Compost As A Soil Conservation Tool

What do you think of when you think of soil conservation? Most would say any soil management practice that results in conserving precious topsoil. Many remember the various advances brought to us over the last half century by the people at SCS and thank the people at ASCS for helping us to pay for them. These advances include contour strips, grass waterways, diversions, tiling of wet areas, and yes, even manure management systems designed to eliminate a daily manure haul. How many of you can say that you have implemented a number of these practices? Many, no doubt.

How does compost fit into this discussion? Understanding this requires an answer to the question of what is compost? There are many answers. Those who prefer can answer with a very complicated response that will consume a paragraph. You may also have an answer that goes something like - it's a pile of manure that's set for awhile! And that answer may not be incorrect but, it may not be correct, either. Compost, simply put, is new soil. Yes, that's right, compost is actually new soil. Your father taught you that that you couldn't make new soil, right? Well, he was only partly correct. If compost is applied to soil, it does amend present soil and add organic content, in effect adding new elements to soil and enriching present soils But this is done through a variety of ways.

Compost can be described as the result of a controlled biodegradation process. In this

process, good soil bacteria are formed when certain conditions met. These bacteria, are referred to as commonly thermophiles (microbes that live in this temperature range), remain active after the initial active process is complete. When introduced into soils as an amendment, they re-energize this soil and bring new life to it. The result is that you have added very healthy new organic matter to the soil and then loosed these new young energetic microbes into your soil as well. The attributes of this situation not only includes a fertilizer value, but creates enhanced properties of soil, including better long term absorption of nutrients, better water holding capacity, much more vigorous root growth in plants, and increased resistance to root disease to name a few.

Many consider the fertilizer N-P-K value of the added compost to be of prime economic value. It may be true that you can measure this one in dollars and cents right away. But, consider how many of these soil conservation practices named above that you can attach dollars and cents savings to immediately. The savings are met only over a long period of time, and future generations thank previous ones for making the investment.

I believe compost is in the same category. The secret of compost is not in it's fertilizer value, but in its' soil enhancing properties. We are making new soil when we amend poor soils with compost. Think of it this way - if you have a barren slope and you do not protect it with a contour or grass waterway, you will end up with soil erosion after heavy rains. This soil ends up in a waterway and becomes silt, which will be dredged somewhere eventually, at great cost. It also costs you, since you now have less topsoil that you will never see again. Therefore, you make the investments necessary to keep your soil. And, the government helps because it is cost-effective to be pro-active when it comes to soil loss - they'll have to pay more later if they don't help now.

Using compost gives you an opportunity to add fertility and tilth back into your soils. It provides an opportunity to leave the soil in better condition than which it was found, so that future generations can benefit from its' miracle. I believe this to be a greater opportunity than any other soil conservation practice to date. Other practices prevent topsoil loss. The practice of compost amending soils will add more topsoil to what we already have and make it healthier.

Many farms already have all of the needed ingredients. What is needed is added education and know-how. We need to increase

our understanding of how to utilize the compost tool. We have by-product materials that are being truly wasted right now. With some help in understanding proper management practices, we can use this tool to better our farms, our fields, our crops and the bottom line for ours and future generations. The compost process should be a controlled manufacturing process, similar to making sılage. The more careful we are in controlling the ingredients and the process, the better the end product quality. Many similar tools are used in the process. We need to better understand what is needed in creating compost so that we can better recognize the value in

certain waste materials.

The Agriculture support should all organizations participate in this process. Extension can provide research, applications assistance, training, and educational materials. Farm Service Agency can provide the assistance of the soil conservation professionals, and ASCS can help with cost-sharing on certain required equipment. Nutrient Management professionals can help with assistance in soils application impact planning. Suppliers can help with providing new tools and service support.

Together, we can all work to make it happen! Get involved.





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