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Humble Healthy Soils

Happy New Year! I wish that readers of this column and all across this county are fortunate to have a bountiful and rewarding year. In the spirit of forward-looking and resolution making—I know I've got some lbs to lose—we are also given the opportunity to remind ourselves of where we came, and truly how lucky we are to have such meaningful lives.

Deep in this reflection, I am reminded of the wise words of the late-great radio host, Paul Harvey. In a moment of clarity he remarked, "Despite all our accomplishments, mankind owes his existence to a six inch layer of topsoil and the fact that it rains."

This cannot be a column written by yours truly without mention of soil!

Soil is the foundation of civilization; not only providing the media by which we build, upon which we walk, and in which we grow, soil is an integral part of natural cycles.

All of these provisions are on full display everyday on the farm, and have been since the dawn of agriculture.

Recently, an agricultural movement has gained traction in some circles, calling for growers to improve "soil health".

Though, there is great debate over the formal definition of a healthy soil: many cite specific ecological criteria that define a healthy soil including, rates of respiration or microbial species composition. Other advocates define the physical criteria of a healthy soil like, water infiltration rates and water holding capacity. And some assert healthy soils are those that demonstrate effective plant-nutrient cycles (like sulfur from a previous article).

Frankly, the debate and its application to farm practices is quite contentious and maybe needless. With no formal definition, it may appear that the voices of the advocates are greater than those who actually apply the practices to the farm. Growers may (and have) become frustrated with the endless stream of voices claiming, clambering, and arguing over a mere definition as well as their declarations of practices that must be implemented to achieve a "healthy soil".

Yet, one who implements practices in the sole pursuit of achieving a particular metric may find that their pursuit has set them further from reaching their goal.



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Far more important than the practices of debate are the *principles* that guide the natural processes which actually create "healthy soils" in whichever definition one may choose. Principles like limiting soil disturbance, maintaining a living root, keeping soil covered, increasing diversity of plant and microbial communities, integrating livestock, all within one's own context do not prescribe a certain practice but instead guide decision-making.

I, like many others, submit that a healthy soil is not just one of the aforementioned biological, chemical or physical criteria. Rather, a "healthy soil" intrinsically exhibits all those criteria. And no less important is that the healthy soil must provide the economic welfare that supports the grower—a healthy soil would be all for naught without those who manage it by its guiding principles.

To learn more about soil health principles and their application to the farm from experts far more knowledgeable than this soil-nerd, please join the Frederick and Catoctin Soil Conservation Districts and the Frederick County Farm Bureau on February 7th at the Great Frederick Fairgrounds from 8:00 am to 3:00 pm. Learn more about the event at the Frederick and Catoctin Soil Conservation Districts website.

In need of pesticide or nutrient management credits? Please join us on February 22nd in Urbana for the annual Central MD Agronomy Update. Register at https://go.umd.edu/2023cmau or call us at 301-600-3576.

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