Managing Mud on Horse Farms
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We all know that feeling. When you lift your foot to take a step and suddenly realize that your boot has been left behind and your socked foot is half a step away from ankle deep mud. Mud is a problem anywhere water meets bare soil and during the last few years we have had our share of mud on Kentucky horse farms.

Horses, like us, are creatures of habit, returning the same areas repeatedly. This behavior causes over grazing and trampling that will inevitably reduce grass cover and result in a muddy eyesore. Recent extreme weather conditions have further thinned Kentucky pastures, magnifying the mud issue. Mud is not only unattractive, it is dangerous for horses and people, it harbors bacteria and decreases pasture productivity. However there are several pasture management tools that can help you reduce mud, and the dangers and difficulties associated with it.

**Overseeding**

Overseeding heavy traffic areas can prevent or correct mud issues and depending on how you do it, can be a long term solution or a short term simple fix. The ideal method is to remove horses from the paddock or fence off an area, then seed into a prepared seedbed or killed sod with perennial grasses like KY bluegrass, orchardgrass and endophyte free tall fescue. This does require equipment and enough time for the seedlings to fully establish, often six months or more, but results in a permanent pasture for many years.

Perennial and annual ryegrass provide short term options for horse owners that are quick to establish and relatively inexpensive. Annual ryegrass will establish very quickly and is inexpensive; however annual ryegrass will only survive to mid-summer. Perennial
ryegrass survives 2 years in Kentucky if not overgrazed, but is a bit more costly and slightly slower to establish.

**Unlike other cool season grasses, ryegrasses can be broadcast on top of the ground and will still germinate and take root.** Especially in small, high traffic areas, this may be the simplest method to manage mud. Keeping horses and people off of this area as long as possible is best, so consider moving the hay rack, water tank or using a different gate for a while. Broadcast seeding of other forage species (Kentucky bluegrass, orchardgrass, etc...) will not be successful unless the area is dragged or cultipacked after seeding to bury the seed. Even when overseeding ryegrass, dragging is recommended.

Success of any overseeding application depends on several factors including time of seeding, seed quality and soil fertility. Always purchase certified seed of improved varieties and consider a soil test before seeding. Make sure to use endophyte-free perennial ryegrass, since turf-type perennial ryegrass contains an endophyte similar to tall fescue that can create problems for pregnant mares. For spring overseeding, early March is the best time in Kentucky.

**High Traffic Area Pads**
In some cases, seeding will never provide enough relief from mud. Paddocks with only one gate or water source constantly face issues with mud, especially when over stocked. In these cases, high traffic area pads are a useful option. These pads do require some investment, however they will reduce or eliminate mud for years to come.

A high traffic area pad or feeding pad consists of geotextile fabric, #4 crushed stone and a dense grade aggregate installed over an excavated area. The result of such material is a pad of smooth dry surface similar to concrete. The geotextile fabric prevents mud from seeping up into the pad and eventually engulfing the area again. Typically, poured concrete will cost around $4.00 dollars per square foot, however the cost of a high traffic area pad around $0.80 per square foot.

High traffic area pads can be installed anywhere that equine or machine traffic is too high to establish cover including around gates, water/feed sources and along fence lines or shade areas.

**Preventing Mud in the Future**

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Mud prevention requires long range planning and a balance between managing horses and managing pastures. Establishing a sacrifice area is a simple way to decrease pasture damage during times of heavy moisture or excessive drought. A sacrifice area is similar to a dry lot that will provide an alternative turn out space to pasture. Ideally, the sacrifice area should be prepared similarly to the high traffic pad as described above.

Pasture rotation is one of the simplest ways to avoid mud issues. By giving a pasture a rest period, bare soil will often be reduced naturally and paired with overseeding will provide greater increase in cover. Pasture rotation only requires 2 paddocks, but 3 or more are recommended to provide each paddock with longer rest.

**More Information**
The University of Kentucky has several publications that relate to managing mud. Please see the list of publications below for more information. These publications, as well as other pasture related information, can be found at [www.uky.edu/Ag/forage](http://www.uky.edu/Ag/forage) with equine specific publications listed under “Horse Links.” Always feel free to contact your local county Agriculture and Natural Resource Agent with specific questions or issues.

- **High Traffic Area Pads for Horses** (ID-164) Higgins, Koostra, Workman, Gallagher and Coleman.
- **Maintaining Healthy Horse Pastures** Teutsch (Virginia Tech) and Smith (University of Kentucky).
- **Establishing Horse Pasture** (ID-147) Smith, Lacefield, Schwer, Witt, Coleman and Lawrence.