



ALEXIS I BROWN

Writing Sample

About the importance of soil

Why is Soil Important?



At first you may think of soil as just dirt. But soil plays an important role in supporting life. It is a mix of organic material (decayed plants and animals) and broken bits of rocks and minerals. At any given point, there are billions of living organisms which are continuously working in soil, helping for the betterment of the soil structure, and producing minerals and nutrients that are vital for the health of plants. Dirt can't do that since it lacks the basic things required for the plant's growth – organic matter. Scientifically, it has been proven that the soil quality is the key to the successful growth of plants. The better the soil health is, the better the growth of plants. Healthy soil produces more food, retains more water, reduces erosion, and provides better rangelands for animals. Soil is a crucial building block for all natural resources and we need to do a better job of taking care of it.

[A recent article in *The Guardian*](#) talks about what farmers around the world are doing to save the soil. The UN has warned that soils around the world are heading for exhaustion and depletion, with an [estimated 60 harvests left](#) before they are too barren to feed the planet. The UK environment secretary warned that the UK is 30 to 40 years away from “the fundamental eradication of soil fertility” and that while “countries can withstand coups d'état, wars and conflict...no country can withstand the loss of its soil and fertility.”

The article points out that pesticides harm soil. And, interestingly, the healthier the soil, the less need there is for pesticides. As one farmer said “we are using fewer chemicals and less fertilizer year on year as the soil recovers. Our aim is to get to using no fertilizer or sprays at all. There are guys in the US who have been doing this for 30 years and their soil is so fertile, they have got so much going on in the ground, that you do not need to apply anything.”

In 2016 at the Climate Change Conference ([COP22](#)) in Marrakech, 32 nations agreed to [the 4 per 1000 initiative](#) calling to increase carbon content in soils by 0.4% per year. Improving soil health would remove about 3.5 gigatons of carbon from the atmosphere.

Healthy Soil in New Mexico

Soil was the topic of conversation on the April 20 episode of KSFR's Garden Journal, hosted by the Santa Fe Farmers' Market Institute's very own Carrie Core. [Click here to listen](#). She spoke with Sam McCarthy of [CORE](#), who sells worm castings for compost at the Farmers' Market, and Isabelle, a founding member of NM Healthy Soil Initiative, which is a community collective and statewide program with the objective to engender healthy soils across boundaries, especially on rangeland and farmland. They were seeking to address the problem of degraded soils, characterized by low levels of organic matter, carbon, microbiology and water, and exacerbated by weather trends such as prolonged drought, high winds, and higher year-round temperatures. Water scarcity is a real concern in New Mexico and other parts of the southwest. But however, without healthy soil [there is little water retention](#). They say the solution is widespread soil health stewardship propelled by education, investment, and a robust network of human and natural resources. You can read the bill in its entirety [here](#).

The Soil Workgroup helped push forward the New Mexico Healthy Soil Act in the 2019 New Mexico legislature. As noted by [the Institute for Agriculture and Trade Policy](#), New Mexico joined several other states in putting forth legislation meant to promote soil health practices designed to both adapt to and mitigate climate change. New Mexico's Healthy Soil Act was sponsored by Small, Stefanics, and Stansbury; it received bipartisan support; and, it was signed into law by the governor a few weeks ago.

The Act promotes soil health and includes keeping soil covered, minimizing soil disturbance on cropland, maximizing biodiversity, maintaining a living root, and integrating animals into land management (including grazing animals, birds, beneficial insects or keystone species, such as earthworms). The Act supports and promotes methods such as planting cover crops, perennials, hedgerows, native grasses and other native vegetation; multi-cropping; adopting no-till or conservation tillage; planned grazing with appropriate graze and recovery periods and herd effect; integrated crop livestock systems; mulching; compost application; soil microbial stimulation and inoculation; or on-site wetland and riparian restoration. The State plans on supporting farmers and providing technical assistance through outreach, education, financial assistance or assistance with project planning, project design, grant applications, and project implementation. You can read the bill in its entirety [here](#).



How You Can Support Healthy Soil

Goatscaping: As we posted last week, [The Railyard Park Conservancy](#) is partnering with the [Quivira Coalition](#) and the [City of Santa Fe](#) on a three-year project to rebuild soil nutrients and structure, and restore the health of the Blue Grama grasses and other native plantings in the Railyard Park. Part of this project is done with support of Amanita Thorp, the daughter of Farmers' Market vendor Becky Thorp (SunStar Herbs). Amanita's business, [Horned Locust Remediation](#), will provide goats and sheep to graze the park. In that post we quoted Amanita explaining how grazing by goats is beneficial to the land and soil. If you have land that could benefit from goatscaping, contact Amanita at Horned Locust Remediation.

Organic Soil: If you are interested in improving the soil health on your land or in your garden, consider visiting the Payne's Organic Soil Yard. Payne's is a generous Corporate Sponsor of the Institute. They are also committed to the health of our gardens. Visit their site for more info.

Composting: You can also visit [Reunity Resources](#), who collects food waste from area schools and restaurants, then uses a simple innovative system to create high-nutrient compost, and operates a community farm on land regenerated by that very compost, providing access to healthy food by donating produce to local hunger efforts.

Education: If you want to teach your kids about soil and soil health, visit [this site](#) for lots of hands-on activities, including soil games, experiments, and career exploration!

As quoted in this post at [HundredGivers.Org](#): "A nation that destroys its soils destroys itself." – Franklin D. Roosevelt

**“A nation that destroys
its soils destroys itself.”**

– Franklin D. Roosevelt

