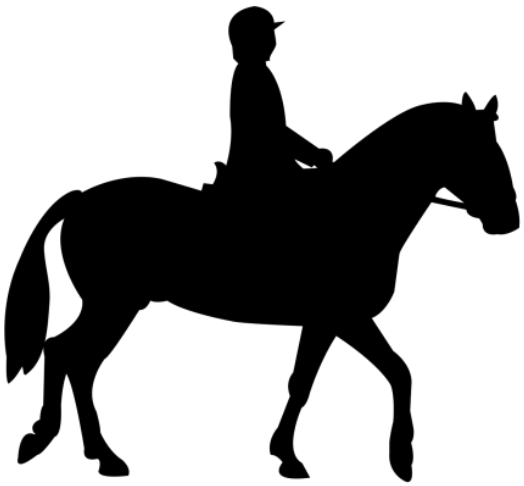
PONY CLUB
AUSTRALIA

2021 Coach's Manual

C Star and K Certificate

* Equitation Science component



First published in Australia in 2021

by Pony Club Australia Ltd

ABN 95 090 080 265

www.ponyclubaustralia.com.au

E: marketing@ponyclubaustralia.com.au

Contents

C* and K Certificate Coach's Manual Update (Equitation Science)

Introduction

As Pony Club coaches we're responsible for sharing our knowledge and the Pony Club syllabus with new generations of horse lovers. Not only do we nurture a respect for the horse, but we also educate our students so that they can ride in a balanced and effective way. We help young riders to develop correct habits and horsemanship skills that are consistent with the community's expectations of animal welfare and that will endure, regardless of where their riding journey takes them.

However, while it's very important that we make sure Pony Club is educational, fun and rewarding our most important duty as coaches is to keep our students safe. Unfortunately horse riding is a dangerous activity, causing 25% of all lethal injuries in children's sport. (It is statistically more dangerous than motorbike riding with 7.8 fatalities per 100,000 participants per year and the group at the most risk of injury and death are young women.) While it would be impossible to make horse riding entirely risk free, as coaches we need to maintain our focus on improving safety wherever possible.

As well as focusing on safety we must also ensure that our students have the understanding and knowledge to make good decisions regarding horse welfare. The world is changing rapidly and we are learning more about the horse every year. Our teaching must reflect these changes – we must be ethical custodians of the horse so that future generations of students can enjoy the horse as we have done.

The new Pony Club Australia syllabus has been written to both honour the contributions and knowledge of the past while embracing the improvements in training effectiveness, safety and welfare that science can bring. Implementing an Equitation Science based training program has been proven to be the most effective way of maximising rider safety and horse welfare. Equitation Science takes the guesswork out of training and significantly enriches our relationship with the horse as it reveals his extraordinary abilities and the differences between our species.

Change can be daunting and while you may have to learn some new concepts, specifically relating to the way that horses learn, you will probably find that the new syllabus is not unlike its predecessor.

It's quite likely that most of your lesson plans and activities will still be able to be used with a few simple changes. The whip and spur licence will give you more opportunities to safeguard the welfare of the horses that you teach and the dual stream K and B certificates will offer non jumping riders a clear, alternative pathway. The simple groundwork component will help you to keep your students safe when handling their horses and give them the tools to manage their horses in a more effective way.

It is our sincere hope that you will enjoy learning the new material in the PCA syllabus and that your willingness to learn will be communicated to your students – instilling in them a long lasting habit of education that can, in the long run, only prove to be of benefit to the horse.

Dr Andrew McLean and Dr Portland Jones

C* and K Certificate Journals

In the new C* and K Certificates you will have noted that students are required to keep a journal. This isn't supposed to be a chore, it is an instrument to encourage good record keeping practices and a certain degree of introspection and objectivity relating to equestrian pursuits. Students should be encouraged to keep the journal in a form that is appropriate for them. For example, students with limited literacy skills could keep a video journal.

As it states in the manuals, the journal should include the student's observations about the horse/s in their care, notes from Pony Club rallies, lessons and competitions, work sheets, any interesting magazine articles and records of all routine and emergency veterinary procedures. The journal is a way of keeping track of progress and a way for the student to record their successes and the times when they were less successful.

Ideally the journal will be a record of the candidate's learning experience and a way to remember the skills and knowledge that they acquired during their Pony Club years.

The K Certificate

You will have noticed that the new K certificate differs from its predecessor. It is similar to the C* Certificate except the jumping component has been replaced with other activities.

K Certificate candidates will choose an equestrian discipline to explore. They will need to demonstrate that they have committed enough time and energy to their chosen discipline to develop an agreed upon level of competency and a thorough understanding of the principles. The skill chosen must be agreed upon by both the coach and the student and suitable strategies for assessing progress should be made collaboratively. At least 20 hours should be dedicated to this alternative discipline throughout the year.

In addition, the K Candidate is to choose from one of the following:

Community Service

The candidate will spend 10-15 hours on a project that will benefit the local equestrian community. This could involve creating a website for a local business, developing a risk management plan (in

conjunction with club officials) for club events, writing articles for a local newspaper about their club or performing volunteer activities for the club (such as painting jump poles or running a training day).

Or

New Skill

The candidate will spend 10-15 hours learning a new skill. This should be equestrian related in some way. Skills could include course designing for cross country, clipping, float maintenance or a first aid certificate.

The new skill component could also be in the form of a 2500 word research project in an area of interest such as Equitation Science, feeding, conformation or conditioning practices for sport horses.

What is Equitation Science?

The new Pony Club syllabus is based on Equitation Science. This is a relatively new field of science that aims to understand the horse and how he learns. It doesn't belong to anyone – it is a field of endeavour populated by scientists from all around the world, working together to make training safer, more effective and with better welfare outcomes for the horse. It is currently one of the fastest growing sciences in the world and is being taught to vet and animal science students in dozens of universities across Australia, Europe, Canada, the UK and the US.

Equitation Science embraces all forms of training that are evidence based and ethical. It has a strong focus on ethology (the study of the horse's natural behaviours) and learning theory (the study of how animals and people learn). It also incorporates biomechanics (which is the science of how the horse moves) and recognises the limits of the horse's cognitive (thinking) and physical abilities. It provides answers to the questions that have troubled horse people for thousands of years and in the process makes horse training safer and more effective. Equitation Science is the best way to improve the welfare of horses because it doesn't guess. As Professor Paul McGreevy says, "Equitation Science measures only the measurable."

A Note on the Use of 'He'

Throughout the manuals the horse is referred to as 'he'. This is, in no way, meant to suggest that geldings are superior to mares, it is just simpler than "he/she." It is a convention of the language in the same way that naming the left hind first when listing the footfalls does not infer that the left hind has special functional significance.

The Ten Principles

It is hoped that throughout their Pony Club years riders will gain a thorough understanding of the Ten Principles of Training as endorsed by the International Society for Equitation Science.
These principles apply to all horses regardless of discipline. They are not only a guide to make training as effective as possible they are also a way of ensuring the best possible welfare of the trained horse and will help improve rider safety too.

1. Prioritise safety when around horses.
2. Understand what the flight response looks like and how to manage it.
3. Understand that the horse's brain is different to ours.
4. Prioritise calmness and be consistent at all times.
5. Find ways to get the horse used to the things that scare him.
6. Use pressure-release and reward training effectively. Avoid punishment.
7. Use voice, seat and weight aids correctly and understand their limitations.
8. Train behaviours gradually.
9. Only give one aid at a time. Each aid should produce only one response.
10. Always prioritise self carriage.

Activity

It is useful to try and think of the Ten Principles in every interaction that you have with the horse, both on the ground and under saddle. It would be worthwhile to have a poster with the principles written on it in the Pony Club clubhouse (A poster is available for download on the PCA website under Resources). As an activity you could talk to your class about their own horses and ask them to consider if there is any aspect of their training/management that could be improved with the Ten Principles as a guideline. It is also useful to have a discussion about various training techniques to see if they do or do not adhere to the Ten Principles. Techniques such as 'rollkur' and rapping obviously do not adhere to the correct principles – you could ask your students to identify why and get them to come up with other techniques that are also problematic.

The Evolution of the Horse

Ethology is the study of an animal's natural behaviours and it is a useful way to gain an insight into the nature of the horse. These natural behaviours have been honed by evolution over many thousands of years to enable the horse to survive and breed. When we consider the evolution of the horse we can see that his behaviours have been formed by a very different environment than the one in which our human behaviours evolved.

Horses are a prey species which means that they evolved to run away from things that frighten them. This instinct is called the **flight response** and it makes the horse's legs move quickly when he is frightened, confused or upset. This provides one of the most important insights into the horse's behaviour because although the horse has been domesticated over 5000 years he still possesses the same instincts as his wild ancestors. In a training context the flight response can show up as a lack of self carriage, shying, swerving, bucking, rushing at jumps and bolting. The degree to which the flight response is displayed is variable – it can be on at full volume or it can be barely present. However, any amount of flight response in training is undesirable because it is detrimental both to the horse's welfare and rider safety.

This is particularly relevant in jumping because a horse displaying the flight response will often jump with less bascule and make a flat jump and thus make it more likely that he will hit the fence with his knees. Although in show jumping this will lead to rails, in cross country this kind of jump can lead to falls of both horse and rider. Although many people would suggest that rushing at fences indicates a love of jumping, horses that accelerate towards their fences are actually just displaying the flight response. Training calmness by focusing on self carriage and by doing downward transitions after the fence will help overcome this.

Activity

As an activity it would be interesting to watch videos of horses being ridden and identify when the horse is displaying the flight response. To identify the flight response, look for fast legs often accompanied by a raised head carriage, quickening, random swerves or losses of line and wide eyes. Excessive sweating and general anxiety are also indicators of the flight response. Horses that are ridden with strong bits may also be exhibiting the flight response as high levels of adrenaline act as an analgesic (pain killer) and may make the horse less sensitive to the rider's aids.

As was mentioned previously the horse was domesticated over 5000 years ago. In many ways the horse was a perfect candidate for domestication. As an activity your C*/K students could make a chart showing the characteristics that made the horse an ideal candidate for domestication. Your students may be able to think of more qualities.

- The horse isn't territorial (unlike a tiger) so he is very mobile.
- He is a herbivore. The carnivorous polar bear, which is often a similar size to the horse (400 – 500kgs) eats approximately 40kgs of meat in one feed, which would make them very difficult to keep in large numbers.
- The horse can survive on a variety of different grass species unlike the panda whose diet is 99% bamboo.
- He is able to eat and run, unlike ruminants like sheep and goats that need to lie down in order to digest.
- Foals can be raised by their mothers and don't require two parents unlike emperor penguins.
- The horse does not have antlers or horns which makes him easier to handle.

In the past 10,000 years humans have tried to domesticate many different species but the horse is one of only 12 large mammals that were successful. Can you think of any other characteristics that might have led to the domestication of the horse when so many other animals were unsuccessful?

Over the years the way that people have trained and managed horses has changed. Often when we look back at the training techniques of the past they may seem overly harsh but it is important to see them in their historical context. As an example, Francois Baucher was born in 1796 and lived into the nineteenth century. During Baucher's lifetime slavery was abolished but women were unable to vote. Young children were still sent to work in coal mines and most people could not read or write. The world was a very different place and consequently so was horse training.

It would be useful to consider with your students the changing nature of the world today and how this impacts upon training practices. The concept of social licence to operate (SLO) was brought into being nearly two decades ago and it is the acceptance of certain practices by the community. Social media and the widespread use of phone cameras has made the horse industry subject to increasing scrutiny. Because it is evidence based, Equitation Science is a very effective way of assuaging public concerns about training while also ensuring that the horse has optimal welfare.

When training is validated scientifically the public can be reassured that the horse is being treated in the best possible way.

Activity

The first known text on training was written by a Greek scholar and soldier called Xenophon who lived over 2000 years ago. The book *On Horsemanship* is remarkable because in an era when violence was far more common than it is today, Xenophon advocated kindness to horses and many consider him to be the father of modern training. Your students could make a poster or write a brief description of Xenophon and include some his words which, despite being over 2000 years old, are still as relevant today as when they were first written.

"Anything forced is not beautiful" — Xenophon, The Art of Horsemanship

How the horse works (memory, habits and intelligence)

It's really useful for students to understand the differences between the horse's brain and our own. Anthropomorphism – which is believing that animals have the same mental characteristics as humans is a problematic practice because it can lead to overly complex and unfair training. It can also lead to the belief that the horse is doing things with the same motivations as humans. For example, it is not possible for the horse to be deceitful or spiteful because he simply does not possess the neural architecture for those emotional states. Emotions as complex as those require a sophisticated dorsolateral prefrontal cortex (the big bulge at the front of a human brain) which the horse does not have. This is not to suggest that he doesn't have any emotions at all, simply that they are far less complex and more related to survival.

However, what the horse does have is a brilliant memory – in many ways better than our own. It is, though, very different to ours. The horse's spatial memory is almost perfect – but he can't recollect or think back on events, his brain is a little more like a GPS which stores mental maps for places. If you consider the evolution and the selection pressures that created the modern horse it is easy to understand that this aspect of the horse's brain is all about survival. Human memory is not very reliable because we can access our memories at will and every time we do that we risk restoring them slightly corrupted. The horse can't do that so his memory is almost perfect. This is of course of vital importance because the shadow that wasn't there yesterday could be the shadow of a predator. Horses rely on their super-fast reactions, speed and brilliant memory to avoid dangers in their home range.

Activity

Ask your students to test how good their horse's spatial memory is. Change something in his environment and see if he notices. For example, putting a wheelbarrow or an upturned bucket in the middle of the arena will make most horses very curious and some quite frightened. Unfamiliar things in familiar places can be very frightening for the horse.

Activity

Ask your students to recall times when they were riding their horse on the trails and the horse seemed to know exactly when he was turned for home. The ability to find the way back to the home range is of great importance to the wild horse because he needs the safety of a herd. If a predator scatters the herd it is very useful for the individuals to be able to find their way back to each other.

Another thing that the horse is very good at is forming consistent habits. Habits are useful for prey species because they allow for immediate reactions. So, for example, the sound of a stick breaking may trigger running away behaviour. Habits are also a lot easier to create and maintain than complicated thinking like reasoning and logic.
The brain is the most expensive (in terms of the energy it uses) organ in the human body. Horses, adapted to eat low protein grasses, do not have the wherewithal to run a large and complex brain.

Every animal on the planet is exactly as intelligent as it needs to be in order to survive in the environment in which it evolved. Evolution tends to hone the characteristics that an animal needs and discards the ones that it doesn't. So, while it might be tempting to think of the horse as a lesser version of ourselves, the truth is that his brain is perfectly adapted for the task of acquiring his herbivorous diet, running away from danger and maintaining close social bonds. On the other hand our brain is adapted for the far more complex task of acquiring an omnivorous diet, predating upon other animals and communicating with other humans using language.

However, it is important not to spend too much time comparing our brain to the horse's because they are both beautifully adapted for the tasks that they do and viewing the horse's intelligence as a lesser version of our own could blind us to his unique and extraordinary abilities. Rather we should endeavour to understand as much as possible what the horse requires for optimum welfare and to manage and train him in the most ethical way possible.

Rider's Tool Kit

In this section of the manual, you will find the building blocks of a correct training system. It is important to understand how the horse learns and, not only that, but that he is learning from every single interaction that he has with humans. This is why even the most placid schoolmaster can become unruly when handled incorrectly.

In the lower level Pony Club certificates, riders learned about reward training and pressure-release. Once you understand that the horse does not have the ability to use higher mental processes like reasoning and logic it becomes clear that the timing of your aids is extremely important. There is only a very small window of opportunity to reinforce the correct behaviour (either via pressure-release or reward) and missing that means that you are reinforcing a completely different behaviour.

It is said that in training you get the behaviour you reinforce, not necessarily the one that you want. What does this mean? It means that behaviour that is reinforced will be repeated, regardless of your intentions. So, if you are riding a downward transition to halt and you are slow to release the pressure when the horse stops but instead allow the horse to reef the reins from your hands (thus removing the rein pressure) you have inadvertently trained the horse to reef. Behaviours like reefing are almost always the result of incorrectly timed reinforcements. Another example: if you are attempting to touch the horse's ears and he avoids your hand by throwing his head up he will quickly learn that throwing his head up is a good way to avoid having his ears touched. That's why it is important to train progressively and never be in a hurry.

When you are using rewards or pressure release training the reward or the release must be given at the EXACT moment the horse offers the correct behaviour. Not one second or five seconds later because then you are simply reinforcing that behaviour. This is one of the many reasons that punishment is so problematic and often ineffective during training – apart from the ethical considerations, it is extremely difficult to apply a punishing stimulus at the exact moment that the incorrect behaviour occurs.

Because the horse does not ascribe value judgements to his own behaviour (that is, he doesn't view behaviours as naughty or good, he simply does what his training, his history and his breeding predispose him to) he doesn't 'know' that he has done something wrong, therefore timing is critical.

Pressure–release Training

In the C* and K manuals the students build on their knowledge of the science of learning. Correctly applied pressure-release training is the foundation of all effective, ethical training systems and so careful attention should be paid to its application. It should be noted that the pressure used should never be painful, only mildly annoying. The horse is extremely responsive to pressure and therefore excessive use of spurs, whips and strong bits is a very clear indicator that training has been incorrect in the past.

In correctly applied pressure-release training the pressure used starts off very lightly, increases in intensity until the horse does the desired behaviour and then ceases immediately. In many situations it is useful to also reward the behaviour with scratching and stroking on the neck. Aids must always start lightly and build in intensity. This way the horse is able to control the amount of pressure that is used as he can choose to perform the behaviour from a very light signal. Giving the horse this control over the pressures used is extremely beneficial to his welfare and, in fact, is vital if the horse is to have optimal quality of life.

The pressure used should increase in intensity in a predictable way. Generally speaking, the aid should be started and finished within about three to four seconds. The horse has a limited working memory so if the pressure is increased too slowly he might not make the mental connection between the start of the pressure and the release. If the pressure is increased too quickly the horse does not have adequate time to respond in a calm way and may become tense.

We can think of all pressure-release aids as being in three parts. The light aid, which increases in intensity to become the heavier aid and then the release of the pressure. The aid must always start out lightly (because this allows the horse to avoid heavy pressure) and must be released immediately when the horse complies (because this tells him what he did was correct). The release of the pressure is the most important part of the aid because it is this that communicates to the horse that his behaviour was correct. Therefore, when applying aids the only variable aspect is the second phase – the heavier aid. If the horse is very responsive, the heavier aid may not be needed. If the horse is not compliant it might be necessary to increase the pressure of the second part of the aid so that it is more annoying. However, every aid must always start lightly and be released as soon as the horse complies.

There are four very important factors to be considered when training using pressure-release.

1. The pressure should only be released when the horse gives the correct response.
2. The pressure should gradually increase during unwanted behaviours.
3. There should be no gaps greater than one second in the pressure. Therefore, if intermittent pressures such as whip taps are used they should be quite quick, as any gap of greater than one second may be perceived by the horse as a release of the pressure.
4. The pressure must be released entirely at the start of the correct behaviour.

It is very useful to get students to rate the pressures that they use in training on a scale from one to ten, where one is extremely light and ten is extremely heavy. Ideally all aids will be between a one and a three out of ten. Anything heavier than a seven out of ten is heavy enough to be painful and needs to be addressed with further training.

It is useful for students to objectively assess and classify their aids as it will give them a guide for future training. For example, if the horse usually performs downward transitions from very light aids (a two out of ten) and in different circumstances (for instance when on the cross country course) becomes very heavy, the student will know that the situation is overshadowing the horse and more training needs to be done.

Rein Contact

There is often a great deal of confusion over the concept of rein contact. Contact is the amount of pressure applied to the reins in order to maintain steady communication with the horse. Contact is required for higher level dressage and also jumping as it offers the rider a finer degree of control and is one of the first steps towards collection. Contact should be elastic – which means it should move with the horse, and it should be light – which means it should weight very little more than the reins themselves. Contact should entail barely more pressure than the amount required to keep the reins from sagging when they are correctly held by the rider.

Heavy or unrelenting pressure is very bad for the horse's welfare and is also bad for his training. A heavy rein contact might be a sign that the horse is expressing the flight response because if you let go he would run faster or run away. Constant heavy contact will make the horse less responsive to the stopping aids and is bad for his welfare.

Reward Training

One of the rules of training is that behaviour that is reinforced is more likely to be repeated. Reinforcement can be given either via a release of pressure or a reward. In order to be reinforcing a reward must be something that the horse wants. Therefore, praise and vigorous patting are not reinforcing. Food and scratching / stroking are most often used as reinforcers.

It can be useful for students to experiment with different kinds of scratching to see which kind their horse enjoys the most. Most horses respond well to rubbing or scratching at the base of the wither. This spot, which is conveniently close to the rider's hand, is one of the few places that the horse cannot reach himself. This is why you will often see horses in the paddock mutually grooming each other there. So important are social interactions to the horse that if he has elevated blood pressure (because he is anxious or frightened) rubbing the base of the wither can gradually lower his blood pressure.

Sadly, because modern horse management practices often do not allow contact between horses and don't always privilege tactile contact between horses and humans, many horses will have to be taught to respond to touch. However, with patience and persistence most horses will find scratching/stroking very reinforcing.

Activity

Ask your students to scratch or rub their horses on the neck until they find a place that the horse enjoys. You will be able to tell that the horse is enjoying it because his eyes will often get a little sleepy, his bottom lip might droop a bit or he might try to groom the handler with his teeth. Although mutually grooming the handler seems quite cute, it can lead to some painful bites and should be gently discouraged.

Classical Conditioning

Classical Conditioning occurs when two stimuli become paired. It is the reason that seat, weight and voice aids work and is also why conditioned reinforcers are effective. It was first studied (in the very first years of the 20th century) by a Russian scientist called Ivan Pavlov who was studying the physiology of digestion. Pavlov had tubes sewn into the mouths of dogs and he would measure the amount of saliva that they produced when they were fed. Everyday Pavlov's assistant would bring the dogs' food on a trolley and Pavlov would measure their saliva. The trolley that the assistant used

to bring the food had a squeaky wheel and very soon the dogs were starting to salivate when they heard the trolley coming down the hall. Pavlov was fascinated by this phenomenon. He decided to ring a bell just before giving the dogs their meat and, after several repetitions, when he rang the bell the dogs would salivate – even if there was no meat anywhere nearby. Pavlov had successfully paired the sound of the bell with the appearance of the dogs' meat.

Pavlov experimented with other forms of stimuli such as whistles and buzzers, successfully achieving salivation with a range of different sounds. He was also able to condition the dogs to salivate when they received a mild electrical shock by shocking them just before feeding. Interestingly, once the dogs salivated when they were shocked their response to the shock appeared to diminish. This discovery led to the development of a training technique called counter conditioning in which an unpleasant stimuli (such as an injection) is paired with a desirable stimuli (such as a food reward) in order to decrease the aversiveness of the unpleasant stimuli.

Classical conditioning occurs all the time. Bob Bailey, one of the best animal trainers in the world, once said that as animal trainers Pavlov is always on our shoulder. What he meant was that animals and humans will classically condition readily and without formal training. Classical conditioning is why you find the smell of the perfume that a close friend wears comforting. It is also part of the reason why the placebo effect occurs. This is when patients show a reduction in symptoms after being given in inert (non-medicinal) substance.

In horse training, the seat and weight aids become associated with the actions of the reins and the riders' legs. This is why after many repetitions the seat and the weight aids will be able to elicit stop and slow responses. However, it should be noted that the seat and weight aids are only as effective as the rein and leg aids to which they are attached. That is, there is no point in using the seat if the rider's leg aids fails because the leg is why the seat worked in the first place. Also, it is important to understand that the connection between the seat/weight aids and the rein/leg aids needs to be maintained through repetition. Classical conditioning works because the subject predicts that one stimuli will follow the other. If, for example, the seat is used continuously without the rein aids it will quickly become ineffective.

In order to be effective, the classically conditioned signal must be both consistent and salient. That is, it must be presented in the same way each time and it must be noticeable. When riders are able

to sit quietly in the saddle the classically conditioned aids will be far more effective. Riders who are constantly moving and losing balance will be far less able to apply consistent, effective aids.

Conditioned reinforcers

It's not always possible to deliver a reward precisely when it is needed. For example, if you are training a horse to step into water, it is difficult if not impossible to deliver a reward at the exact instant his first hoof touches the water. Therefore, good trainers often use conditioned reinforcers to bridge the gap between the behaviour and the reward. Conditioned reinforcers, as the name suggests, is a stimuli that has been paired (through the use of classical conditioning) to a reinforcing stimuli. That is, a conditioned reinforcer is anything that becomes associated with (and therefore starts to predict) a reward. In horse training conditioned reinforcers are generally sounds. The sound – which must be very noticeable and the same every time, comes before the reward and therefore over time starts to predict that the reward is coming. Words can be used as conditioned reinforcers but because the horse hears a lot of human speech they may not be very noticeable to him. Therefore, mechanical devices like clickers and/or whistles are often used.

Generally, the process of introducing a conditioned reinforcer (let's use the clicker as the example) begins with 'charging the clicker' which means making the connection between the click and the food reward. During this phase the trainer clicks and then gives the food reward in very quick succession (within a second or so). Once this is repeated several times the trainer can check the strength of the association by waiting for the horse to look away and then clicking. If the horse looks for the trainer it is likely that he has made the connection between the click and the food reward. If not, the process of click/treat should be repeated several more times, ensuring that there is little gap between the click and the subsequent treat.

Some things to remember:

1. The click must come before the food, not at the same time or afterwards.
2. There must be as little time as possible between the click and the food in the beginning of the training.
3. The click must always be followed by food.
4. The click is not a cue for behaviour, it is a way of bridging the time gap between the correct behaviour and a food reward.

Activity

Train a horse to respond to a conditioned reinforcer. This can be done by a group of students and their coach. You will need a horse, some food that the horse likes and preferably a safe yard so that the horse can be on one side of the fence and the group on the other. You are also going to choose a conditioned reinforcer. It can be a word, a whistle, a click or any other sound that is the same each time and noticeable to the horse.

Get ready! If you are using carrots or apples as reinforcement they should be cut into small enough chunks so that the horse doesn't spend too long chewing – but not so small that you risk choke. If you are using pellets make sure you can reach them quickly and easily. Remember, in the beginning, you need to deliver the food within a couple of seconds of the click.

It is useful to start with the horse being held quietly in a head collar by a helper. The tasks of clicking and treating can be done by a single person but alternatively can also be done by two people working together. In this case one person will click and the other give the food reward. Sharing the tasks can be a good option for getting started.

Make your chosen sound (we'll call it a click though this is by no means compulsory) and very quickly afterwards (less than three seconds) deliver the food reward, making sure to keep your fingers safe! Allow the horse to chew and when he has finished repeat the click/treat. Do at least ten repetitions making sure you deliver the food as quickly as possible every single time. Don't click if the horse starts 'mugging' you for the treats. Rather, wait until he is standing quietly and then click/treat. If the horse is particularly food motivated (or a pony!) wait until he looks away before you click/treat. He will quickly learn that he is only rewarded when he looks away. You will know you have successfully paired the click and the treat when he starts to request food by turning his head away.

If after 10 repetitions the horse doesn't seem to be making the connection, you will need to deliver the food more quickly. Also, make sure that the food you're using is desirable. Very food motivated horses will find plain chaff reinforcing but not all horses will!

Once the horse has made the connection between the click and the treat you can train him to do just about anything. An easy exercise to begin with is to train the horse to target something like the lid of

a bucket with his nose. Bring the lid close to his nose and as soon as he touches it click and treat. Put the lid behind your back while the horse chews. Repeat this several times and then change where you present the lid. You'll find that pretty soon the horse will touch the lid with his nose even if you hold it out near the ground or up high.

Punishment

Punishment occurs when you add something the horse doesn't like after he performs a certain behaviour or if you take away something the horse likes after he performs a certain behaviour. Punishment decreases the frequency of the behaviour… however it also assumes that the horse will change his future behaviour to avoid consequences in the future. And most adult humans can't do this! If we could, no-one would ever have two speeding fines.

Hitting the horse with the whip for refusing a jump is punishment. On the surface it might seem like a pretty benign practice but punishment can have many side effects and, as trainers, we need to consider these very carefully. If the horse is punished while being ridden it can cause powerful fear associations between horse and rider. It can also make the horse reluctant to try new behaviours in the future. Also, punishment is non-directive, that is, it may tell the horse what NOT to do but it doesn't tell him what TO do. So, if the horse is punished for refusing a jump he may refuse less frequently but he might start bucking or spinning instead. Punishment can also cause significant physiological effects and can cause raised blood pressure, heart rate and cortico-steroid levels.

Like all training the timing of punishment is critical. Punishing the horse for biting five seconds after he bites you is simply punishing what he was doing five seconds after biting. If punishment is to be used it should be used *during* the behaviour you would like to diminish in frequency.

In an ethical and sustainable training system the use of punishment should be considered very, very carefully. There is almost always a better way to train.

In the context of punishment it is useful to discuss with your riders the concept of social licence to operate (SLO). This refers to the ongoing public acceptance of an industry's standard practices and is increasingly more foregrounded in discussions of animal welfare. SLO has its foundations in the public's beliefs, perceptions and opinions. It is dynamic and therefore not permanent.

In order to be sustainable, the horse industry must be aware of the wide-reaching effects of SLO and ensure that current practices do not lead to a withdrawal of public approval. As SLO is constantly

evolving to reflect public opinion it is worth noting that practices that may once have been deemed appropriate can, and do, fall from favour.

The use of punishment is a practice that will be increasingly scrutinised by the public. And therefore, for that reason as well as the ethical and practical considerations, its use should be considered extremely carefully.

Exercise

Have a look at some animal related industries that have been impacted upon by SLO. The live export trade and greyhound racing are two that are increasingly under the spotlight of public opinion. Discuss with your students the concept of SLO and how it has forced these industries to change. Are there any aspects of the horse industry that make it vulnerable to public opinion? Is this a good or a bad thing?

Shaping

At C* and K Certificate level students will be expected to start to incorporate the Equitation Science Shaping Scale (ESSS) into their training – or at least to understand how they can achieve their riding goals more effectively if they shape the behaviours they want in a progressive and systematic way.

Shaping (sometimes called successive approximation) is the process of gradually changing behaviours over time. A failure to shape in small enough increments is one of the most common reasons for unwanted behaviour. The horse is adapted to run away, not only from things that frighten him, but also from things that he doesn't understand. So, training must be very incremental – each step building upon the successes of the step before, if we are to avoid tension.

The Equitation Science Shaping Scale is a very useful guide for shaping behaviour because it guides the rider through which aspects of each behaviour they should focus on at once. For instance, if the horse is both rushing and crooked some riders may wonder which to fix first - the rushing or the crookedness. However, the ESSS makes it very clear what needs to be addressed first. Do you know?

(The answer is on Page 34, before the Lesson Plans.)

The following imaginary scenario can offer some insights into the ESSS and is a useful way to explain it to students:

Imagine that you are stuck in a very remote desert. Miraculously, you manage to catch a wild horse and you plan to ride back to civilisation. Once you have habituated your horse to the bridle and the saddle you would carefully habituate him to your weight. Now that he calmly accepts you on his back you must train him to go where you want him to!

You start by training the stop, turn and go forward responses from your reins or legs using pressure – release training. At first your horse is really heavy and delayed in his responses so you work on improving that. Then you find that your horse speeds up and slows down randomly, so you carefully train him to maintain a rhythm (because you can't imagine that riding for many days on a horse that lurches uncontrollably from one gait to the next will be much fun). Then you train turn because you decide it's no good wandering aimlessly around in the desert – you need to be able to navigate accurately. Once you can do that, you find that it's easy to keep a smooth contact on the reins and do minute adjustments of line and tempo with just your fingers. Your horse is now a pleasure to ride!

You ride out of the desert and everything is going well until you come to a deep ditch. Your horse has never seen a ditch and he gets extremely anxious. However, you decide to stick with your training plan because it's already been so successful and you revise all of your horse's previous training. Firstly you make sure that your aids work, then you make sure you can control him immediately with light aids. Then you check that you can control his tempo and after that you check that you can control his line. Pretty soon you find that you have a nice, even contact in both reins and your horse is happy to cross the ditch.

Later on, you come to a creek and you find that your horse once again gets anxious. By now you know how to manage this situation so you revise his training and pretty soon your horse is calm and you can cross the creek. A few hours later you come to a bigger creek and you go through the same process again. Eventually you come to a river and, by going through the same process, you are able to cross the river and make your way back to civilisation.

Although this example seems a bit far-fetched it does offer a useful guide for the order in which to shape behaviour.

When training any behaviour you can ask yourself these questions:

1. Does he do it?
2. Does he do it immediately from light aids?
3. Can you control his tempo while he does it?
4. Can you control his line while he does it and does he stay reasonably straight through his body?
5. Does he maintain an even contact on the reins while he does it?
6. Will he do it everywhere?

If you follow these basic principles, you will find that your training will progress much more smoothly.

The Equitation Science Shaping Scale

1. Basic attempt
2. Obedience
3. Rhythm
4. Straightness
5. Contact
6. Proof

Let's look at that in more detail using the step back in hand as an example.

If the horse takes a single backwards step from pressure (it might be quite heavy in the beginning) he has achieved basic attempt level.

The horse is at obedience level when he will take two backwards steps immediately from a light aid. When he can take multiple backwards steps (without rushing or stalling) from a light aid he is at rhythm level. And when he goes backwards in a straight line and stays straight through his body, he has achieved straightness level.

When the horse can take multiple steps backwards from a light aid, a consistent contact should start to develop between the handler and the horse. The horse should also maintain a consistent posture

throughout the steps, neither raising nor lowering his head. Once he can do this he's at contact level. When he can achieve all of the qualities above in a wide variety of situations, he is at proof level.

It can be really useful to work through the shaping scale by asking yourself some questions (in this order). We will look at the downward transition from walk to halt in hand as an example.

- Did he do it in 2 – 3 steps of his front legs?
  (If yes that's basic attempt).
- Did he do it immediately from a light aid?
  (If yes that's obedience).
- Did he do it smoothly?
  (If yes, that's rhythm)
- Did he do it and stray straight on your line and straight through his body?
  (If yes, that's straightness).
- Did he do it and keep his head and neck the same throughout without being held in that position?
  (If yes, that's contact).
- Did he do it, maintaining all of the qualities above, everywhere you asked him?
  (If yes, that's proof).

You can think of pressure–release, reward training, punishment, classical conditioning, habituation and shaping as tools. When you use these evidence-based tools correctly your training will not only be more efficient it will also be as ethical (and therefore as sustainable) as possible.

Ground work (On the Ground)

The most significant change to the new Pony Club syllabus is the addition of ground work. You might feel daunted by the prospect of teaching this but if you can lead, halt and step a horse backwards you can teach your students ground work.

The rules for safe groundwork are the same as the rules for safe handling from the certificate manuals. These rules include never wrapping the rope around fingers/hands/waists/necks and wearing appropriate safety clothing, including a helmet, boots and gloves. Many serious accidents occur while horses are being handled, so ground work is an important skill for riders to learn. It would be quite appropriate for you, as a coach, to wear a helmet when coaching ground work to set a good example for young and impressionable riders.

It is also really important to ensure that handlers and their horses maintain safe distances at all times during ground work lessons. Young people can get distracted easily and their peripheral vision is not as well developed as an adult's, so maintaining this can require almost constant vigilance. Teaching ground work gives you an opportunity to discuss other basic, safe horse handling practices such as never looking at a mobile phone while handling a horse and definitely never trying to take selfies while riding!

Teaching ground work also gives you an opportunity to discuss the fit of gear with riders. Nosebands should not be adjusted too tightly; you should be able to get two fingers stacked on top of each other between the noseband and the nasal bone on the front of the horse's face. Tight nosebands are uncomfortable and can cause long term damage to the soft tissues, nerves and even the bones of the horse's head.

During ground work the handlers should use one of the two ground work positions. In the early stages of ground work training we use Position 1 because it allows us to see every movement that the horse makes which helps us to reinforce the correct responses with greater accuracy. Teaching young riders these positions and how to move from one to the other could be the subject of several lessons.

During all groundwork, maintain an upright body position and focus.

Position 1:

The student should stand on the horse's near side, facing backwards, looking toward the horse's left hip. The student should stand beside the horse, never directly in front, in case he gets a fright or strikes with his front legs. The reins should be held in the left hand, at most 15cm from his chin. This position is used when training step back and park. It is also used when holding the horse for the farrier and vet – although of course the handler would change sides so that they are on the same side as the vet.

Position 1: here showing step back

Position 2:

The student should face forwards (the same direction as the horse), standing on his near-side, next to his cheek. The student's feet should be about 1m (3ft) or less from the horse's hooves.

The reins should be held softly in the student's right hand, at most 15cm from the horse's chin, with the excess rein in the left hand.

Position 2: here showing stop.

Stop response

To promote safety and reduce expressions of the flight response the first lessons in groundwork always focus on the stop response. This includes stop, step back and slow.

The first exercise is step back. Because the muscles used in a backwards step are the same as those used in a correct downward transition, it strengthens those muscles and creates correct habits that will help with under saddle training.

The rider should start in Position One and apply pressure towards the horse's chest without moving their feet. As soon as the horse steps back the rein pressure is released and the horse is rewarded with a scratch.

When training and teaching, remember the KISS principle:
KEEP IT SIMPLE for STUDENTS – both human and equine**.**

A Note on 'Following'

A lot of horses learn to follow the handler's legs and feet and while this may seem like a good idea it can create confusion for the horse. For example, if the horse is trained to follow the handler's feet when he is loaded onto the float, tied up or mounted, the 'rules' of training have been broken. If horses are trained to stop, go forward and turn from light signals not only are they calmer and more obedient we are also adhering to the KISS principle!

The pressure used to achieve the step back should always start lightly and increase until the horse begins to take a single step backwards. It's worth remembering that if the student cannot step the horse backwards, the probability is also very small that they can stop the horse quickly (both on the ground and under saddle) in an emergency situation. Therefore the step back is an extremely important component of safe training.

Once the student can achieve a single backwards step (basic attempt) it's time to work on two steps (that is, a step backwards from both front legs). You can think of this as 'buy one get one free'. Pressure is applied as previously but instead of releasing as the first leg moves backwards, keep increasing the pressure until the second front leg begins to move backwards and then release and

reward. Pretty soon you'll find that the horse will take two steps backwards from one pressure. This is important because it means that he has taken a whole stride backwards which strengthens the behaviour and makes it clearer.

If the horse is not standing square with the front legs you will notice that the leg that is furthest forward will step back first. This is because it was the last leg to stop. You will also probably notice that some horses are heavier when one leg (often the offside foreleg) is forward. It is well worth addressing this and ensuring that the horse is symmetrical in his responses.

Why the lead rope, not the chest?

Many riders use pressure on the chest to step their horses backwards and this is a useful aid. However, it is important for safety that the horse also stops from lead rope pressure only – because this is the pressure that will stop him in a hurry when required. If the horse gets a fright while being led, the safest and easiest way to stop him immediately is to apply pressure to the lead rein.

Make sure that the student can achieve two backward steps from a single, light pressure regardless of which front leg is the most forward in the halt (obedience).

Asymmetry

All horses are lateralised, that is, their legs work in diagonal pairs. So, what happens to the right front leg also happens to the left hind and what happens to the left front leg also happens to the right hind. Each of the diagonal pairs works a little differently. One pair is often harder to slow and the other is more difficult to quicken. This is why horses are often asymmetrical – because they take slightly different length steps. When the horse is really asymmetrical he may appear lame. This is often known as bridle lameness – a gait asymmetry that is caused by crookedness not pain.

The next exercise will be to practise downward transitions from walk to halt. The students will be in Position Two for this exercise. Set up pairs of cones around the arena and ask the students to halt their horses between the cones. Ideally the students will be able to halt within two to three steps of their horse's front legs. If they can't do this return to the step backwards exercises because this will help improve the stop.

Students should also be able to slow their horses when leading them. The aid for this is the same for stop/step backwards but lighter.

Once the students can stop and slow clearly from light signals and the horse maintains a clear rhythm in self carriage (rhythm) it is useful to get the students to practise going forward as well. The aid for go forward on the ground should be a slight pressure on the head collar in the direction of travel. The rules of pressure-release apply just as much to the go forward aid as they do the stop aid so make sure that your students release the pressure as soon as their horse takes a step forward.

For horses and ponies that are reluctant to go forward it is very important to be extremely clear about the release of the pressure – even if the handler has to apply the aid again immediately afterwards. Remember, the release of the aid is the most important component; the pressure just motivates the horse, the release is what trains him.

Once your students can go forward and stop their horses from light signals you can practise turn. Try and encourage the students to turn the horse away from themselves – that is, to turn to the right. That is the safest way to turn because it is unlikely that the horse will stand on their feet or run them over. (In reality, your students will turn their horse both left and right in normal management situations. If the horse has a reliable stop response he will become much safer in all handling situations, including turning to the left.)

Once your students can stop, slow, go and turn there are lots of exercises and games that they can play that will assist learning. Try a ground work obstacle course (halting between cones, walking between parallel poles etc.). You could also use a metronome to set the rhythm for walking and by altering the rhythm help the students to walk slower and faster. Note: most horses will walk in hand at between 45 and 55 beats per minute. But you could set it as slow as 30 BPM to teach them very slow walk.

The students can then move on to training their horses to travel straight. Ask them to walk their horse between two cones and to correct him if he veers off the line. If you watch closely you will see that horses that lose line often do it in conjunction with quickening or slowing steps. Therefore, for horses that lose line consistently, it can be useful to spend more time with the metronome, ensuring that the horse is particularly clear about rhythm. Once the horse is able to maintain his own line you will notice that he becomes straighter in his body (straightness).

When the qualities of basic attempt, obedience, rhythm and straightness have been achieved you will find that the horse will become more consistent in his head and neck position and a smooth, even contact will develop – even during groundwork. This is contact level.

The final stage of the ESSS is proof which occurs when the horse maintains all of the previous qualities in a variety of different situations, including warm up arenas and competition environments. This can often offer challenges for young horses and those that are off the track. Young students trying to cope with tense and even disobedient horses can sometimes forget what they have learned about shaping behaviour systematically. When they explain the horse's behaviour to you, they might use words like, 'crazy', 'mad' and 'naughty'.

Rather than those anthropomorphic explanations it is best to try and get them to focus on what rung of the shaping scale their horse was on. There's a very good chance that the horse could not achieve obedience level because this is the place where most training fails. Unfortunately, when the horse gets heavy in his responses the aids become painful. Don't forget that if the pressure used to elicit behaviours is depicted on a scale from 1 – 10 (1 is light and 10 is heavy) we want our responses to be about 2 or 3.

If the horse cannot achieve obedience level on the ground the rider should persist with ground work until he has. Carefully working through the shaping scale not only gives the horse familiarity (which leads to calmness) it also gives the handler/rider something to focus on.

Riding (In the Saddle)

Taking an Equitation Science perspective doesn't mean abandoning the knowledge that has been developed over decades by Pony Club coaches of the past. Equitation Science adds an understanding of how horses learn and provides solutions to some of the problems commonly encountered by riders. While the focus of the new manuals is slightly shifted towards improving training practices you will see that much has remained the same:

The importance of a good position cannot be overstated. Riders must be balanced and be able to maintain a stable position. This not only allows them to apply the aids effectively it also helps to keep them safe.

Good, safe practices are always important. Riders must wear appropriate clothing and prioritise their safety and the welfare of their horse at all times. Correct procedures for mounting, dismounting etc. should always be followed.

School figures are a great way to train both horse and rider because they encourage accurate and thoughtful riding.

Being able to ride safely in a wide variety of different situations is important.

The foundation responses are the basic behaviours that all horses should be able to perform easily and from light aids. Studies have shown that many accidents are caused by a failure in the way the foundation responses are trained and maintained. It is a fallacy that the training of well established 'schoolmaster' horses does not need to be maintained. Although older, well trained horses will often perform well when initially ridden by unskilled riders, all horses will eventually learn incorrect habits if ridden incorrectly. Even a very young child can and should maintain the training of their horse. Careless (simultaneous) application of the aids and unrelenting pressure are damaging to a horse's wellbeing and will eventually lead to a deterioration of the horse's training.

Even with C*/K students the first thing that you should do every lesson is check that your students can stop. The halt is an often overlooked exercise but it is very important. If the students are holding a light contact they should be able to halt by simply closing their fingers more firmly around the reins and (from the walk) by stopping their arms from following the movement of the horse's head and neck.

Stop / downward transitions are a really vital part of training because they help to minimise expressions of the flight response and keep riders safe. Poor stop responses are associated with a wide variety of incorrect behaviours such as bucking, shying, tension, rushing and bolting.

It is very useful to ask your students to give their halt a mark on a scale of one to ten based on how much pressure it takes to achieve it (if one is very light pressure and ten is the heaviest aid possible). Anything over a five out of ten needs your immediate attention as a coach because this pressure is potentially quite painful for the horse which means that the rider is inflicting pain with every downward transition. This is not only unethical it is also unsafe because a horse in pain will be unpredictable.

Ideally the horse should be able to stop from walk within a stride – or within two steps of the front legs. It can be helpful for the coach to count the front legs steps for the students to make it easier. Or, in the rhythm of the walk the coach can count out the three phases of the aid, "Please (light pressure). Stop (stronger pressure). Now (release pressure)." Riders should also scratch or stroke their horse's wither/neck as a reward once the halt has been completed.

Practise these halts until you are confident that your students can stop reliably. In order to improve accuracy you could ask your students to stop between two cones, or between two parallel poles.

Of course you can't practise downward transitions without also practising upward transitions. The signal for go forward is pressure with both legs below the knee. If the horse doesn't respond to light pressure from the rider's legs they might have to use the pressure of their heels. And if he doesn't respond to that, the rider might have to vibrate the heels against his sides. Don't forget it is really important that the pressure starts off very lightly and is released as soon as the horse goes forward.

Poor go forward responses are associated with several incorrect behaviours including rearing, napping, jibbing and refusing jumps.

A Note on Whips

Even in the hands of a small child a whip is a potentially very destructive tool. It is important that children understand how to use the whip correctly. The whip should rarely, if ever, be used as a tool for punishment; that is, a single hit after a behaviour to discourage that behaviour from happening again. Rather, the whip can be used as a tool of negative reinforcement; that is, light taps increasing in frequency until the horse goes forward. Students should only use a whip if they understand how to use it correctly and humanely. This is why the whip licence is being introduced.

Riders should practise their upward and downward transitions walk/halt/walk until they are light and reliable. Make sure you vary the time that the horse stays immobile in the halt – sometimes the halt should be brief and sometimes longer. This is a good way of ensuring that the horse will be obedient when a longer halt is required.

The following is an excerpt from the one of the new manuals and it explains clearly the way to deal with a horse that is reluctant to go forward:

Some horses are always slowing down. These horses are often called 'lazy' but really it's just a problem with their training. They need to be trained to maintain the tempo of their legs until the rider gives them the aid to slow down. If your horse is constantly slowing down it can be quite tempting to keep nudging him with your leg to keep him at the required speed – a little bit like peddling a bike up a hill. But your leg aid should always mean 'go forward', it shouldn't mean 'keep going'. Every single time you use your leg your horse's legs should move faster. If you use your legs all the time without releasing (like pedalling a bike) your horse will learn to ignore you. Ideally you want your leg aids to work as though you were riding a skateboard down a hill – one small nudge and you glide along for ages.

If your horse slows in the walk, do an upward transition to trot and, after a few strides, ride a downward transition back to walk. Remember not to pedal! Make sure you only use your leg to mean go forward. It's a little bit like daring your horse to slow down and when he does, correcting him with an upward transition. If you're very careful to use your leg correctly, pretty soon he will learn to maintain his own tempo. Just remember, you are the drummer in the band and you decide on the tempo of your horse's legs.

As a coach it can be really tempting to allow riders to 'pedal' their horses in a lesson, because they slow the whole ride down. But it's really useful to teach riders that there is an easier alternative.

Being able to ride at a slower than usual pace is useful, even for younger riders. The horse should slow from light aids and should maintain the slower gait without constantly being slowed. Slow trot can be very calming for anxious horses if the focus is on achieving self carriage. You can use a metronome to set a slower rhythm in the trot (70BPM is quite slow) or you could find pieces of music that match that tempo and ask riders to ride in time.

Answer to Question on Page 21

As per the Equitation Science Shaping Scale on Page 23, the rider would address the rushing first because in the shaping scale rhythm comes before straightness.

Lesson Plans (6)

Lesson One: The Training Game

Topic and goals

The training game is a great way to get students practicing their pressure–release, reward training and shaping. The main difference is that they will be practicing on each other, not a horse. The goal of this lesson is for students to gain an insight into how to shape behaviour. It is also useful if they begin to understand how frustrating it can be to learn without language.

Equipment

You will need a clicker or a whistle – or any device that emits a sound reliably and immediately.

Introduction

Pressure–release, reward training and shaping are three of the most important learning modalities that horse riders use. Failure to correctly use pressure-release has been identified as one of the main causes of problem behaviour. This lesson allows the students plenty of time to practise their skills without the horse to distract them.

Gear Check

N/A

Main activities

In the training game one student (the animal) will be sent from the room and the others will decide on something that they are going to 'train' that student to do. It must not be painful or humiliating. In the beginning choose something fairly straightforward – such as sit in a chair or pick up a book. But you should be able to attempt far more complex behaviours once the students understand the game.

(Continued)

Another student (the trainer) has the clicker. The animal has been told that more than anything they want the click from the clicker. In the context of the game (unlike the real, animal training world) the click does not have to be followed by a treat.

Once the behaviour has been agreed upon the animal returns to the room. When the game begins none of the other students should make eye contact or offer any hints as to the required behaviour, rather the trainer uses clicks only to shape the correct behaviour. So, for example, if the task is to cross the room and pick up a book the trainer should click if the animal starts walking in the correct direction. The animal should return to where they started each time the trainer clicks for the first four clicks.

If the animal gets really stuck or appears frustrated gently remind them to go back to where it was that they received their last click. Encourage the trainer to reward every small improvement as this is the most efficient way to train.

Sometimes the animal will seem to just 'get it' and chooses the correct behaviour, but at other times the trainer might have to be patient and consistent to get the behaviour right. For example, if the task is to pick up a book and the animal keeps walking past the book without seeming to notice it, the trainer may have to click just as the animal walks past, or click the animal looking towards the book.

Once the correct behaviour has been achieved it's useful to ask the animal for feedback on the training experience. They often remark that it was frustrating. This is useful for them to realise that their horse might feel this when they are being trained.

Extension

You can use a combination of pressure-release and reward. The trainer will have both a clicker and a dressage whip. The whip should be used as a series of gently escalating taps, just as it would be in pressure-release. The whip should be mildly annoying, never painful – just as it is in a real life horse training scenario.

Lesson Two: Developing Contact

Topic and goals: One of the most fundamentally important skills for riders to acquire is the ability to maintain an even, consistent pressure on the reins. This pressure should be enough to keep the reins from sagging but no more than that. The goal of this exercise is for students to gain an understanding of contact and its importance.

Equipment: You will need a spare set of reins and pairs of different objects to attach to them (such as milk cartons full of water, small chocolate bars etc.) as well as some thick elastic (similar to that used to make waistbands in clothing).

Introduction: Being able to maintain a light even contact is a very important skill that riders need to acquire. Like all skills it takes practice and focus. These exercises are designed to assist students understand contact.

Gear check: N/A

Main activities: This lesson is a series of exercises that students can work through to deepen their understanding of contact.

Take your paired objects and attach them to the billet ends of the reins. Ask the students to each pick up the reins and feel the weight in their hands. Ask them to hold the reins as though they were attached to the bridle. To get a more realistic feel you could drape the reins over a smooth rail with the weighted end on one side and the student on the other. The students can pick up the reins with gloves on and off to see if there is a difference in the feel of the weight with their gloves on.

Place the students into pairs. Ask one to hold the two ends of the elastic and the other to hold the middle (as though it were a pair of reins). The students should hold their hands level with each other at about waist height. The student holding the end of the elastic should move their hands slowly backwards and forwards and the student holding the middle should try and keep the 'reins' straight by moving their hands – in the same way that they would in the walk and the canter.

Lesson Three: Conditioned Reinforcers

Topic and goals: The aim of this lesson is to train a basic behaviour (in this instance target a tennis ball on a stick or something similar) using a conditioned reinforcer. The goal is for students to acquire some skills with classical conditioning so that they can begin to train their own horse this way if they choose.

Equipment: You will need a tennis ball on the end of a stick or something similar. You could use an ice-cream container lid taped to the end of a whip or anything that is visible and safe. You will also need a horse, a clicker or whistle and treats. Ideally you will also have a yard or a rail so that you can keep the horse on one side of the rail (or fence) and the trainer on the other.

A Note on Treats

Ideally the horse should be able to quickly eat the treats that he is given. Therefore if carrots are being used they should be cut into fairly small chunks. Alternatively, pellets are very effective – each reward should be the equivalent of about one heaped teaspoon of food.

Introduction: Conditioned reinforcers work because of classical conditioning. Therefore it is useful to review the material on classical conditioning in the C*/K manual before you begin. There is also explanatory notes on conditioned reinforcers and this should also be reviewed. It is also useful to discuss the limitations of the horse's vision with students before you begin. There is a great deal of material available online, and it would also be useful to watch some footage of horses being target trained before the practical component of the lesson.

Gear check: N/A

Main activities: Put the horse in a safe, small yard and have two students stand on the other side of the rail with the treats, the target and the clicker.

Present the target where the horse can see it – usually to the side of his muzzle. When the horse bumps it with his nose click and give him a treat. The gap between the click and the treat should be no longer than two seconds at the most. Remove the target and allow the horse to mostly finish his mouthful. Repeat. In the beginning present the clicker is the same place each time but after about five repetitions you can begin to present it in different places. (Continued)

Just remember that the horse has a blind spot in his vision just in front of his nose so don't present the clicker there. When the horse is touching the target reliably you can begin to present it higher and lower. If you have reasonably good timing you should very quickly be able to get the horse to touch the target anywhere you hold it.

Extension: If you have suitable facilities each student could train their horse independently.

Lesson Four: Turn on the Forehand on the Ground

Topic and goals: Introducing lateral turns of the hind legs is often most effectively done in hand. It allows the handler to see the movement of the legs (rather than just feel it) and target the correct crossing of the inside hind over and in front of the outside hind.

Equipment: You will need four marker cones.

Introduction: Begin by making sure that the horse is adequately habituated to the whip by rubbing it all over his body. If he tries to step forwards or away from the whip simply keep it in position on his body and step him back for one stride (two front leg steps). When he stands quietly and immobile remove the whip from his body and reward with wither scratching.

Gear Check: Each handler must be dressed safely including a helmet. They should carry a long (dressage length) whip. Whips with slightly fatter ends (like a crop) are often very useful for sensitive horses as they are less aversive than thin ended dressage whips. The horse should be wearing a bridle, correctly fitted.

Main activities: Halt the horse. Slide the whip down his body until the end is on his hindquarter. Tap lightly. As soon as he takes a single step in the right direction cease tapping and reward with scratching. Just one step is fine at this stage – the handler will shape more steps over time.

Repeat the process on the same side until the horse steps away immediately from a light aid. The next step is to achieve the correct hind leg crossing. Apply the aid but now, if the horse doesn't step correctly, continue the tapping until the inside hind steps over and in front of the outside hind.

When the handler can achieve this from a light aid they can move on to multiple steps. The horse will need to walk a very small circle (30cms diameter) with his front legs. The handler should notice that once they can achieve multiple steps from a light aid the horse becomes more consistent in both the rhythm of the steps and the posture of his head and neck.

Extension: Place the cones in a square with 10m sides. At each cone the handler should halt and turn on the forehand 90° and then walk forwards again.

Lesson Five: Direct Turn of the Forelegs under Saddle

Introduction: In a correct turn the first step is the horse's inside foreleg abducting during the swing phase. The second is an adducting step of the outside foreleg, also during the swing phase. The horse should not speed up or slow down while turning.

The aids for turn are simple. The rider looks in the direction they wish to turn in and very slightly takes the turning rein away from the horse's neck while maintaining enough tension on the outside rein to prevent excessive neck bend. As soon as the abduction of the inside foreleg begins the rider can return the rein to its original position. There is no need for leg aids.

A Note about the Aids for Turning:

The Pony Club syllabus is not based on dressage. It is a multi-disciplinary syllabus designed to improve both horse welfare and rider safety. It is evidence based, which means it has its foundations in rigorous science. When teaching turn, there may be some riders who would like to use multiple aids and this should be discouraged as it is unnecessary and is not best training practice as it can lead to habituation and / or confusion.

Equipment: You will need a dressage arena, some marker cones and a metronome.

Gear check: Correct (safe) riding attire and saddlery.

Exercise: Mark out two x five metre loops off each long side. Riders can begin by walking these loops, paying careful attention to the accuracy of their line. The metronome should be set to 55 beats per minute and riders should be attentive to whether or not the horse attempts to increase or decrease his tempo one way more than the other. If the horse quickens during the turn the rider can slow the tempo a little before the turn and then again afterwards if necessary. If the horse slows the rider can quicken him just before the turn and just afterwards if necessary.

The exercise can also be performed in trot with the metronome set to 75 beats per minute.

(continued)

A Note on the Metronome

In this exercise we are using the metronome to mark the horse's strides. Therefore to ride at the required tempo riders should adjust their horse's speed so that the beat occurs on the movement of one of the horse's legs – for example the near side foreleg. In rising trot, the beat will occur as the rider either sits or rises.

Extension: The tempo of the canter is about 95 beats per minute. Riders can perform shallow loops or 15m circles in canter using the metronome to assist in training a consistent tempo.

Lesson Six: Riding with No Stirrups

Topic and goals: To encourage riders to develop a more balanced seat by riding without stirrups.

Introduction: Riding without stirrups is a great way to develop a strong and supple seat. It is also a very good way to improve balance. However, some riders might be frightened at the thought of riding without stirrups. If this is the case you should carefully try to determine what aspect they are frightened of. Don't dismiss their concerns and if they are legitimate allow them to continue to ride with stirrups.

Equipment: You will need a safely fenced arena.

Gear check: Correct (safe) riding attire and gear.

Exercise: The horses should be thoroughly warmed up. It is important for this exercise that they are calm and responsive before you begin.

Begin slowly and carefully. At halt riders should take their right foot out of the stirrup and carefully cross the stirrup over the horse's wither. The horse should be rewarded for standing quietly with wither scratching. This process should be repeated with the left foot and stirrup.

When walking off for the first time it is important not to let the horses hurry as this will make them fearful. Riders should ride several halts, assessing the horse's responses when compared to previously. If the horse is much heavier than he was during the warm up this could indicate that the stirrups are over-shadowing his learned responses and care must be taken to maintain calmness. If the horse becomes really unresponsive or tense the rider can dismount and do some ground work with the stirrups in the crossed position until he becomes calm and responsive once again.

Riders should maintain a balanced upright seat and ride school figures at walk, until they are confident and the horse is calm. Try trotting for the first time on a small circle and begin with a very slow trot. If the horse quickens ride a downward transition.

Eventually riders should progress to riding school figures at walk, trot and canter without their stirrups. Most riders really enjoy work without stirrups once they get confident!

NOTES


PONY CLUB
AUSTRALIA