



Horn Farm
*Center for
Agricultural Education*

**Horn Farm Center for Agricultural Education
Creating a Regenerative Farmscape**

Regenerative Agriculture is a holistic land management practice that leverages the power of photosynthesis to close the carbon cycle, and to build soil health, plant nutritional density, and crop resilience. Regenerative agriculture improves soil health by increasing soil organic matter--which is primarily carbon-based. Better soil health leads to increased biodiversity above and below the soil surface. Restoration of the soil carbon sponge allows for the restoration of the water cycle. Increased water percolation, filtering, and retention improves ecosystem health. By regenerating farmscapes we can rehydrate and naturally cool our climate.

Soil Health Principles*

- Much of soil life is fed by liquid carbon compounds produced by photosynthesis, exuded through living plant roots. Keep living roots in the ground as long as possible.
- Soil life is hard at work building underground structures that make life on land possible. Try not to disturb those underground structures with tillage.
- Soil life needs protection from heat, pounding rain, and wind. Keep soil covered year-round (preferably with plants.)
- A diverse system is more resilient than a monoculture. Use plant diversity to increase diversity in soil microorganisms, beneficial insects, and other species.
- Like any other living system, soil ecology will succumb to overwhelming stresses (such as excessive use of biocides, compaction, undergrazing, overgrazing, etc.) Minimize chemical, physical, and biological stresses.
- A healthy landscape stores and filters water, cools the surrounding atmosphere, creates mist and clouds, and prevents flooding and drought. Complex systems involving all kingdoms of life are responsible for the water cycle on land. Plan, monitor, and adapt your management with the whole water cycle in mind.
- Nature never farms without animals. Animals move nutrients, create small and large pores in soil, manage flows of water, pollinate crops, balance predator/ prey relationships, and replenish

soil microbes. Find ways to integrate and welcome a diversity of animals, birds, and insects into the system.

- Every place has a history, and unique strengths and vulnerabilities. Get to know the context of the land.

*This is an expanded version of the USDA-NRCS (United States Department of Agriculture - Natural Resources and Conservation Services) Soil Health Division's soil health principles adapted by Didi Pershouse.

For more information visit:

<http://soilcarboncoalition.org/learn>

Our farmers are stewards of this land we call the Horn Farm.

One of the primary responsibilities of the gardener or farmer is to leave the land in better condition than how it was found. This requires observation and awareness of the health of the soil, responsible and conscientious use of water resources, and supporting and coexisting with the natural systems that surround and interact with the farm. Given the reality of climate change and the uncertain times in which we live, the role of the farmer becomes one not only of stewardship, but as an agent of restoration, a healer of damaged landscapes. Farmers are required to farm following better than organic standards. Chemical fungicides, herbicides, insecticides, pesticides, soil amendments, and fertilizers are not permitted. The use of Horn Farm Center approved, organic fungicides, herbicides, insecticides, pesticides, soil amendments, and fertilizers products are allowed.