

The Hill Country Steward

Go Native with Soil Health

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Have you heard? There's a whole world of life in the soil beneath your boots. News about the benefits of soil health is everywhere and agricultural producers across Texas are taking notice. Healthy soils lead to clean air and water, bountiful crops and forests, productive grazing lands, and healthy landscapes.



Photo Credit: Larry White

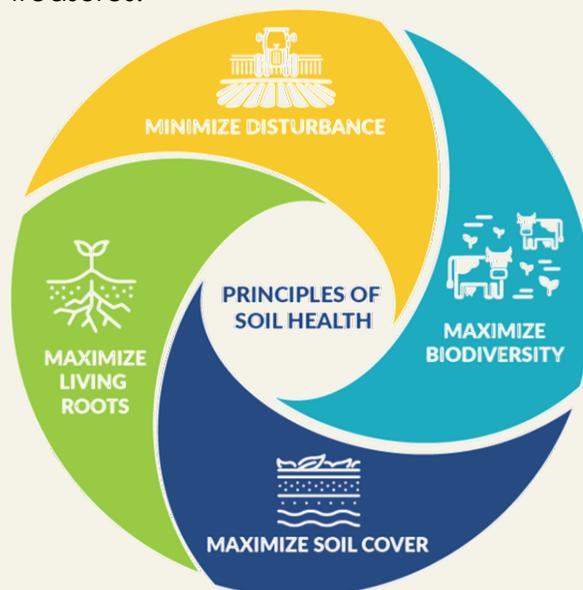
Texas farmers and ranchers are adopting conservation practices such as no-till planting, residue management, prescribed grazing systems, and diversified crop rotations. These choices are crucial not only to local farmers and ranchers, but also to our region's future.

Soil health plays a role on how resilient crops, livestock, and wildlife are to our region's everchanging weather patterns including droughts, floods, and climate shifts.

The health of soil is determined by its continued capacity to function as a vital living ecosystem that sustains plants, animals, and humans. Soil is a living and life-giving natural resource, **not** an inert growing medium. Healthy soil is teeming

with billions of bacteria, fungi, and other microbes that are the foundation of an elaborate symbiotic ecosystem. Soil does all this by performing five essential functions:

- **Regulating water:** Soil helps control where rain, snowmelt, and irrigation water goes. Water flows over the land or into and through the soil.
- **Sustaining plant and animal life:** Soil is the base that plant and animal life rely on. The diversity and productivity of living things depends on our soils being healthy.
- **Filtering and buffering potential pollutants:** The minerals and microbes in soil are responsible for filtering, buffering, degrading, immobilizing, and detoxifying organic and inorganic materials – including industrial and municipal by-products and atmospheric deposits.
- **Cycling nutrients:** Carbon, nitrogen, phosphorus, and many other nutrients are stored, transformed, and cycled in the soil.
- **Providing physical stability and support:** Soil structure provides a medium for plant roots. Soils also provide support for human structures and protection for archeological treasures.



Looking to improve soil health on your land? The USDA Natural Resources Conservation Service (NRCS) offers technical and financial assistance to local agricultural producers who may not know where to start. NRCS specialists can help with recommendations to develop a voluntary conservation plan to address soil health and other conservation concerns on your land. There is no charge for NRCS assistance or the conservation plan to help you meet your land management goals. Maximizing soil health is essential to maximizing profitability.

As world population and food production demands rise, keeping our soil healthy and productive is of paramount importance. Farming using soil health principles and systems, including no-till or minimal tillage, cover cropping, and diverse rotations, more and more farmers are increasing their soil's organic matter and improving microbial activity. As a result, farmers are sequestering more carbon, increasing water infiltration, improving wildlife and pollinator habitat – all while harvesting better profits and often better yields.

To learn more and connect with folks who care about your piece of Texas just as much as you do, visit www.texasconservation.org. If you have questions related to stewardship or conservation, you can email them to DearStew@texasconservation.org and you might just see them answered in a future column. And be sure to come back next month as we dive into stewardship as it relates to our region's wildlife. Looking forward to learning more with you. – The Hill Country Steward

The Hill Country Steward – not a person, but a partnership of local experts dedicated to sharing the best information, tips, and lessons learned. Have questions? Send them to DearStew@texasconservation.org. Learn more at www.texasconservation.org.

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