

Advice on Noise on routes used with horses

The law and management of public access rights vary widely between the four countries of the United Kingdom. Practical elements of the following advice apply in all of them but the legal requirements in Scotland and Northern Ireland may differ from those in England and Wales.

More advice is available on www.bhs.org.uk/accessadvice.

IMPORTANT This guidance is general and does not aim to cover every variation in circumstances. Where it is being relied upon, The Society strongly recommends seeking its advice specific to the site.

A horse's range of hearing is greater than a human to higher frequencies (over 33 kHz in the horse compared with under 20 kHz in humans) although a horse may not be able to hear the lowest frequencies audible to humans.¹ Hearing ability is very important to survival for a horse and its ears can pick up sound at a lower volume and a greater distance than will be detected by a human. As with humans, there is variation in quality of detecting sound at the extremes of the range with some horses hearing much better than others. Age may decrease aural function, as may certain health conditions.

Horses can become accustomed to noise, whether short sharp sounds, continuous noise or discontinuous noise (e.g. gunshot, motorway, train). Police and military horses have proven their resilience to noise but the training involved is highly skilled and the horses are carefully selected. Some horses would never reach the same acceptance even with the same training. Such training may not be in the scope of most horse owners therefore it should be assumed that noise is likely to be distressing to horses which are not accustomed to it. If a human may be disturbed by a noise, then so may a horse be disturbed, but a horse may be concerned about sounds which humans recognise and dismiss instantly as no threat.

Temperament and experience will affect whether individual horses can become habituated to noise or whether their distress level continues or rises. It must not be assumed that a noise that is accepted by one horse will be accepted by all.

Environments which are likely to produce noise should be avoided in the vicinity of routes used by equestrians, particularly byways, bridleways and minor roads which should be protected for quiet recreation and exercise. Sudden loud noises should particularly be avoided, e.g. birdscarer gas-guns.

¹ Saslow, C. A. (2002) Understanding the perceptual world of horses. Applied Animal Behaviour Science, 78: 209-224.

Horses are prey animals and their usual response to danger is flight. Their instincts will assume that unexpected noises are a predator and a threat so they will flee first and check later. A horse will hear a sound, quite possibly not detected by a human near it, may freeze to remove its own noise while it checks the threat, then run away from the noise. Depending on temperament and the perceived threat level, the horse may stop and turn back to the source of the noise to check whether further action is needed, or may carry on running. A horse may also spin to identify the direction of the threat.

There is a risk to a handler, rider or carriage-driver (equestrian) who may fall when the horse reacts, and even if staying with the horse, may not be able to avoid another hazard such as traffic, fencing or a cattle grid.

Horses can become difficult to handle in conditions where there is a continuous level of noise because it may mask other sounds that could be a threat. This can be a reason for unsettled behaviour in wind or by the sea or heavy traffic, especially in an unusual environment where the horse is not comfortable with the general threat level.

Variation in their temperament, the nature of the environments they have known and their confidence will affect how horses respond to a noise. They are more likely to react to sudden noises close to them.

The impact of noise on horses can be reduced by acoustic barriers and buildings. Attenuation can also be achieved by shrubs and trees, if the growth is dense enough, and over a sufficient depth, height and length, to be effective. This is unlikely to be achieved by new planting for many years so existing mature vegetation should be retained and supplemented where possible, and its adequacy for the purpose checked. Where that does not exist or cannot be retained, other acoustic attenuation will be required until new planting is mature enough to be effective. **Specialist advice** on noise attenuation should be sought (below).

Considering how similar a noise may be to a natural predator is a useful guide to whether a horse will be troubled by it. A quiet rustling is likely to have greater impact than a high speed train because the former could easily be associated with a predatory animal moving into position to attack whereas a flow of motor traffic is a continuous steady loud noise which is less likely to be a predator; it can be heard from far away and the majority of horses these days have been exposed to and accepted commonly occurring mechanical noises from their birth. There are many situations of horses unperturbed by trains or motor traffic, even for the first time, in fields or on bridleways alongside a railway or motorway.

Because a human hears a sound, it is often assumed that this is what is troubling a horse, but the horse may have accepted that sound, and be reacting to something that a human has not heard or seen, possibly even behind it.

Specialist advice

The Society is unable to offer further advice on noise attenuation as this is a specialist area of complexity. Expertise is available from anyone registered with the [The Association of Noise Consultants \(association-of-noise-consultants.co.uk\)](http://association-of-noise-consultants.co.uk).

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