

Sustainability Spotlight

Carbon Farming

Sustainability encompasses a wide range of practices and methodologies for improving the world we live in. Many of those practices are widely known like recycling, conserving water, and planting trees. However, other practices are not as obvious like carbon farming. According to the United States Department of Agriculture (USDA), “Carbon Farming is the use of specific on-farm practices designed to take carbon out of the air and store it in soils and plant material.” The goal of carbon farming is to capture carbon in the soil to mitigate the overall effects of climate change.

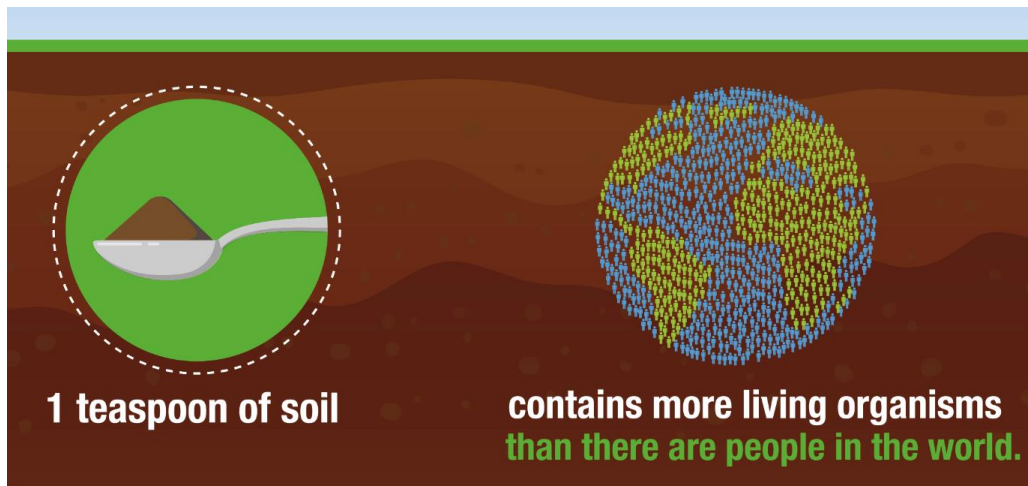


Image Source: agriculture.basf.us

Carbon farming often utilizes soil amendments to improve the quality of the soil. The USDA defines soil amendments as “products added to soils to improve soil qualities like soil fertility. Many of the soil amendments that can improve soil health, also sequester carbon. Amendments that increase soil organic matter may improve the water holding capacity and infiltration in soils, which promotes resilience to climate-related impacts such as drought, heat waves, or heavy rains.” The list below identifies some of the soil amendment applications:

- Compost – the controlled decomposition of organic material such as plant material, food scraps, and other natural materials.
- Biochar – a charcoal-like material generated from the burning of organic material belonging to agricultural and forestry waste
- Agroforestry – the intentional planting of trees and shrubs in areas that have crops and animal farming systems
- Whole Orchard Recycling – the on-site grinding or chipping of whole trees during orchard removal and incorporating the chipped material into the topsoil before replanting occurs

Carbon farming may not be the most conventional way that the average person can contribute to helping the environment, but it is a practice that should be admired and even replicated on a smaller scale with backyard composting or planting of vegetation and trees in neighborhoods to capture carbon and improve soils in local communities.



Southfield Sustainability Team

Alex Bollin – Planner I

Terry Croad – Director of Planning

Souzan Hanna – Sustainability Planner

Brandy Siedlaczek – Storm Water Manager

Frederick E. Zorn – City Administrator