Fencing

From a safety perspective, the most important structure on your property is the fence. Fences not only contain your horses but they also add value to your property and define your boundaries. However, horses, especially young horses, are notorious for running into fences because they don’t see them and are unable to stop in time, or they roll beside them and get trapped underneath, or they paw at the fence and get their legs caught. Therefore good fencing is of the utmost importance in preventing injuries and rearing and caring for healthy unblemished horses.

Words & photos: MaryAnne Leighton
A safe fence for a large paddock should be about wither-height of an average-size horse; therefore a 14.3hh horse needs a fence that is 5' high. For small paddocks and stallion yards, the top of the fence should be at the horse's eye-level. All fences must be visible, sufficiently sturdy to prevent escape and safe enough to prevent injury, not allowing a horse to get his head or feet caught in it.

The type of fence you need depends on the sex, age and numbers of horses you have but always design your fence to contain the escape artist or the horse who believes your expensive fence was built especially for him to rub on. Before investing in an expensive new structure, draw a plan of your property and the existing buildings, fences, water pipes, underground power and phone lines on it. Also make note of existing and future gates. You might need several different types of fence for different categories of horse or different areas of your property and your choice of fencing materials is influenced by your budget and the type of horses you are fencing for. The fence you choose will depend on the area to be fenced and the number of horses to be contained, the size of paddock or yard, the breed and temperament of the horses, topography of your property, finance and any other uses to which the paddocks and yards will be put. Try to incorporate a laneway into your design, along one edge of the property or down the centre to separate paddocks and make moving horses easier and safer. For visibility incorporate sighter wire which can be plastic-coated wire or can be one or more strands of electric tape or braid.

**Posts**

Posts can be timber or steel. Round posts are safer but more expensive than split posts. Star pickets (steel posts) are dangerous for horses particularly in heavily-used areas. They are a major cause of serious and often fatal penetration injuries particularly of the chest and abdomen or high up between the back legs.
Post and Rail

Timber fencing has been used in Australia since European settlement. It is strong and durable, more forgiving than barbed wire or steel and is cheaper than other types of fencing. Timber is most appropriate where horses have plenty of room to move but post and rail fences should be augmented with electric tape to keep horses off the fence and prevent them chewing, rubbing or leaning on it and knocking rails off. Rails should be attached to the inside of the posts to make a smoother and safer fence line and to prevent horses knocking shoulders or hips on protruding posts. Timber is safe providing all edges are dressed and bolts and wire twitches are cut flush with the timber or recessed. Post and rail fences require regular maintenance to keep them safe; timber can split and rails can warp, swell, contract or fall down and they should regularly be checked for splinters. Timber requires regular painting or staining to keep it looking good. Horses confined in timber yards, especially those fed a minimum amount of roughage, will chew timber and can demolish wooden fences in a short time.

Post and Wire

Plain wire is good for long stretches of boundary fences but you need five to seven strands, tightly strained, to be safe for horses. Plain wire must be strained tightly or it can do almost as much damage to a horse as barbed wire. A horse with a leg caught in a slack plain wire fence may panic and struggle causing the wire to cut into the leg. If a trapped horse stands quietly waiting to be freed the wire may cut off the blood supply to the leg, resulting in serious damage to tissues. In small enclosures horses tend to reach through or over a plain wire fence unless an offset electric tape is used. Plain wire may be plastic-coated to improve visibility. High tensile wire is not recommended for horses as it lacks visibility and the narrow gauge wire cuts like a knife if a horse runs into it.

Electric Fencing

Constructing fences so horses can see them prevents many injuries, and preventing horses from actually touching a fence averts many more. Electric fencing satisfies both these requirements and is being used more and more for horses, particularly thick braided electric wire and broad electric tape which are more visible and thus a great improvement over older thin wires. There are two type of electric fence – portable and permanent - and they can be powered by mains, battery or solar power. Electric tape or braid can be installed with insulators and caps onto star pickets or with insulators to timber or steel posts. Electric fencing enables you to fence off small paddocks quickly and easily. It works well in conjunction with other fences because it keeps horses away from a fence, but by itself it is not as dependable because most types are merely a psychological deterrent rather than a physical barrier. Electric fencing can be a quick and inexpensive way to contain horses and can make existing fences...
safer and longer-lasting but repair and maintenance are constant. Most electric tape or braid will break if a horse runs into it; if it does not break it can cause serious injury if a horse gets caught in it. Electric fencing is cheap and it has been claimed that an electric fence can be built for about fifty percent of the cost of a standard fence. However, it can be costly if it is not built properly and with the correct components. Use cutout switches to isolate different sections of the fence to identify faults and avoid your electric fences running parallel to power lines which will cause interference in the power supply to the fence.

**PVC**

PVC looks like timber, is slightly more expensive than timber but requires less maintenance. PVC fences are available in several styles including post and rail, they are lightweight and easy to carry and assemble. Whole panels can be cut to size in a factory and delivered, ready for erection. PVC never needs painting or staining, is impervious to termitite infestation and moisture, its smooth surface does not catch mane and tail hair and it does not cut if a horse catches a leg between the rails. It is non-toxic, will not melt, warp or bend in extreme heat or snap in freezing conditions. PVC is nail-free, has a greater breaking strain than timber and is somewhat flexible, however, it will shatter under great impact and the resulting sharp edges can slice or impale a horse. Unless you add an electric wire, horses can knock or push out the rails causing an escape hazard and some brands don’t hold together if the posts move or the rails contract in cold weather, causing the rails to slide out. PVC fencing is not suitable for stallions or horses that continually test a fence.

**Pipe**

Steel pipe is durable and can last forever if coated with anti-rust paint or if you use the galvanised version. However, pipe is unforgiving and can cause serious injury if a horse runs into it at full speed or becomes impaled on a broken section. Pipe has more structural strength than timber and can span wider distances between posts, reducing the number of posts needed. Posts are set in concrete and rails attached, often by welding. Pipe has the advantage of being portable and is often used for portable round yards and arenas but the spacing of rails is critical to prevent a head or leg to become...
caught. Lightweight pipe panels can be attached to the side of a float for use at shows, trail rides and camps. Pipe is often used for yards, including stallion yards, and boundary fences where it is crucial to have a fail-proof fence. A recent introduction is cattle rails – a steel equivalent of timber 4” x 2” rails which are good looking, strong enough to contain cattle yet lightweight and portable.

**Continuous Polymer Fence Rail**

Continuous fence rail is comprised of either galvanised or high tensile wires embedded in or bonded to a polymer to form safe coated wires and rails of varying widths. It comes in three colours (black, white and brown) and the rails look like post and rail fencing while the coated wire looks more substantial than ordinary wire. It is light, strong, requires minimal tension to keep it straight and smooth, is easy to clean and requires no painting. A buckling and tensioning system successfully holds the fence in place and the fence is easy to install or take down, move or reconfigure. The coated wire and continuous rail can be attached to existing posts but the rail system is not well suited to uneven land due to the bonded wire at the edge of the rail giving minimal vertical movement. The fence is strong, smooth and flexible and absorbs impact without breaking or weakening.

**Chain Wire**

With the exception of diamond mesh, all fences or panels made of interlocking wire or steel are potentially dangerous to horses, particularly if the holes are large enough for a hoof to go through but not easily be withdrawn. Weldmesh is frequently used for stable dividers and has many advantages including allowing horses to see and touch each other and to increase ventilation in stables. However, it can become dangerous if the welding joins are fractured, and a horse kicking through the mesh can get a hoof caught causing injury. It is also not unusual for horses to get their top teeth caught when chewing mesh panels, ripping their teeth out when they panic and pull back. The best type of mesh for horses is diamond mesh or V mesh, the cross-wires of which form hinge joints allowing the fence to fold rather than squash down if a horse falls into it or a tree falls on it. This ability to fold enables it to be restored to its original height. If kept properly strained it is durable, will stay tight for a long time and requires little maintenance. Mesh should be installed on the inside of posts for strength and safety, horses then cannot push it loose or pop the staples if they run into it or rub on it. Diamond mesh with a top and bottom pipe rail is dog-proof and makes an excellent fence for foaling paddocks.

**Barbed Wire**

A tight barbed wire fence is suitable and indeed necessary for cattle which are more robust and have a thicker, more impenetrable skin than horses, but barbed wire should never be your first choice of fencing material for your horses. Existing barbed wire fences can be made marginally safer by adding an offset electric tape to the inside of the fence but, ideally, barbed wire should be replaced with a safer option.

**Gates**

Gates can cause as many injuries as the worst fencing so all gates should be looked at critically for potential danger spots, including when they are opened and closed. Gates should be visible and easily recognisable. Horses can get their heads or legs caught in gaps between gates and their supporting posts or between bars and cross-pieces. There should be minimal gaps between the gate and its posts and bars should be spaced so that a horse cannot get its head through, even sideways, or can easily withdraw it if it does. Boundary gates should be wide enough to allow a tractor to pass through and gates between paddocks should be 2.4 metres wide. All catches should be horse-proof and should not project out from the posts into the gateway itself. Bolts or wire twitches on gate posts should be recessed and have no sharp edges. Gate posts in high traffic or high pressure areas should be of round timber and have rubber strips nailed to them to prevent injuries like knocked-down hips. Gates separating yards containing young horses need particular attention because colts especially will rear up and play over the top of a gate.

Safe fences are vitally important for every horse property. Fences and gates should be easily visible, well-maintained and escape-proof. When turning horses out into a new paddock for the first time, do it in the middle of the day when they are most docile and less likely to run around. Allow them time to see the fences and check their boundaries.