Fall Garden Soil Preparation

Fall is officially here! The gardening season may be coming to an end, but there are several tasks we can still get done. Getting a soil test is an important fall activity. Fall soil preparation gives us a jump start on spring planting as soil is ready except for a small amount of raking.

Spading or tilling the soil in the fall allows for the winter conditions of freezing and thawing to naturally break the soil into particles. This results in a crumbly state desirable for spring planting. Soil is often damp or wet in the spring which makes deep spading more difficult. Tilling soil that is too wet will make clods. Clods are extremely difficult to break down into that crumbly state ideal for planting. Soil tilled in the fall will still break apart over the winter leaving a nice texture for planting. As a rule of thumb, soil should never be worked while it is wet as it destroys some of the physical properties.

Fall tilling also allows for the addition of organic matter such as compost or other materials. If you have freshly raked leaves, you can use them in the garden. Use a lawn mower with a bagging attachment to chop and collect the leaves, then apply them directly to the garden bed. Normally, a 2 to 4-inch layer of shredded leaves can be composted naturally into the soil over the winter. Spread the leaves over the garden area and spade into the soil as deeply as possible, 6 inches or more is best. A small addition of nitrogen rich fertilizer or manure may help decompose thick oak leaves quicker.

As the leaves break down, they supply needed organic matter for our heavy clay soils. It is almost impossible to get too much organic matter in our soils. Organic matter is like magic. Soils with a healthy amount are easy to till and naturally break apart. High organic matter soils also retain moisture while providing good aeration. This combination of properties is often what is lacking in average garden soil.

Fall leaves can also be used as a mulch. You can use them now to protect perennial flowers from winter conditions. They can also be stockpiled for spring. Apply a 3-4 inch layer of mulch around any bare soil. Mulch has numerous benefits such as conserving moisture and controlling weeds.
Fall tillage is also a good time to take a soil test. Additions of phosphorus and potassium can be worked into the soil as well as materials to adjust the soil pH. To take a soil test, collect small samples from around the garden about 6 inches deep. Mix these random samples together in a clean bucket. Gather two cups of soil to be tested. Bring the sample to your local Extension Office for analysis at Kansas State University. They will provide a detailed fertilizer regimen for your landscape.

Enjoy the autumn days with the leaves swirling around your feet and the cool nip in the air. If you have questions about preparing your garden soil, call your local extension office for more resources.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Cassie may be contacted at choman@ksu.edu or by calling Beloit (738-3597). Find us online at www.postrock.ksu.edu