The Hard Truth about Rocks at the Bottom of Planting Containers

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As we get our containers ready for planting our amazing annuals or that coveted tomato plant, conventional "wisdom" dictates we must first add an inch or so of gravel. Problematic? You bet!

Rocks in the bottom of containers do not contribute to better draining soils and healthier plants. Instead plant roots encounter saturated soils that don't drain efficiently. It all has to do with something called a perched water table.

Ideally, when we water our containers, or Mother Nature provides rainfall, water percolates through the soil and out the drainage hole below. All the roots get water and the excess drains away. In a container with rocks at the bottom, however, water percolates through the soil and, upon encountering the different layer, the water moves sideways, creating a saturated zone. Water in this saturated zone gets "hung up" on the layer that is different.

And it doesn't have to be rocks that are placed at the bottom of the pot. ANY layer of difference will contribute towards a perched water table—a different potting mix, sand, pop cans, and golf balls among them. (I've heard lots of stories about the creative stuff gardeners use!)

To keep potting soil from falling through the pot's drainage hole, place a piece of newspaper, a coffee filter or a paper towel over the drainage hole. This will keep the potting soil inside the pot but still allows water to drain efficiently.

If you're trying to use up a lot of space at the bottom of a really large pot, custom cut a piece of plywood to fit inside the pot at the depth needed for healthy plant roots (nothing less than 9 inches deep). You'll still need a drainage hole drilled into the plywood so water drains efficiently. In essence, you're creating a shallower pot within the larger one. If you live in a windy area, stones and bricks can be placed at the bottom of the pot (before the plywood goes in) to provide ballast.

