

## Soil

Written by Jeff Poppen  
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As important as soils are, most people and many farmers know little about how they work. This was not always so. Publications on farming from 100 to 150 years ago indicate a widespread understanding of the role of humus, soil structure and fertility, and how plants grow. Recent discoveries in soil microbiology verify these wise traditions of diversified crops and rotations, composting for a stable humus, and the integration of animal husbandry and crop production on all farms. Why is this knowledge so obscured?

When President Eisenhower's farwell address warned us of the military/industrial complex over fifty years ago, little attention was given to agriculture. Once we realize gunpowder and agriculture chemicals are made from the same ingredients by the same companies, a picture develops. A bit of history helps understanding this connection.

Most of the weapons used by both sides during WWI were made by the same companies. They are made from ammonia, phosphorus and potassium nitrate, the same familiar NPK used for artificial fertilizers. Marketing these products to farmers after WWI proved difficult, because traditional farming wisdom kept soils fertile and they didn't need extra fertilizers.

The military/industrial/agricultural complex, if I may amend Pres. Ike, started funding ag colleges, which then began a misinformation campaign. Students, often sent to college from self sufficient, diversified family farms, were taught that a farm should either raise livestock or crops, but not both. This separation spelled disaster for our nation's soil, because healthy humus production relies on animal impact. Land grant colleges still enforce this disconnection today.

As the new generation began following these recommendations, the microorganisms in the soil that are responsible for moving nutrients into plants were killed. For example, nitrogen fertilizer destroys nitrogen fixing bacteria, and the same is true for other microbes and elements. When humus levels drop, plants become susceptible to insects and diseases, and more chemicals are deemed necessary. By the end of WWII, many American farmers were using chemicals.

Ultimately, we have GMD crops sprayed with herbicides, which are either fed to confined

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animals feeding operations, made into unhealthy pre-packaged grocery items, or given as aid to underdeveloped countries, undermining their local food systems. But let's not forget that 70% of world food production still comes from small landowners on 5 acres or less, according to the U.N. World Food Organization. Also, 70% of environmental pollution comes from agricultural runoff. Agribusiness doesn't feed people, it feeds the military/industrial complexes at the expense of our health.

The concentration of vast quantities of wealth has given rise to a banking system holding most people in perpetual debt, an educational system obscuring agricultural wisdom, and the necessity of a large military presence worldwide.

What do we do? We grow gardens and feed ourselves and our neighbors, we boycott big ag products, and we support local farmers who understand soils and treat them with wisdom of traditional agriculture. And we get together at the annual Local Food Summit, held this year at Trevecca Nazarene University on Dec. 7<sup>th</sup>, where we will learn from different perspectives about healthy local food, and enjoy it in meals prepared by Nashville's premier restaurants.

More info can be found online at [TNlocalfoods.com](http://TNlocalfoods.com).