

Remineralize the Earth

The climate change solution right under our feet



Gone Tomorrow: Fertile Soils, Nutritional Value Disappearing



Loss of soil fertility is a global crisis. Since the adoption of chemical fertilizers, topsoil has lost significant organic matter. Soil erodes faster than it's replenished, and nature takes 1,000 years to create a mere 3 centimeters. Thus, 30% of arable land is now barren. We only have 60-100 harvests left.

Water contamination threatens the health of all life. Roughly 60% of soil ends up in rivers, streams and lakes, intensifying contamination from runoff fertilizers and pesticides.

Deforestation decimates wildlife populations. Mass tree loss destroys our soils, rangelands and freshwater. Entire ecosystems suffer.

Nutritionally-depleted food is the price we pay for the current industrial agriculture paradigm. Nutrient levels of calcium, iron, and vitamins A and C have been dropping drastically, causing a dramatic loss in the nutritional level of almost all minerals and nutrients.

Climate Change Matters: Earth, Oceans in Peril



Global warming has dramatically decreased snow and glacial coverage worldwide. In the last decade, Antarctica's rate of ice mass loss has tripled.

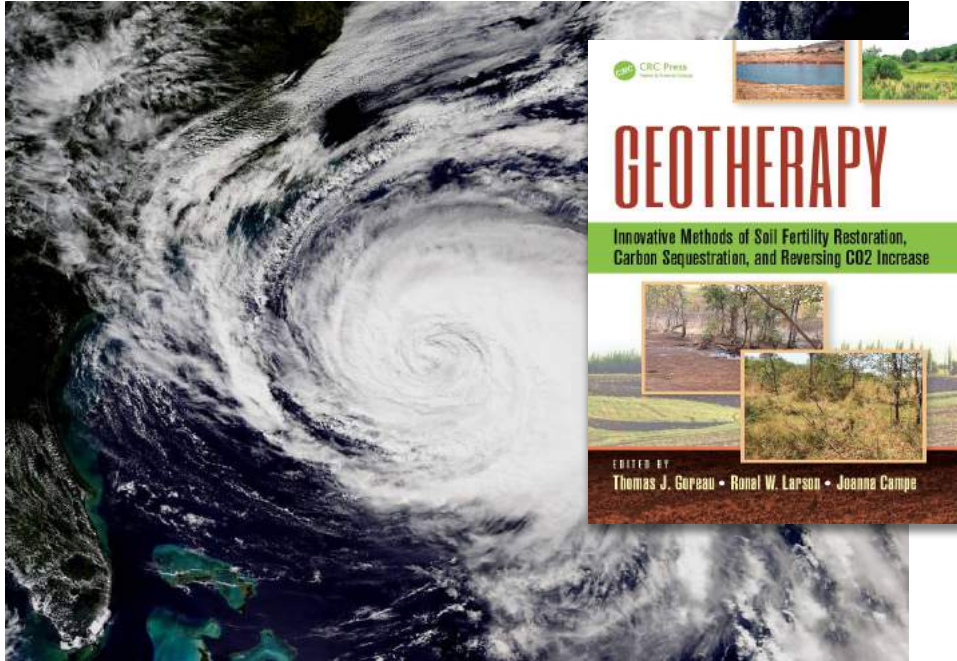
Sea levels rose about eight inches in the previous century. This rate has nearly doubled in the last two decades and is accelerating every year.

Oceans are warmer and more acidic due to increased carbon dioxide absorption. This kills off coral reefs, further endangers aquatic life and adds to extreme weather events.

Widespread fires have magnified concerns that we are locked in a worldwide pattern of conflagration that is both persistent and catastrophic.

Restore the Earth, Stabilize the Climate

Remineralization, widely regarded by a growing movement as a blueprint for restoring ecological balance, is crucial to roll back the effects of climate change.



Rock powders act as a natural slow release, long-lasting fertilizer greatly increasing soil fertility, biomass, biological productivity, and food supplies. At the same time, chemical reaction with rocks is the major mechanism that removes CO₂ from the atmosphere on geological time scales. This is an important solution to reverse runaway global climate change. Remineralize the Earth is the major organization promoting and providing information on the use of rock powders in agriculture, pastures, forests, and for ecosystem regeneration.

Thomas J Goreau
Geotherapy (CRC Press)
Soil Carbon Alliance

UN Commission on Sustainable Development

The brilliant, practical, natural, economic solution that is rock dust.

We are talking about **restoring** soils and forests.

We are talking about **producing** higher agricultural yields.

We are talking about **more nutritious** food.

We are talking about **storing** carbon in soils to stabilize the climate.



Why Rock Dust?

It's Abundant

Millions of tons of finely ground rock dust are available as a byproduct of the aggregate industry.

It's Natural

Rock dust contains up to 70 or more minerals and trace elements needed by all life.

It's Economical

Rock dust costs less to apply versus conventional fertilizers and pesticides.

It's Brilliant!

Results with rock dust show as much as 2-4 times the yield for crops grown on degraded land and 4-8 times more biomass for forests.



...because rock dust creates better soils

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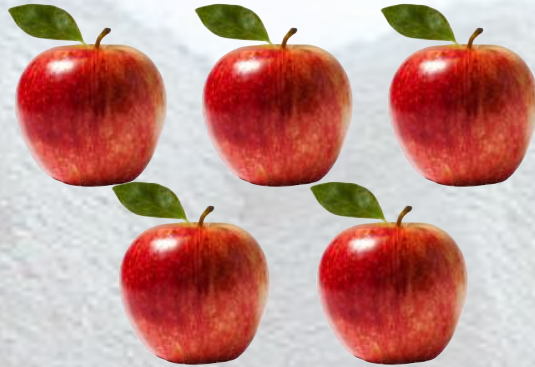
Healthy Soil, Healthy People

Through remineralization, we can bring soils back to life,
increase yields, grow more nutritious food, and greatly
reduce the cost of health care.

1965



Today



Nutrient Density

On average, you would need to eat 5
apples today to equal the same nutrition as
1 apple in 1965.

Now *imagine* increased yields while at the
same time enhancing the nutrient quality
of the food we eat.

Source: Changes in *USDA Food Composition Data for 43 Garden Crops, 1950 to 1999* Donald R. Davis, PhD, FACN, Melvin D. Epp, PhD and Hugh D. Riordan, MD

Impacting Sustainability: Local to Global



Imagine an agroforestry model that can sustain the food, fuel and income of local communities – a model that can be scaled up to develop larger integrated systems for agriculture and biofuel.

Soil remineralization is simple, intuitively learned, and applicable at the community level. Materials required are inexpensive and among the planet's most abundant resources.

Our Vision: Current and Future Directions

Let's Remineralize! Science Ed K-12

Research Projects with Rock Dust and Biochar:

- Stone House Farm – Hudson, NY
- Equinox Farm – Berkshires, MA

Agroforestry Projects – Post-Hurricane Caribbean

Preventing Forest Fires through Remineralization



Our ongoing projects: Your donation dollars at work



Local Projects – Paulo Freire Social Justice Charter School demonstration trial for aji peppers in Holyoke, Massachusetts and Grow Food Northampton.

International Projects – Bahia Research Projects and a high school class on Barbuda testing the rock dust from the volcanic eruption from nearby Montserrat.

RTE's domestic and international projects educate, advocate and engage in on-the-ground activism. Our multi-faceted approach incorporates, grassroots community initiatives as well as scientific research, entrepreneurial ventures and large-scale projects.

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Your investment in Remineralize the Earth will help:



1. **Integrate** more sustainable models into industrial agriculture that go beyond organic to increase yields, food quality, and food security.
2. **Partner** with government agencies and NGOs to establish agroforestry projects in the Caribbean, Haiti and Puerto Rico, which will create resilient food systems that survive and thrive during future climate upheavals.
3. **Coordinate** an effort to mount a forest remineralization campaign, mobilizing local, state, federal, National Guard and volunteer organizations to prevent destructive and deadly forest fires. This will lead to forests and landscapes that are healthier and more resilient to drought, disease and weather extremes.
4. **Provide** online resources on biology, geology, soil science, climate science and other related topics, complementing schools' core curricula and giving K-12 educators the ability to connect scientific concepts to relevant, real-world applications through remineralization projects.

Paradigm Shift: From Scarcity to Abundance

**We can move from an economics based on scarcity
to an economics of abundance through remineralization.**

“One of the most important things humans can do as constructive passengers aboard Spaceship Earth is to help restore the health of our planet’s soils and climate. Remineralize the Earth was one of the first organizations to identify and accept that challenge. Joanna Campe introduced me to the concept of remineralization over twenty years ago. The efforts and significant achievements at RTE are deserving of your support.”

– Greg Watson, former Commissioner of Agriculture, Massachusetts

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Remineralize the Earth

Our Mission

Remineralization utilizes finely ground rock dust and sea-based minerals to restore soils and forests, produce higher yields and more nutritious food, and store carbon in soils to stabilize the climate.

Who We Are

Since 1996, Remineralize the Earth (RTE), a Northampton, MA based, 501(c)3 non-profit organization, has advocated for the life of this planet's soils, championing a cleaner, more natural alternative to both chemical fertilizers and pesticides. RTE brings together farmers and gardeners, scientists and policymakers, as well as the general public through education, outreach, projects, research and advocacy.

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Remineralize the Earth's most valuable resource

At Remineralize the Earth, we collaborate with 20-30 students, graduate students, researchers, science writers, and professionals from all over the world who work together with us. Our volunteers contribute up to 20 hours a week per person, providing an incalculable value as far as what we are able to accomplish.

We are based in the Pioneer Valley, with the opportunity to take advantage of the Five College Consortium (UMass, Hampshire College, Amherst College, Smith College, Mount Holyoke). For more than 20 years we have worked with Hampshire students under federal work study, a tremendous program that has provided us with a 1 to 11 multiplier effect, covering \$11 of the students' \$12 wages.



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Remineralize the Earth

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A young green plant with two leaves growing out of dark, rich soil. The plant is positioned on the left side of the frame, and the soil is dark brown and textured. The background is a soft-focus view of the same soil.

Help seed a new future

Pledges of \$5000-\$25,000 for the next three years will secure our current budget and put us on a path to expanding our capacity and making a greater impact.

Here's how you can participate in this watershed moment:

- Please make a multi-year pledge of \$5000-\$25,000
- Make a one-time “heroic” stretch gift (go for it!)
- Help engage new donors to participate
- Become a new donor!

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