## **The Soil Heath Station**

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The Soil health station was one of the most prestigious stations for me. It teaches you how to treat your soil.

One thing we learned about was no-till. No-till is healthy for your soil. No-till tends to increase soil organic matter in the top several inches of the soil. On the other hand, tillage can act to bury carbon and increase its storage. That said, overall, intensive tillage tends to burn up much of the soil organic matter, more so than no-till.

The tillage isn't great for your soil. Furthermore, tillage has all along been contributing negatively to soil quality. Since tillage fractures the soil, it disrupts soil structure, accelerating surface runoff and soil erosion. Tillage also reduces crop excess, which helps soften the force of pounding raindrops.

In no-till farming, farmers do not till their fields before planting. Instead, they use specialized equipment to create a channel that is just immense enough for seeds to be planted, minimizing soil disturbance. Tilling is the practice of aerating the soil to permit moisture and air to filter through, allowing seeds to germinate, encouraging root growth, controlling weed growth, and integrating fertilizers into the soil. One field may be tilled multiple times before planting for different reasons.

Soil health is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Healthy soil gives us clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes.

At the Cayuga County Conservation field days, the most important station for me was the soil health station. I think it was the most memorable and it really helped me.