



Predictive Pets

Dr Chris Brown 26/02/10

Do our pets possess a sixth sense?

It seems so strange for some people to accept. But could a mutt or moggie that only responds to its name occasionally possibly do what cutting edge technology can't and predict natural disasters hours before they occur?!

History, however, seems full of stories involving pets and animals displaying abnormal behaviour just hours before tragedy strikes and saving the lives of their human companions. Even the Greek historian Thucydides recorded the strange sight of rats, dogs, snakes and weasels deserting the city of Helice in the days before a massive earthquake struck in 373 BC. But the biggest problem with all these theories has been the lack of scientific proof. Finally, however, it appears that some proof has been found...

Just a few years ago, buoyed by hundreds of stories involving herds of buffalo and elephants stampeding their way to high ground to avoid the Boxing Day Tsunami of 2004, scientists set about uncovering what it is about our animal friends that give them such powers. After all, harnessing such an early warning system could save thousands, if not millions of lives.

Early theories about what it was that allowed pets to make these predictions were:

- ability to detect changes in the earth's magnetic field
- sensing of gases released from rocks just before a quake.

But it was the lucky discovery by respected scientist Professor Stanley Coren that made people sit up and take notice. While studying a group of almost 200 dogs in Canada, he observed a massive spike in their levels of activity and anxiety. The very next day, a magnitude 6.8 earthquake hit the area. That's amazing enough. But what's really incredible is the fact that the 13 deaf dogs in the group showed almost no changes at all, they simply went about their business as usual. Suddenly, as *New Scientist* magazine reported, there was evidence that our pets might be hearing the early warning signs that we can't; perhaps rocks scraping and breaking underground. Such high-pitched sounds would be well out of range of our hearing but well within their capabilities; sort of like an early warning 'dog-whistle' that comes from deep underground.

So rather than being concerned about a 'sixth sense', we probably only need to look as far as the 'five senses' we already know about.

But the impending danger doesn't have to be as dramatic as an earthquake to make our pets show their extraordinarily powerful senses. Most dog owners will observe strong changes in their pet's behaviour in the hours before a summer thunderstorm.

They will pace, pant, bark and generally appear on edge. Considering this is without the use of a weather map or report and often occurs well before a storm cloud even appears in the sky does make it quite remarkable. Most animal behaviour specialists accept that a combination of senses contribute to this ability; hearing the thunder in the distance, sensing the vibrations from it and also detecting a sudden drop in air pressure.

The Newcastle Earthquake was another example...

Its 10:17 am on Thursday, December 28, 1989. In the post-Christmas haze, the beachside city of Newcastle should be subdued and restful. But it's not. Dogs are frantically barking and pacing across their yards as if on alert for an unwanted house guest. Maybe they are, because, in exactly 10 minutes, an earthquake measuring 5.5 on the Richter scale will rip through the city, killing 13 people. Why the earthquake occurred was one mystery. Why my childhood dog, "Claude", a standard poodle that had never known an earthquake, howled himself hoarse in the hour before the quake has remained another...

Loud and clear - How our range of hearing compares to our pets.

Cats: up to 64,000 Hz

Dogs: up to 45,000 Hz

Cows (and buffalo): up to 35,000 Hz

Humans: up to 20,000 Hz

Budgies: up to 8,000 Hz

So with their secret perhaps uncovered, does it make it any more likely that we might see "Fido" on the frontline against catastrophes like the Newcastle Earthquake or the Boxing Day tsunami? For now, at least in Australia it seems not. But at least somewhere in the world pets *are* employed as earthquake predictors.

Believe it or not! China has already appointed a team of so-called 'seismic snakes' in the south of the country which are observed 24 hours a day. The reptiles are monitored for any signs of distress or attempts to escape which may serve as an early warning for the local residents of an impending earthquake.

Events where pets have shown their predictive powers

- Thunderstorms
- Cyclones
- Tornadoes
- Earthquakes
- Tsunami's
- Volcanic eruptions

Signs Animals Have Given to Warn of a Disaster:

- Running away
- Trembling
- Vocalisation
- Inability to settle
- Loss of appetite

If sensing earthquakes is all about hearing high frequency sounds, then those dogs with smaller heads and shorter ears tend to be best at it. Breeds like...

- Silky Terriers
- Australian Terriers
- Basenjis
- Boston Terriers
- Chihuahuas
- Dachshunds
- Fox Terriers
- Maltese
- Pugs
- Poodles
- Schnauzers
- West Highland Terriers

Also seem to be the breeds most prone to anxiety. Are they hearing too much?!

So in summary...

Rather than a SIXTH SENSE, it may just be that our pets use their existing FIVE senses to greater effect than we give them credit for.

And this explains how they come to be used as both...

- **Seizure Dogs:** Detect changes in behaviour that commonly occur prior to epileptic fits in people.
- **Diabetic Dogs:** Detect changes in behaviour and scent of people that are about to suffer a diabetic 'hypo' (loss of consciousness caused by a low blood glucose level).