Fencing for Horse Safety and Security

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INTRODUCTION

Horses are very active animals and, as all horse owners realise, they are also extremely thin-skinned and prone to accidents. The general rule is, the more expensive the horse, the more accident prone it is. Horses are subject to cuts and injury from almost any object found in the paddock of the average rural block and because of the animal's size and speed, the injuries are often serious.

A common sense approach to fencing will help to minimise injury to horses and will also go a long way towards keeping horses out of harm's way and secure.

TYPES OF FENCES

A fence should provide a combination of effective control and economy. Fences may consist of:

- Post and rail
- A conventional barrier
- Electric
- A combination of barrier and electric.

FENCE CONSTRUCTION

1. **Posts**

   These may be of wood, steel, fibre glass or concrete and must be strong enough to support the weight of the wire in the fence and to maintain the separation of the individual wires. Posts should also be at least 50 cm in the ground, preferably deeper, particularly in wetter areas. However, this will depend on the material being used, e.g. steel pickets can be 165 cm or 180 cm in length, so depth will depend on the height of the required fence, which will be determined by the height of the horse and its propensity to jump. Anti-sink plates will need to be fitted in wet areas to avoid gradual sinking.

   Strainer posts may be up to 500 m apart or at each direction change. Posts should be from 6 m to 20 m apart, depending on whether droppers are used and the wire type used.

2. **End assemblies**

   These are generally made of wood, steel or concrete and may be home-made or commercially manufactured. Any end assembly must be at least 100 cm in the ground and preferably concreted in. The depth required really depends on the characteristics of the soil, the presence of rock, proneness to waterlogging and the design of the end assembly. Single post end assemblies need to be set deeper and will benefit from being fitted with a bed-log. These are fitted horizontally under the soil surface perpendicular to the strain of the wires. In wetter or boggier soils, end assemblies need to be deeper to help restrain the post from movement once the wires are strained. The effectiveness of double end assemblies made of steel or timber is increased by setting posts deeper and/or increasing the length of the horizontal rail. Care should be taken in ensuring the correct direction of the restraining diagonal brace or wire. The width of the post is important for both strength and resistance to applied strains so concreting a post in effectively increases the diameter. Driven timber posts are more secure than those set in dug holes that are then backfilled and tamped in.

NORTHERN TERRITORY GOVERNMENT

3. **Wire**

   The type of wire to be used in a fence is open to discussion. There is merit in both conventional "soft" wire as well as high tensile (HT) wire. For short strains, HT plain wire, such as 2.80 mm or 2.50 mm, will be the choice. The 2.80 mm wire is extremely strong but not easy to tie and work with. Using HT wire will allow short strains to be tightened and to remain tight with no stretching.

   The older "soft" wire, such as 4.00 mm (8 gauge) or 3.55 mm (9 gauge), has an advantage in that it tends to be easier to tie and handle, and is also easier to see because of its thickness. Wire "tails" can be twisted out of harm's way more easily than is the case with HT wire.

   Because of its ability to resist stretching and its strength, an overall recommendation would be to use HT wire throughout.

   Barbed wire is not recommended for horses, particularly on small paddocks

4. **Wire spacing**

   Wires should be 20 to 30 cm apart, with the bottom wire being at least 30 cm off the ground so the horse will not snare a hoof or a shoe in it.

5. **Fence height**

   Average fence height should be 1.3 to 1.5 m, but it depends on the size of the horse. A conventional cattle fence, which is 1.2 m, is generally suitable for ponies and well-behaved horses. Yard height should be about 1.8 m.

FENCE VISIBILITY

For horses, fence visibility is of paramount importance. Horses usually gallop during the early morning and late afternoon. They are prone to run into fences at considerable speed, especially if the ground is damp and slippery. The resulting damage to both the horse and the fence can be expensive.

“Horse sighter wire” has a white plastic coating which makes the wires more visible to horses.

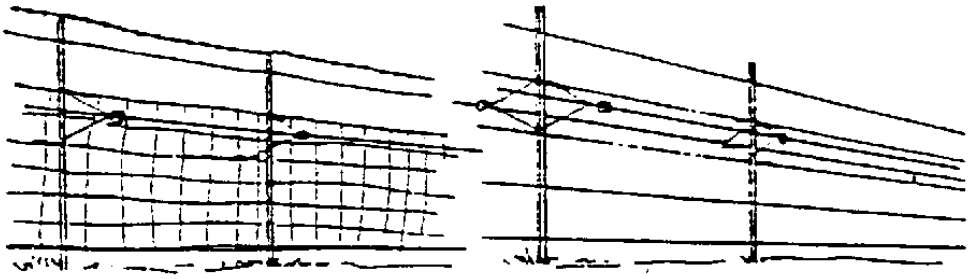
Commercially manufactured PVC tubing is available to place around the top wire of the fence for enhanced visibility. This material certainly does the job although strips of synthetic (plastic) fertiliser bags or flagging tape placed at regular intervals along the top wire will do the same job at a lower cost. Aluminium soft drink cans can also be hung at regular intervals to help with visibility.

In addition to the above, the visibility of fence lines should be effectively maintained by slashing, grading or the use of herbicides. The herbicide of choice is Glyphosate or residual herbicides for a better long-term effect.

OTHER OPTIONS

Electric fences

Electric fences are becoming more popular for horses. They are not necessarily more expensive, but are effective as they need less wire, which reduces the cost. One of the main concerns in the Top End is lightning damage to electric energisers. However, technology is available to overcome this problem. On large paddocks with several horses, where separation of animals is required, electric fences may well be more effective and more economical.



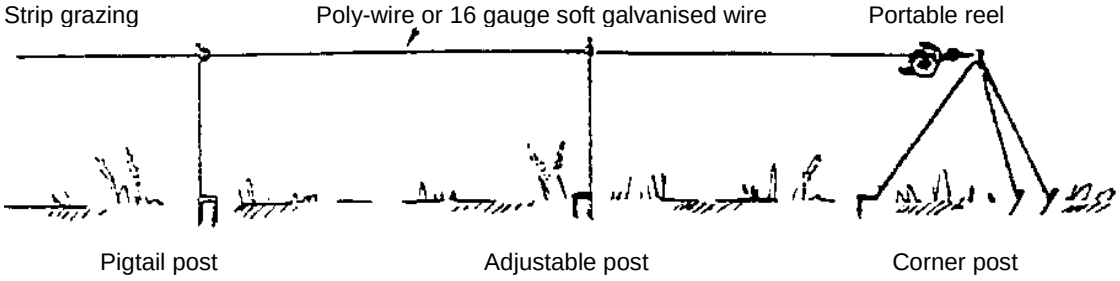
A single offset wire *Offset wires on both sides*

Electric fences for horses need not be of the same construction as cattle fences. Even a single or double wire design may be sufficient if it is energised. An existing fence can be upgraded to help reduce damage by reducing the pressure on it and can be electrified simply and effectively with the use of an insulated outrigger wire. The diagram above shows how the outrigger is attached to the conventional fence.

In the case of adjoining paddocks that may be used to separate mares and stallions, an outrigger on either side of the dividing fence will keep the animals clear of the fence.

A combination barrier/electric fence can be erected using fibreglass rod type posts and four plain wires at a lower cost than a standard cattle fence of three plain and two barbed wires or four barbs. Insulators are needed on steel posts; the strongest are porcelain and the easiest are plastic pin-lock types, but are susceptible when fires occur.

Electric fences can also be used as temporary "strip-feeder" fences. This consists of fine stainless steel wire twisted into a poly tape or twine a little thicker than a builder's string line. This type of fence may be easily erected and removed as required. Typical applications are in educating young horses and in controlled strip grazing of pastures. The diagram below shows a typical "strip-feeder" fence. It is used where the fence needs to be moved regularly, such as daily.



Rigid fencing

Rigid fencing can be constructed of either timber or steel. Examples include white painted fences around many of the larger horse studs and racing stables. This type of fence is effective but expensive.

Cable fencing

Cable fencing is a reasonably inexpensive option where small areas are required or where low-cost yards are needed. Round yards are particularly good examples of where cable may be used.

CONCLUSIONS

Low cost and effective fences are an achievable goal. They are necessary if damage to horses and fences is to be avoided. In horse fences:

Don't

* use barbed wire
* electrify barbed wire
* leave wire "tails" on the fence
* make the fence hard to see; mark the top wire.

More information can be obtained by contacting a local office of DPIR.

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