

A Changing World

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Exsodus - FreeDigitalPhotos.net

Global warming, the magnetic pole shift, increasingly erratic weather and natural disasters make us mindful of how to protect our horses and build contingency plans. There have been so many disastrous events around the world, we now know how close it can hit to home. According to the Annual Disaster Statistical review, there were 385 natural disasters worldwide in 2010 that killed more than 297,000 people. The surviving number of people affected was 217 million.

Not only are such disasters more common and widespread but occur with increasing or unheard of severity. The Earth is undergoing changes, as it always has, but in our tiny space in time of that process, we have to adjust to those changes to survive.

The earthquake in Haiti started off 2010 as one of the deadliest events in two

decades. Out of 3.9 million victims, 222,570 were fatalities. The next highest was Russia with floods, wildfires and a heat wave between June and August contributing to a total of 55, 800 deaths.

Flooding and severe storms are a continuing problem worldwide on a scale never before seen. A dormant volcano coming to life is rare enough and geographically isolated, yet recent eruptions from different locations have had widespread effects.

A Shared Challenge

The numbers presented may help to make us take notice and we are beginning to realize that such events are no longer merely isolated, shocking news broadcasts in passing. We are collectively experiencing tragedy and loss around the globe to the point where countries are becoming focused on their own catastrophies instead of collectively helping others.

The first recent wake-up call was the tsunami formed from the earthquake in the Indian ocean near Sumatra in 2004. The effects and devastation covered the area from Africa to Thailand. Despite monitoring and warning mechanisms in place, we lag behind the animals' awareness of impending danger. One of the noted events in recorded history is from 373 B.C. when many animals, including rodents left the Greek city of Helice just days before the devastating earthquake.

In the dismal human tragedy from the 2004 tsunami that struck Thailand, there were almost no animals among the dead. The ones that were easily noticed in trying to get away were elephants. Some broke their chains to head to the mountains, while others defied handlers while carrying tourists and moved to

higher ground. Unexplained behaviour in animals is still often attributed to a 'sixth sense'. It has been well-studied that elephants can communicate using infrasound. This is a very low frequency, below 20 Hz and outside the range of human hearing. Onlookers may think that an elephant is just standing still, but it has been scientifically proven that he may well be communicating over distances of over 40 kilometers (25 miles) thanks to sensitive nerve receptors in the feet.

The Equid family have a physiological structure that is not fully understood. It is called the auditory tube diverticulum or guttural pouch, located dorso-posteriorly to the posterior pharynx. In 2003, Fauna Communications Research Institute concluded that horses do produce infrasound. Infrasound is outside of our normal perception, but it is produced by nature, including earthquakes and serves as a different means of communication available to some animals. Vibrational or electromagnetic, there are scientific explanations as to why many more humans died than animals.

There are common known signs that have been observed and learned from history such as catfish moving violently, chickens that stop laying eggs, bees that suddenly leave their hives, cats and dogs showing nervousness, restlessness, or inhabitual aggression. It is already known that horses, during a severe thunderstorm, will move to lower ground or gulleys if the choice is available. A good instinct to avoid wind, debris and especially, lightning.

For those of us who are aware of disasters close by, there still exist silent dangers to us all, and to our horses. One of these is ultraviolet radiation. Van B. Nakagawara, O.D., of the American Optometric Association explains that UV radiation is composed of invisible high energy rays from the sun that are

recorded beyond the violet/blue end of the visible spectrum. UV-B in particular is damaging to the crystalline lens of the eye and can cause ocular disorders, cataracts, cancer of the skin around the eye, photokeratitis, and corneal degenerative changes. UV-A can damage the retina.



Polar ozone-destroying stratospheric clouds - www.nationalgeographic.com

The ozone layer located in the stratosphere, which is 20 km (12 miles) above the Earth prevents most of the UV rays from reaching the surface. Although an expanding ozone hole has been monitored for years in the antarctic, in 2011 the first ozone hole is developing over the Arctic at a quicker rate due to high-altitude freezing. The degree of ozone loss was larger this winter than ever before.

Markus Rex, a physicist for the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany, announced concern about this ozone

depleted air reaching as far as northern Italy in Europe or New York or San Francisco in the United States. This can occur until late spring and affect different areas as the air mass moves southward.

Protect yourself by covering up or using sunscreen, wear UV glasses and provide outdoor shelter for horses during the day, especially between 10:00 and 15:00 hrs. (10am - 3pm). As the years go by, this situation will worsen.

Forewarned, Forearmed; To Be Prepared is Half the Victory

- Miguel de Cervantes Saavedra, Spanish writer and author of Don Quixote (1547-1616)

Severe storms are causing forest fires, flooding and landslides. Sometimes the storm itself can pose the greatest threat. Such situations usually require evacuation. You should identify what type of potential problems exist in your area and make a plan. In a severe or widespread disaster do not expect to call 911 and be instantly rescued. Everyone is affected when a crisis strikes, so talk to neighbours in your community or set up a meeting to discuss available resources such as types of shelters or relocation areas for horses, who has power generators and if they are mobile, types of vehicles or trailers to move horses, hay and water. Establish a contact network and a plan of action. Discuss various scenarios, different options and routes to be used. Review area maps and know where you would go if roads are unusable. If a set plan turns out to be not executable due to some other unforeseen event and everyone has to get away, then at least you can watch each other's backs.



Photo - EquiVetAustralia.com



Photo - EquiVetAustralia.com

You must decide whether to stay or go. Take into account the number of horses you have and the time it would take to evacuate. There is a big difference if you have one horse with a one-horse trailer or forty horses. Depending on the situation, it is better to be safe than sorry.

Maintain at *least* a three day supply of food and water for you and your horse(s). You may not be directly affected and are able to stay, but an event could happen nearby that cuts off roads, electricity and either disrupts or contaminates drinking water. Allow at least twelve liters (12.68 quarts) of water per horse, per day. Keep chlorine bleach on hand to purify water: two drops per litre (or quart) of water and let stand thirty minutes.

If you have to go, have pictures of each of your horses on both sides, preferably with you also in the picture to identify yourself as the owner. You can put copies into a ziplock bag with any pertinent papers, instructions, your contact info and wrap it around the halter with duct tape. A contact number can be written in permanent ink onto the halter. Never use nylon halters, they must be breakable in the event that a horse is lost and gets snagged on debris. An ID can also be etched into the hoof and/or a waterproof tag braided into the mane or tail. With advance warning you could use small animal clippers to 'etch' your name, number or ID onto the horse's neck or write directly onto the horse with an auction crayon. At worse, use spray paint!

Keep a first aid kit to be able to clean, disinfect and bandage wounds. Keep required medication or tranquilizers, if you deem it necessary. Talk to your vet and learn what is available and what you are allowed to administer.

Find Peace of Mind and Courage in Alternatives

In Quebec, there are frequent little tremors but this past winter, one was prolonged and grew in intensity. It scared me enough to get into the field. Seeing that the horses continued to calmly graze, reassured me. Outside was definitely the safer place for them, too. It was a frightening few seconds and I never felt so helpless. It was that event that motivated me to get informed and prepare an emergency plan.

Increasingly frequent weather fronts producing high winds often cause power outages here. Access to water is my priority. A gas generator is useful to run the well pump but is limited to how much fuel is available. By talking to local farmers about my concern, one looked through his old barn and gave me a good, old-

fashioned hand pump - the kind with the long handle that you raise up and down to get the water flowing.

The references listed not only helped with this article, but I strongly suggest looking at the spca.bc.ca link. The EquiSearch link contains further links and resources. Also, the Wildfire Preparedness link has a checklist that can be useful in any evacuation situation.

After the recent flooding in Australia, you may have seen the video that went viral in horse circles, but also made the news broadcasts. Water levels were so high in some areas, that only the roofs of houses were still visible and the video was of a swimming horse trying to unsuccessfully get onto the roof of a house.

You are responsible for your horses. Letting them go to fend for themselves should only be an option when a disaster strikes with no warning. A little research, preparedness, and local networking can protect you and your horses. In the event that you become separated, the small actions you take beforehand will have you reunited. May you all be safe.



photo - equivetaustralia.com

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