



CLIMATE ACTION NOW - Western MA

Regenerative Farming, Forests and Food Systems (RegenCAN)

Are you feeling the urgency of the climate crisis?

Do you care about the food you and your family consume?

Are you concerned about the future of our farms and forests?

Regenerative Farming, Forests and Food Systems (RegenCAN) is a working group of Climate Action Now that focuses on life-giving, key strategies for addressing the climate crisis and healing our ecosystems. The group is working to transition farming, forestry, and food systems practices from producing significant greenhouse gas emissions to practices that significantly improve the health of soils and forests, reduce food waste and improve the quality of the food we eat. Working in harmony with nature, this holistic strategy improves personal, public and planetary health.

RegenCAN is committed to:

- Building a powerful coalition of local farmers, consumers, scientists, forest ecologists, educators, youth and climate activists
- Educating people about the connection between land use, climate change and public health
- Highlighting the importance of working with natural systems to restore balance
- Empowering people to create an equitable and just food system with a focus on land use and regenerating soil in Western Massachusetts.

The climate movement has understandably focused on stopping use of fossil fuels and fighting for renewable energy, but it has largely ignored terrestrial mitigation, which stores carbon in healthy soil. Even if all fossil fuel emissions ended today, it would not be enough. To prevent climate catastrophe, we must sink excess carbon from the atmosphere into the soil. The climate movement must think holistically and add Nature's powerful tools to our tool-kit!

Humans have disrupted the earth's balance by burning fossil fuels, using harmful agricultural practices, and deforesting the planet. Fortunately, nature has an amazing ability to heal itself, so we are joining an international movement, organizing now, to stop destructive practices and promote healthy methods of farming and forest protection. Because forests and soil play an enormous role in storing carbon, one of the major greenhouse gases, we are learning the importance that regenerative agricultural practices, protecting forests and transforming our food systems have in climate mitigation.

So, what is regenerative agriculture? It's an approach to farming which focuses on improving soil health by restoring its carbon content. Regenerative agricultural practices include: composting organic waste to create rich fertilizer for the soil; little to no tilling of fields when planting crops to preserve carbon in the soil; diverse cover cropping to add nutrients to the soil instead of leaving fields bare; crop rotation which prevents depletion of nutrients and reduces pests; and not using pesticides, synthetic fertilizers, and other harmful chemicals, to support the soil's essential microbiology and in turn the human microbiome fundamental to health. Regenerative agriculture has already been successful around the world.

Why should we protect forests? Deforestation is the second leading cause of global warming and produces about 24% of global greenhouse gas emissions.¹ Scientists say that deforestation in tropical rainforests adds more carbon dioxide to the atmosphere than the sum total of all the cars and trucks on the world's roads. Forests help us by removing and storing carbon from the atmosphere, producing and releasing oxygen, shading and cooling homes, reducing flooding and preventing soil erosion, and cleaning the air and water. Recent research shows that it's important to protect older forests because older trees store more carbon than younger trees.

While forest-based biomass has been widely considered to be a renewable fuel source, burning wood to generate electricity emits 150% the CO₂ of coal plants and 300-400% the CO₂ of natural gas, per unit energy produced.² Clear-cutting forests for biomass products has serious harmful impacts on Earth's climate. A significant percentage of U.S. southeastern forests have been clear-cut to supply biomass to the European Union. And efforts are well underway to do the same in the northeast. We need to stop this trend!

Do our food choices really matter? Consumers have power and farmers will grow what consumers demand. Changing to organic plant-rich diets, free of harmful chemicals, can make a significant difference in our health and the planet's health. Animal-based foods are more resource intensive than plant-based foods (using more land, water and producing more greenhouse gases) so just reducing our meat and dairy consumption, even if not vegan or vegetarian, would save large areas of land and drastically reduce greenhouse gas emissions.

Cutting down on food waste is another important change we can make. About one third of the food produced every year is wasted in our current food system. About 11% of all the greenhouse gas emissions that come from the food system could be reduced if we stop wasting food. In the U.S. alone, the production of lost or wasted food generates the equivalent of 37 million cars' worth of greenhouse gas emissions.³ Reducing food waste avoids deforestation for additional farmland, and could help feed more people in the world.

Visit our website- <http://climateactionnowma.org/farms-forests-food/> - for more information and to get involved.

¹ <https://www.earthday.org/campaigns/reforestation/deforestation-climate-change/>

² "Carbon emissions from burning biomass for energy," Partnership for Policy Integrity.

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