

Area 6

The Foundation of Life: An Essay on Soil Conservation By: Hannah Tirlea

Just imagine: you're sitting outside your house. The sky is dark and frightening. A dead tree lies on the concrete ground. As you gaze about, all you can see are the fragments of your once full-of-life city. Now, all plants are gone and the air is difficult to breathe. Your stomach growls, but you have no food left to eat. The animals that had once filled the city have disappeared along with the plants. "How did the world get this way?" you ask yourself in a disbelieving tone. A great sadness wells up inside of you as you realize the gravity of the situation...and the feeling of ominous doom is ever present. If we continue to harm our soil, that could be how Kentucky is like in the future. Therefore, we should conserve soil for many scientific, economic, and city development reasons to ensure this catastrophe never happens.

What is Soil?

As a child, you probably played in the dirt outside or made mud-pies. That "dirt" is also called soil, which is a combination of different materials found in the Earth's upper crust. There are three particular sizes: sand, silt, and clay. Soil is formed when rocks are broken down by ice, frost, wind, or water. Plants take root in these fragments. Over time, this process binds the materials together. In Kentucky, our main soil type is called Crider soil, which is well-drained, permeable, and can be found in the Pennroyal and outer Bluegrass regions.

Why is Soil Important?

There are several scientific reasons why we need soil in Kentucky. First of all, many animals find their habitats in soil. These animals include worms, insects, lizards, groundhogs, and even some bears. If all our soil was gone, then those animals wouldn't have a home to live in. Secondly, soil provide food for humans and other animals. Plants need the minerals in soil for photosynthesis and we need plants to eat. These plants wouldn't be able to sustain life if soil weren't present. Also, without plants, we wouldn't have clean oxygen to breathe. This is a major problem because humans need oxygen or else we die. Thirdly, soil is only found on this planet. That means if we contaminate all the soil on Earth, we can't find more on Venus or Mars. Therefore, we need to conserve soil in Kentucky.

Another reason why we need soil is because it plays a big part in Kentucky's economy. For example, soil is used in the development of tobacco, which is one of our most exported crops. In fact, Kentucky is fourth in the nation for the selling of crops. Soil is also important for livestock. Animals can't survive without food and all food is derived from soil. If we didn't have this essential mineral, animals would die and we wouldn't have livestock to sell. Trees used for lumber grow in soil as well. A portion of Kentucky's economy relies on making things out of wood, so we need soil for that.

The last reason is that soil helps Kentucky in city development. Wherever you are right now has soil underneath it. It doesn't matter if you are at home, at school, outside, or at the mall. Soil is the foundation for all buildings and roads too. In Georgetown (my home town), Toyota is a major company that provides many people with livelihoods, including some of my family members. However, this car company wouldn't exist without roads for the cars to travel on. You can't have roads without soil. Urban development, or the expansion of cities, is another reason why we need soil. As our population grows larger and more people connect with each other, we need more room for all of us to live. Without soil, urban development would be put to a stop.

In conclusion, soil is an essential material that we should conserve for many scientific, economic, and social reasons. A life without soil would be a dull one: with no animals, yummy food, a roof over your head, or even air to breathe. We need soil every minute of every day. Therefore, we shouldn't ruin the amount we have left. You can do something about this through soil conservation, which is anything that protects soil from natural or man-made factors. One way you can contribute is to add organic matter (dead plants or animals) to the Earth. This will decrease soil erosion and make it healthier in general. Humans have been using soil since the 4th century A.D. and we are not going to stop now. What are you waiting for? Go help with your local conservation efforts to make Kentucky a better place. After all, this commonly ignored and stepped on material is providing you with life right this very second. It would be a shame if soil disappeared. Without soil, our world would be a much different place.

Resources

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