

Soil Moisture Tips for a More Resilient Garden

Unseasonal weather extremes, from winter cold snaps to summer heat domes, add stressful growing conditions for even the best adapted garden plants. Resiliency – the ability for plantings to recover from environmental stress – can be improved with attention to gardening methods that foster good soil porosity and that support a variety of beneficial soil organisms. These are conditions that are necessary for strong root development. Strong root systems are essential for development of the reserves that help plants recover from the setbacks of cold and heat damage.



Don't Overwork the Soil or Yourself!

While tilling and cultivating initially appears to make soil loose and fluffy, soil structure is broken apart in the process, resulting in *more compact* soil. Compact soil lacks vital pore space for moisture storage and availability to plant roots. Minimize soil disturbance to protect soil structure.



Keep a Rough & Permeable Surface to Capture and Hold in Every Drop

Coarse textured mulch helps channel water into the ground, and helps reduce water evaporation from the soil. Think leaf mold (shredded, partially composted leaves), woody mulch (arborist chips, yard waste wood chips), burlap (great for instant cover), and clean straw (suitable for flower and food gardens). Avoid fine textured composts which tend to crust over (but do use them when needed as a surface amendment layer under coarse mulch). Avoid fine bark, as its waxy fibers tend to compact into water repellent layers. Avoid synthetic weed barriers in permanent applications, as they interfere with the movement of air, moisture, and beneficial soil organisms.



Cultivate Mycorrhizae and Beneficial Soil Organisms for Better Soil Moisture Availability and Root Health

These types of organic mulch listed above support soil building organisms (earthworms, millipedes, and more) and mycorrhizae fungi. The biological activity of all these organisms contribute to good soil conditions for moisture retention and availability to roots.




Water Deeply & Infrequently

This is a popular garden mantra for good reason. Periodic deep irrigation will increase the amount of water held in the soil and promote deeper root growth, increasing resiliency to episodes of high temperatures. Running sprinklers for a few minutes every day does the opposite. Check before and after watering to see where the water goes and adjust water rates to adjust the wetting depth to match healthy root depths.

Find more timely tips for sustainable garden care in Pacific Northwest Month-by-Month Gardening, Cool Springs Press.

Christina Pfeiffer, Horticulture Educator, ISA Certified Arborist®

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www.christinapfeiffer.net

