

# The 'vice' squad

**OUR EXPERT**

Justine Harrison



Justine is a qualified equine behaviourist who uses the science of behaviour to help owners better understand and resolve issues with their horses.

Owning a horse that windsucks, box walks or weaves is frustrating, but why do equines perform these behaviours and can they be resolved? Behaviourist **Justine Harrison** weighs up the evidence

Performing stereotypies can cause health problems – and damage to fencing

**CASE STUDY**

## “We resolved his crib-biting”

Sarah bought Jake, a three-year-old Belgian Warmblood to back and bring on. She called me out when Jack began biting the stable door. Initially he did it a couple of times, before turnout time, but then it occurred frequently and at different times.

The yard where Sarah kept Jake had restricted turnout and he was stabled for 20 hours a day. As Jake wasn't getting much exercise, Sarah restricted his hay to keep his weight down. It mean he was spending long periods of time confined to his stable with nothing to eat or do.

All horses need exercise, mental stimulation and the freedom to graze and run about, but for youngsters it's essential. They also need to be able to socialise and play with other horses.

When a horse's natural behaviour is restricted we often see 'problem' or unnatural behaviours occurring.

Sarah found a small yard to move Jake to, which has 10 acres of land. The horses are all turned out together from 7am until about 6pm and only stabled at night.

One of the other horses is a playful yearling who is fantastic company for Jake.

Sarah needed to change Jake's previous associations with being stabled (hunger, frustration and boredom) to be more positive. She 'enriched' his stable, giving him a huge straw bed, ad-lib hay on the floor and in nets, alfalfa blocks, strings of vegetables hung from the ceiling, a feed ball and different toys every day.

She started walking him out in-hand with equine company and taking him to graze in the lane next to the yard.

Jake has not bitten the door since his move. We caught the stereotypic behaviour before it became very established and changed how Jake felt about his stable.

## Copy cats

Many people worry about their horses 'copying' stereotypic behaviour from others, but there is no scientific evidence to support this.

Often, horses on the same yard may start performing these behaviours as the environment is the common factor. Perhaps the horse's basic behavioural needs are not met (they are unable to socialise or have minimal turnout) or the environment is somehow traumatic for them.

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**T**here are many theories why horses crib-bite, box walk and weave – behaviours known as stereotypies – and different views on how to manage or prevent them.

Some people believe they are copied from other horses, or that they can only be inherited.

In fact, there are so many conflicting opinions it can be difficult for owners to know what to do if their horse starts performing one of these behaviours.

## What are stereotypies?

Stereotypies are abnormal behaviours that are repetitive and have no obvious purpose or goal. They occur in many species and are recognised as a behavioural indicator of poor welfare.

Domestically reared horses and those captured from the wild may perform a range of stereotypic behaviours. However, none have been observed in free-ranging 'wild' horses.

The behaviours are often called 'vices' but this term is unhelpful as it implies the

horse is doing something wrong. In fact, he is desperately trying to adapt to a situation he finds difficult.

Stereotypies fall into several categories:-

### Oral stereotypies

- Cribbing/crib-biting;
- Wind sucking;
- Wood chewing;
- Tongue movements (rolling or lolling);
- Lip movements (lip licking and smacking)
- Rubbing teeth against objects or surfaces.

### Locomotor stereotypies

- Box walking;
  - Head movements (bobbing, tossing, shaking or swinging);
  - Pacing;
  - Weaving;
  - Wall kicking;
  - Pawing and digging.
- ### Self-mutilation
- Self-biting;
  - Lungeing into objects.

## Cause and effect

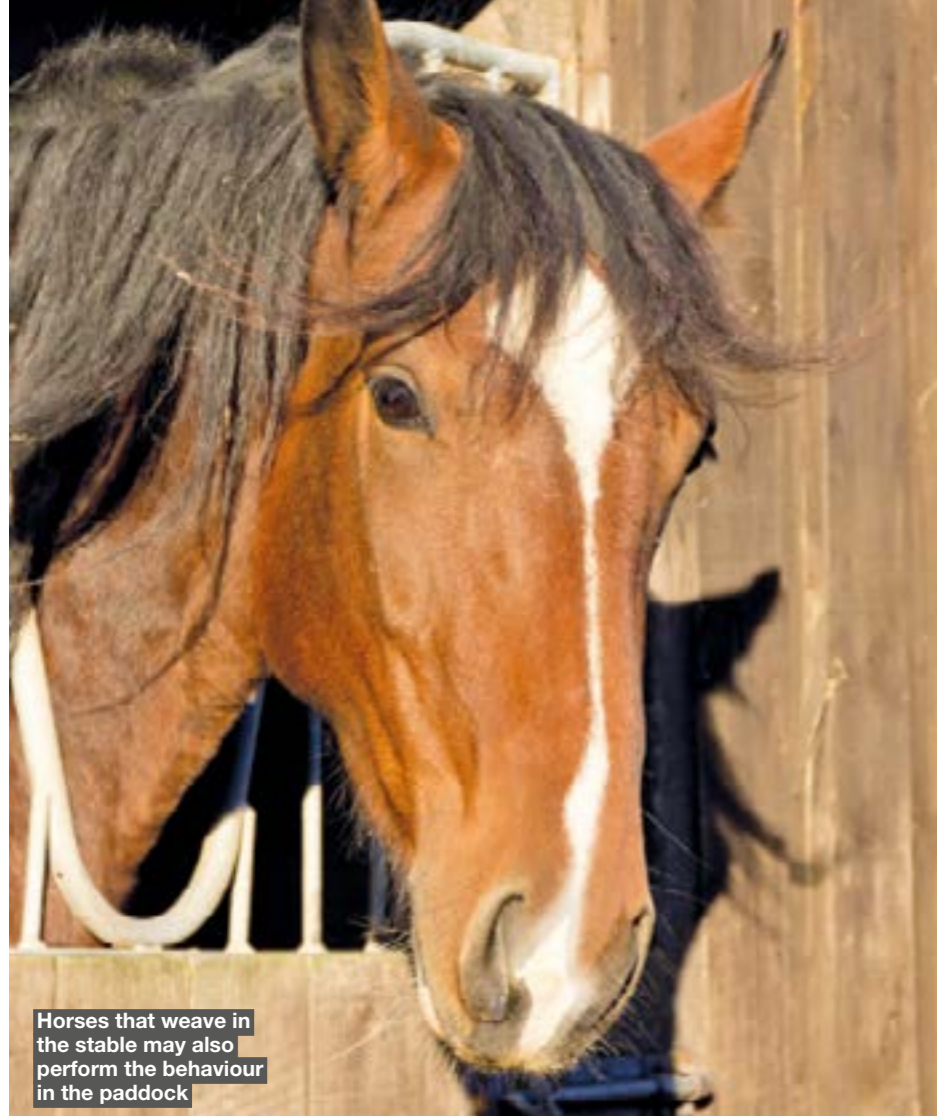
Animals often perform the behaviours listed left when they have no control over their situation.

Confinement, social isolation, unnatural feeding, over-feeding of grain, constant low-grade pain, the inability to escape frightening or stressful situations and environments that are barren and lacking any interest for the animal are all contributing factors.

The behaviour is often developed as a foal. Horses who experienced a traumatic or early

## Being in a more natural environment can resolve unwanted behaviour





Horses that weave in the stable may also perform the behaviour in the paddock

weaning are at greater risk of a stereotypy developing. Foals fed grain after weaning and those confined to a stable rather than put in a paddock were also more likely to start windsucking or crib-biting.

Once the behaviour starts, there is a high risk of it becoming habit – performing the action becomes rewarding for the horse.

Research has found cribbing has a similar effect on the horse's brain to the human brain when cocaine has been taken.

As a result, horses that have performed certain behaviours over a long period may start to perform them habitually rather than just at a particularly stressful time.

For example, a horse who has cribbed for many years only when stabled may also start to perform the behaviour when turned out, despite being in a 'healthier' environment.

### The health risk

Performing a stereotypy can put a horse's health at risk:-

- Oral stereotypies like cribbing and wood chewing can cause damage to teeth and gums.
- Locomotory stereotypies (weaving, box walking and head bobbing) can put excessive physical strain on joints.
- Weaving and pacing expend a lot of energy and it can be difficult to maintain a horse's weight.

- Wounds may be caused by self-mutilation or wall kicking.

There are further worries for the owner – their horse will not be welcome on all livery yards; fencing and stable doors can be damaged and some stereotypies increase the risk of colic.

Vets will often advise against a buyer purchasing a horse that performs stereotypies, and therefore his financial value is reduced.

### Can we fix it?

Whether you can resolve the stereotypy depends on how long the horse has been performing the behaviour, his age and the type of stereotypy performed.

If the behaviour has just started and is not well-established, you have a good chance of resolving the problem.

The most important thing is to seek professional help immediately. Call your vet and ask them to assess your horse and rule out any physical problems.

Then, contact a qualified behaviourist – they can help you analyse the cause and set up a plan to reduce or resolve the behaviour.

Stereotypies are almost impossible to stop completely if they have been performed repeatedly long-term. However, the problem may be able to be improved or resolved so it is always worth getting expert advice.

## Learning difficulties

Researchers at the Royal Agricultural University discovered that horses who crib-bite find it difficult to change something they have learned.

Horses in a study were taught to touch a coloured triangle on the wall with their muzzle, in order to receive a food reward. All the horses learned the test very quickly.

They were then asked to touch a new shape next to the triangle, a coloured circle.

Many of the horses found it difficult to change their behaviour and touch the new shape – in some cases taking as many 100 attempts.

However, those that cribbed were by far the worst performers, and some failed to learn the new task.

If you have a horse that cribs, bear in mind that he may find it difficult to 'unlearn' something he has been trained to do.

Be patient and if he doesn't understand what is being asked of him, try asking in a different way.

## Avoiding stereotypies

To prevent horses developing stereotypic behaviours we need to understand their innate needs and ensure these are being met:-

**Appropriate weaning:** Foals should be weaned gradually from their dam, keeping stress to a minimum. Weaning should be done no earlier than at six months old and ideally later if at all possible.

**Friends, forage and freedom:** By far the best way to relax your horse is to give him as much access as possible to turnout, equine company in a friendly stable group and ad-lib grazing or good quality forage. If your horse has to be



One of the innate needs of a horse is to interact with other equines

stabled, ensure he can see – and preferably touch and interact with – other horses.

**Environmental enrichment:** Research has found that 'enriching' a horse's environment can provide mental stimulation and prevent boredom. Try these ideas:-

- Make root vegetable 'kebabs' by threading them onto strong cord or rope and hang from your stable ceiling or tree branches in the field.
- Hide treats such as apples or carrots inside towels or staple-free cardboard boxes and allow your horse to investigate.
- Suitable plants can be placed amongst the forage ration. Horses love cow-parsley,

cleavers, mint and dandelions – find out what your own horse enjoys.

● Studies have shown that given a choice of bedding, horses prefer a big straw bed to rummage through.

**Routine:** Maintain a consistent daily routine – feed and turnout at the same time whenever possible. Keep horses in the same groups and have regular handlers for each one.

**Sleep:** It is important horses feel safe enough to rest and sleep well. Is your horse feels threatened by a field mate, turn him out with friendly company instead. If stabled at night, make sure he has a big stable and a deep bed

## TIP from the TOP

Avoid stereotypies developing by ensuring your horse has access to 'friends, forage and freedom' to keep his stress levels down.

to encourage him to lie down. Turn off lights and avoid disturbing the horse.

**Feeding:** Access to grazing

is ideal, but you can also feed

good quality forage as a replacement. Research has shown that horses crib-bite less when fed forage at the same time as their grain feed. Feeding forage-based diets and reducing concentrate feeds is also recommended.

## The link to gastric ulcers

Horses that crib and windsuck are often found to have gastric ulcers.

There is debate over whether, in some cases, the horse may start performing these stereotypies to produce saliva that will buffer stomach acid. This eases the pain caused by the gastric ulcers.

Evidence shows crib-biters drink more water compared to normal horses, which may be for the same reason.

However, there is also a school of thought that horses which perform stereotypies are so stressed they are at a higher risk of developing ulcers. This is because stress increases the levels of acid in the horse's stomach. ■

● For more information on gastric ulcers, see page 96.

## Does suppression work?

Research has shown that performing stereotypic behaviours can reduce stress and it may relieve physical discomfort.

Therefore, stopping a horse from performing the behaviour could be detrimental to his welfare.

A whole range of devices are available to try and prevent stereotypies, such as anti-weaving grilles and collars to prevent cribbing or windsucking. Surgery has even been performed in some cases, where muscles and nerves are cut in order to

prevent a horse from arching his neck to draw in air.

But attempting to stop the horse performing a stereotypy does not address or resolve the cause of the problem. It could cause the horse more stress, or result in him finding another unwanted behavior to perform.

Horses prevented from windsucking by having bars placed around his stable may start sucking in air while standing in the middle of the stable.



Preventing a horse from performing a stereotypy – such as using a weaving grille – could cause him stress