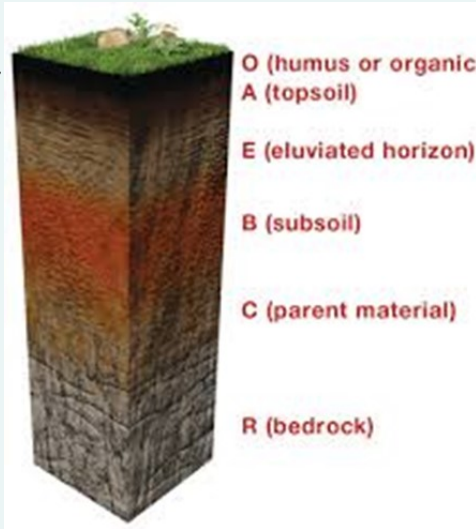


Let It Lie: Delaying garden cleanup until spring can greatly benefit the soil

On purpose or intentionally, many gardeners have left plants in their gardens over the winter. This is a good thing; everyone should consider doing so on a yearly basis. Scientists, specifically agronomists and soil scientists, refer to the plant litter that remains after a harvest as “residue.”

Leaving residues in place over the winter, instead of pulling them up or tilling them into the soil surface, provides numerous benefits for the soil and your garden.

Plant residue reduces erosion and the loss of valuable topsoil. Residues cover soil and protect it during the non-growing season. They catch rainfall, reducing the impact that individual rain droplets have with the soil surface. Residues also slow any



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flow of melting snow over the soil. Both of these actions help protect the soil structure, keeping it intact for next year's crops and gardens.

The presence of plant residues on the soil surface also prevents something called “soil crusting.” You may have seen that during a very heavy rainfall; the soil won't absorb any water. Even worse, sometimes little streams form on dry soil and then become larger streams. This carries away the nutrients. *Residual plant material also reduces weeds by covering and shading the soil. Weeds are often early spring germinators, and residues inhibit their growth. They limit the amount of soil that is available for the weed germination and development. Residues reduce the resources and space that weed seedlings require to grow.*

Plant residues provide shade, regulating soil temperature. This keeps soils cooler during the non-growing season to the early part of the next growing season. *Cooler soil temperatures provide more suitable conditions for soil microbes.* Microbes are necessary for maintaining a productive soil for crop/plant growth. Cooler soil temperatures also aid in the retention of soil moisture, which in turn is favorable for seed germination in the spring. **In sum, residues create microhabitats of moist, even-temperature, microbe-rich soil to the benefit of plant seeds and seedlings and garden plants.**

Lastly, plant residues provide a source of organic matter for the soil. Organic matter is essential to soil health. It helps create an environment supportive of growth. Organic matter provides an energy source for soil microbial populations, which results in faster decomposition rates, releasing essential nutrients for crops and garden plants. Soil organic matter also helps maintain good structure of the soil itself. This further reduces erosion and improves water infiltration and soil aeration.

Editor's note: I'm late cleaning up my beds this year and have decided to let almost all my perennials stand over the winter. I confess that I usually clean up most of them, denying critters safe haven. The authors make a compelling argument for Letting It Lie!

Written by two soil scientists/professional agronomists: Kelley House and Kate Norvell from the Soil Society of America. Article in November/December *Horticulture* magazine, pp. 8-9



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