



## Fireworks and equine welfare

### Redwings' position

Redwings Horse Sanctuary has seen first-hand the dangers fireworks can present to horses and we would like to see the use of fireworks restricted to publicly organised events for which a licence would be required.

We recognise that this is a significant change from current regulations, but our own experience, including dealing with fatalities among our own residents, has led us to take a view that unregulated use of fireworks and horse welfare are inherently incompatible. We are also confident that we reflect the views of the majority of Redwings supporters in holding this position.

### Redwings' role as horse owner

Redwings Horse Sanctuary is one of the largest equine welfare charities in the UK, and we have around 1,500 rescued equines in our direct care at any time, making us a significant horse owner in our own right. The majority of our horses are looked after at sites in Norfolk, but we also have centres in Essex, Warwickshire, Scotland and on the English/Welsh border.

Redwings specialises in the rescue and care of nervous, abused or completely unhandled equines, included semi-feral ponies from commons such as those in South Wales, Bodmin and Dartmoor. These horses can be very reactive and allow us to see clearly how natural it is for equines to be continuously alert to possible threats and flee from potentially dangerous situations, with a strong instinct to remain with their companions at times of stress.

### Horses as flight animals

Horses are complex creatures, and as a flight animal, their survival has depended on different instincts to those of prey animals like humans. The points below summarise some key aspects of equine psychology and physiology.

- Horses are hard-wired to run away from things which frighten them; they have the largest amygdala (fear centre in the brain) of any domesticated animal.
- Highly attuned senses enable them to constantly monitor their environment for any potential dangers, and they are often able to detect sounds, movement and smells that humans cannot pick up. What is loud for us is even louder for them.
- A stress response in the horse's body can enable them to run faster and for longer than their body would normally cope with, often leading them to gallop to the point of exhaustion, injury or running blind and putting themselves and others at risk.

- Horses have a strong herd instinct and if one horse senses danger and runs, its companions are highly likely to follow.
- Research has shown that horses who are prevented from following their instinct to run, by being stabled or sedated for example, still experience high stress levels and, in fact, are often more stressed by being unable to fulfil their instinct to flee or to get away from what is frightening them.
- Horses may tolerate fireworks on some occasions, but not others. A fireworks display that is just a little louder, a little longer or a little closer may push them beyond their ability to cope. Other factors that are already impacting on their mental wellbeing can mean a horse has less capacity to deal with additional stress at a particular point in time.

We know that many horses have the ability to overcome their instincts with careful training, a capacity which has resulted in horses holding a unique place in human culture and history. However, research has also shown that training does not necessarily eliminate the fear itself but may simply mediate the instinctive behavioural response. Police horses, for example, who are carefully selected and go through extensive, high-level training, have learnt to tolerate many stimuli which a horse would naturally find highly aversive. Yet monitoring of physiological factors, such as heart rate and cortisol levels, show that police horses often still experience significant internal stress in the face of stimuli such as fire or smoke, even when their behaviour is exemplary <https://www.horseandhound.co.uk/news/do-police-horses-feel-stress-401165>

### **When risk becomes reality**

The cases below are just the most serious examples of the effect of fireworks on Redwings horses. Incidents of distress to our horses and anxiety to our staff are routine when fireworks are used. The use of fireworks is increasing according to staff at a number of different Redwings sites. Fireworks are now expected for at least the first two weeks of November, as well as on New Year's Eve, and throughout the year for private celebrations.

### **Sprite and Percy**

Redwings lost two ponies during the night of 5<sup>th</sup> November 2016 at one of its sites in Norfolk. The deaths were almost certainly related to fireworks being let off close by. That evening, staff who work to check our horses overnight, described the sky as being lit up by multiple fireworks for a prolonged period that evening.

One of the ponies, 19-year-old Welsh pony Sprite, was found with severe colic around 6.30pm. The member of staff who found him reports that the rest of his group were still running in distress round the field, but that Sprite had collapsed. Redwings' on-call vet was contacted immediately and found Sprite in such a severe state of distress and physical exhaustion that euthanasia was the only humane option.

The fact that Sprite was found so early in the evening suggests that his condition had come on extremely quickly as staff were on-site till 4pm and any early signs of colic would have been picked up on the afternoon check and prompted action. Sprite had no history of colic since his rescue in 2010.

The group were checked again during the night and no problems were evident. However, first thing the next morning, in the same field, 25-year-old Percy was found unable to bear weight on one of his front legs.

Percy was clearly in a lot of pain, sweating and with raised heart and respiration rates. Our vet gave immediate pain killing medication, and X-rayed the large swelling on Percy's elbow. While there was no breakage, there was evidence of extensive soft-tissue damage. On re-checking Percy once medication had been given time to take effect, there was no improvement in his significant pain levels or ability to bear weight on the leg and euthanasia was necessary on welfare grounds.

## **Cinders**

On 1<sup>st</sup> November 2014, fireworks were set off close to Redwings Ada Cole, our centre just outside Harlow in Essex.

The Redwings Ada Cole centre is in a more built up area than the charity's other sites, making early November particularly challenging for the team there. The centre manager remembers that on the evening that Cinders sustained her injury, fireworks were being let off continuously from as soon as it went dark until almost midnight. The horses were checked regularly, but very little could be done to minimise their stress. The site is effectively surrounded by houses, and the horses on site are often surrounded by fireworks during Bonfire Night. The woodchip area was extremely churned up overnight, showing how the horses' flight instinct had prompted them to run in their distress, without being able to escape the source of their fear.

Thoroughbred mare Cinders was one of a small group of horses on an all-weather woodchip turnout area at the centre. She was found to be severely lame (non-weight bearing) the following morning. X-rays revealed a sub-luxated coffin joint, where the bone in Cinders' foot had become partially detached from its neighbour; a very serious and painful condition, most likely caused by severely wrenching the foot. Surgery is possible, but the success rate is relatively low, and the aftercare needed is protracted.

Thanks to our supporters, Redwings could have funded the surgery, but Cinders was quite a highly-strung horse, who had not warmed to humans and wasn't straightforward to handle. It was sadly decided that the additional stress of being sent away for specialist surgery which, if successful, would be followed by intensive after-care, would constitute yet more stress and discomfort to this sensitive mare, and it was kinder to put her to sleep.

## **Oxhill fire**

In 2012 a stray firework landed on a newly delivered trailer of shavings bales at Redwings Oxhill in Warwickshire, starting a substantial blaze. The fire was close to our donkey barn – of wooden construction – where eight resident donkeys were housed at the time. It was only due to a timely evening check by a member of staff that the fire was spotted, emergency services called and the donkeys evacuated.

It took three fire crews to bring the fire under control. Without the fire being found when it was, the barn and all eight donkeys would certainly have been lost in a most traumatic way, and possibly far more fatalities and damage could have occurred.

The close neighbour who had been hosting the fireworks party hadn't made the team aware of the event, despite Redwings having more than 80 equines at the site.

## **How Redwings reduces risk**

We arrange extra overnight checks at times when firework displays are most likely to be held. Additional staff are often drafted in to help with these checks, which comes at a financial cost to the charity and disrupts routine work rotas. Even with these extra checks, staff know that there is often little they can do to reduce the distress and risk to Redwings' residents. Extra forage is also made available to horses to encourage them to stay settled, though this also comes at a cost.

Letters are circulated to neighbours to our Norfolk sites in the run-up to Bonfire Night, asking them to let us know of any planned fireworks displays. Some neighbours are good at informing us of when and where they are going to be letting off fireworks, giving us a chance to move horses to fields further away. However, we are still often unaware of displays before they take place.

We also work to raise awareness of fireworks more generally, and produce advice and guidance for other horse owners. Our *Fireworks Checklist* is available online and promoted in the autumn through social media and other channels.

## **Changing the culture of firework use**

Redwings welcomes any restrictions that will encourage responsible firework use that is mindful of the impact they can have. It is important to note that there is no evidence that any of the distress, injury and even death that fireworks have caused to our own horses was related to breach of regulations. We feel that tweaking existing regulations is unlikely to make a significant difference to the risk fireworks presents to horses, and welcome more fundamental change such as the proposal to make training and licencing mandatory for anyone planning to use fireworks.

Redwings also encourages any research further investigating the impact of fireworks on horses and evaluation of the potential impact of any changes to current fireworks regulations and enforcement.

Reducing noise levels below the 120db maximum would be welcome, but no explosive device is conducive to good animal welfare. As one internet comment put it, "The loudest firework is always the one you're not expecting." Animals are never expecting fireworks; and what is loud to the human ear is usually far louder for many animals.

Exploring fireworks-related internet forums reveals much of the culture around fireworks and makes it clear that many people are specifically looking for devices that are as loud as possible. Not only do comments indicate a lack of concern about the potential effects of loud fireworks, but some are actively looking to be anti-social. One firework supplier noted that the question "You got anything to piss my neighbours off?" is a phrase they hear "a thousand times" ([www.fireworks-forum.org.uk/threads/loudest-firework-in-the-uk.25631/](http://www.fireworks-forum.org.uk/threads/loudest-firework-in-the-uk.25631/)).

## **For equines, for animals, for us**

Redwings has repeatedly seen first-hand the risks that fireworks routinely present to horses, and the financial and emotional cost on people who care for them. Horses are just one

species of the many animals who are negatively affected by fireworks, not to mention many humans who experience distress and even physical injury as a result of firework use.

**Useful links:**

- Redwings' *Fireworks Checklist* with practical advice on reducing risks for horses: [https://www.redwings.org.uk/sites/default/files/Fireworks\\_poster\\_%20web\\_final.pdf](https://www.redwings.org.uk/sites/default/files/Fireworks_poster_%20web_final.pdf)
- Report a fireworks incident with The British Horse Society: <https://www.bhs.org.uk>
- The RSPCA's *Bang Out Of Order* report has more information on the impact of fireworks on animals and how fireworks could be better controlled: <https://www.rspca.org.uk>