Soil's a lot more than just dirt

Logan Bennett
Extension Spotlight

I started college with a degree path towards natural resource management. I love to go fishing, and I'm an ocean fisher at heart. The ocean is one of my favorite places to be. I figured that if I worked in a career that focused on fishing resources, I could spend more time fishing.

That is until I took soil science at Oregon State University. As one of the requirements for the class, I had to visit the OSU Organic Growers Club, which is a small mixed vegetable production farm just off campus in Corvallis. My first time there, I learned that there were regular volunteers that went to the farm every week to produce vegetables, berries and flowers that got taken to market, and sold in community supported agriculture (CSA) programs.

What really caught my attention was that a portion of the food being produced at this farm was also being donated to a local pantry. I thought it was great that we had students helping the community by growing organic food.

This visit, and the realization that I could help folks through growing food, was enough incentive to begin my journey into agriculture. I started going on a weekly basis to the Growers Club, and every week I learned more about farming and about the soil that we were growing our crops in.

PHOTO COURTESY OF LOGAN BENNETT

Transplanted brassica starts at OSU Organic Growers Club in Corvallis.

The farm was in an ancient riverbed, on a soil called Chehalis. The soil there is a silt loam, meaning that its ~30% sand, ~40% silt and ~30% clay. Because it's a silt loam, it has a little more silt than sand or clay. This is an excellent soil to be growing food in. Soil like this has superb drainage, with enough water retention to keep the roots of your crops watered.

Because of the soil texture, it stays soft all year. Soil like that doesn't need to be tilled often, if ever. Because it's an ancient riverbed, the soil is naturally fertile. Its heavier on silt than sand or clay, which makes it outstanding farming ground. However, because of that silt content, the soil is very soft during the winter, which is why my old two-wheel drive Tacoma got stuck at the farm multiple times over the years that I worked there.

The farm became a place for me to educate others about soil. The landscape, production quality and land use history were all tools that allowed me to teach others about growing food and land stewardship. I was able to use the farm to teach hundreds of students at OSU, as well as community members in the Corvallis area, about the resources beneath their feet. This was the launch pad that led me towards a career in agriculture.

My relationship with the soil has taken me all over Oregon and into other states to learn about one of our most vital resources. In the United States, we classify soils into 12 orders, which range from permanently frozen to bright red, tropical soils. In Oregon, our landscape holds 10 of the 12 orders of soil. This makes us a unique landscape, with some of the most fertile soils in the world.

This diversity of soil orders gives Oregon a diverse array of habitats, prime agricultural land and beautiful scenery. Because of our soil morphology, we can grow wine grapes, blueberries, wetlands, forested areas and many other crops and landscapes in Douglas County.

Soil is a lot more than just dirt. It is the foundation for our survival. It's a nutrient recycler, a water filtration system, a substrate for growing crops, a carbon sink, habitat and an information storage system. We have relied on the soil since our inception to feed us. It's an invaluable resource that we often take for granted.

As Paul Harvey once said: "We owe our existence to a 6-inch layer of topsoil and the fact that it rains." Before those rains come this fall, I encourage you to walk on unpaved earth.

Take a soil sample in your yard, feel the grittiness and try to determine the texture of your ground. Check out web soil survey and see what soil profile you live on. Next time you enjoy a fruit or vegetable, think about the soil it was grown in.

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