

Can Animals Sense Impending Disaster?

Oscar, a cat in a Rhode Island nursing home, [accurately predicted](#) the death of more than 50 residents, offering them comfort in their final hours. An octopus named Paul [correctly predicted](#) eight World Cup matches in a row by selecting boxes containing flags of the competing nations. Some seizure-response service dogs are able to predict the onset of a seizure before it begins alerting the individual. Medical Alert dogs can detect dangerous blood sugar levels and certain cancers in humans just by smelling their breath.



By Bonney Brown

Animals have acute senses that allow them to experience things we miss. For example, humans have 5 million scent receptors while Dachshunds have 125 million. Bloodhounds top all other dogs with 300 million scent receptors. Many creatures, including horses, cats and snakes, have a special auxiliary olfactory organ called the Jacobson's organ that gives them an even richer scent experience.

When it comes to hearing, most animals can hear high-pitched sounds that are completely inaudible to us. Most nocturnal mammals can see in what humans would consider to be darkness. Whiskers give animals yet another way to detect subtle changes in the environment.

With these impressive senses, some scientists have wondered if animals may have an early warning ability because they hear infra-sounds produced by earthquakes, volcanoes and storms that are inaudible to humans.

Geophysicists have found that some animals and fish react to minor changes in electromagnetic fields. Mote Marine Laboratory used technology to track movement of sharks and discovered that they headed out to deeper waters about a day before a major hurricane made landfall.

According to a study in the International Journal of Public Environmental Research and Public Health, researchers in Italy observed a group of toads abandon their pond. Five days later an earthquake struck the area. The researchers are exploring possible chemical changes to ground water that may occur before earthquakes.

Reports following the deadly 2004 Indian Ocean Tsunami told of elephants fleeing to high ground and dogs refusing to go down to the beach in the days leading up to the tsunami. Officials at Sri Lanka's Yala National Park reported very few animal deaths from this disaster even though the park is home to hundreds of elephants, leopards and monkeys. They believe that these animals were able to sense the danger long before humans did.

One explanation for unusual changes in animal behavior that are noticed immediately before humans feel an earthquake is that animals likely feel the smaller, faster P wave from the earthquake while most humans do not feel anything until the larger, slower S wave arrives. It's possible that animals can sense other even subtler changes to the environment before a natural disaster that we cannot detect.



The United States Geological Survey feels that the verdict is still out: “Even though there have been documented cases of unusual animal behavior prior to earthquakes, a reproducible connection between a specific behavior and the occurrence of an earthquake has not been made.”

Whether our pets can predict natural disasters or not, those of us who share our lives with them marvel at their rich senses and enjoy observing their fascinating behaviors.

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