



The Dark Side of Dirt

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Dirt. Defined in the dictionary as any foul or filthy substance such as loose soil, mud, dust or soiling substance. To many people, that dark, desolate place, made up of rocks, sand, bugs and other undesirable critters. Dirt. Not the stuff you buy at garden supply stores; that stuff is not dirt at all, just a mixture of composted organic materials. No, I mean just plain old dirt. You know, that stuff you walk on, that your house is built on, or possibly made of; that stuff we bury our trash in, spray with herbicides and other poisons, pave over, and cover with endless lawns, sport complexes, amusement parks or golf courses, and never seem able to find a reason not to dig up or disturb for yet another improvement to the landscape.

Many of this nation's immigrants came to this country because the dirt in their native countries had become infertile and could no longer support crops, or it became infested with diseases that ruined crops. This country had an abundance of dirt. The stuff to grow crops in to feed your family. The stuff that made the Central Valley in California the most productive agricultural region in the world.

Yes, that stuff, the substance that took billions of years of continent building, oceans, erosion, floods, fires, earthquakes and the death of trillions of organisms to become the material we need to maintain life as we know it. It contains remnants of the dinosaurs, great forests, ice ages and even materials from stars that went supernova before our planet or sun even formed.

Dirt is the sum total of everything that came before us. Sadly, it is the least explored place on earth. It is just there. We take it for granted, rarely thinking about how harming it could lead to harming ourselves. Yeah, DIRT, the stuff that is also directly or indirectly responsible for providing 99.9% of our food, medicines and clothing.

Spring 2021, Around Here magazine

Now, here is a dirty little secret that you may not know: IT'S ALIVE! Not just with ants, earthworms and all the other creepy crawly things we associate with dirt. Far from being a dead place, the earth below your feet is a lively, vibrant ecosystem that contains a rich mixture of organic material that comes from decayed plants, animal matter, particles of rock, minerals, water, air, earthworms, nematodes, ants, spiders, and plant roots. In addition, it contains millions of microorganisms such as algae, fungi, bacteria and protozoa. A single teaspoon of soil can have **up to billion bacteria**, several yards of fungal filaments, several thousand protozoa, and scores of nematodes. There is more life below ground than above! Without these organisms and their abilities to break down the nutrients in the soil, your plants wouldn't have the ability to absorb nutrients, water or any of the other elements necessary to grow.

In essence, without dirt, everything and everyone dies. So, the next time you look at your yard or garden, a farmer's field or an orchard, or perhaps think about dumping something on the ground that really should not be there, think about how important what you are walking on is to our continued existence, and may that thought move you to treat it with gratitude and respect.

On Saturday, March 20, from 9-10:30 a.m., Master Gardeners of El Dorado County will be offering a free public education class on "Turning Dirt into Gold". Learn how to nurture your soil to improve plant healthy and reduce disease and pests. To enroll in this virtual class, please register at: <https://ucanr.zoom.us/meeting/register/tJYrcOGuqDsrHNbDmwTTOynkL-mPR7CvwUzI>

Due to the pandemic, Master Gardener events will for the foreseeable future continue to be limited. We realize our public classes are valued by county residents and we are doing our best to provide virtual learning opportunities. You can find our new online class schedule at: http://mgeldorado.ucanr.edu/Public_Education_Classes/?calendar=yes&g=56698, and recorded classes on many gardening topics here: https://ucanr.edu/sites/EDC_Master_Gardeners/Public_Education_Classes/Handouts_-_Presentations/.

Due to the California stay-at-home order, the Sherwood Demonstration Garden will be closed until further notice. Check http://mgeldorado.ucanr.edu/Demonstration_Garden for updates.

Have a gardening question? Master Gardeners are working hard remotely and can still answer your questions. Leave a message on our office telephone: 530-621-5512, or use the "Ask a Master Gardener" option on our website: mgeldorado.ucanr.edu. We'll get back to you! Master Gardeners are also on Facebook, Instagram, and Pinterest.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at <http://mgeldorado.ucanr.edu>. To sign up for notices and newsletters, see http://ucanr.edu/master_gardener_e-news.