CPD article

Potential effects of the COVID-19 pandemic on horse behaviour in the UK between March and October 2020

Once the COVID-19 pandemic started and the UK went into lockdown on 17th March 2020, many horse owners had to change their horse keeping practices. Exactly how varied depending on their exact circumstances. Horses kept at home, or on full and part livery, would have experienced little change other than a reduction in ridden exercise as some owners chose to stop riding to reduce the risk of personal injury. Owners of horses kept at DIY yards faced greater difficulties as, in many cases, their visits reduced in frequency, horse care rotas were not being adopted, and horse management shared with other owners; this, coupled with uncertainty about future income raising anxiety levels in some individuals, may have had knock on effects for horse behaviour. The pandemic also contributed to some unexpected effects. Increased public footfall in the countryside meant more horses being uncontrollably fed by members of the public, and horse sales continued, even increased, with rehoming from some welfare organisations following the same trend.

https://doi.org/10.12968/ukve.2021.5.1.34

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Key words: equine | behaviour | COVID-19 | welfare

Once the COVID-19 pandemic started and the UK went into lockdown on 17 March 2020, horse keeping practices changed for many horse owners. Key concerns potentially impacting on horse behaviour included owner anxiety, routine care of horses and changes in exercise/turn out regimen (Williams et al, 2020). As spring and summer progressed, largely with dry and sunny weather, and as lockdown restrictions eased, there was also an increase in public footfall on rural and semi-rural rights of way and roads adjacent to horse pastures as people accessed the countryside in increasing numbers (*Table 1*) (Natural England, 2020). Anecdotally, this led to increased interaction between horses and the public. Articles in the equestrian and national press about the adverse effects on horses of feeding by members of the public supported this anecdotal evidence (British Horse Society, 2020; Radford, 2020). In the months following the lockdown in March 2020, there was an increase in online equestrian activities, with some people entering into riding and buying a horse in order to be able to do so, making up a small part of the author's clinical caseload, as well as being reported in the equestrian press (Redrup, 2020). There has not yet been any empirical research published on the effect of the COVID-19 lockdowns on horse purchasing behaviour but some of the rehoming organisations report an increase in rehoming. For example, Redwings Horse Sanctuary saw a 75% increase in their annual rehoming figures (Redwings, 2020).

This article explores the potential impacts on horse behaviour of these various activities and changes in horse care related to the quarantine and social distancing measures imposed by the UK wide lockdown from March 2020, and the subsequent easing and tightening of restrictions on the UK population.

Effect of owner anxiety on horse behaviour

When horses are handled by nervous humans their heart rate increases (Keeling et al, 2009). Horses also react differently to odours from nervous humans, they touch people more and spend more time with their head raised, compared with when they are exposed to the odour of happy people (Sabiniewix et al, 2020). Therefore, it is likely that exposure to anxious owners and other anxious people will have a negative effect on horse behaviour; making horses more likely to react fearfully. Williams et al (2020) reported that lack of provision of hand sanitiser, means of sanitising shared equipment, and social distancing measures, concern over accessing veterinary and farriery care during lockdown, and fear for future loss of in-

Table 1. Percentage of adults (16+ years) surveyed by Natural England on their access to the outdoors and open spaces between April and August 2020

	April 2020	May 2020	June 2020	July 2020	August 2020
Percentage of adults 16 years and over visiting fields/farmland/countryside*	25%	29%	31%	34%	34%

*Natural England data from https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-august-2020-experimental-statistics

come were all sources of anxiety for many owners. Ruminating on these issues while handling their horse might trigger nervousness in their animal.

Effect of restrictions on owners caring for their horses

Horse owners keeping their horses on full or part livery were affected most in terms of how frequently they could visit their horses: 79% and 78% of owners, respectively (Williams et al, 2020). Owners keeping their horses on do-it-yourself and grass livery were less affected in their daily visiting: 47% and 30%, respectively (Williams et al, 2020). In the case of owners on full or part livery this meant that yard staff now had near exclusive care of the horses, perhaps not a significant change from the horses' point of view as it is usual for staff to care for horses within these livery arrangements, but visits from owners were now very limited.

Horses do not appear to form attachments to their human owners in the way dogs do. Horses have been demonstrated to be just as tractable when handled by unfamiliar people in novel and potentially frightening tasks as when handled by their owners (Ijichi, 2018). Horses also find unfamiliar, as well as familiar humans, a 'safe haven' in a modified 'strange situation' test (Lundberg et al, 2020). Provided horses are handled fearlessly and with competence, then they are more likely to be compliant and less likely to become distressed (Gronqvist et al, 2016), and horses trained largely with positive reinforcement (food) are also more likely be attracted to both familiar and unfamiliar people (Sankey, 2010; Lundberg et al, 2020). Therefore the risk of unwanted behaviour increases when horses are frightened by incompetent and fearful handlers, and when their typical training and handling experiences are based on aversive stimulation without reliable negative reinforcement, i.e. clearly signalled and consistently released pressure (McGreevy, 2007).

Horse owners should be advised of this, and should visit and check the handling and care of horses on a yard to make sure it is calm and competent, before they commit to entrusting the horse's daily handling to the personnel involved.

This also applies but may be more difficult to achieve on DIY livery yards where a proportion of owners club together to care for their horses on a rotational basis (Williams et al, 2020). Anecdotally, this has presented similar challenges to those indicated above. Not all horses are easy to handle, and not all persons involved with DIY yards are either confident or competent when handling horses, especially those animals that are not their own — leading to deteriorations in horse behaviour.

Overall, those who care for horses need to feel confident and competent when handling them, and should do so according to the first principles of horse training (International Society for Equitation Science, 2018). This highlights another drawback of the fluctuating local and national COVID-19 regulations: it has not always been possible to get practical instruction from freelance riding instructors who could help.

Effects of changes in activity

Williams et al (2020) reported that very few owners were concerned that their horses would spend more time confined because of the pandemic. It was also reported that many owners were still riding their horses: 66% kept at home, 36% at full livery, 48% part livery, 42% DIY livery and 41% grass livery. However, this left a large proportion of owners no longer riding, so while some horses experienced the same workload others had less or no workload and were being turned out (Williams et al, 2020).

Horses need to be turned out for at least 1 hour per day to have free-movement and alleviate stress (Clemence et al, 2020). Being ridden, for one hour per day, is insufficient to relieve the stresses associated with chronic stabling (Clemence et al, 2020) and being ridden more than twice in one day, such as for two 45-minute riding lessons contributes to increased stress (Jung et al, 2019). Therefore, decreased activity provided a horse is turned out, is likely to be welfare enhancing and reduces the risk of behavioural problems, such as increases in stereotypical behaviours (weaving or crib-biting) or frustrated attempts to move more energetically when brought out of the stable.

Increased activity, such as being ridden for longer each day, or more frequently such as by more than one friend or family member has the potential to increase stress and may also increase unwanted behaviour at least during the first rides of the day. Jung et al (2019) found that two of their experimental horses bucked more during the first ride of each day. Furloughed owners or those working at home may have ridden more rather than less.

Effects of petting and feeding by members of the public

Petting and particularly hand feeding of horses can encourage horses to engage in unwanted oral behaviour directed towards the human body (Hockenhull and Creighton, 2010). Paired feeding tests, where two horses are placed in an enclosure with only one food source, have been used to investigate dominance relationships in horses, with the result that such competitions increase aggressive behaviour between horses (Houpt et al, 1978). Therefore, indiscriminate hand feeding by members of the public has the potential to encourage horses to engage in those unwanted oral behaviours, as well as provoke aggressive behaviour towards other horses.

KEY POINTS

- When stabled, horses should be turned out at least once a day and for greater than 1 hour.
- Stabled horses should be ridden for more than 1 hour day at a single time.
- A horse's stress will increase when handled by anxious owners or handlers.
- Unchecked feeding by the public can increase unwanted oral and aggressive behaviours in horses.
- The behaviour of some horses has likely been adversely affected by the effects of the COVID-19 pandemic on humans.

Conclusion

Horse behaviour is likely to have been negatively affected by changes in handler or management when handlers are less competent and more fearful, where controlled exercise is more than twice per day, and where there is no access to turnout. Owners should be encouraged to turn out their horses for at least an hour per day, not to exercise them excessively, and to become as competent as possible in their handling skills. Care should be exercised when turning horses out adjacent to public rights of way, using fencing and/or signage to prevent public access to horses where there is a risk of inappropriate feeding. EQ

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