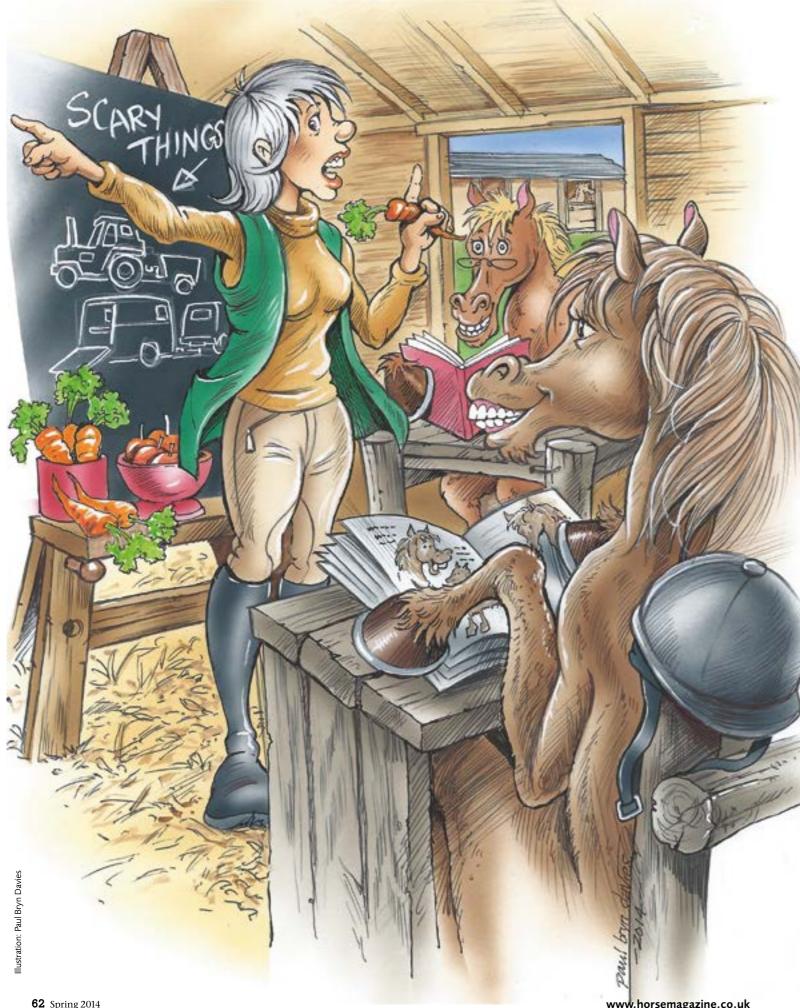
HORSE WORLD HOW HORSES LEARN





Justine Harrison is an equine behaviourist who uses the science of behaviour to help owners solve a wide range of issues with their horses.

TRAINING INSIGHTS

Build a better relationship with a horse by discovering how he learns and processes information. Justine Harrison helps you train your horse the right way

here is an increasing number of training methods which are promoted as being 'ethical', 'natural' or 'speaking the horse's own language'.

It can leave owners confused as to what is the best route to take, whether they are looking for a trainer or want to teach their horse themselves.

But instead of focusing on which is the best training method to use, a better approach is to consider the scientific principles of how horses learn so we can create a tailor-made programme to personally suit us and our horse.

If we understand how his mind works we can decide which methods are ethical, teach the equine more effectively, improve performance and develop our relationships with him.

A horse learns and acquires knowledge about his environment and handlers all the time.

But just like people do, individual horses have different rates of learning and may find some things easier to learn than others - there is no 'one size fits all' when it comes to training.

This could be as a result of genetics, upbringing, life experiences and how they have been managed.

Horses learn in a variety of ways and here are some key examples:

Learning method: Habituation

Habituation is the simplest form of learning and it means getting used to something over time.

In this way, horses learn whether something is important to them or not.

For example, horses turned out in a field next to a motorway may initially be anxious about the traffic, but over time they will learn there is nothing to fear and will become accustomed to the sights and sounds.

> In a few hours they may move a little closer to the fence and after several days they may be grazing alongside the motorway.

When you are introducing your horse to something new for the first time, break the whole process down into small steps and let him become accustomed to it over time.

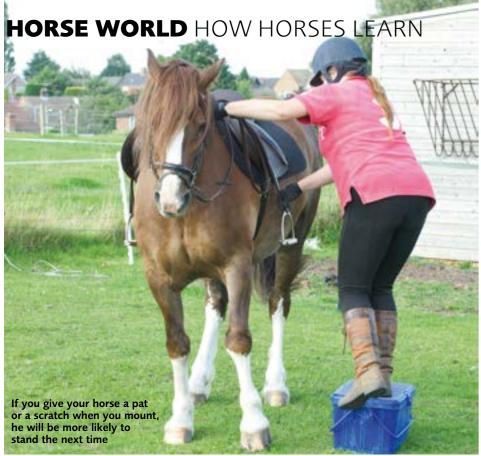
If your horse has never seen a tractor before, have one parked a distance away, perhaps 20 metres or so, and let him move towards it at his own pace.

Ideally, he should be loose and free to make his own decision to move away. If this isn't possible, you could use a flat headcollar with a loose lead rope and let him leave if he wants to.

Once your horse is accustomed to the sight of the parked tractor, you would repeat the process with its engine running, then again with the vehicle moving.



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The process would need to be repeated in a variety of situations, with the horse encountering the tractor in different locations.

You can speed up the training process by using positive reinforcement (see right) – rewarding your horse when he takes a step towards the tractor.

Be a smarter trainer

- On't use too much pressure: if
- a horse doesn't perform the required behaviour, he may not understand what is being asked. Or, he may be afraid or in pain. Don't fall into the trap of using escalating pressure or harsh gadgets to try and force a horse to do something as this can lead to behavioural problems.
- Perfect your timing: Rewarding a horse long after the event will mean nothing to him. He must immediately make the association between the behaviour he's performed and the resulting consequence.
- Have patience: Don't push a horse to do too much, too soon. While he is learning something new, a horse can take as long as 10 seconds to decide to do something. Give him time to respond.
- Keep him interested: Repeating a task over and over again will just result in a horse becoming bored and losing interest. Some learn very quickly and don't need to repeat tasks very often. If your horse consistently performs the desired behaviour in a training session, give him a break and move on to something else.

However, if you rush, force or punish your horse while he is learning about the tractor, you risk sensitising him to it. His fear may be increased and he could become more frightened than he was initially.

Learning method: Operant conditioning

Here, an animal learns from the consequences of his actions.

The term 'operant' was coined by behaviourist B F Skinner in the 1950s and was used to mean any "behaviour that operates upon the environment to generate consequences".

Skinner found the consequences of behaviour are either reinforcing or punishing:-

- Reinforcement is any event or thing that makes a behaviour more likely to happen again;
- Punishment is something that makes a behaviour less likely to happen again.

Reinforcing or punishing consequences are either classed as positive or negative. We are taught to think of 'positive' as good and 'negative' as bad.

However, in the case of operant conditioning, positive simply means adding something and negative means withdrawing or withholding something.

It is important to keep this in mind when understanding how this type of learning works.

Positive reinforcement: This is the addition of something rewarding to the

horse which makes a behaviour more likely to happen again.

An example could be teaching your horse to stand still to allow you to mount. If he stands quietly, reward him with something he likes or enjoys – a treat or a scratch on the withers.

As he was rewarded, he will be more likely to stand the next time you mount.

Take into account, though, it is the horse that decides what is reinforcing for them. If your horse doesn't like scratches, then doing so won't be a reward for him.

Negative reinforcement: Here, you are removing something unpleasant which should result in the horse being more likely to repeat a desired behaviour.

It is a common method of training used with horses, and is often referred to as 'pressure release'. While leading your horse you may ask him to stop by putting pressure on the leadrope – when he stops, you release the pressure.

Negative reinforcement occurs when the pressure is released and, as a result, the horse is more likely to stop in the same way next time.

Another example is using your legs to ask your horse to change pace.

Once he's upped the pace, you stop using your legs. By doing this as soon as he has complied with what you want, you have increased the likelihood of him increasing the pace next time you use your leg aids.

Be careful as pressure must be kept to a minimum. If you use too much, you risk frightening the horse.

Positive punishment: The addition of something unpleasant when a



If a horse mugs you for treats, taking them away will show him the behaviour was wrong "Individual horses have different rates of learning and may find some things easier to learn than others" www.horsemagazine.co.uk

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horse exhibits an unwanted behaviour can reduce the chance of it recurring.

Smacking or telling a horse off because he's mugging you for treats is positive punishment.

It is a method often called on in horse training but it is mostly inappropriate. Too often, horses are punished when they are frightened, already doing what has been asked or long after the event.

Sometimes, it happens because the rider is in a bad mood or frustrated, and is taking it out on their horse.

Negative punishment: Here, you remove something rewarding to the horse, which makes the behaviour less likely to happen again. For example, when your horse is mugging you for the treats in your pocket, if you ignore him and withdraw the food he will back off.

For any of the 'operant conditioning' principles to be effective, good timing is vital. The consequence must be delivered immediately after the behaviour occurs, and it must be consistent. Many people are inconsistent in the way they deliver a reward or punishment.

As a result, the horse becomes confused and the training isn't successful. This is why it is advisable to work with an experienced professional who can help you improve your timing and skills.

Every interaction you have with your horse will have an effect on them - you are training them all the time whether you realise it or not.

Using excessive pressure or punishment risks the horse becoming fearful (and possibly aggressive) and he may start to associate you and your training with that fear.



Horses naturally want good things to happen and avoid unpleasant experiences, so they will enjoy their training when it is rewarding to them.

The emotional and physical state of your horse will depend on how you train and it is far better to motivate your horse to do something than force him.

Flooding: a word of warning

Flooding is a method sometimes used to treat human phobias. It involves the person being exposed to the thing they fear, with no means of escape.

For an arachnaphobic, it could involve being shut in a room with several spiders, in the hope they would get used to them over time.

However, the technique can make matters worse and can cause the 'patient' to become terrified.

Unfortunately, people inadvertently use flooding when training horses.

For example, if a horse is frightened of a horse box or travelling and won't load, an owner may use lunge lines and whips and force them to load.

The horse's fear may increase to the point that they collapse and give up.

His original fear has not been solved, but has probably escalated, and as a consequence the horse may develop severe behavioural problems.

Using a gradual step-by-step approach is a far better way to introduce your horse to something new or to retrain him to approach something that he fears.



Studies have been performed which showed horses trained using positive reinforcement (well-timed food rewards) learned tasks faster. They also remembered them for longer than those who had been trained without rewards.

The research, which was performed by Carol Sankey MSc at the University of Rennes in France, also found the horses were generally friendlier to humans and more likely to come closer to people they didn't know months after their initial training.

The horses had made a more positive association with humans, having been rewarded, and this improved the horse-human relationship.

>> NEXT ISSUE: WE EXPLORE MORE LEARNING TECHNIQUES AND SHOW YOU HOW TO COMPILE A SUCCESSFUL STEP-BY-STEP TRAINING PLAN FOR YOUR HORSE.

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