

July-August 2021

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# Opening the Gates to Good Welfare



WORDS BY Jessica Morton

There are people who have trouble seeing things from the horse's side.

In April this year, at the renowned San Rossore racetrack in Pisa, Italy, a jockey was arrested for beating and setting the neck of the racehorse he had been riding on fire. The reason behind this incomprehensible act? The horse 'wasn't listening to him'.

But what about listening to the horse? Overfed, isolated and confined to a small box - can anyone really expect to get the full attention of a three-year-old Thoroughbred during the short time he is permitted to stretch his legs and see other horses?

When we picture scenes of animal cruelty, we generally imagine thin, malnourished horses in haphazard paddocks filled with abandoned cars, barbed wire fencing and empty gas cans. Less commonly associated with mistreatment are luxurious stabling facilities housing expensive and pampered performance horses.

Yet the dark side of equestrian sports is that many of today's top level horses are kept in completely controlled and unnatural environments.

Confined to boxes and isolated, sometimes for 23 hours a day, many will resort to behavioural anomalies such as box-walking, weaving, aggression or learned helplessness to deal with their boredom, frustration and loss of agency.

Unfortunately, when faced with escalating behavioural issues, some owners resort to even more restrictive measures instead of uncovering the root of such unwelcome behaviours. They may even place the blame on the horses themselves, as if they were misbehaving on purpose.

Horses, like people, are social animals who, in nature, associate with other members of their kind. They rest and graze near each other, groom, play and travel up to 16 miles a day in the wild. They build strong bonds with certain horses in the herd, and it is a remarkable testament to their adaptability, that so many seem to cope (at least to a certain extent) with the loss of freedom and the isolation we inflict upon them.

*Confining horses suits our needs, not theirs*

Historically, the practice of confining a horse to a stall was an attempt to provide protection and shelter, as well as to keep them at close hand.

Bedouins, for example, shared tents with their prized Arabian horses during sandstorms, and London coach drivers kept their cab horses tied up in lean-to stables in the city. People lived alongside their horses out of necessity - their livelihoods depended on having ready access to them.

During wartime, some cavalry generals believed that a disciplined and controlled living arrangement created a stronger horse that was psychologically more capable of handling the rigours of war.

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*Horses are sentient beings with needs, wants and interests that are entirely independent from what we ask and expect from them.*

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Modern horses, in contrast, are kept largely for recreation or sport. Is it still humane to keep them in isolated confinement for convenience?

Today's average sport horse lives a micro-managed lifestyle confined chiefly to a stall (often under video surveillance). A few times a day, he is dishd out portions of carefully balanced feed and he is allowed outside only for carefully controlled riding and exercising. This artificial living arrangement and loss of agency can have acute effects on their wellbeing, behaviour, and even athletic development under saddle.

There are horse owners who genuinely believe that turnout is unnecessary when horses can get enough exercise being ridden or lunged. Research, however, is increasingly showing that meeting the physiological need for movement is different from meeting their psychological need for free movement and social agency.

IMAGE A: Today's average sport horse lives a micro-managed lifestyle, confined chiefly to a stall (often under video surveillance), exercised under the direct control of their human carers.

IMAGE B: It is possible to have a mutually beneficial relationship with these sensitive and intelligent animals without denying them companionship and freedom.

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A study at the University of Tours in Nouzilly, France, showed correlations between horses who were suffering negative emotions in their stables and poor performance under-saddle.

Horses who were withdrawn in the stall, expressed their negative emotional state when working under-saddle as a reluctance to move forward and tail swishing. Horses who were hypervigilant or aggressive in the stall were more likely to exhibit a 'jerky gait' show unexpected 'surges' of speed at the canter and act up. These findings suggest that compromised welfare and depression caused by isolation creates negative associations with being trained and ridden<sup>1</sup>.

Stabling and isolation from friends may be favoured by owners of horses who are difficult to catch or particularly attached to their herd mates. Some owners object to the extra time and effort it takes to collect horses from the pastures, then brush-off dirt and mud prior to exercise - or they don't want to risk their horse losing a shoe, especially before a competition.

Competitive sport horses are often expensive, much more so than the average recreational mount. Fear of injury justifies an owner's decision not to turn them out with other horses. Trainers often turn a blind eye to the horse's need for socialisation, preferring to keep their clients' expensive horses inside rather than risk a costly litigation case, in the case of injury.

Exercised daily, walked or grazed in-hand, brushed and bathed frequently, these physically pampered but often psychologically misunderstood horses are visited by a constant stream of healthcare professionals (nutritionists, farriers, veterinarians, chiropractors, massage therapists and dentists). This management regime may seem privileged to us but, for the horse, it is far removed from a natural and healthy lifestyle.

### Benefits far outweigh the risks

When a group of horses is turned out in a domestic setting, the chances of injury are actually low. This is especially the case where horses have enough food to forage on, shelter, space and water to negate the need to compete with their companions over resources.





In fact, decades observing free-ranging horses tells us that in nature, they have very few fights.

We know horses are not meant to live alone. Isolation suppresses their natural instincts and takes away their personal freedoms and mental stimulation. This can lead to chronic stress, stereotypes and learned helplessness. When a horse's social agency is restricted, we often see unnatural behaviours appearing instead.

Solitary confinement can encourage pawing, box-walking, weaving, biting and windsucking; stress responses that have been identified as risk factors for equine colic. An international study shows colic frequently occurs in cribbers<sup>2</sup> and statistics from the 2015 World Equine Veterinary Association Congress confirm cribbing is a major risk factor in horses with repeated colic bouts<sup>3</sup>.

A horse may become aggressive and territorial of his box. He may stand with his hindquarters facing the doorway, threatening to kick or bite anyone who dares enter. Stereotypes (those repetitive behaviours with no obvious purpose we used to mistake as 'vices'), help horses cope with frustration. Research has

confirmed they can reduce stress and relieve physical discomfort in a horse - similar to biting your nails compulsively just before sitting an exam.

Stereotypes are considered a behavioural indicator of poor welfare in animals and have never been observed in feral horses living in their natural state.

Researchers studied a group of horses prone to repetitive behaviour (such as cribbing and aggression towards their handlers) who were given a 'holiday' on pasture. The experience positively influenced their welfare and enhanced their expression of natural behaviours. After twenty days, the horses showed no further aggression towards their human handlers. Sadly, all negative behaviour returned as soon as the horses were brought back into the stables<sup>4</sup>.

Often, the longer horses were kept from enjoying natural behaviour, the worse their social skills became. The researchers noticed it took 20 days for the horses to express natural behaviour again. Sadly, it may actually be the initial expression of frustrated behaviour because of confinement that convinces the horse's owner to limit the time they spend outside in the first place.

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IMAGES A, B & C: Gut Schönweide, a German stud established in 1731 is integrating the best of tradition with innovation and research, to ensure all horses, including stallions can live more natural lifestyles. All the horses spend time in the paddock before riding, which they say makes them more relaxed and balanced under saddle. Images courtesy of Gut Schönweide [www.schoenweide.de](http://www.schoenweide.de).

IMAGE D: Other breeders are also reaping the benefits of breeding and managing horses in ways that mimic their natural free-ranging state, saying the youngstock develop into more balanced and resilient athletes. Image courtesy of Constanze von Rautenfeld and Guido Gasparro, Le Puledraie di Sterpeti stud.





## Keeping horses indoors is inherently unnatural

The results of a study by Nottingham Trent University showed that as horses became more isolated, they exhibited higher levels of faecal cortisol, a chief indicator of stress. The researchers observed horses' behaviour in four types of housing designs; stabled alone, kept individually but with a small amount of contact with neighbouring horses, kept in pairs in a barn, and finally, kept out together as a herd in a paddock<sup>5</sup>.

Thermal imaging of the eye, another non-invasive measure of a stress response, showed the eye temperature to be significantly lower for horses living out in a herd, indicating lower levels of stress when compared to the other cohorts<sup>6</sup>.

If Dr Andrew McLean could make only one wish as an equine welfare scientist, it would be that all horses in confinement were at least granted audio, visual and tactile access to other horses.

"Social connection is crucial for mental and physical health in herd animals" said Dr McLean. "Horses are intelligent and they need company. The psychological effects of isolation are as dramatic on horses as they are on humans.

"We know behavioural anomalies last long after inmates are removed from isolation. Why would we think horses handle confinement and isolation any better?"

Dr McLean compares the practice of confining horses inside closed boxes to the inhumane treatment of convicts in Tasmania during the 1800s. Inmates of the Separate Prison at Port Arthur were relegated to forced isolation as the authorities claimed psychological punishment was an effective method to reform them. Convicts were locked in single cells for 23 hours each day, referred to by a number rather than a name, and allocated only one hour of exercise on a high-walled yard. Whenever they left their cells, they had a hood put over their heads to prevent anyone from recognizing them.

The dark consequences of this treatment resulted in many inmates developing mental illnesses from the seclusion, while others, in desperation, were driven to commit the capital offense of murder, preferring to escape their incarceration conditions with the death penalty.

Even today and years after their release, modern-day inmates who have experienced periods of solitary confinement report difficulties integrating into society, feelings of anxiety and depression, and a desire to remain in confined spaces.

The psychological effects of solitary confinement linger with horses too. Many have not experienced life on pasture since they were yearlings, and will find the initial change to living naturally a difficult one.

Some of these horses may exhibit signs of depression, weight and muscle loss while they adjust to their new lives. Others may panic and crash into fences or wait alone at the gate for hours hoping to be let back into the more familiar stable.

Alternatively, a horse who remembers the trauma of being separated from his herd or had a frightening experience may become extremely fearful of leaving his new herd in the future.

## Prevention is better than cure

Studies in other social species have demonstrated that a lack of social experience early in life can affect adult social behaviour<sup>7</sup>.

Young horses often pick up unwanted behaviours because of early isolation. Foals confined to a stable rather than a paddock after weaning were more likely to start windsucking or crib-biting, maybe as redirecting their suckling reflex on to other surfaces<sup>8</sup>.

Research has found cribbing has a similar effect on the horse's brain to the human brain after cocaine was taken, and as a result, a horse who has developed certain behaviours over a long period as a coping mechanism to handle confinement may perform them habitually<sup>9</sup>. For example, a horse who has cribbed for many years when contained in his box may also continue to perform the behaviour when turned out in a herd despite being in a 'healthier' environment.

Foals require socialization from a young age much like puppies do. Herd interaction helps develop their social behaviour with other horses. Without it (much like a fear-aggressive dog who was never taken to the park) they may become more aroused and threaten to bite or kick when they encounter a new horse, to clear their personal space or ward off an imagined attack.

For breeders Constanze Von Rautenfeld and her husband Guido Gasparro, seeing life from their horses' perspective has always been a main priority at their stud 'Le Puledraie di Sterpeti'.

"Experience, education and our own studies have shown us that this [more natural] way of keeping horses is best for them" says Constanze. "When we were still living in Germany, we did not have the opportunity to keep our horses outside all the time, but they were at least housed together in an open stable with 24-hour access to large paddocks."

"Here in Italy, we found more favourable climatic conditions which allowed us to implement our ideal management concept. In addition to an optimally balanced diet, free physical exercise plays such an important role in a horse's life - especially when they are young!



IMAGES A to D: Constanze von Rautenfeld and Guido Gasparro decided to relocate their sport horse stud from Germany to Italy so they could breed and manage their herd in more natural conditions year-round. Their aim is to keep all horses outdoors in groups as long as possible, including stallions and those who are in training. They firmly believe this upbringing helps them develop into strong, resilient sport horses.

Image courtesy of Constanze von Rautenfeld and Guido Gasparro, Le Puledraie di Sterpeti stud.





"In addition to sufficient space in the fresh air, horses need to be able to move around on different surfaces such as earth, sand, stones, grass, and water. These conditions are practically impossible to recreate inside a stall."

Many valuable competition horses are confined to a stall after weaning, only turned out alone in a small pen for a few hours a day. Without contact with other horses, they cannot take part in important social behaviours collectively known as 'loafing'. Actions such as mutual grooming and playing together, or simply standing together with a friend in the shade, nose to tail during hot weather, so their tails can flick the flies away from their faces, or when in cold, wet weather they stand close and use their bodies to keep each other warm.

"Our foals are born outside, and they grow up in the herd" says Constanze. "This upbringing helps them develop into strong and resilient horses with a balanced, amiable character. This is especially beneficial for those horses destined for physically demanding sports like eventing."

### Herd living and aggressive behaviour

Researchers have found that depriving young horses of social contact resulted in increased aggression and less submissive behaviour when reintroduced to living with other horses<sup>10</sup>.

The biggest behaviour issue with orphaned foals is their tendency to lack normal human-horse and horse-horse boundaries. This can be extremely dangerous - as Constanze discovered when she reintroduced a hand-reared colt to the herd after seven months.

The foal initially showed no abnormal behaviour - even though he was notably more attached to humans than his fellow species. The problems showed up when he matured into a four-year-old stallion and demonstrated a dangerous lack of respect for humans on the ground and under saddle. Expert trainers and veterinarians advised immediate castration because of the stallions' unsafe aggression- but this was unfeasible as he was the last representative of a rare bloodline. In desperation, Constanze and Guido let the young stallion cover two mares and then integrated him into his 'own' herd to see if things would improve.

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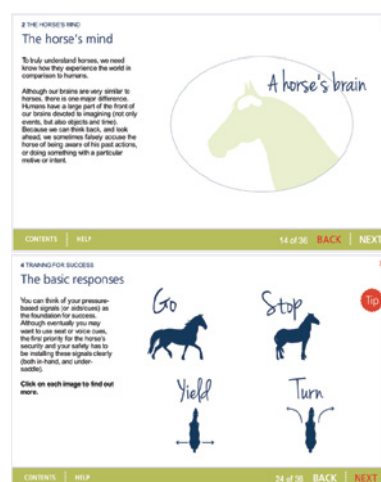
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**IMAGE A:** The 'social grids' between stables are designed to allow two stallions to play and interact safely. The large box size of 5 x 5 m provides enough space for the horses to rest and retreat when they want some quiet time.

**IMAGE B:** Another design innovation implemented by Gut Schönweide are the 'feeding bars' into the stable corridors. This gives horses ad-lib access at ground level (a natural feeding position that helps clear the airway) and allows them to forage in sight of the other members of the 'herd'.

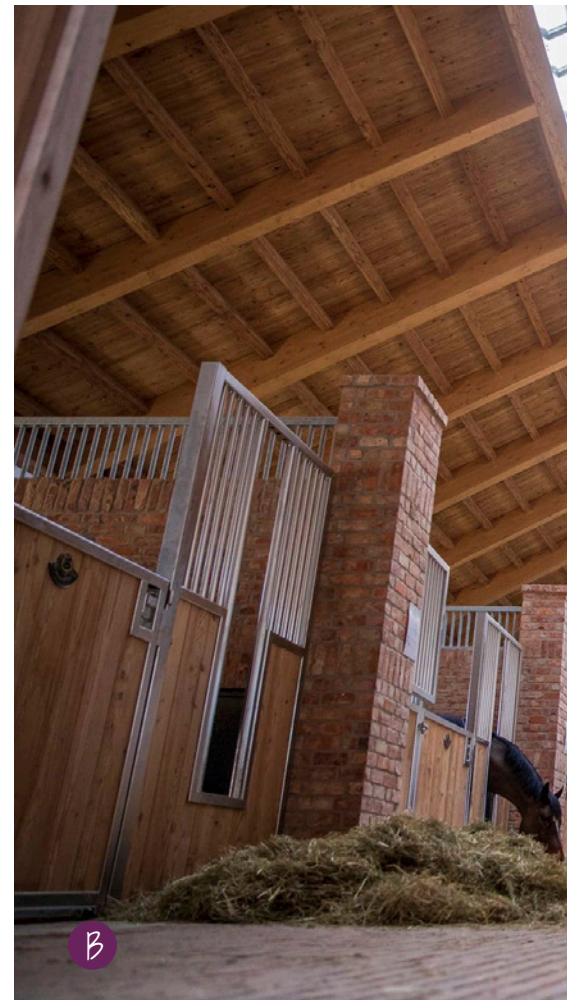
Image courtesy of Gut Schönweide.  
[www.schoenweide.de](http://www.schoenweide.de)

The mares played an important role in teaching the young stallion social rules. He remained with them until his foals were all born. Then, they tried working with him again. When the stallion returned to training, he was a different horse. The mares had taught him how to behave, and today he is both, a successful breeding stallion and an excellent cross-country horse.

### *Scientific stabling solutions*

Despite all the welfare and behaviour disadvantages, in many cases, stabling horses is unavoidable. But when turnout isn't an option, a few simple changes and enlightened approaches to stabling design can facilitate opportunities for equine interaction.

Breeding stallions are a good case in point. Traditionally considered difficult and even dangerous, they are usually kept in strict isolation with barriers that prevent them making physical contact with other horses. This, however, is likely to create a cycle of conflict behaviour.



In response to the increasing call for finding better housing solutions for stud stallions, the Swiss National Stud in Avanche, began experimenting with the idea of 'social boxes' designed to allow individually housed horses opportunities for social (and safe) interaction with their neighbours.

Their research project was such a tried and tested success that it inspired the German Warmblood stallion station Gut Schönweide to adopt these innovative design features.

"We attach great importance to the well-being of our horses" said Sonja Kruck, a spokesperson for Gut Schönweide.

"Our specially built 'social grids' permit stallions to extend their head and neck into the box next door, to socialize with their neighbour. The grids are installed on just one side of the box, so the stallions have space to withdraw and don't get harassed on two sides. The boxes are larger than normal (5 x 5m) so the stallions can lie down undisturbed."





Over in Italy, Constanze and Guido keep all their stallions and mares outside. Foals are weaned from their mothers at 8-9 months before being returned to the herd. At 20 months they separate the male colts from the mares and integrate them into a separate (bachelor) band. All their young horses live outside, even whilst they are in training.

"No horse should have to stay in a stable for 20 hours or more. I find it is sometimes a challenge to convey this [natural management] concept to others and demonstrate that it is possible to keep horses, (even competitive stallions) in this way" said Constanze. "The cost may be higher than conventional horse keeping (we provide a minimum two hectares per horse in the herd). But let's be honest, just as we are willing to pay a reasonable price for healthier organic meat or vegetables, the wellbeing of our four-legged friends is worth the investment.

"Our horses give us so much joy and will remain by our sides for many years if we keep them healthy, happy and active."

### Time to break the cycle

Land suitable for horses is expensive and hard to come-by, so it is unlikely we can ever expect to make do without confining horses, particularly near urban areas.

If you are planning on stabling your horse for long periods, consider the long-term effects this might have on his or her health and happiness. Horses are sentient beings with needs, wants and interests that are entirely independent from what we ask and expect from them.

Their incredible capacity to adapt allows them to tolerate confinement more than other species but unfortunately, it is also the reason they often submit to physical and psychological abuse by their handlers.

If we truly want to develop ethical and respectful relationships with our horses, we can and must challenge our old patterns of thinking.

Horses deserve to live their lives as nature intended, and it is possible to have a mutually beneficial relationship with these sensitive and intelligent animals without denying them companionship and freedom of movement.

Surely, it is worth making every effort.

This progressive stabling concept includes feeding bars into the stable corridors (see image above), a simple design idea packed with benefits. Not only does it make feeding out less time consuming for staff who don't have to enter each individual box, it also keeps the hay separate from the bedding; it gives the stallions ad-lib access at ground level and allows them to relax and enjoy their foraging in visual contact with the other horses in the barn.

The safety of the 'social grids' between stables that allow neighbouring stallions to have physical contact is more challenging for many of us to accept (see image A). However, according to Kruck, no serious injuries have been recorded apart from the occasional small bite wound or ripped horse rug.

"Initially, the stallions reared a bit and there was some threatening behaviour, such as squealing and knocking against the bars with the front legs. For that reason, the stallions' legs were bandaged the first day - as a precaution - but there never was any real aggression, even during the breeding season" said Kruck.

### Stallion turnout

The Gut Schönweide horses all get a good workout in the paddock before riding, which makes them more relaxed and balanced under saddle too. "We honestly believe that it's possible for every horse to be outside - no matter the breed" continues Kruck.

"Since our stud is still under construction, there is always a lot of noise about and the horses are not phased because it happens around them every day."

Gut Schönweide wants to lead by example, encouraging all stallion owners to allow their horses opportunities for free exercise and social contact.

"Stallions have the same herd instincts as any horse, and yes, we recommend you bandage your stallion for his first experience outside - but you should also have confidence in him too. If he gets a lot of exercise every day, he will be more relaxed and that will lower the risk of injury and allow space for an even better relationship to develop."