

## Here are the basic principles:

- Always keep soil covered with plants -- they pump carbon underground!
- Don't use synthetic chemicals (herbicides, pesticides, fertilizers) on soil -- they kill soil organisms.
- Don't till soil -- it shreds the things you want, like fungi, soil aggregates, worms.
- Plant many cover crops -- nature loves diversity and some will always grow no matter what the weather.
- Rotate annual crops with cover crops, perennials, fallowing, animal pasturing
- Plant perennials for their deep roots, constant soil cover, protection from erosion, and ability to store lots of carbon



Our poor Earth.

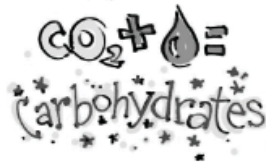
Day after day, carbon dioxide gas is pumped into the air, warming up our planet and threatening our environment.



Fortunately for us, there's a solution -- and it's right underneath our feet



Good soil management helps promote the growth of healthy plants that absorb sunlight.



Plants then use their own chlorophyll along with carbon dioxide and water to produce -- carbohydrates or simple sugars!



Some of these are exuded thru the roots, feeding soil microbes that bring the plant water & nutrients. The plant thrives, locking more CO<sub>2</sub> into soil organic matter, and



...that keeps our air from trapping heat, and our planet healthy!

## What can I do about climate change?



No matter who you are, you can take action to restore carbon to the soil & help rebuild the marvelous system that nature put in place to renew our atmosphere.

### Action steps if you are a:

Farmer

Gardener

Homeowner

Landscaper

Consumer

Investor

Funder

Businessperson

Activist

Educator

Policy Maker

Office Holder

Manager

for more on  
**Soil Carbon Restoration:**  
 go to  
[www.nofamass.org/carbon](http://www.nofamass.org/carbon)



### **Farmers**

- Keep soil covered with green plants
- Avoid use of synthetic chemicals (fertilizers, pesticides, fungicides) and use natural nutrients to build plant health and vigor
- Incorporate no-till or shallow till practices
- Plant nitrogen fixing cover crops in paths and between rows or beds
- Incorporate perennials, pasture cropping or forest gardens into your farm plan
- Graze or browse livestock, feed compost to poultry

### **Gardeners/Homeowners**

- Keep soil covered with green plants
- Raise height of mower to cut grass taller
- Plant living mulch like clover in garden paths
- Compost, rather than burn, your yard waste
- Incorporate multi-layer, perennial, diverse plantings into your yard
- Plant your lawn with diverse species, including deep rooted grasses and nitrogen fixing species like clover

### **Landscape Managers**

- Minimize the use of pavement and un-productive mulch.
- Incorporate nitrogen fixing trees and perennials into the landscape.
- Maintain diverse forested buffers and perimeters (can be productive).
- Emphasize perennials in plantings and fill in gaps with annuals.

### **Consumers, Investors, Funders or Businesspeople**

- Invest your food dollars in local farmers building soil, invest your climate action donations and advocacy in restoring soil carbon via reforestation and reversing desertification (rehydrating the land) locally and globally.
- Compost your kitchen waste.
- Stop buying from/supporting large scale, soy, corn, canola and cotton products which use GMOs, synthetic nitrogen and persistent herbicides, contributing to massive soil loss every year.
- Purchase food from farmers who use regenerative and organic practices.
- Consume only grass-fed and pasture raised meats, poultry and animal products, looking for farmers and ranchers who prioritize soil building.

### **Activists/Educators**

- Support replanting your local environment, support diverse meadows and deep rooted grass landscapes
- Study soil microbe biodiversity and support composting everywhere.
- Get to know diverse plants and bio-diverse ecosystems in your region.
- Invest your climate action donations and advocacy into reforestation and reversing desertification (rehydrating the land) locally and globally.
- Advocate against factory animal operations & for properly managed grass and pasture-based farming.

### **Policy Makers**

- Emphasize development projects that restore, preserve, and do not destroy soil ecosystems.
- Rule out synthetic nitrogen fertilizers on athletic fields, institutional and public lands.
- Align local building codes with renewable energy use, biodiversity, and habitat restoration and protection.
- Prioritize green infrastructure for coastal and inland flood management.