

The big question today and is a current issue is what is happening to our soil? Our soil is being broken down and losing its health. Yes, soil health is a real concern happening today. A estimate of 60 years we will run out of healthy soil. So, what can we do to prevent degrading our soil.

Well the first thing is noticing what the soil does for use a community and nationwide. The soil hold nutrients for us to grow crops and filter our water. With the filter being destroyed basically the soil is also causing us harm in out atmosphere. So many things are hurting the soil such as tilling, fertilizing and using pesticides.

NPR radio had a very strong argument about this specific topic. Rattan Lal describes the information about how with the soil degrading is also degrading our atmosphere. Bianca describes how you can keep your soil healthy. David describes the soil ecology.

So how can you save your soil and keep it healthy? Bianca says use guidelines to manage soil practices. Don't dig up your soil and release carbon into our are that causes atmosphere issues. David describes the soil ecology and how tilling disrupts our micorriza fungi's and how fertilizer and pesticides basically infect our soil. Also, did you know that there are more organisms in the soil than humans?

With healthy soil it can absorb more water and help with floods, as well as help in time of droughts. If the soil is healthy it can take in more water which also brings oxygen in the soil to make it even better. With proper soil practices we can have soil last triple of what its expected to last. So save the soil!

Soil health is a big concern in the farming industry, but it should also be a concern to you because the soil could stop being a good producer for our crops and we will need a lot of food for our growing population or else our people will start to starve to death. There are many concerns for our soil it could stop providing nutrients to our crops and that would not be good for us we need to keep growing constantly because of the constant growing population. There are many reasons why our soil is starting to deteriorate it is because the soil has no time to bounce back from providing so many crops the soil needs time to rest. One example of a country with bad soil that can't feed its population is sub-Saharan Africa they have bad soil there, but they can still grow certain crops but the soil there has been overworked and now they can't grow crops to feed their population. We have many ways we can save our soil there is a practice called the till process that doesn't disrupt the soil too much and a pro of this practice is that it keeps carbon inside the soil where it belongs and not in our atmosphere.

Yeah, we have food to feed our population, but that food is growing in bad soil and that soil can only affect the crops we are growing, and the food goes to your local grocery store and you could be eating that unhealthy crop for dinner. Bianca Moebius mentioned that there are ways to keep our soil healthy, but the farmers must participate to keep our soil in good shape there are incentive based programs for producers but they still don't participate because they think that their income would decrease but that's not true their income would increase or stay the same way.



The Ground Beneath Our Feet on NPR radio discusses the issues with soil in modern day society, including soil degradation and taking soil for granted. The show had four guest speakers including Rattan Lal, a distinguished professor of soil science and director of Carbon Management and Sequestration Center at Ohio state university, and president of the International Union of Soil Science, Bianca Moebius-Clune, director of the USDA-NRCS Soil Health Division, and David Montgomery, a professor of geomorphology at the university of Washington, and author of "Growing a Revolution", and "Dirt".

First, Rattan Lal mentions that water quality, air quality and the state of our food are all issues under the umbrella of soil condition. David expands on this issue by including that we are taking soil for granted and healthy soil will make it possible to produce more efficient food in the long run. The host raises the question: how can someone who lives far away from their food source be more woke about sustainable soil being used on one's food? Bianca answers by saying that healthy soil has more organisms in one handful than there is in the whole world.

This radio show went on like that for a while, the host raising questions and the experts answering. Then they turned to viewers and read questions that had been sent in on social media. The main points I got was that we are taking our soil for granted because we "have enough food", but in the long run our food will be more sustainable (less time, less money, more resources) if we take care of our soil and use the right kind. David Montgomery says that one of the biggest-and most surprising- threats to soil is tilling, which disturbs the normal organisms and fungi in the soil. Another interesting part was when Rattan Lal talks about carbon sequestration. He says that carbon levels have almost doubled, but we can use it to our advantage by putting it back into the soil to raise organic matter levels.

In conclusion soil degradation is a serious issue and listening to this is important to learn more about it and how to fix it.

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The Ground Beneath Our Feet was broadcasted on the MPR radio last week talking about the restoration of the earth's soil and why it is important. A professor of soil science, Rattan Lal was featured in this broadcast where he talks about the damage of our soil and why restoration is crucial. He states that not only does soil affect water quality and air quality, but could also be a major factor of climate change. It is estimated that if nothing is done, we will run out of usable soil within about 50 years and more damage will prevail in the world.

In the broadcast they also introduce the director of the USDA-NRCS soil health division director, Bianca Moebius-Clune, who talks about the healthy characteristics of soil and how it helps the environment and itself. Soil must be able to function because it is an ecosystem for many organisms who help give nutrients to plants. She talks about how soil stores water which is good for droughts and gives high resilience against storms. She answers a fellow viewer question about composting as well, talking about how compost is one of the richest types of soil and helps the environment at the same time by reusing food waste instead of sending it to a landfill.

Lastly, they occasionally talk to the professor of geomorphology, David Montgomery, about soil degradation, examples of degradation, and the threats it offers to the soil. He talks about how microbes acquire nutrients for plants and how the overuse of fertilizer harms organic matter and native fertility of soil. Some examples of degradation would be tilling soil, which disrupts and harms fungi and roots extension for plants. Overall, they all say that the world is not just a thing for tilling and digging, it is where we live and humans should stop being greedy and let soil be natural.

Ground Beneath Our Feet

A recent study shows that about one third of the planets top soil is degraded and it is very possible we could be out of suitable soil for farming within fifty years. The Ground Beneath our Feet broadcast on MPR radio had guests Rattan Lal, Bianca Moebius, and David Montgomery to discuss this upcoming issue.

They discussed very relevant ideas such as the fact that if we care for our soil it will care for us and vice versa. We know that, yet we continue to destroy what we have. Professor Montgomery brought up that our soil has already lost half of its organic matter which is vital to growing the crops we depend on. When farmers plow or till their soil to benefit themselves, they're disrupting fungus that serves as root extensions for the plants. When that fungus is disrupted the soil is damaged therefore our crops grown in that soil will not grow to their full potential.

"We need to work with our ecosystem, not against it!" says Bianca Moebius-Clune. She is right. As stated before, if we work with our soil it will work with us. Ms. Moebius-Clun also stated that we are incredibly greedy with the soil that we have, and we commonly take it for granted. Our history shows in bold that societies that destroy their land don't last and that is exactly where we are headed. Working together and making minor changes in the way we plant our crops and utilize our soil could make a big difference and this broadcast was a ver educating eyeopener to anyone who tuned in.

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