

# **Ants can detect earthquakes 24 hours before they occur**

## **Ant behaviour before earthquakes changes**

When an earthquake is imminent, the behaviour of the ants changes in a unique way. They stop going in and out of their mounds. Instead, the ants congregate outside their mound before, during, and up to a day after the earthquake occurs. They basically halt all activity within their mound and meet outside, as they sense the growing tension in the universe. By evacuating their mound, they prevent their colony from being swallowed alive by earthquake activity.

## **Unique cells enable ants to detect impending quakes**

Tests carried out by geobioscientist Gabriele Berberich shows that the red wood ants detect changes in environmental gas emissions by using their unique chemoreceptor cells. These cells allow the ants to sense changes in carbon dioxide levels. The ants also have built in radars called magneto receptor cells. These help them detect changes in the electromagnetic field.

During the three-year study, from 2009 to 2012, Berberich and her colleagues measured ten different quakes with magnitudes ranging from 2.0 to 3.2. Berberich used special software that tracked 15,000 different ant colonies, 24 hours a day. She found out that each colony built its mound along a fault line and only responded to quakes with a magnitude of 2.0 and greater.

## **Lessons to be learned from ants**

A lot can be learned from ants. Not only are ants great communicators who work together to preserve their colonies, but they also work together effectively to accomplish tasks like lifting obstacles twenty times their weight. Anything is possible with ants. Their faith and work ethic are unshakable. Their ability to prepare, survive, and thrive in colonies that contain billions of ants is impressive. In fact, in 2004, a super colony spanning 62 miles was discovered in Melbourne, Australia, which contained millions of nests and multiple billions of ants. Ants are also a very fertile, reproducing, and productive species. A queen ant can lay up to 100 million eggs in a single day, and can produce eggs for up to 15 years.

## **Listening to nature's signals**

Nature communicates with humans every day. The human body sends out signals to let one know when they are sick. The human body gives signals when the weather is changing. Ants communicate when an earthquake is imminent to preserve their colony. The universe is a beautiful masterpiece of communication. With so many signs and signals in the weather, in plants, and even in ants, hidden knowledge of the universe can be unlocked by intuitive, curious, and listening ears.