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Natural History Notes

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THE QUILL-PIG



Porcupine

One of nature's most unusual creatures is the porcupine. The name itself is from Latin, *porcus*, and French, *epin*, meaning pig with spines, which is a very descriptive term. It's a thickset, clumsy, slow-moving member of the rodent family. But its most distinguishing feature is its remarkable coat of barbed quills. The adult porcupine weighs up to 15 pounds and averages 25-35 inches in length. The thick muscular tail adds another 6-12 inches to the porcupine. Its limbs are short and powerful with strong curved claws, which make the porcupine a very adept climber. It has only fair eyesight and identifies food and other animals by smell.

The porcupine is the second largest member of the rodent family in North America. The largest is the beaver. As do all rodents, the porcupine has one pair of upper and lower incisors that are banded with enamel on only one side. As the animal chews, the softer dentine is worn down and leaves the enamel to form a sharp cutting edge. The incisors grow continuously and must be worn down to keep the rest of its teeth and jaw in order. Thus, the porky spends a lot of time just chewing on hard objects.

The porcupine is found from coast to coast and from Canada to Mexico. Essentially it is an arboreal and nocturnal animal, meaning it spends most of its time in trees and is active at night. The porcupine utilizes about a two-acre home range. Its den is in rocks, stumps, or a hole underground. It does not hibernate but will remain in its den through a stretch of bad weather. Porcupines are solitary animals, though not anti-social. Several porkys may share the same den in winter.

Porcupines feed on green vegetation, clover, alfalfa, and leaves and twigs of deciduous trees. They've also been known to raid vegetable gardens. In the winter, porkys switch to the needles and bark of evergreens. They will gnaw the bark off trees to get the sweet layers underneath. If extensive enough, the damage may kill the tree. Porcupines will also chew ax handles, boots, and canoe paddles to get the salt and oil left on these articles.

The porcupine's most recognizable feature is, of course, its quills. They are actually modified hairs with barbed tips. The quills are about four inches long with a hard outer surface. Just below the tip of each quill are over 1,000 microscopic barbs. These barbs lie flat against the quill until it enters flesh. The warmth and moisture encountered cause the barbs to expand and become fully anchored. The quills cannot be pulled out without ripping or tearing the flesh. Contrary to popular belief, a porcupine cannot throw its quills. They are loosely attached to the skin and may fall out when the animal shakes itself. A porcupine has approximately 30,000 quills covering its body with the fewest number on its underside.

When a porcupine is attacked it will gnash its teeth and present its back to the predator. The porky may also lash out with its tail. If the attacking animal gets a muzzle full of quills it will usually retreat. Considering the porcupine's effective protection, it is little wonder that few animals bother the porky. Generally the predators must be fairly desperate to attack a porky. The fisher and wolverine are the only animals known to readily attack the porcupine.

Porcupines mate very carefully. After a gestation period of seven months, one young is born in May or June. The baby is larger than a black bear cub at birth and is one of the largest young of all, in proportion to its mother's size. The baby porky weighs about one pound and is twelve inches long. The quills of the newborn harden a few hours after birth. As the porky grows, its quills become hollow. The hollow quills give the animal buoyancy, and it thus can swim with ease. The life expectancy of a porcupine is less than ten years.

The scientific name of this animal is *Erethizon dorsatum* which means irritable back. So when you see one up close, look but do not touch.