, walk on their hind feet, weave their bodies and chatter their teeth. Breeding season is also when they make the most noise, including shrieking and barking.

**The gestation period is also unusual**. It can be as long as seven months. **Porcupettes are precocial when born** - meaning almost capable of caring for itself. Its eyes are open, its body - about 10 inches long and fully furred - is already covered with soft quills. As the quills dry, they will harden. Within a few days the porcupettes can climb trees and eat solid food, though they still remain with the mother and nurse for about 50 days.

**And another un-rodent-like trait possessed by the porcupine is a relatively long life**. Many rodents only live for a year or so, but porkies may live for 10-12 years in the wild.



**In the rodent family, only the beaver is bigger than the porcupine**. Adult porcupines can weigh up to 20 pounds. Males larger than females. They have a stocky body, rounded back, short legs and a short, club-shaped tail. **Their heavy skull has bright orange incisors**; two above and two below. Their teeth are big and strong - well-adapted for gnawing large pieces of wood.

**Porcupines have small eyes** suggesting poor eyesight. And indeed, porkies can only see moving objects within a short range. Their hearing is fair, they do have a sharp sense of smell.

Each foot has long, **curved claws perfect for climbing** trees. The soles on the hind feet are rough and callused - another adaptation for an arboreal lifestyle. Surprisingly, **porcupines can swim**, thanks to their air-filled quills, which help to keep them afloat.

**Porcupines come in a variety of earthy colors** from grizzled-black to yellowish-brown. The hairs on their sides and belly have light-tipped hairs. Their coats may lighten in summer too. But it's not the hair that defines the porcupine. It is the quills.

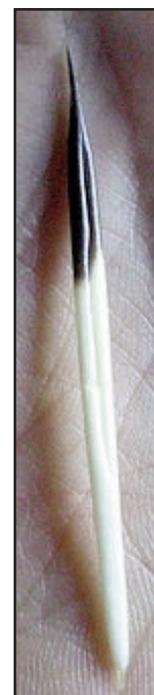
**Most of their upper body, sides and tail are covered with quills.** Only their underbelly is soft and furry, and vulnerable! Quills are actually modified hairs that are composed of many, many air cells. Up to 30,000 quills may be found on one animal. Quills are one to four inches long and tipped with black. The longest quills are found on the porcupine's back.

**Porcupines can not throw their quills.** But the quills are loosely attached and when they come into contact with something they will detach and become lodged into whatever they come in contact with. If that happens to be another animal, the affect can be devastating.

**Most of the time the quills lie smoothly along the porcupine's body until threatened.** At which point the porkie will contract its back muscles causing the quills to stand on end. It may start to back toward the threat, tuck its head between its front legs or swing its tail back and forth and chatter its teeth. Once the threatening animal has been impaled, it may never recover.

**Each quill has a sharp tip that slants backward like a barb.** Once lodged in the tissue of a victim the quills continue to move inward. Quills can literally move as much as an inch a day, causing tremendous pain. **An animal attacked by a porcupine can be blinded or even die as the quills eventually pierce the heart or lungs.**

**Despite possessing such deadly weapons, porcupines are prey for a number of Pennsylvania predators.** Fishers (a large member of the weasel family) have mastered the technique of flipping the porcupine onto its back so they can attack the belly - where no quills are found. But many fishers probably learned this technique the hard way. Other carnivores will sometimes kill porcupine. And some biologists think coyotes may have learned to work in pairs to maneuver a porcupine onto its back.





## A Simple Review of Porcupines



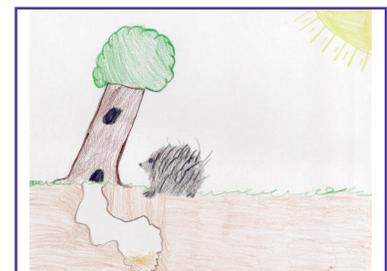
**Porcupines or "quill pigs" are pretty prickly.** As a matter of fact they wear a full coat of needle-like quills. The quills are sharp and can be quite dangerous. Fortunately, most of the time the quills lie softly upon the porcupines back and sides. And porcupines themselves are usually quiet, calm and busy gnawing on branches - happy to be left alone.



Porcupines are pretty big for rodents - up to 20 pounds. They look even bigger because of their quills. **Good climbers, they spend most of their time in trees resting or eating. Eating wood.** Porcupines eat tree bark, stems and evergreen needles in winter, twigs, roots, berries and many other plants in summer. In spring they like to gnaw off branches to reach the tender tree buds at their tips. **They also love salt** and will chew on anything with salt, including tool handles that people have handled, road salt that has been spread on roads during snow and ice storms, even picnic tables. **They eat shed deer antlers too** for the calcium in the bone. The antlers fall to the ground in winter, when porcupines can most use the calcium in their diet.

**Porkies are crepuscular.** During the day when they want to sleep or rest, they stay in the trees where they are able to quietly camouflage themselves against the tree trunks. They do not hibernate but rarely venture far from their winter den.

**Female porcupines have only one porcupette each year** in a den underground. That's not much for a member of the rodent family. Consider that a mouse may have over one hundred babies each year! The porcupette **already has soft quills at birth**, which harden within a few days. Most young porcupines are ready to live on their own at about two months of age.



Porcupines have poor eyesight, but they do have facial whiskers that help them find their way through thick brush. When they climb, **their sturdy tail helps to brace them against the trunk. Their feet have thick soles that help grip the bark as they climb.**



You know how it feels when you get goosebumps? That's sort of what it's like when a porcupine raises its quills in self-defense. **Porkies cannot shoot their quills**, but will release them when something threatening brushes up against them.

The quills are sharp with small barbs on their tips. Those tips continue to work their way into the body of any animal unlucky enough to have been attacked by the porcupine. If the quills move deep enough, the animal may die.

**Although porcupines are not aggressive, it is best to always view one from a distance** and never let your pet dog get close to one. A porcupine defends itself by hiding its bare face from an attacker and keeping its bare belly to the ground. But some predators, like fishers, have learned how to flip porcupines over to attack their soft bellies.