



FARM SOLUTIONS

Get a load of this...

By Dr. Ed Bonnette, Hubbard Feeds Companion Animal Nutritionist

As I was wheeling out a delectable-smelling load of horse manure to the pile outside the barn the other day, I was thinking about the old saying, "There are only two things that you have to do in life: die and pay taxes." Well, there should be a corollary to this that states, "And if you have animals, you will move manure."

I personally do not mind working in the manure too much because I get to play with my toys (i.e., my skid loaders, tractors and spreaders). We try to keep the pile turned over so it ferments into compost to help keep the smell down, but Ohio's weather of rain every other day makes that hard sometimes. When I get ready to spread it, I make sure my close neighbors are not having any family get-togethers. Due to all the red clay on my place, I need to make sure the land is dry enough that I will not bury my tractor to the axles — I did that last year and, with my tractor, loader and cab weighing over 5 tons altogether, it was not a fun day digging it out. I try to stay at least 30 feet from any water drainage ditches, and since I fertilize a lot of my neighbors' gardens, I try to do it early enough that it can dry a little before the rototillers get to work.

I am very lucky to have such a small number of "animal units" (which are based on how much manure one animal will produce) that the EPA and other agencies normally do not bother me. However, trying to be a good steward of the land, I want to make sure I am applying the proper amount of "organic" fertilizer in the pasture or crop field. But how do I know how much manure is added per acre? I know my spreader is classified at 175 bushels (not heaped), but with my composed manure, how much is that weight-wise?

I recently came across an article from the Ohio State University called "Manure management for small farms." It said that the first thing to do is analyze both the manure and soil. The next step is to determine how much the spreader is spreading, lay a tarp down in the field and spread the manure normally. Then, weigh the tarp with manure and divide that number by the square footage of the tarp. Next, multiply that number by 21.78, and that will give you the tons per acre. For example, if the tarp with manure weighs 100 pounds and it is a 50-square-foot tarp, then that is 2 pounds per square foot times 21.78, resulting in 43.56 tons per acre. You may want to use the smallest tarp you can get, since the standard 6x8-foot size equals 48 square feet. Cutting the tarp in half or even smaller makes it easier to lift to weigh. For instance, 50 pounds in half of the tarp may be messier to handle, but it is easier to move than 100 pounds.

After determining the manure weight via the tarp, I'll need test results for both the manure sample and for the requirements of my soil. If the 43.56 tons per acre in the example above is too much manure for what the soil needs, I can put the tractor in a faster gear to spread the load over more land, resulting in less manure per acre (or put it in a slower gear if I need more). It may take a time or two to get the speed right for the correct amount of manure needed, but it is worth it.

By taking a little time to do some calculating before I start to haul the composted manure, I can help improve my soil and reduce my dependence on dry fertilizer. I'll also reduce the chance of excess nutrients getting into the waterways and take advantage of a renewable natural resource that is readily available. Sounds like a win-win to me — and I can "take a load off" to enjoy my family and my animals.