



LEPS

Langley Environmental Partners Society



Horse Manure Composting Program

Alternative Bedding for Better Composting

Reducing carbon

Reducing the amount of bedding going into your compost is essential to producing quality finished compost. Because horse manure itself is considered to be the ideal carbon to nitrogen ratio for composting, as soon as you add bedding material, the carbon levels will be too high.

The microorganisms (“bugs”) that break down the materials in your composting bin need carbon for energy and nitrogen for growth and reproduction. Having the correct C:N ration is important because if there is an imbalance in either of these, the population of “bugs” in your compost will diminish and/or decomposition of raw materials will slow.

Another problem with carbon levels that are too high is that if you spread compost with high carbon on your fields, the compost you spread will “rob” plants of nitrogen as the nitrogen and other nutrients will be drawn from the soil to continue the process of decomposing the wood shavings. The exact opposite effect you want!

Wood pellet bedding- a great option!

The alternative bedding that I like to use is wood pellet bedding. Despite my initial reservations about using the product, after learning to use it properly, I would never go back to shavings or sawdust again. Not only did I find it easier and quicker to clean stalls, my horses respiratory issues cleared up, I saved money, and best of all I was making an excellent quality compost.

Using an alternative bedding source, other than conventional materials such as sawdust and shavings, is a great option to reduce the amount of carbon materials going into your compost and will also reduce the total volume coming out of your barn each day. Studies have shown that by using wood pellets, you can reduce the carbon levels in your compost by almost 40% and total daily volume produced by 50%.



Pictured left- Wood pellet bedding.

Pictured right- Excellent quality compost from a farm using wood pellet bedding.



Alternative Bedding for Better Composting continued...

Wood pellet bedding composts much quicker than shavings or sawdust which often do not fully compost or take a long time to decompose. On many of the site consultations I do, I will see manure piles several years old and the sawdust looks almost exactly the same as the day it went into the pile. As the pellets expand with use, the product that ends up in the compost system has such a small particle size it breaks down quickly and easily whereas shavings and sawdust have very large particle size, especially shavings, and so take much longer to decompose, if at all.

The Art of Using Wood Pellet Bedding

Using this alternative bedding material is indeed an art form as many of the “converted” will tell you. Many people give it a try for a short time, say they don't like it, and never use it again. It definitely takes a bit of practice to use the stuff well. You really do have to give yourself some time to get used to it and, remember, practice makes perfect! I hope the following tips will help you transition quickly.

Buy it

If you are looking for a source for this type of bedding, many local feed stores sell bags of wood pellet bedding as well as businesses that sell fuel for wood stoves. The product is sold by the bag and in many places, if you buy a pallet, usually 50 bags, the price per bag is cheaper. There are a number of brands out there, each with their own plusses and minuses so you will have to experiment with brands to figure out which one you like best.

Getting Started

In many cases the instructions on the bag of the product you choose are not necessarily what works best. Following are some tips that took me some time to figure out so hopefully you will benefit from my few months of experimentation.

Starting your stall

You will need between 4 and 7 bags to get a 12x12 stall started. This depends on how thick you like your bedding. Keep in mind that the product continues to expand as you use it so if it looks a little thin in the beginning it will fluff up considerably over the first week of use.

Pour a couple of bags of the pellets into your wheel barrow and then add enough water that when you stir the water through the wood pellets, all of the pellets will feel damp. Watering the bedding prior to putting it in your horse's stall will help the expansion process begin resulting in better absorption and the product lasting longer. Pre-watering also stops the horse from crushing the pellets as they walk around on it and stops them from slipping on it as well. Once the pellets have been sufficiently watered, leave the wheel barrow for at least an hour to allow the pellets to expand. If not much expansion is occurring, add more water and wait again.

Alternative Bedding for Better Composting continued...

Once the pellets look like they are expanding and becoming “sawdust-like”, put them in the stall and repeat the process until you are happy with the thickness of the bedding. Having multiple wheel barrows makes this process much quicker and easier! If you have a larger wheel barrow you may be able to do more than 2 bags at once.

Cleaning your horse's stall

Cleaning your stall is going to be a little different than if you have been previously using shavings. If you have a cat and have used scoopable cat litter, your stall cleaning is going to be quite similar to that. Your horse's urine will clump into a puck-like shape which you can scoop out. Keep in mind that sometimes the urine “puck” will break apart so just take out any of the solid parts and leave the rest in the stall. The moisture from the urine left will help the product to continue expanding. You don't need to worry about odour, pine is a natural deodorizer and if you are really concerned, there are deodorizing products out there for you to use.

Once you have picked out the manure and urine, thoroughly mix the bedding in the stall. In particular, pull the less used bedding in from the side of the stall to the middle. If the bedding seems a bit dusty take your hose and lightly sprinkle the bedding. I do this just about everyday as it also helps the bedding to continue to expand.

You will need to add approximately 1-2 bags of fresh bedding to your stalls each week, being sure to use the starting process mentioned above. I will normally get this bedding started in one wheel barrow while I clean the stalls and so it is ready to add when I am finished cleaning. It will just take time for you to figure out your own routine.

You will probably want to totally strip and restart stalls every 2-3 months which is the same as using shavings or sawdust anyways. This gives the stall time to air out and for you to give it a good disinfecting.

Good luck and happy composting!