

THE POWER OF SOIL

WHAT SOIL CAN DO FOR THIS PLANET

WHAT IS THE PROBLEM AND HOW CAN SOIL HELP?

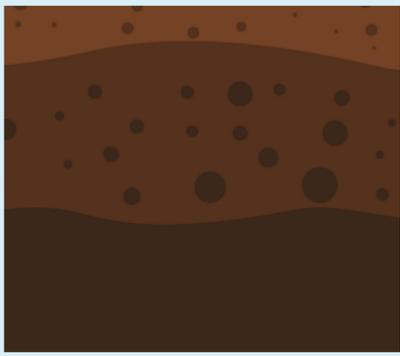
There is an excess of carbon dioxide in the Earth's atmosphere which is causing our oceans to acidify and hurt marine life. Soil on Earth has lost 50-70% of its original carbon content but we can put the excess carbon from our atmosphere back into the soil. This will create a positive feedback loop which will be beneficial to everyone, especially nature. Here is some information and ways we can use soil for good.

PLANT PHOTOSYNTHESIS

Photosynthesis in plants have the ability to capture carbon dioxide and, instead, release oxygen back into the atmosphere. Plants also use this energy to grow leaves and as much as 40% of CO₂ that has been captured is used to feed small microbes in the soil. If stable, microbes can create soil humus (soil humus can lock in carbon for hundreds of thousands of years.



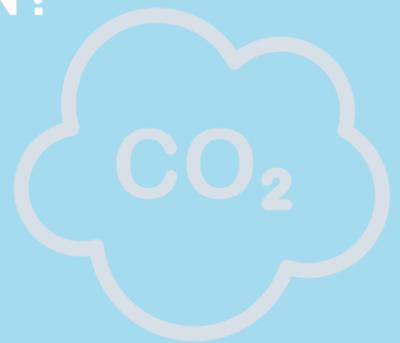
HOW WILL SOIL HELP WITH FRESH WATER STORAGE?



Soil creates aggregates with the carbon they receive. Aggregates are structures that create air pockets. Water can be stored in soil as it can act as a giant sponge holding water. This can be very helpful during natural disasters where water is scarce. If soil is not healthy or doesn't have enough carbon, it can lead to flooding.

HOW CAN WE REBUILD SOIL CARBON?

If we want healthy soil we are going to need special care. Since soil is crowded with living organisms, it needs to be nurtured with organic matter. Soil would need to be protected from nature's extremes so it should be protected by cover crops and have proper pasture management.



CONCLUSION

Rebuilding soil carbon has no risks and would be a game changer for the fight against climate change, so what are we waiting for? It will help solve so many crisis in the present and prevent many disasters in the future. Such a small change will have such a big impact. If you didn't know about the power of soil before, now you do!

REFERENCES:

Soil Solutions to Climate Problems- Centre for Food Safety

The Soil Story (Video) 2015

GREEN GANG 2020 PGC

