



“TOPSOIL”

A question we are frequently asked is “where can I buy some good topsoil.” There is really no good answer for this question and I always feel obliged to discuss the situation further with the person making the inquiry.

My first response is generally “are you sure you need topsoil in the first place?” You see, there are no standards or quality control for “top soil.” A soil product sold as “top soil” can be man made by mixing various soil and organic materials together to achieve what one might think is good top soil. Or, it can be naturally occurring such as what might be scraped off a field and sold or stockpiled to be sold later as “top soil.”

I generally use quotes around “top soil” because it can mean different things to different people. For example, one dictionary defines top soil as “the surface layer of soil.” This is probably the most common understanding of top soil, but note that this definition does NOT say anything about that soil being any better than what you already have - that’s perceived. Another dictionary defines it as “the upper layer of soil, usually darker and richer than the subsoil.” The key word here is “usually,” although, I think most of us would agree that good top soil should be richer and darker. However, how does one determine “richer?” Richer suggests more nutrients. And darker is really in the eyes of the beholder and should not necessarily imply better.

You can buy top soil in a bag and this has most likely been manufactured. Same could be true for what you buy that comes in by dump truck. This doesn’t necessarily make it “bad,” but if you decide you need top soil, you should always strive to buy a soil that is better than what you have. Rather than buy a “top soil” which you might layer on top, we’d rather see gardeners improve their existing soil which can be accomplished by incorporating. Also, there is always the possibility of bringing in soil contaminants in the top soil you buy. A few such contaminants that I am familiar with because it has happened here in Columbia County, are poison ivy, Japanese bamboo, and even termites. We’ve also had situations where top soil has been harvested from a field where heavy amounts of a weed killer have been used which later proved impossible to get anything to grow in. Again, there is no quality control and while a friend or neighbor may have purchased what they thought was good top soil, that supply may be gone when you go to buy some from that recommended supplier.

Quite often we are told that the top soil is needed to fill in areas, such as depressions around the yard or to fill containers or raised beds or to spread on top of the existing soil with the hopes of making everything grow better. Experience has shown us that the homeowner/gardener would have greater success by adding organic matter (either purchased or made at home in the form of compost) to the existing soil. This will increase the quality and texture of the existing soil while increasing the volume of soil. This extra soil, if that’s what is desired, can then be used in containers, raised beds, depressions, and the like.

In my opinion, “good” top soil should be high in organic matter, therefore, darker; well drained; and richer meaning high in nutrients, but not too high. That dark, organic matter taken from the bottom of a wet land, swamp or pond, for example, can actually be too high in organic matter thus reducing drainage properties, and very high in nutrients which are measured in soluble salts. When used by itself, you may have little or no success in growing anything in this soil. However, it is still usable, but must be used as a soil amendment - added to and incorporated into the existing soil so that it is less than 50% of the new medium. Again, this is a good way to increase the volume of soil. I would rather see gardeners spend money on good organic matter that they would then add to their existing soil rather than buy “top soil.” Of course, don’t forget the various sources or organic matter around the home. These include leaf mulch and pine needles. And there’s always peat moss. These can be added directly to the existing soil in the depression or raised bed and once worked in, will increase the volume of soil while reducing the potential for introducing foreign weeds and insects. But be mindful of the pH of these amendments.

If you are having a new home built, you may want to stipulate that the contractor save the topsoil from the site and stockpile it for later use in YOUR yard. Be sure they DON'T sell it off as "top soil" to someone else. You may need to watch for this.

When it is absolutely necessary to purchase topsoil, the search for suppliers can begin with the yellow pages of the county wide phone directory. Businesses listed here generally have been around for more than one season. The classified section of your newspapers are also a source as are recommendations from your local garden center or nursery business. Before you buy, inspect the product. **DO NOT BUY IT SIGHT UNSEEN.** You think you know what good topsoil should look like, make sure it looks like that. When you squeeze a handful of the soil, does it look and crumble like rich chocolate cake or stay in a wet ball. It should crumble like the cake. Also, insist on knowing what the pH of the soil is (6.2 - 6.8 preferred for most plants) and also the soluble salts reading (low teens). These are tests that the supplier can have done on the soil before it is sold. Topsoil is usually sold by the cubic yard. Approximately 12 cubic yards are needed to cover 1,000 square feet with 4 inches of top soil, the recommended minimum depth for a lawn.

Professor Norm Hummell, former Cornell University turf specialist suggests "the ideal topsoil should be a loam or fine sandy loam of good tilth or structure and one should avoid soils that are sediment deposits (like from ponds or swamps) or soils that contain large clods or rocks." If it is naturally occurring topsoil, ask it's original source. If manufactured, ask what ingredients were used to make it.

Buying top soil is not an easy task, nor should it be because it is costly and the wrong stuff can create problems you may never be able to overcome or correct. It is truly a "buyer beware" situation.

More gardening questions can be addressed to the Master Gardener volunteers of Cornell Cooperative Extension of Columbia County, 479 Route 66, Hudson, NY 12534 at (518) 828-3346 or via email at columbia@cornell.edu." ###