

NORTH WEST REGIONAL GROUP
ARAB HORSE SOCIETY

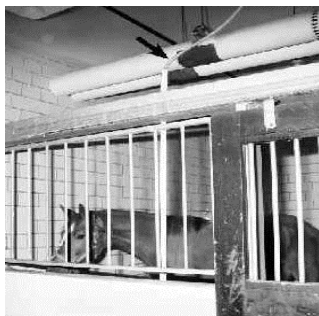
The use of mirrors in preventing stereotypic weaving

By Caroline Georghiou



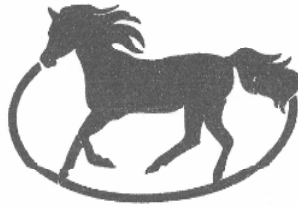
STEREOTYPIES – WHAT ARE THEY?

Stereotypic behaviours are described as being 'repetitive and invariant with no obvious goal or function' (Mason, 1991a). They are thought to be indicators of a welfare problem, although it has been argued that the behaviour may help the horse 'cope' with a situation and they are prevented or restricted from performing the behaviour, the horse appears to show more signs of stress (Mills and Nankervis, 1999).



During the winter months, horses are stabled for longer periods of time, and this can often bring about an increase in stereotypies such as weaving, crib-biting, box walking and so on. This increase is thought to occur because even though the horse has sufficient protection from the winter weather and their nutritional requirements are met; many are restricted or prevented from performing their natural behavioural repertoire (Appleby and Hughes, 1999). There is a widespread belief that if an animal cannot perform these behavioural patterns, they will suffer in the same way that they would suffer if necessities such as food and water were not available. Questions concerning how behavioural deprivation affects the welfare of any animal are therefore concerned with what motivates them to perform specific behaviours (Appleby and Hughes, 1999).

Horse owners and managers often believe that stereotypic behaviours (more widely known as stable vices) can be:-



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- Learned and copied by other horses on the yard, which is considered as being incorrect and the real reason why other horses perform the same behaviour is because they are exposed to the same environment
- And can cause harm to the individual performing the behaviour e.g. weaving can cause excessive wear to the front shoes and can cause stress on the joints and tendons.

It has been suggested by McGreevy *et al.*, (1995a) that between 5%-20% of horses on any yard can be seen to show one or more stereotypies. For these reasons, owners and managers have resorted to using devices such as crib-straps, anti-weaving bars and even surgery to try and stop the behaviours being performed. But these measures will ONLY prevent the horse from carrying out the behaviour without removing the underlying cause or motivation (surely causing more stress to the horse).

Environmental Enrichment (EE) devices are often being studied and developed to encourage animals to perform behaviours similar to that of their wild counterparts, which may reduce or prevent the occurrence of stereotypies. An example of this is the use of an Equiball that helps to encourage the horse's natural foraging behaviours and also prolongs feeding, as naturally they would forage for up to 16 hours a day. Another recently developed EE device is the Lincoln Stable Mirror that is thought to help prevent weaving.



THE LINCOLN STABLE MIRROR

WEAVING - WHY DO HORSES DO IT AND DO STABLE MIRRORS WORK?

Horses have been observed to begin to weave as yearlings, and it is more commonly seen in horses that are stabled and have lower levels of social contact (McGreevy *et al.*, 1995), as naturally they are social animals. It is thought to develop as a form of frustrated escape response; usually to regain social contact with another horse on the yard.

Stable design has been shown to be an important factor in reducing or preventing weaving. Cooper *et al.*, (2000) found horses that were able to gain social contact with a conspecific through a barred window, reduced weaving by 99%, and the more open sides a stable has the more





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weaving is reduced. As it is not always possible to redesign a stable yard, other methods such as the stable are being designed. Studies have indicated the use of a stable mirror has reduced weaving by up to 77%, although long term use has shown as much as a 99% reduction (Mills and Davenport, 2002).

It is not clear why stable mirrors work, it is thought they could mimic visual contact, therefore reducing social isolation; or they may act as a distraction and reduce the horse's perception of confinement. It is important to ensure the correct type and size of mirror is used; Jackson Arenas worked with Daniel Mills and produced the Lincoln Stable Mirror (only scientifically viable product to date). The mirror must not be too large so the horse feels threatened and has the sensation of not being able to escape (feeling claustrophobic). The mirror must also be shatterproof; otherwise it will result in damage to the animal.

Jarvie (2001) suggested that mirrors had a calming effect in horses, and a new scientific survey also stated the use of stable mirrors resulted in a 'happier' and more relaxed horse. These results were also found by the Lincolnshire School of Agriculture in Grantham. Daniel Mills, a principal lecturer at the Animal Behaviour Cognition and Welfare group at the University of Lincoln, told the Sunday Telegraph 'behaviour stopped almost instantaneously. Some of these horses had been displaying this behaviour for 6 years'. Therefore concluding, that the use of stable mirrors as an environmental enrichment device does have a significantly positive effect on the reduction of stereotypic weaving.

If your horse is showing signs of stereotypic behaviours (stable vices), remember that merely restricting or preventing the behaviour may cause more stress; it is the underlying cause and motivation of the behaviour that needs to be addressed (Appleby and Hughes, 1999).

References

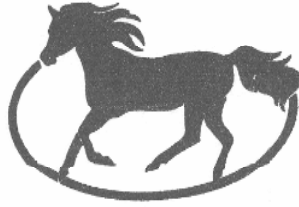
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<http://www.intelligenthorsemanship.co.uk/.htm> (Jarvie J., 2001)

<http://www.horsedata.co.uk/weaving.htm>