



Land Management for *Track Grazing Systems*

**Transforming the lives
of equines together**



Managing the balance

The trickiest thing about managing the grass on a track is keeping the balance between keeping the grass healthy enough so you don't lose it altogether, but not promoting a high amount of grass growth if you are using your track for weight management.

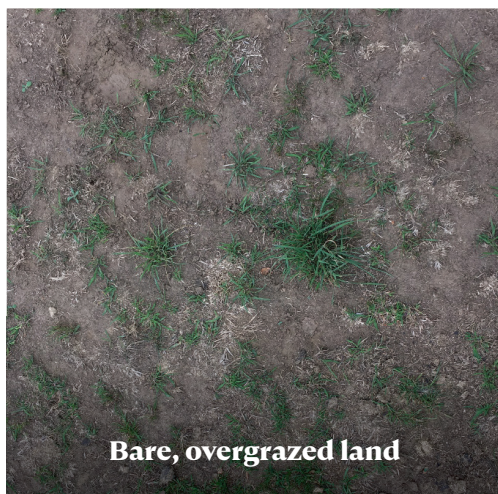
What does grass need?

Grass needs sunlight and the right balance of air, nutrients and water in the soil in order for it to grow. If you have any area such as a track system which gets a higher footfall and grazed harder, it can disrupt the balance of air, nutrients and water within the soil, which will stunt growth. Constant over-grazing will also reduce the plant's ability to put energy into root growth so over time the roots will weaken, making it more likely that it will get pulled out by the roots when horses graze. Any grass plant with shallow roots will also struggle to grow effectively during the summer as the roots will not penetrate deep into the soil and therefore will dry out more quickly.

The benefits of caring for your roots!

The roots of a healthy grass sward work to help hold together and stabilise the soil during wet weather, they also draw up and use water for growth and create tiny channels as they grow which aids water drainage through the soil. Any bare patches of soil will not have the root structure to help hold them together so will get wet and muddy more quickly. They will also promote weed growth. Weeds are able to grow in more compacted areas because many of them have a long 'tap' root which helps them to penetrate compacted soils and in summer reach deeper into a more moist layer of the soil.

There are a number of things you can do to avoid losing all the grass on your track and maintain that tricky balance. **Caveat here – If on a livery yard or rented land, seek the land owner/ yard manager's permission to undertake any land management activities.**



Bare, overgrazed land

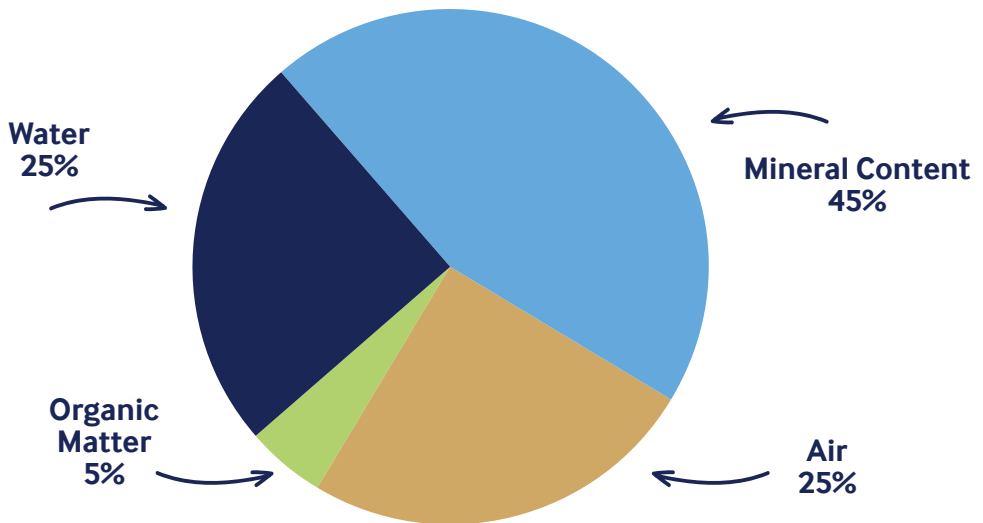


Fairly dense sward, healthy

Mud and winter

We would advise against using your track in the winter months, when it is very wet and muddy. The action of the horses hooves in the mud will damage grass roots and will compact the soil. Soil compaction is when the soil is compressed and the majority of the air gaps in the soil are removed. Air is important for root growth, but also important for water drainage. Ideal soil composition is around 25% air, 25% water, 5% organic matter (manure, dead grass, leaf mould etc.) and 45% mineral content (the actual soil). If that 25% air is reduced to 5% (for instance) then there is

Ideal Soil Composition



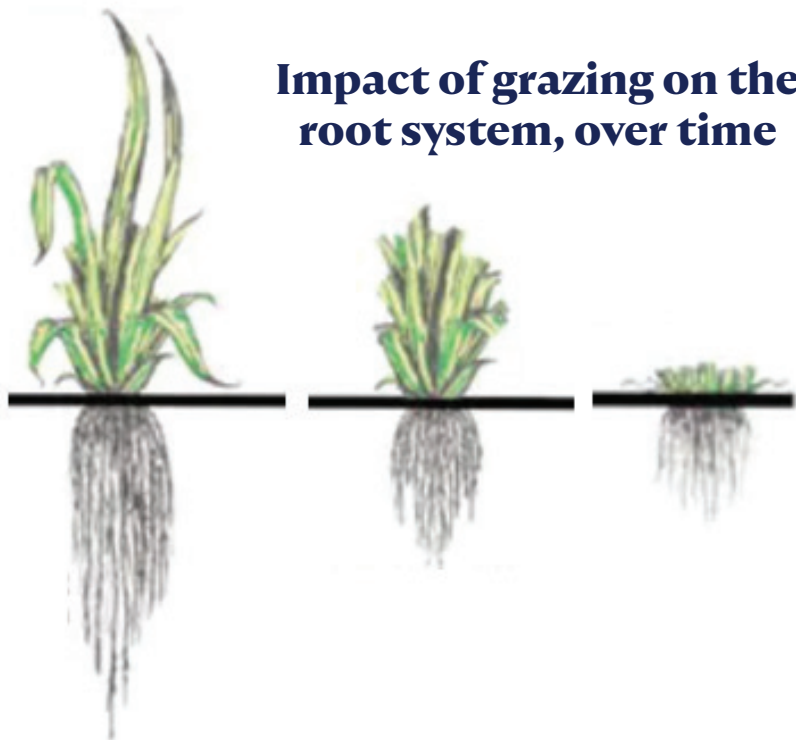
no way for water to drain through the soil. This in turn, increases the amount of water sitting on your track and promotes flooding and makes more mud! Some soils are naturally more prone to compacting (clay and some very sandy soils) Also bear in mind that Keeping horses in wet mud will actually reduce the amount they will move and will negate the purpose of a track to create movement and enrich their living environment.

Bransby approach - Resting the grass

At Bransby, we come off our tracks as the ground starts to get a bit wetter in the autumn. This means our tracks will rest over the winter until February/March the next year. Winter is an ideal time for our tracks to rest, as they recover from the period of intense grazing, but don't grow away lots to give us the problem of too much grass growth in the spring.

Bransby approach - Care and repair

We assess the condition of each track and create a treatment plan based in the needs of the track. We alleviate compaction with an aerator or a sward lifter (sub-soiler), we will sometimes overseed if the sward is sparse and we will fertilise the soil if our soil samples indicate they are low on key nutrients, or the grass looks like it would benefit from a small amount of nitrogen.



Bransby approach – Weeds

If weeds are becoming a problem we will consider weed spraying. We do not spray to eradicate every weed but will weed spray if weeds are multiplying and are at risk of taking over.

We have the equipment and ability and are lucky enough to have the funding to do this work. As horse owners on a livery yard, you may not have quite so many options available to you – there is still lots you can do:

Resting

Hopefully, this should be possible if you still have the middle of your paddock to use during wetter periods. Resting will allow grass to re-grow, roots to strengthen (which helps with plant growth, soils structure and drainage) and if grass is allowed to rest long enough to go to seed (depending on the time of year the track is rested), it will naturally drop seed and you get the benefits of all that free seed.

Care and Repair

Dependent on if you own the land or on the type of livery yard, you may be able to get a local farmer to help to aerate. This is usually done with an aerator or grass slitter, if you can't do that, even using a set of chain harrows under the right soil conditions will help. Rest will also, over time alleviate compaction – hence why the first point is so important.

Over-seeding

If you have sparse grass growth, overseeding may be needed. Autumn is the best time to do this as the ground temperature is still warm but wetter weather will help



Sub-soiler (Pan Buster)



Chain harrows (you can get chain harrows a lot smaller than this one of course, lots of people with their own land tow them with quads)

germination and growth. Be aware, if you have a designated species-rich grassland (classified by Natural England) (or SSSI – site of special scientific interest) then you will need advice on any overseeding to avoid introducing the wrong grasses to your sward.

Types of grasses to overseed

you will need to consider what you are using your track system for. If it is for weight management – use a grass mix that does not contain any ryegrass (Perennial, Italian, Annual or Westerwolds are all types of ryegrass). Lots of grass companies now will do a meadow mix or non-ryegrass mix. Ryegrass has been designed and improved over the years to maximise growth in livestock, so is higher in sugar and proteins than other grasses and will promote weight gain in horses. If you have the type of horse that needs to gain weight and are using your track for enrichment and movement, then a mix with some ryegrass may be of benefit as ryegrass is hardy and grows well. It will cope better with constant grazing – but be sure your horse does not have any metabolic condition which may make it more sensitive to the higher sugars.

Mulching

You do not always have to invest in a bag of grass seed to help overseed your track. All those bits of hay the drop onto the hay barn floor – or are left by your horse can be of benefit here. Firstly – know what hay you have. If it is a ryegrass hay then you may not want to do this for the reasons above. However, if you have a meadow hay mix, spread those bits of waste hay thinly on your track. Any seeds in the mix will help to overseed your track. The stalks of the hay work to mulch your ground. They will break down over time – adding nutrients and organic matter back into your soil, they will help keep moisture in the soil and they will help to prevent weed growth. Do not leave a mulching layer that is too thick however as it will also hinder grass growing through from underneath.

Loafing areas

If there is a loafing area that you will want to use a lot – consider investing in some Mud Control or Jelka mats: Mud Control mud mats or Jelka mud mats are mats designed to ‘float’ on mud, to provide a hardstanding area in muddy conditions which is easy to install, moveable and does not require groundworks, stone or hardcore to use. Both types of mats do need a thin covering of sand over them to improve grip for horses and avoid slips. These will protect the ground and avoid it becoming so poached and therefore ease soil compaction.

Replacing lost nutrients

The best thing to do – if possible, is to take a soil sample every 5 years and get it sent for analysis. This will tell you the levels of key minerals within your soil and whether any need replacing. There are companies who will test your soil and use an appropriately qualified agronomist to give advice on the needs of your land, the cost for this is around £50. If a fertiliser is needed, you can buy granulated fertiliser in small bags – it is best if spread by a contractor as they will have equipment to ensure it is spread evenly and at the right rate, but it can be spread yourself, if you have the knowledge and experience.

Take care to ensure you are fertilising at the right rate and get advice from an appropriate expert about where and how to fertilise, for instance – you should not spread close to a watercourse as fertiliser can leech into waterways causing pollution which is harmful to wildlife. We would advise not use a fertiliser without having your soil tested as if there are already sufficient nutrients in the soil, then not only will you be wasting money on fertiliser, but you are also more likely to cause leeching of nutrients into water ways. It is generally best to avoid using nitrogen as a fertiliser, or if used, use it in small quantities. Over-use or high use of nitrogen can promote the growth of grasses such as ryegrass and can cause the increase of sugars in grassland.

Using manure as a fertiliser

You can use old horse manure as a fertiliser if you have a good worm burden control programme and know that your horses aren’t shedding high levels of worm eggs. Fertilising with manure is a good way of providing a low level of slow release all round nutrients. There are no hard and fast rules but data suggests that the manure you use will need to have sat in a manure heap for at least 3 months – this is to ensure that the heap will have opportunity to heat up enough as part of the composting process to have killed the majority of any viable worm eggs in the manure. It will also give the manure a chance to break down a little which will help it to spread more easily. If the manure contains a high level of bedding material such as straw, wood shavings etc. then it will likely need a lot longer to breakdown, otherwise large chunks could mulch the ground too heavily, stopping grasses from growing through it. The area where manure is spread will need resting for at least 3 weeks but ideally 6 weeks before grazing again to allow the manure to breakdown before re-introducing horses. Avoid using other farmyard manures as they are likely to be too high in nitrogen and seek advice on how and where to spread as discussed in the above paragraph.

Weeds

Weeds such as docks and thistles will thrive in bare soils. These can be dug up or sprayed with weed-killer, but any weed spraying needs to be done by a suitably qualified contractor. If you are unable to dig weeds out or get them sprayed, then as a minimum, it is a good idea to ensure they are kept cut back, especially if they have developed seed heads as you want to avoid any seeds falling onto your pasture. Some weeds are less likely to compete with your grass and some can be beneficial for horses to graze, there is lots of good literature out there if this is an interest area. Any poisonous weeds will need to be controlled for horse health (such as ragwort or hemlock) in these cases, ensure you dig them up, bag them up and do not leave on a compost heap as sometimes seeds can continue to develop even after the plant has been dug up.