

Grassland management advice



This brief guide is intended to provide horse and pony owners and keepers with some basic advice on their grassland management. This is a huge subject, which can only be lightly touched upon here, but will supply details of where to get more information for individual needs.

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Introduction

Horses are often given the reputation of being poor grazers. Their selective grazing habit is that of choosing only the sweeter grasses, and manuring in specific places where they then won't graze. Regular removal of droppings from paddocks prevents the build up of rank areas of ungrazed pasture and has a significant impact on the numbers of worm larvae that are harmful to horses and ponies.

Improving grassland

Horse and pony owners and keepers can play a role in maintaining any existing unimproved grassland they control, and ensuring that other grassland is not unnecessarily 'improved'. Such improvement includes activities like drainage and artificial fertiliser and/or lime application. It is not always necessary to carry out either of these operations, and consideration should be given to any existing wildlife and the landscape setting before they are undertaken.



How many horses and ponies per hectare (acre)?

The **British Horse Society** (BHS) recommends between 0.4 and 0.8ha (1-2 acres) of pasture for each horse during the summer. But of course horses and ponies are all different, and this may be far too much grazing for a Shetland pony! Different types of horses and ponies have different needs, and this must be taken into consideration.

Overgrazed paddocks not only look awful, but are also bad for the horses and ponies in them, as the risk of harmful worms building up is far greater. Perhaps a good general aim on clay soils should be for 1.2 hectare (3 acres) per horse.

Pasture management

Grazing management for horses and ponies is a difficult balance between the desire for grass cover in the winter months, and ensuring that grass intake by ponies during the spring and summer months is restricted.

In a typical year, grass grows five times faster in May than it does in September, so a well managed paddock of one hectare (2.4 acres) can grow the equivalent of

two sacks of a medium energy feed per day. With 4 horses or ponies in the field, that's like giving them 10kg of hard feed each, Ref. H & H Feed Forum 4th April 2002!

Traditional management recommends a routine of fertilising, harrowing and rolling paddocks in the spring and autumn. It is probably cheaper, and definitely far better for your land to look after it all year round, not just in the spring and autumn!

Try to avoid any supplementary feeding in the field. Not only does this lead to bare, 'poached' areas where weeds will ingress, but also if the horses and ponies have eaten all the grass, they need moving on! If you must feed in the field, remember to clear up the buckets and bowls afterwards. Buckets and bowls look unnatural in the countryside, and can also be a potential hazard to your horse or pony's health. Where salt or mineral licks are being provided, move them around so that no one area becomes overused.

Where possible, a 1-2 meter wide strip of rough grass should be left on the field margins between fencing and hedges to provide a valuable wildlife haven for field and bank voles and overwintering insects.

Drainage

Ideally, grassland that horses and ponies are kept on should be well drained allowing for good soil aeration, and should not hold puddles after rain. Any existing ditches should be kept clear of vegetation and the build up of silt, but deepening ditches or digging new ones may have damaging effects on your own paddocks, horses and ponies and neighbouring landowners. Before any new drainage is carried out, advice should be sought from the Environment Agency's internal drainage board.

Weeds

It's important not to think of everything except grass as being a weed! Other plants should really be classified as herbs, many of which are not only extremely palatable to horses and ponies, but also beneficial.

Weeds such as ragwort are obviously poisonous and must be removed, ideally by hand pulling and burning. Other invasive plants that are considered weeds are those plants which horses and ponies will not eat like docks, thistles and nettles.

Regular cutting or mowing of these should stop them spreading but it may be necessary to dig them up to completely kill them. Spot treating with a herbicide such as glyphosate (Roundup) will also kill weeds it comes into contact with, but the pasture cannot then be grazed for a given period.

Rolling, Harrowing and Mowing

Grassland cultivations, such as rolling, harrowing or mowing must not be carried out if ground nesting birds are present, and should only be done when the soil conditions are right. Driving over land that is too wet will cause serious damage from compaction.

Harrowing is carried out to pull all the dead grass, or thatch, up from the base of the healthy grass so that air, water and nutrients can more efficiently get to the soil. This should be carried out in the early spring, before strong grass growth gets underway.

Rolling repairs any damage done to the fields by hooves over the winter, but can cause soil compaction, which may be as damaging as the hooves!

Keeping the grass height to five centimetres (2-3 inches) during the growing season and 2 centimetres (1 inch) in the winter, will have a huge impact on the ground conditions, especially in winter, protecting the ground from the effect of horses' and ponies' feet.

Fertilisers

Try to avoid having to use artificial fertilisers. These can lead to a loss of wildlife habitat, and the rich grazing they cause may lead to obesity, particularly in ponies, which in turn causes potentially lethal laminitis.

Before anything is applied to fields, a soil test should be taken to establish an actual need. Soil should be tested to find its pH, which should be 6.5. If a soil is too acidic, an application of lime will help to restore the correct pH. Three other elements are needed in balanced proportion for optimum grass growth. These are potash, phosphate and nitrogen. If these elements are not in balance, it may be necessary to apply an organic compound fertiliser to the grazing, which must then be rested until they have been washed into the soil.

Dung

There are many reasons for picking up dung from horse paddocks. Not only will the paddock look better, as the horses and ponies will graze far more evenly, but they will also benefit from the removal of harmful parasites that are excreted in their manure.

Selective grazing causes long rank grasses around latrine areas which can have reduced wildlife value.

A typical horse, which weighs about 450 kilograms, produces around 20 kilos of manure per day, or around nine tonnes per year. If the horse is in his field for even half the day, this is four and a half tonnes of manure on his one hectare paddock!

Resting the grassland

The key to good grassland management is to rotate the grazing. Throughout the year, paddocks should be rested to allow the grass to recover for two to three weeks at a time. Ideally, paddocks should be rested for six months but this is

rarely feasible. Resting paddocks from autumn through to the mid-summer completely breaks the life cycle of most of the internal parasites.

Even smaller paddocks can be sub-divided with temporary electric tape to rest them.

Riding on grassland can damage the sward, so it is preferable to exercise elsewhere if possible.

Calendar

Time of year	Action	Reason
Late Winter	Soil test to establish pH and other nutrient levels	Optimum soil pH for grass growth is 6.5. Early testing allows for forward planning
Early Spring	Harrow pasture Roll pasture Be aware of too much grass	Harrowing pulls up dead 'thatch' from grassland Rolling repairs damage from hooves and firms soil to maximise root contact with available nutrients High risk period of laminitis in ponies (and horses)
Late Spring/Early Summer	Apply nitrogen, phosphates or potash fertilisers where necessary	Results of soil test will establish whether fertilisers are necessary. Application timing is crucial to ensure the conditions are right for nutrient uptake, and to prevent

	<p>Keep grass length to 5cm (2-3")</p> <p>Target invasive weeds such as docks and ragwort</p>	<p>nutrients being washed out of the soil by heavy rainfall</p> <p>Not only is grass more able to make it's own nutrients if it is kept at this length, but it is also able to withstand the actions of hooves better at this length</p> <p>Hand-pulling of weeds early in the year is far easier than when they have become established</p>
Summer	<p>Continue with mowing to keep grass length to 5cm</p>	<p>This also stops weeds from flowering and/or setting seed</p>
Autumn	<p>Continue with mowing</p> <p>Be aware of 'autumn flush' of grass growth</p>	<p>Vigorous autumn grass growth is potentially another real risk to ponies that suffer from laminitis</p>
Winter	<p>Rotate paddocks</p>	<p>Try to minimise serious damage to grassland by moving from paddock to paddock</p>
Remember	<p>Pick up droppings as often as possible</p> <p>Grass will continue to grow whenever the soil temperature is above 6°</p>	<p>This reduces the number of parasites and encourages the horses and ponies to eat from the whole of the field.</p>

Summary

Well-managed and maintained paddocks can have an enormous effect on the local landscape and countryside as well as on the health of the horse and ponies that live in them.

The more land that is available to each horse, the less damage will be done. Try not to overgraze and practise good management.