



The Dirt on Dirt

*By Marcia Rae
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Everything we eat (well except fish) starts as dirt. No dirt, no farms. No farms, no food.

Read a little history and learn that civilizations succeed and die due to the quality of their dirt. People fight wars over dirt and migrate because of dirt. The UN Convention to Combat Desertification estimates that desertification in Sub-Saharan Africa will drive 60 million people from their homes in the next 20 years. It is hard for me to wrap my head around 60 million people and 20 years is not very long.

While it might be easy to think that Sub-Saharan Africa is half way around the world and 60 million people on the move is not my problem, that is not the case because the loss of dirt is happening everywhere and at an alarming rate. Since the beginning of agricultural production in the Great Plains of North America in the 1880s about one half of our topsoil has disappeared. The process is exacerbated and speeded up by over-tillage and overuse of inputs such as synthetic fertilizers and herbicides, which leave residues and buildups that inhibit the soil micro-organisms that convert organic material into dirt. Without the organic material and the microbes, the soil does not stick together. It just blows or washes away.

You may still think this has little to do with you, since we seem to have plenty of dirt in the Willamette Valley, but in reality the fertility of our soils has diminished in the 150 years we have been planting here and along with it plant yields. Of course, only about 7% of the food we eat actually comes from local sources, so most of us are eating food from the mid-west, California, or some other country such as Mexico or Chile, where farming methods may be even sketchier than in the U.S.

For every unit of food we consume, using U.S. industrial agricultural methods, six times that amount of topsoil is lost. The Food and Drug Administration estimates that each person consumes an average of 1 ton of food a year. That means you are responsible for the loss of 12,000 pounds of topsoil.

That is, of course, unless you eat food grown using sustainable farming methods. Sustainable in this context means that inputs and outputs are in balance and can go on forever – not an easy thing to achieve and almost impossible unless you are farming plants AND animals. It is in putting organic material back into the soil that the soil itself is maintained. If we take plants out and eat them, we then have to put organic material back, and let the microbes turn poop, green garbage, and cover crops back into dirt. It is circular, cyclical, and essential. Get to know your farmer. How does he/she make dirt? Shop local.

Munch On This – Have you been kind to the earth today? Did you contribute to the loss of dirt, or did you make dirt?

PS – See you at the Farmers Market this Saturday, 9 a.m. to noon, for real local local food. Music by Mary Parker's Main Street Band.

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