

Biodiversity for a Livable Climate

Restoring Ecosystems to Reverse Global Warming

February 12, 2015

2015 is the International Year of Soils

2015 International Year of Soils



The 68th UN General Assembly has declared 2015 the International Year of Soils (IYS 2015) with the intention to spread awareness and greater knowledge of the importance of healthy soils to global food security and ecological vitality. The Food and Agricultural Organization (FAO) of the UN will be working in collaboration with national governments and the secretariat of the United Nations Convention to Combat Desertification to implement the goals of IYS 2015 under the framework of the <u>Global Soil</u> Partnership.

Several specific objectives of IYS 2015 include increasing public understanding of the role of soil in climate change adaptation and mitigation, encouraging policies that protect and enhance soil quality, and promoting the advancement of soil information collection and monitoring on regional, national and global levels.

To learn more about IYS 2015 visit: http://www.fao.org/soils-2015/en/

Carbon Farming for the Future

Upcoming Events

Reversing Global Warming: Carbon Farming for Food, Health, Prosperity and Planet!

A one-day conference for farmers, gardeners, government officials, citytown councils, civic leaders, school board members, educators at all levels, park/forest and environmental managers and stewards, nursery and landscape business owners, and all other folks concerned about the health, prosperity and the ecological future of the planet.

by Jacqueline Sussman



Now that climate change experts at NOAA and the IPCC have concluded that even in a zero-emissions scenario, where we completely stop emitting CO2 worldwide, the effects of climate change will worsen and persist for centuries into the future, the big question tied to the future of humankind is this: is there a way to safely pull and store CO2 from the atmosphere and reverse climate change?

Increasingly, scientific studies are giving an emphatic thumbs up. Instead of focusing all our attention and policy efforts on reducing carbon emissions, we can reverse the current destructive trends of climate change through climate-smart policies and actions that restore nature's capacity for absorbing and storing carbon in the world's soils. Esteemed soil scientist, Dr. Rattan Lal of Ohio State University, has stated, "A mere 2 percent increase in the carbon content of the planet's soils could offset 100 percent of all greenhouse gas emissions going into the atmosphere." While this information brings an optimistic tone to the climate change conversation, doing so will require major shifts in the ways we operate our large-scale agricultural systems.

Industrial agriculture farming techniques deplete land of organic nutrients and prevent soils from effectively absorbing carbon from the atmosphere. The use of inorganic fertilizers, pesticides, fungicides and other industrial chemicals kill the microbial life that is vital for plant regenesis and productive soil ecosystems. Monoculture crop systems (often used to produce U.S. corn, wheat and soy) are the antithesis of the ecological variety present in robust and biologically diverse food-producing systems.

Regenerative organic agriculture is an alternative set of farming practices that allow for healthy, highly functioning soils through a productive cycle of photosynthesis and nutrient exchange that can sequester and sustain greater volumes of carbon at greater soil depths. In addition to the enhanced carbon sequestering capacity in regenerative



Organized by Biodiversity for a Livable Climate and sponsored by the <u>Institute</u> <u>for Sustainability and Post-Carbon</u> <u>Education</u> (ISPE) at Bristol Community College.

Register Now

When

Friday, February 20, 2015, 9:00 a.m. - 4:30 p.m.

Where

Auditorium H 210, Bristol Community College, 777 Elsbree Street, Fall River, MA.

Fees

Tickets are \$5-\$35, sliding scale, volunteer slots and scholarships available.

For more information visit here or contact us at Climate2015@Bio4Climate.org

Future Events

Reversing Global Warming: Urban and Suburban Carbon Farming for Food, Health, Prosperity and Planet! May Conference

Sunday, May 3, 2015, 9 a.m. to 5 p.m. Science Center, Hall C, Harvard University.

A one-day event organized by Biodiversity for a Livable Climate agriculture, there are a myriad of other benefits including the reversal of land degradation and soil erosion, increased water storage capacity, improved nutritional quality of food, reduced GHG emissions and fossil fuel use, and crop yields that are greater than industrial yields in conditions of environmental stress such as flooding and drought. Shifting from conventional industrial agricultural techniques to regenerative organic agriculture will create more climate resilient food systems in which harvests remain much more stable during times of water scarcity.

Several organizations are actively working to enhance the carbon sequestration capacity of global soils and disseminate the hopeful message that there is a longterm and low-tech solution for sequestering excess atmospheric carbon and reversing climate change. Among these organizations are <u>The Carbon</u> <u>Underground</u>, <u>Rodale Institute</u>, and the <u>Soil Carbon</u> <u>Coalition</u>.

The Marin Carbon Project is one collaborative effort of member organizations that works primarily with grassbased livestock on dairy farms and ranches to create site-specific action plans that will maximize the carbon sequestration potential of grazed grassland systems. Restoring grassland ecosystems in arid and semi-arid regions of the globe, which comprise about 40% of the global land surface area (excluding Greenland and Antarctica), can provide long-term soil organic carbon storage for hundreds to thousands of years. Healthy grasslands are just one example of the many diverse ecosystems that can be properly managed to serve both in agriculture and as a large long-term soil carbon reserve. By engaging with nature to restore healthy soils in our global agricultural systems, we can achieve a healthier, more carbon-stable future.

and sponsored by <u>Green</u> <u>Cambridge</u>.

For more information <u>visit here</u> and <u>Register now on</u> <u>Eventbrite</u>!

For up-to-date info on our events

Visit our Website Join our Meetup Group

Stay Connected



About BLC

Our mission at Biodiversity for a Livable Climate is to mobilize the biosphere to restore ecosystems and reverse climate change. Our primary project is to re-direct the mainstream climate conversation from an almost exclusive concern with atmospheric carbon to encompass the entire carbon and water cycles and the regenerative role of biology.

Learn more about our ongoing projects, upcoming events and find additional information and resources at <u>bio4climate.org</u>.