



Mud Management Figuring Out Footing Materials

FIGURING OUT FOOTING FOR HORSE PADDOCKS

Footing material is useful for winter paddocks and confinement areas or for high traffic areas such as gates or watering points. The purpose of a footing material is to build up an area to keep your horse or animal up out of the mud. In the process of doing so, you decrease the amount of mud being created and allow for surface water to drain through — all good things for the environment.

When to get it?

The best advise one can give on footings for paddocks is this: get it in the summer! Wood products such as hogfuel are more readily available in the summer months because of a lack of a market for the material as power plant fuel. During the summers contractors are often looking for cost effective means to get rid of stump grindings while burning bans are on (or in areas where burning is never allowed). The other key reason for getting your footing material in the summer is it will be easier and less hectic getting deliveries in the dry months. Imagine trying to guide a big truck through a ruddy pasture and down a slippery hill in the middle of a downpour — all the while competing with the other customers who also waited until the last minute!

What types of footings are there?

Although there are many products that can be used for footing materials two main types are being used in the Northwest: gravel and hogfuel. Hogfuel, made from chipped stumps or branches, provides a good surface and good environmental control as well. It is called “hogfuel” because originally at the paper mills trees were run through a steam-powered machine called a “hog” or “hogger” which chipped the bark off the outside of the trees. This chipped material was then used as fuel to run the “hog”, thus

Hogfuel

Hogfuel is very useful as a footing in a horse paddock both for the horse and the environment. The natural composting process of the wood product contributes to the breakdown of the nitrogen in the horse’s urine and manure. This process helps keep harmful runoffs from being released into the environment. The same process also keeps the confinement area from having any urine or ammonia smell often present in outdoor confinement.

Decomposing hogfuel

Since hogfuel is organic, over time it will decompose. What this means is that every year you need to get more — although probably never as much as the first year’s amount. It also means that after a time you will end up with a build-up of fine, organic material, i.e. more mud. To deal with this, every couple of years this organic material needs to be removed, either by hand with a shovel or with the aid of a tractor and front loader (depending on the amount). Remove the highly decomposed fine material during the dry months and add it to your compost pile or garden. If you don’t, you will end up with more mud, similar to a situation where the manure in a paddock isn’t picked up — over time there is a build up of fine organic material and eventually this becomes mud.



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Freebies!

There are several free sources of hogfuel — power and phone companies trim the trees under their lines as do tree trimming services. These companies all need places to dump their trimmings. You can either call them and get on their waiting list or if you spot a truck in your neighborhood, stop and talk with them. These companies are often very anxious to have a free, easy place to dump their load of chips.

If you decide to get tree trimmings, be sure your horses doesn't eat the mold in green material in these chips. If you think your horse might be inclined to "browse", try to get the chips during the winter months when there aren't as much greens. Either that, or use the chips on areas that the horses aren't confined to such as walkways or outside gates.

Also, keep your eyes open for developments near you where they might be grinding stumps instead of burning. These places might be willing to give away the hogfuel for free or for a reasonable price. They may even load your pick-up - - just stop and talk to them.

Choosing hogfuel

If you are going to buy hogfuel, be sure to go and look at it first as there is now a great variety in what constitutes as hogfuel. Check on the size, material (type of trees) and for foreign objects. Avoid any hogfuel made from lumber, building materials or mill ends as this may contain metal, nails or other foreign (and sharp) objects. The size can vary greatly as well. Too small a product will decompose before the end of the winter — too large and that will make it hard to pick up manure. If it's really large it may be dangerous for the horse as well. The wood pieces should be soft and not splintery or like stakes. Hogfuel around the Northwest is usually made from a combination of cedar, fir, pine and hemlock — any of which are fine. Cedar will last longer because of it's natural ability to repel insects and it also has a very pleasant sent. However, it may hold a bit more moisture than other the types of wood products. A very small percentage of horses might be allergic (skin sensitivity) to cedar. To test this beforehand try a bag of cedar shavings as bedding for a week or so to see how your horse does.

Gravel

Gravel is another important footing to consider especially useful in the highest traffic areas, such as in front of stalls, gates and watering points. It won't break down like hogfuel does and it drains well. However, gravel is roughly two to three times as expensive as hogfuel, but done correctly, you shouldn't have to replace it every year.

A combination of 1 1/4" minus crushed rock used as a base covered with 5/8" minus allows for drainage but still allows you to pick up manure easily. It is important to have the smaller size on top. Horses don't mind standing on the 5/8" size and you can still pick up manure — the pieces of gravel fall through the tines of the manure fork easily. With the larger size gravel, it is very difficult to pick up the manure and horses are uncomfortable standing on it.



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A workable combination of footings might be to use the gravel as a pad in front of your horse's stall or shelter and then use hogfuel in the remainder of the paddock.

How deep?

A rule of thumb is to put down twice as much footing as you have mud in the winter. So, if you have 3 inches of mud, you will want your footing at least 6 inches deep. When using the two sizes of gravel, be sure to cover the base (1 1/4" minus) with at least three inches of the smaller gravel (5/8" minus). This is to be sure the larger gravel doesn't work its way through to the top.

Other materials??

There are lots of possible footing materials, some more interesting than others. Different kinds of sand are often used. While these often drain well, their danger lies in the probability of horses ingesting sand with their feed and colicking. Sand colic is very common in Western Washington and dangerous as well. Other possibilities for footing include bottom ash, pit run, and man-made materials. Some considerations in choosing a footing include: will it be a suitable, safe surface for my horse to run, stand and lie on? Can I easily pick the manure from the footing material? Will the footing material contaminate my compost pile in any way? What is the cost and availability?

Good luck and here's to a mudless winter for you and your horses!

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