

Interpretative Fact Sheet Common Porcupine (Erethizon dorsatum)



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Common Porcupine (Erethizon dorsatum)

tourism.oregonstate.edu/common-porcupine-erethizon-dorsatum/

By colliek2 August 28, 2020

TRUE OR FALSE? (Answers at end of story)

- 1. Porcupines have 30,000 quills on their bodies.
- 2. They throw quills like javelins in self-defense.
- 3. Porcupines are near-sighted.
- 4. Male porcupines do a mating dance.
- 5. They have good memories.
- 6. They learn quickly.
- 7. Porcupines are good swimmers.

Old and New World

Common, or North American, Porcupines range from northern Mexico north into Canada, and Alaska. Porcupine species can be found in tropical and temperate habitats on every continent except Antarctica.

Different species of porcupines developed similar but different types of quills. The 11 species of 'Old World' porcupines have quills grouped in clusters. The 12 species of 'New World' species, like the Common Porcupine, have guills that are attached singly.

There are other differences as well with the 'Old World' preferring rocky areas in higher elevations. The 'New World' porcupines are somewhat smaller, live in lower elevations, are excellent climbers, and prefer woodlands.



Common porcupine (courtesy of ODFW)

Oregon's Porcupine

One 'New World' porcupine lives in Oregon, the Common porcupine. Is a large, stocky, shortlegged rodent. Male can weigh over 23 pounds and stretch out nearly 4 feet (including the tail). Females are lighter and smaller.

Porcupines are usually dark brown or black and have white highlights. Modified hairs, or quills, cover most body surfaces (except the underbelly, face, and feet). Quills are scattered among the course dark guard hair and normally lie flat against the body.

Diet

These slow-moving rodents live in mixed coniferous and hardwood forests and some rockier areas. Porcupines are active mostly at night, but can be seen feeding in the trees at any time.

Their diet is predominantly vegetarian (including twigs, roots, stems, berries, needles, bark, etc.) and they are pretty picky when choosing which tree to munch on.

They also like salt of any kind and will seek out salt in any form (like that used in plywood, in a backpackers bag, collected on a hand tool, etc.).

Quills

Porcupines do not hibernate and are active year around. Their hollow quills and wooly underfur keep them warm. The quills insulate the porcupine, similar to a polar bear's fur, and help the porcupine swim.

Native American tribes used quills as tools and decoration (baskets, clothing, and on any item decorated with beads).

Baby porcupines or "porcupettes" are born with quills. These quills typically harden within one hour of birth. Only one porcupette is in the nest at any one time.

Solitary Animals

Male porcupines are solitary (and quiet) for most of their lives, except during breeding season. The volume and activity gets turned up during breeding season.

Males may fight for the right to mate. Males also perform an elaborate dance as part of the mating process.

Females are also solitary most of the time except when breeding and caring for their young. The female provides all parental care. Their solitary life style is cited as one reason for their long lives (up to 30 years in the wild).

Chatter

Porcupines make a variety of vocalizations, some which can be heard at considerable distance. Sounds include moans, grunts, coughs, wails, whines, shrieks, and tooth clicking. They are very vocal during mating season and during attacks.

Even though they are physically slow, they are intelligent and able to learn quickly. They have good memories and will remember being mistreated.

Defense

Porcupines are not aggressive. Even so, they have several effective defense strategies. Like a skunk, the mammal first let's go a very strong warning odor. They may also loudly clatter their teeth and give a verbal warning.

The quills however are most deadly defense.

In an attack, the porcupine turns its rear to the predator and contracts muscles near the skin. This causes the quills to stand up and out from the body ('bristle'), it also reveals a white stripe down

the porcupine's back.

The white stripe is a warning to other animals and is relatively visible in the dark. Two other North American mammals have contrasting black and white warning colorations. Can you name them? Answer at the end of the story.)

Quill Defense

Bristled quills can detach relatively easy at this point, particularly if the porcupine connects a tailful at the attacker's face. The hollow quills easily imbed into the attacker's flesh.

Quills easily penetrate and embed into skin. They are very painful and difficult to remove.

Each quill has a microscopic barb on the end which makes it difficult to dislodge. Body heat causes the barbs to expand and become deeply embedded.

Embedded quills can cause death or injury to most predators. It takes about 10-42 days to replace quills lost in defense.

Typically, the attacker will retreat. If not, the porcupine will try to escape by climbing a tree. 'New World' porcupines are good climbers, and yet, occasionally fall out of trees usually when trying to get that tempting morsel at the end of the branch.

Do they stab themselves?

That brings up the question of 'Does a porcupine stab itself when it falls from a tree?' Why yes.

Porcupines have a special protection against self- inflicted pokes/infections. They are the only North American mammal with antibiotics in its skin.

Predators

Predators can include cougars, wolves, coyotes, bears, raptors (golden eagles and great horned owls), and fishers (a cat-sized mammal related to a weasel).

Fishers and cougars are high risk predators for the porcupine. Both are tree climbers and will force the porcupine to the ground. Fishers will repeatedly bite the porcupine face and wear the animal down.

Quills, however, are not much of a threat to a cougar. It is able to tolerate them to a certain level, although some have been killed with dozens of quills embedded in their gums.

REFERENCES:

- -Oregon Dept. of Fish & Wildlife (https://myodfw.com/wildlife-viewing/species/porcupine)
- -Porcupines (http://www.nhptv.org/natureworks/porcupine.htm)
- -Wikipedia, common porcupines (https://en.wikipedia.org/wiki/North American porcupine)

-USDI, Fish & Wildlife Service (https://www.fws.gov/refuge/Tetlin/wildlife_and_habitat/porcupine.html and https://www.fws.gov/refuge/julia_butler_hansen/wildlife_and_habitat/mammals/porcupine.html)

ANSWERS:

True and false: 1. True. Porcupines have 30,000 quills. 2. False. They don't throw them. 3. True. 4. True and maybe reminiscent of the 1980's Disco (just kidding!). 5. True. 6. True. 7. True, the air in the quills help them float.

Other white-striped animals: wolverines and skunks.