

“Seeing is believing.” We have all heard that old saying an untold number of times over the years, and most of us have probably used it, as well. But, it embodies one of the grave fallacies by which we laud that which is negative and demean that which is good.

This plays out over and over again in regard to our agricultural and residential environments. That endless field of tall, dark green corn waving in the breeze brings forth rhapsodies of praise for the land and the people who work it. And, the green, well-watered lawn, mowed to perfection in front of the comfortable home suggests to us that whoever lives there “really knows how to take care of things.”

But, what is hidden from our imperfect human sight and our even less well-developed insight into what we cannot see?

Probably, not even the workers who planted, fertilized, sprayed, and harvested the corn crop have any idea of what lies in the soil beneath those plants. And the homeowner who is so proud of her weedless flower beds and bright green lawn likely has little knowledge of the inhabitants of the soil in her yard.

So, seeing what is—at first glance—pleasing to the eye may not be giving a truthful picture of what is really there. Chemical farming is all about yield and looks, not about what actually matters in the long run—soil health. Even the most dedicated soil scientists have identified only a small percentage of the organisms that make up the mass of tiny residents of the soil we walk on, garden in, and depend on for our existence. And yet, those experts do know that what goes on under the surface of the soil is vital to life on earth. And it is exceptionally diverse.

So, a field of wildflowers (many of the ones we call “weeds”) may have a much healthier environment below the sod than that bright green field of corn. And the lawn of the maligned resident on the corner lot who let his yard go “wild” for the birds probably has much more diversity in soil organisms under his knee-high grasses and forbs than the manicured real estate of his neighbors.

“Seeing is believing” has a corollary—“If I can’t see it, I don’t believe it.” And that leads us to making false assumptions about the natural world around us. Books have been written for well over a century that have attempted to dissuade us of this folly, and it has worked on some of us, some of the time.

Charles Darwin, long after *On the Origin of Species* and *The Descent of Man*, spend a good amount of his later years studying earthworms. Amy Stewart, in her book of 2004: *The Earth Moved*, “On the Remarkable Achievements of Earthworms,” has written the story of Darwin’s work and has accompanied it with information about the modern earthworm experts and the realization that these scientist have come to regarding the extensive influence earthworms’ activities have on soil.

David Montgomery and Anne Biklé’s *The Hidden Half of Nature* is an explanation of the importance of Earth’s smallest living beings—soil microbes—in a healthy planet. Montgomery wrote an additional book, *Growing a Revolution*, “Bringing Our Soil Back to Life,” that examines more deeply the

changes needed to make agriculture regenerative in a way that will lead to better planet health. He advocates adopting three basic practices of conservation: ceasing to plow, planting cover crops, and growing a wide diversity of crops.

These three modern books, in addition to Darwin's work on earthworms, go a long way to showing the average non-scientific reader how to live to improve life on this vulnerable planet whose health and survival as a viable home is absolutely essential.

And the necessary steps involve more than farmers adopting organic methods of producing crops and working to conserve water, sequester carbon, and protect the soil biota. People not involved in agriculture—except for when they sit down at the dinner table—need also to open their lives and see beyond that weed free flower bed and the fertilized, watered lawn and instead, work to also make their surroundings healthy pieces of Earth.