

Green Mission News

June 2013 Green Mission News

What's in the News...

European project proposal to develop zero-emission circular economy on Baltic Island



"If you can make an old invention like the diesel engine run clean, you can make an even older invention, the national economy, run clean too," says inventor Anders Höglund... ([Read article](#) Scott Perret)

External Article Links:

- Seed Giants vs. U.S. Farmers

www.centerforfoodsafety.org/files/seed-giants_final_04424.pdf

- Out of Hand- Farmers Face the Consequences of a Consolidated Seed Industry

www.farmertofarmercampaign.com/

- How the U.S. State Department Promotes the GMO Seed Industry's Global Agenda

http://documents.foodandwaterwatch.org/doc/Biotech_Report_US.pdf

- Patent Exhaustion

www.seedmatters.org/patent-exhaustion/

- God, move over (Vandana Shiva)

www.asianage.com/columnists/god-move-over-325

- Hybridization between genetically modified Atlantic salmon and wild brown trout reveals novel ecological interactions

<http://rspb.royalsocietypublishing.org/content/280/1763/20131047>

- Genetically modified salmon could pose threat: study

www.montrealgazette.com/news/Genetically+modified+salmon+could+pose+threat+study/8446629/story.html

- Mini-Farms Thrive as Demonstration, Training and Research Centers

<https://app.e2ma.net/app/view:CampaignPublic/id:1408724.13073993026/rid:e5f788248e30794c99e4f81f6cb376f3>

- Researchers find high-fructose corn syrup may be tied to worldwide collapse of bee colonies

<http://phys.org/news/2013-04-high-fructose-corn-syrup-tied-worldwide.html>

- European project proposal to develop zero-emission circular economy on Baltic Island

www.naturalstep.org/en/european-project-proposal-develop-zero-emission-circular-economy-baltic-island

- U.S. ZERO WASTE NATIONAL BUSINESS CONFERENCE

www.uszwb.org/2013-national-conference

- The Many Benefits of a Whole Foods Diet: An Interview with the Co-Author of Whole

<http://sustainablog.org/2013/05/whole-foods-diet-nutrition/>

- Plant-based, whole-foods diets can extend lifespans

www.press-citizen.com/article/20130524/OPINION02/305240002/Plant-based-whole-foods-diets-can-extend-lifespans?nclick_check=1

- An inventor's winding path to solar energy

www.kansascity.com/2013/05/08/4225193/ron-aces-meandering-path-from.html

- Patent filing claims solar energy 'breakthrough'

www.mcclatchydc.com/2013/05/08/190683/patent-filing-claims-solar-energy.html#.UY5Fua5pfi5

- Battle to save the bees rages across US- Apiculturists and scientists are trying to reverse a dramatic decline in bee colonies that threatens agricultural production

www.guardian.co.uk/sustainable-business/battle-save-bees-rages-across-us

- Innovative solutions for urban mining

<http://phys.org/news/2013-05-solutions-urban.html>

- Seeking Food Ingredients That Aren't Gene- Altered

www.wral.com/seeking-food-ingredients-that-aren-t-gene-altered/12487539/

- Integrating Eastern and Western Wisdom Could Hold the Keys to a More Sustainable World

www.japanfs.org/en/mailmagazine/newsletter/pages/032789.html

- From Food Security to Food Sovereignty

<http://civileats.com/2013/05/29/from-food-security-to-food-sovereignty/>

- At the trough- An awful farm bill faces opposition

www.economist.com/news/united-states/21578688-awful-farm-bill-faces-opposition-trough

- Chemicals Revealed: Over 5,000 Kids' Products Contain Toxic Chemicals

<http://watoxics.org/publications/chemicals-revealed>

(more)

- Cadmium, mercury and phthalates—oh my!

www.iatp.org/blog/201305/cadmium-mercury-and-phthalates—oh-my

- EPA Green-Lights New Pesticide Highly Toxic to Bees

<http://www.beyondpesticides.org/dailynewsblog/?p=10479>

- Environmental Ignorance Is Economic Bliss ?

steadystate.org/environmental-ignorance-is-economic-bliss/

- Towards the Circular Economy reports are to make the case for a faster adoption, quantify the economic benefits of circular business models, and lay out pathways for action

www.ellenmacarthurfoundation.org/business/reports

- Farm Bill Fiasco: What Next for the Food Movement?

<http://www.foodfirst.org>

- Hollow Bee Hives May Threaten Our Lives Too

The United States should follow Europe's example and ban pesticides that may be wiping out these key pollinators.

<http://otherwords.org/hollow-bee-hives-may-threaten-our-lives-too/>

- World's fish have been moving to cooler waters for decades, study finds

www.washingtonpost.com/national/health-science/worlds-fish-have-been-moving-to-cooler-waters-for-decades-study-finds/2013/05/15/730292e8-bcd7-11e2-9b09-1638acc3942e_story.html

- Signature of ocean warming in global fisheries catch

www.nature.com/nature/journal/v497/n7449/full/nature12156.html

- Natural Catastrophes in 2012 Dominated by U.S. Weather Extremes

global cost of \$170 billion due to natural catastrophes last year, the United States alone accounted for 69 percent of overall losses

<http://vitalsigns.worldwatch.org>

- Composting Supports Jobs and Healthy Watersheds, Say New ILSR Reports

www.ilsr.org/paydirt/

- Wisconsin Bill Would Treat Organic Milk, Sharp Cheddar, Brown Eggs as "Junk Food"

www.prwatch.org/news/2013/05/12095/wisconsin-bill-would-treat-organic-milk-sharp-cheddar-brown-eggs-junk-food

- Are You Being Watched ?

How Corporations and Law Enforcement Are Spying on Environmentalists

www.earthisland.org/journal/index.php/eij/article/we_are_being_watched/

- Greenpeace welcomes leading retailers' commitment

www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=31&id=61205&l=e&special=0&ndb=0

- Genetically Engineered Trees and Glowing Synthetic Plants? No Thanks

www.huffingtonpost.com/rachel-smolker/no-thanks_b_3326165.html

- Quantitative Analysis of Forest Fragmentation in the Atlantic Forest Reveals More Threatened Bird Species than the Current Red List

www.plosone.org/article/info:doi/10.1371/journal.pone.0065357

- Trends in Amphibian Occupancy in the United States

www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0064347

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Full Length Article Below:

Published on Tuesday, May 21, 2013

www.commondreams.org/view/2013/05/21

For Climate Solution, Look to the Ground

Soil, that humble brown stuff we call dirt, is part of the answer to saving our future

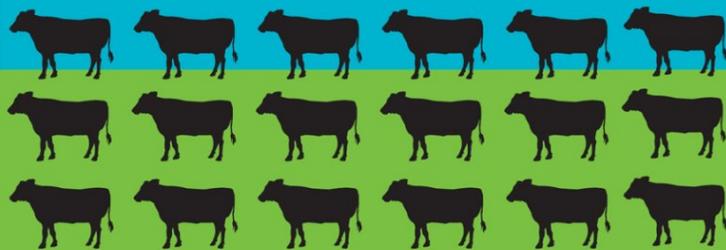
by [Judith Schwartz](#)

Late last week the concentration of carbon dioxide in the atmosphere crossed the 400 parts per million (ppm) threshold. From a climate standpoint this is alarming, and points to the urgency of shifting away from fossil fuels. However, I also feel that our sole emphasis on CO2 blinds us to other means of addressing climate change—notably by

returning carbon to where it belongs, in the soil. For this approach represents not only our greatest opportunity to reduce atmospheric CO2 levels, but simultaneously enhances soil fertility and biodiversity, and the land's ability to retain water.

COWS SAVE THE PLANET

AND OTHER IMPROBABLE
WAYS OF RESTORING SOIL
TO HEAL THE EARTH



UNMAKING THE DESERTS, RETHINKING CLIMATE
CHANGE, BRINGING BACK BIODIVERSITY, AND
RESTORING NUTRIENTS TO OUR FOOD

JUDITH D. SCHWARTZ
FOREWORD BY GRETEL EHRLICH

We get the impression that human interference with climate is a sky thing: those greenhouse gases we keep pumping into the air. But it's also a ground phenomenon. The flip-side of rising atmospheric CO2 is the loss of carbon in the soil, the main component of soil organic matter. More carbon is stored in soil than in the atmosphere and plants combined. Over time, more CO2 has entered the atmosphere from soil-disturbing agricultural practices than the burning of fossil fuels. Once we understand this, and encourage

land management strategies that store carbon as opposed to promoting its oxidation, things look different. This is cause for optimism because while we can't un-burn fossil fuels (futuristic geoengineering tricks notwithstanding), we can effectively return carbon to the soil.

According to Rattan Lal, Distinguished University Professor at the Ohio State University, who speaks widely on the topic, soil-carbon restoration can potentially store about one billion tons of atmospheric carbon per year. This would offset around 8 to 10 percent of total annual CO₂ emissions and one-third of annual enrichment of atmospheric carbon that would otherwise stay in the air. Allan Savory, whose TED 2013 talk on greening deserts and reversing climate change has gone viral, stresses the potential of grassland soils for storing carbon. He says applying Holistic Planned Grazing—a land management framework in which livestock are tools for land restoration—on half the world's grasslands could bring atmospheric carbon dioxide to pre-industrial levels, while feeding people. With estimates of soil carbon losses well into the tens or even hundreds of gigatons, even slightly increasing soil organic carbon would greatly help efforts to mitigate climate change.

Our discussions of CO₂ are based on the Keeling Curve, the diagram that presents concentrations in parts-per-million since 1958 and among the most recognizable images in science. When we see the graph and its inexorable climb upward—especially now that it's cracked 400—we can only respond with despair. Where can one find hope, or the wherewithal to fight for change? Climate talks come and go to no avail; even if greenhouse gas emissions hit a full stop, concentrations wouldn't drop down to 350 for nearly a century. However, if we consider our carbon predicament in terms of the carbon cycle, we can work with natural processes to bring it back in balance, primarily through various forms of regenerative agriculture. In the words of Australian soil scientist Christine Jones, "the process that actually removes CO₂ from atmospheric circulation is photosynthesis." The reverse of photosynthesis is oxidation (or combustion or respiration), which is what happens when we burn fuel. Or, referring again to soil, when a field is harvested and the land left bare—the carbon in the ground oxidizes. Think of the millions of acres on which we can make a start.

In confronting environmental problems, we're often overwhelmed with a sense of crises competing with each other. There's the terrifying unknown of climate change, the heartbreak of losing plant and animal species, the specter of land around the world drying out. But through the lens of soil carbon, we can see these as manifestations of the same problem: soil depleted of carbon cannot hold water; without moisture, plants and microorganisms can't survive, which limits sources of diversity. But the reverse also holds true, and improving one problem leads to advances in the others. Soil organic matter can absorb many times its weight in water, so an increase in soil carbon means more water held in the soil. Which means happy soil microorganisms and growing plants. Thriving plants mean increased biomass and more carbon drawn from the atmosphere and into the ground. Which increases soil organic matter, which restores nutrient cycling, which broadens the range of organisms, and onward in a positive feedback loop, in alliance with nature's predilection to heal itself.

Cutting emissions is a crucial part of reducing atmospheric CO₂ levels. But as we

reckon with climate change and other environmental problems, it's time we brought our efforts down to earth. Soil, that humble brown stuff we call dirt, responds readily to restorative measures. Soil carbon, a fulcrum in many biological cycles, offers crucial points of leverage. By focusing only on atmospheric carbon, we're missing an important part of the picture. We're also missing the opportunity to engage the public, push past malaise and hand-wringing, and get our hands dirty—literally—to safeguard our future.

Judith D. Schwartz is a longtime journalist who lives in Vermont. Her most recent book is [Cows Save the Planet](#) (Chelsea Green Publishing), which looks at soil as a crucible for our many overlapping environmental, economic, and social crises.