

How to make your horse happy

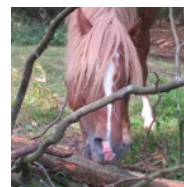
Before we can enrich a horse's environment and make them happy, we first have to know what they need. The Natural Animal Centre's behaviour triangle below shows how horses prioritise their needs in order of importance. At the bottom of the triangle is the most important need of safety. Unless this first need is fulfilled they cannot complete any needs higher on the triangle. The same goes for every level e.g. if a horse does not feel safe (need 1) they will not sleep (need 4). Unfortunately some horses do not feel safe for years and they will have to sleep to survive but it will not be good quality sleep, like us on a long flight. Whereas, other needs which are not vital may be given up completely if the needs below are not fulfilled long-term e.g. mutual grooming (need 3). Horses should be able to fulfil all of their needs to thrive and not just survive.

Ideally horse's need:

1) Safety - A permanent, bonded herd together 24/7 allows horses to feel safe as others are watching out for them.



2) Eating and drinking - To drink and eat as a group. They need to eat for about 17 hours a day. 1 1/2 hours of this time should be spent browsing on bark, twigs, leaves, roots, fruit, seeds and aquatic plants (8).



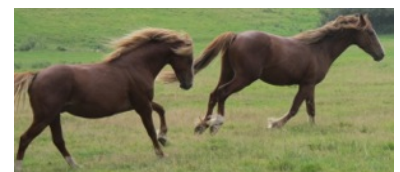
3) Body care - Horses must have enough space to roll, stretch and scratch. They need access to companions who they like to mutual groom with. Horse's need options available which allow them to regulate their own temperature.



4) Rest and sleep - For horses to sleep properly it is vital that they feel safe enough to do so. In addition, they must be physically able to lay flat and stretch their legs out somewhere comfortable. Horses sleep for 3/5 hours a day in many different bouts over 24 hours (9).



5) Motion - For both emotional and physical reasons horses need enough room to run and play with the herd 24/7. Horses are most active at dawn and dusk as they are crepuscular.

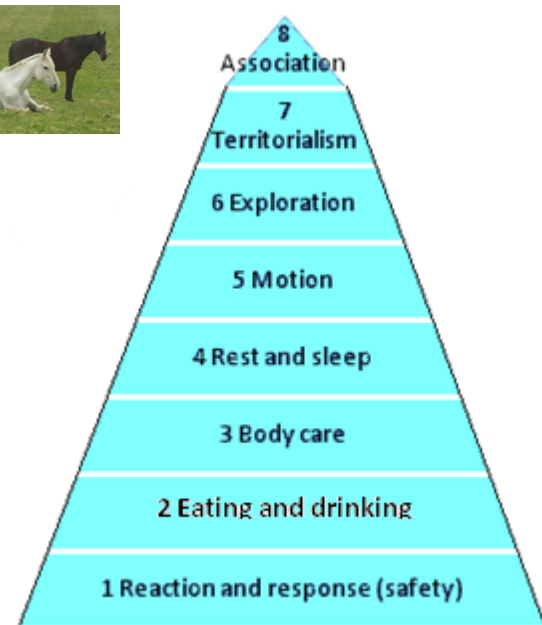


6) Exploration - Horses need a stimulating environment for them to investigate. This aids their problem-solving skills, makes them easier to train and builds their confidence.



7) Territorialism - Horses need a well-known home range where their herd can fulfil all of their needs and make choices.

8) Association - Social interaction is essential to a horse's happiness. Horses will form lifelong pair bonds if we allow them to stay together (15).



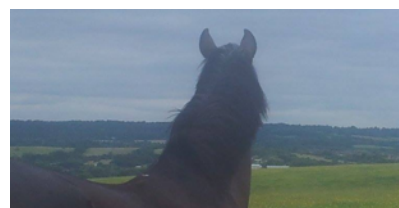
Now that you know what your horse needs you can go through the list and take what works for you to make your horse's life marvellous! You may not agree with everything listed as a lot of the ideas are not in line with traditional horse management, so just take what you want and leave what you don't. Even if you can only manage 1 small thing today, that is fantastic.

1 To fulfil your horses **safety** needs:

- Above all horses need to be with a consistent herd of the same horses. In natural conditions groups are stable except for about 75% of youngsters leaving to join a new herd when they are 1.5 to 4 years old (9). Sometimes two friends will leave together and they may stay close with an overlapping home range so that they visit their family (18). Equines who leave their nursery herd may join a new herd where they already have a family member. Once they move they will often stay with that herd for life (9). The reason that youngsters leave is to make sure that there is no incest. In domestic situations where we geld stallions then it is ideal for mares to be kept with their offspring long-term as part of their herd. This is drastically different from how many horses are taken from their family abruptly and forever and then moved from yard to yard leaving their friends behind each time.
- Horses need horse company. 'Alone-ness equals loneliness in the horse' (4 p204). A lone horse can never feel truly safe and different species company is just not the same. It would be like if you only ever saw horses, sure you would have company but you would crave a conversation with a human!
- When putting horses into herds it is best to have an even number so that they can pair bond. Horses will normally choose a pair bond who are similar to them in age, gender and size (15).
- If your horse has to go through a stressful experience e.g. seeing the vet, you can make it easier by having their herd nearby. A human example is that a child will be a lot calmer at the dentist if his mum is with him.

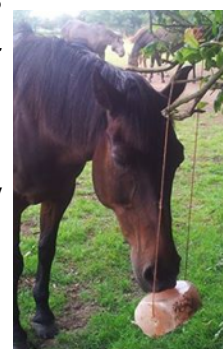
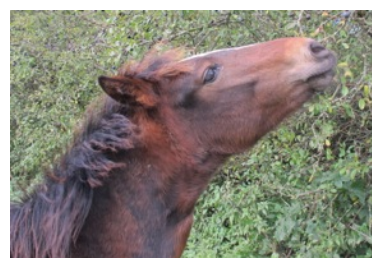


- In a stable/barn by providing more windows and in different directions they will feel safer as they can see more of their surroundings. Vision is their primary sense and it extremely important to them that they can see what is around them (18). In a study increasing the amount of openings resulted in weaving and nodding behaviours to decrease (2).
- A chain across the stable door allows the horse to see more and makes the stable seem more open.
- Pair bonds should be stabled next to each other so that they can feel safer knowing their best friend is next door.
- Horses will prefer a room with a view, no one likes to be stuck looking at a wall all day. However, it is not ideal for them to see the arena as it has been proven to cause them to release stress hormones if they watch horses being schooled.
- Horses should be able to see at least one other horse at all times. If they are stabled and cannot see a horse they will spend more time standing alert (17).
- A quiet peaceful home is best. A radio on all day is not ideal as it disturbs and affects your horses ability to hear other sounds which may make them anxious.
- Horses have a preference for light (9). So structures which shut out natural light are not ideal.



2 To fulfil your horses eating and drinking needs:

- Hide vegetables and safe plants in their hay for them to forage for and find.
- Provide a variety of safe branches/logs for them to browse on. This will prevent your horse wood-chewing on their stable, fence etc which can splinter their alimentary tract or cause intestinal disruption (4).
- Provide different types of hay and both wet and dry hay so that they have a choice of what they prefer (you wouldn't like the same food 3 meals a day). Research suggests that generally horses prefer wet hay (18). Also soaking hay reduces the levels of simple sugars as they dissolve.
- Horse's need forage available 24/7. After 2/3 weeks of continuous access to a single feed ponies will stabilise their bodyweight and consume 2 to 3% of dry matter (9). This is because horses learn that food is not scarce and they don't have to overeat. Horses should not be left without food for long periods to avoid gastric ulcers developing. When feeding hay to a group of horses it should be fed in many different piles spread out. If the horses are displaying any signs of aggression then move them further apart!
- Hay should be fed from floor level to facilitate good teeth, nerves, muscles and airways (9). You can recycle big car tyres to make great hay holders.
- If you give your horse a concentrate feed give the different feeds separated in bowls placed around their space so they have a choice of what to eat first and are encouraged to move and eat. Or if possible you could scatter the feed on the floor so that they will walk and eat as they are supposed to. This is why some horses will paw as they eat from a bowl, it is a displacement behaviour due to their frustration.
- Provide your horse with a pink salt lick. This can reduce the stereotypy crib-whetting where the tongue is firmly held across the door top (4).



- Horses may eat soil to supplement their dietary sodium (14).



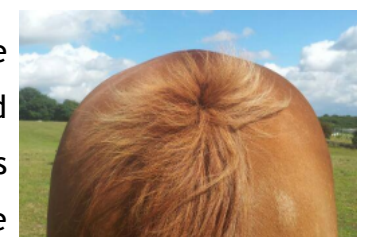
Another reason why they should have access to pasture every day!

- Soak some hay in water with a herbal tea-bag for flavour. Always provide normal hay as well in case they don't like the flavour. (12)
- Allow your horse to choose safe herbs from different bowls. You can cut many yourself (save some money) and allow them to dry out e.g. nettles, mint, rose hips etc.
- Hang vegetables on twine.
- Make your horse a treat branch by skewering polos, fruit and veg on to branches (13).
- Give your horse a little flavoured water as a treat e.g. apple juice. Provide an alternative of normal water too in case they don't like it.
- Leave treats in random places to give them a feel-good boost (like us finding a £10 note).
- Seed grasses in your pasture which are healthy for your horse. Grasses may look very similar but some have 300 times the sugar per mouthful. For more info visit <http://www.safergrass.org/>
- For safety reasons drinking is a group activity (like us at the pub) so put many water buckets/troughs together and position them away from a wall so that the horses can drink at the same time. Letting the herd drink together in an open space prevents scuffles around the water trough as the horses have plenty of space to move away and cannot get trapped against the fence. In addition, if you put a second water source near to the first then the horses will see that water is plentiful and does not have to be defended.
- Find a meadow with a safe stream for your horses to drink from and cool down in.



3 To fulfil your horse's body care needs:

- Rubber scratching mats, broom ends and a pillow post (available at www.embehaviourist.co.uk/pillow-post) will provide your horse with different textures to scratch themselves on.
- Put 3 posts in the ground then put tyres around them in a stack to make a scratching post. Alternatively you could fill the tyres stack with dirt and make it shorter so that they can scratch their belly on it.
- Trees and hedges are needed for shade, scratching and eating.
- Avoid electric fencing where possible as they can't scratch on anything, they are fearful of it and it's terrifying when you touch it by accident!
- Provide different surfaces so that your horse has a choice of textures to roll on and they are great for hooves. You may like to use sand, wood chips and pea gravel, the more the merrier.
- A natural water pool/pond/stream is perfect for horses to stand in to escape insects and cool down on a warm day (feel free to join them). However, horses should never be given access to water when it is frozen or they will have trouble getting out and could drown.
- Tails should be kept long in length so that they can use it as a fly swat. Pair bonds will stand top and tail so that they can fly swat each others faces.
- The tail should not be pulled at the dock as it hurts them and the long hair protects their bum from colder weather. In the wind and rain the horse turns their rump into the wind and their tail blows through their legs to protect their delicate area and belly. The dock is a thermal vent and when warm they lift their tail to let heat escape (4).
- Manes should be kept long to protect them from the sun, wind and rain. In the winter the mane prevents heat loss from the jugular vein (11). Not to mention they look divine.



- Ear hair shouldn't be trimmed as they grow the hair long to prevent foreign bodies entering the ear canal (9).

- Whiskers should not be trimmed, to find out why read <http://www.embehaviourist.co.uk/wp-content/uploads/2013/12/Whiskers1.pdf>

- Time without a rug on with familiar companions allows horses to mutual groom which aids shedding, parasite control and alleviates stress (11).



- A big interesting field gives the animal a wider choice of regulating their temperature e.g. rest somewhere with high wind or stand in the shade. To warm themselves up horses love to sunbathe with the side of their body to the sun (18).

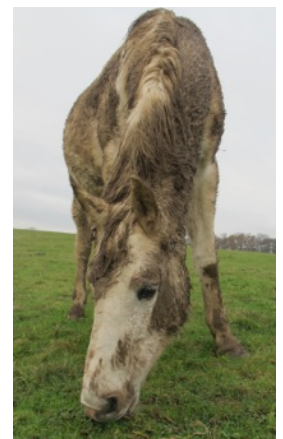
- Horses need a span of 6 metres to roll properly (9), space not normally accommodated in a stable. This is why so many horses become cast/stuck when rolling in a stable. They just don't fit!



- Horses need to be out in the daylight everyday so that they can make Vitamin D which is important for many functions such as keeping their bones healthy (6). This means that their skin needs to be out i.e. no skin-tights hoods over their head!

- In the summer you can create a muddy area for them to roll in which will provide protection from the flies and sun. Don't worry about what they look like, mud is the look for 2015.

- Allow your horse to roll and be muddy. Rolling has many benefits such as to help them shed their coat, to scratch and stretch their body and to speed up the drying and re-fluffing of their wet coat. In winter a layer of mud traps heat and protects the horse against the wind.

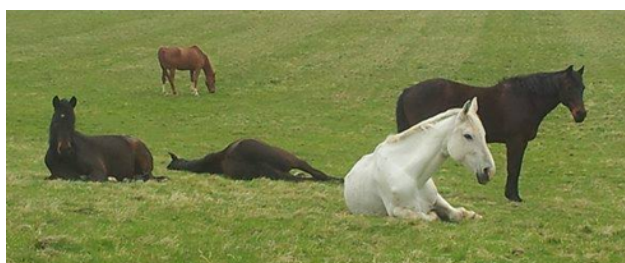


- Ideally all horses will have access to a shelter with hard standing where they can get out of the mud and rain. Usually the more open it is the more they will use it. As if they can see through windows and opening they will feel safer. However, if there are too many openings then a lot of wind will come through. Perhaps the ideal would be see-through covered windows across the whole side or lowered walls with shrubs covering the windows so they can see through but are protected from the wind?



4 To fulfil your horse's rest and sleep needs:

- Horses sleep for 3/5 hours a day (9) This time is spread over many different bouts throughout 24 hours (18) so please be aware that when horses are stabled for the night they are not sleeping all night as we do.
- To feel safe enough to sleep properly most horses will need the company of at least one other horse who can keep watch for them.
- In preference tests horses have shown that they prefer to sleep on deep straw beds (9).
- Horses on deep beds lay down more (9).
- Horses need enough space to lay flat out with their legs stretched.
- Any medical issues which inhibit the horse from laying down e.g. arthritis, should be managed to support them.
- If horses travel and stay away from home this will affect their sleep for up to 3 days as they won't feel safe (3).



5) To fulfil your horses **motion** needs you can:

- If your horse is stabled make sure that they have as big a box as possible as restricted movement increases the risk of leg and hoof problems (18). Another effect of lack of movement is the development of laminitis and metabolic syndrome as exercise helps the body to regulate insulin (7)



- A much better alternative to a stable is a communal barn/shelter. Google 'The Equicentral System' to find out about a fantastic way to manage horses to benefit their health and happiness, your workload and your pastures health. However, with communal living be careful not to over- crowd a confined area with too many horses.

- A patio outside their stable/barn gives them a much bigger area to move around. In addition, they have a choice whether they want to be in or out and so can regulate their temperature.



- Ideally horses should have 24/7 access to pasture so that they can walk and eat for 17 hours a day, little and often as they were designed to. If this is not possible then try for as much turnout as possible. I know some people worry that their horse will eat too much and so restrict turnout. The problem is then that horses eat much quicker when they are turned out. They view grass as a scarce resource and in 4 hours they can eat the same amount that they usually would consume in 8 hours (1). Usually the issue with obese horses is that they are eating grass which is far too rich for them. So we are actually better



off giving them free access to grass 24/7 but making sure that it is the

right type of grass. Also as I said earlier after 2/3 weeks of continuous access to a single feed they will stabilise their bodyweight (9). It is perfectly fine for them to gain a little weight in the summer as long as they lose it in the winter. This is the natural rhythm for them. One last point, I am often told that horses are only turned out for 2 hours a day as they will get fat. Is it any surprise that they are fat if they stand still in a stable all day?

- Turn your horses out in as big a field as possible to make it much more interesting for them. In fields smaller than 5 acres canter is restricted and they cannot play properly (5). It would be like you trying to play tennis in your kitchen. In addition, a larger field will reduce worms and add a wider variety of nutrition (4).
- When turnout is restricted try to give your horse daily access to the sand school with their pair bond so that they can move freely and interact.
- Take them out for outings in the countryside. Some horses may love to explore different areas although other less confident horses will like to stick to where they feel safe. If your horse tries to run home when going out then this is not enjoyable for them and you should get professional help to ensure you both enjoy going out together.
- If you have two horses you can ride one and have the other follow you around your enclosed fields.



6 To fulfil your horses **exploration** needs you can:

- Set up puzzle games for your horse, click the link to see more:



http://media.wix.com/ugd/49624a_87a87d9242494fd996feb9ba78d32139.pdf

- Use an interesting field with hills, mounds, dips, a stream and woodland wherever possible.
- Take your horse and their pair bond for browsing walks. Its pretty much like a picnic for them, they love it!
- Big rocks and logs in the field make it more interesting and get them to think more about where they are moving if they have to move around things.
- Provide a variety of safe toys for horses to object play with. This will widen their comfort zone when they feel safe at home with the support of their friends.
- When it's hot a paddling pool and water sprinkler can be great fun for all the family.
- In any way, shape or form positive, diverse experiences boost the confidence of young so be creative! (18).



7. To fulfil your horses **territorial** needs you can:

- Make sure that resources are seen as plentiful by your horses so that they do not have to worry and feel that they have to compete with each other.
- Horses have a home range which they normally occupy (4). They feel safe here as they know escape routes and where resources are (9). Wherever possible we should not move horses away from their home. Moving home is stressful enough for us and we decided to move.
- It is important for horses to be turned out in the same field so that they can build a map of where all the resources are.
- Provide a large area for them to explore. A bigger space is important for reducing worms, trimming feet and providing a variety of nutrition (4).



8. To fulfil your horse's **association** needs you can:

- When stabled horses can be visited by their friends who can be tied up outside their stable. Just be careful only to do with this with close friends so that the stabled horse doesn't feel trapped.
- Ensure that the herd is a mix of mares and geldings and different ages so that they can enjoy a rich social life.
- Make sure that the same horses are turned out in the field together so that they can form strong friendships.
- Try your hardest to keep the same herd of horses together forever.
- Stabled horses will be happier if they can see, smell and touch their stable neighbour through a part grill or window in between the stables. This has been proven to reduce weaving and nodding (9). However, make sure that there is also an area where they can have a space away from other horses if they want as a stable is a very small area and you don't want them to feel trapped.
- Spend time with your horse doing things which they like e.g. hand-grazing.
- Spend time with your horse doing absolutely nothing! Just sit and relax with them and do what horses do best. Some horses may like to be scratched or stroked and some will not, leave it up to them.



So there you have it, the recipe for a happy and healthy horse. Focus on just one need at a time, write your to do list and then in no time your horse will be living the dream!

Please do send me some pictures of your enriched environments and let me know if you have an idea to add to the list. With full credit given to you of course, I shan't steal your thunder.

Good luck, I can't wait to see all the happy horses!



References

1. Biggs-Waller, S, The Horse (2012) *Horses grazing summer pastures* [online] Available: <http://www.thehorse.com/articles/29114/horses-grazing-summer-pastures>
2. Cooper, J, McDonald, L and Mills, D (2000) *The effect of increasing visual horizons on stereotypic weaving: Implications for the social housing of stabled horses*. *Applied Animal Behaviour Science* 69:67-83.
3. Coumbe (2001) *The equine veterinary nursing manual*, Blackwell science ltd, Oxford
4. Fraser, A (1992) *The behaviour of the horse*, CAB International, Wallingford
5. Kusunose, R et al (1985) *Behavioral studies on yearling horses in field environments: 1. Effects of the field size on the behavior of horses*. *Bull. Equine Res. Inst.* 22:1-7.
6. NHS (2014) *Vitamin D* [online] Available: <http://www.nhs.uk/Conditions/vitamins-minerals/Pages/Vitamin-D.aspx>
7. Mazan, M, The Horse (2012) *Healthful Horse Barns* [online] Available: <http://www.thehorse.com/articles/29115/healthful-horse-barns>
8. McDonnell, S (2003) *The Equid Ethogram: A Practical Field Guide to Horse Behavior*, The Blood-Horse Inc, Hong Kong
9. McGreevy, P (2004) *Equine Behaviour*, Elsevier Ltd, China
10. Mills, D.S., S. Eckley, and J.J. Cooper. (2000) *Thoroughbred bedding preferences, associate behaviour differences and their implications for equine welfare*. *Animal Science* 70:95-106.
11. Rees, L (1984) *The horses mind*, Butler & Tanner Ltd, GB
12. Rogers, S <http://www.learningaboutanimals.co.uk/>
13. Sallet, A <http://www.equinebehavioursolutions.co.uk/>
14. Salter, R,E and Pluth, D, J (1980) *Determinants of mineral lick utilization by feral horses*. *Northwest Science* 54:109-118.
15. Simpson, H (2004) *Teach yourself horse*, D.J. Murphy Ltd, Great Britain
16. Simpson, H (2008) *Meeting the needs of your horse*, NAC Library Publiation, Great Britain
17. Sweeting, M.P., C.E. Houpt and K.A. Houpt. (1985) *Social facilitation of feeding and time budgets in stabled ponies*. *J. Anim. Sci.* 60:369-374.
18. Waring, G (2003) *Horse Behaviour*, Noyes Publications, New York

