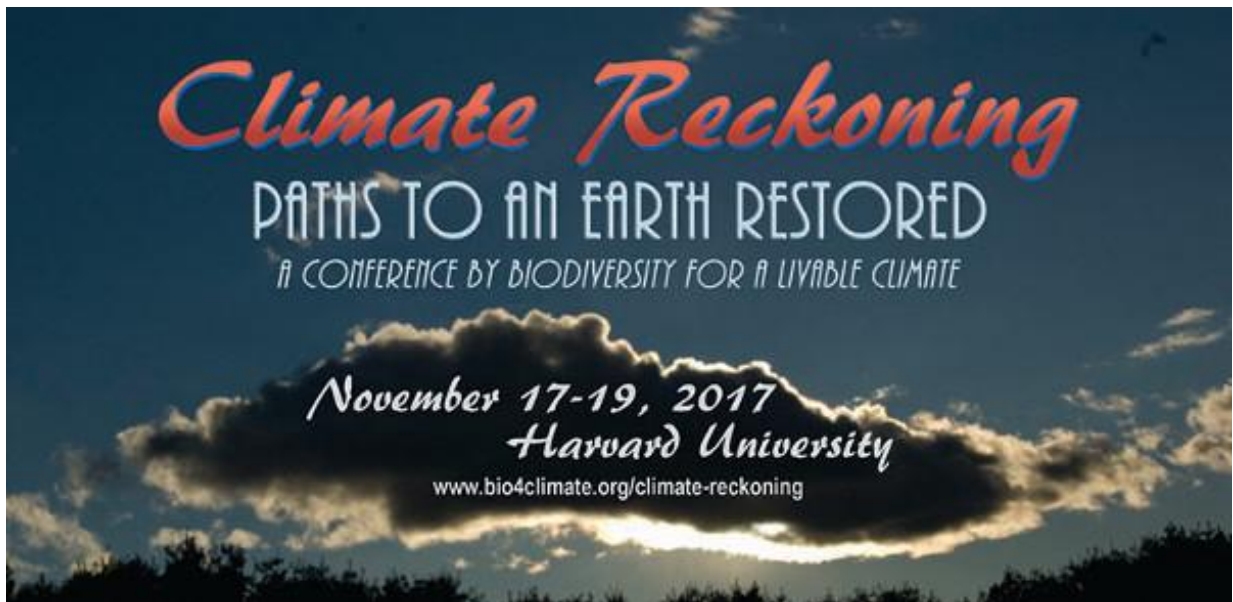




Biodiversity for a Livable Climate

Restoring Ecosystems to Reverse Global Warming

September - October 2017



Climate Reckoning: Paths to an Earth Restored

Connecting the Dots to Reverse Global Warming!

November 17-19, 2017, Harvard University*

Cambridge, Massachusetts

Save the date!

Our tenth conference in three years takes a systems approach to climate. It's not just about carbon, or regenerative agriculture, or water, or politics - it's about the entire Earth system working as a complex whole. We can solve a universe of problems by understanding living systems and how to bring them back to life. The good news: we already know how to do it!

Join us this fall in Cambridge, Massachusetts, November 17-19, 2017, when we'll look at the most hopeful picture yet, as we prepare to put these dark and disturbing days behind us.



Photo: Hans Braxmeier/[Wikipedia](#)

Great Work, Australia!

by Adam Sacks

Australia is the world's driest inhabited continent with deserts making up most of the interior of its approximately 3 million square miles. Its habitats range from alpine heaths to tropical rainforests. It has one of the lowest population densities in the world (around 4 per square mile), with humans arriving roughly 70,000 years ago and developing rich indigenous cultures.

Australia is deeply afflicted by climate change, with periods of [extreme heat waves](#) intermingled with occasions of severe flooding. The Great Barrier Reef, the largest coral reef system on the planet, is dying as a result of ocean warming. Ironically, coal plays a major role in the Australian economy, both for electricity generation and export.

And yet ...

Some of the most remarkable environmental progress anywhere is made on this "island continent." Here are just a few examples:

Permaculture

Events

[Meetup, Potluck and Discussion!](#)

Sunday, October 22, 2017

6 - 9 p.m., Cambridge, MA

Frédérique Apffel-Marglin: Sacred Soil: Biochar and the Regeneration of the Earth

One of our favorite anthropologists, Frédérique is back to discuss her new book, *Sacred Soils*, and explore the importance of indigenous worldviews along with considering the Earth as a whole, vital, functioning system. Her warm presentations are always insightful and thought-provoking. If you're in the Boston area, please join us!



*For up-to-date info on
our local events*

[Join our Meetup Group](#)



Photo: [Meso-American Permaculture Institute](#), Guatemala

This picture is from Guatemala, but permaculture, now a global phenomenon, originally grew out of the efforts of two Australian pioneers, Bill Mollison and David Holmgren. They drew from earlier practices of innovators such as Australian P.A. Yeomans, developer of [Keyline Design](#); Japanese Masanobu Fukuoka, master of [Natural Farming](#); and American no-work gardening guru [Ruth Stout](#).

As Mollison has stated, "Permaculture is a philosophy of working with, rather than against nature; of protracted and thoughtful observation rather than protracted and thoughtless labour; and of looking at plants and animals in all their functions, rather than treating any area as a single product system."* That used to be revolutionary, now it's sounding reassuringly familiar.

Permaculture practitioners such as Jeff Lawton have worked successfully in some of the most challenging environments in the world, such as the [Jordanian Desert](#). But mostly permaculture provides methods for improving both the productivity and health of land, the people who manage it, and the biodiverse species that call it home. [Restoration Agriculture: Real-World Permaculture for Farmers](#) by [Mark Shepard](#) is one place to begin your permaculture journey, as is [Permaculture News](#).

*Mollison, B. (1991), *Introduction to permaculture*. Tasmania, Australia: Tagari, cited in [Wikipedia](#).



Photo: Claire Gregory's suburban permaculture

Stay Connected



While you're visiting we have a small favor to ask...

Won't you join us in turning this climate crisis around? Please click the donate button below and join our monthly giving campaign.

Donate



About Biodiversity for a Livable Climate

Through education, policy and outreach, our mission is to promote the power of the natural world to stabilize the climate and to restore biodiversity to ecosystems worldwide. Collaborating with organizations around the globe, we advocate for the restoration of soil, and of grassland, forest, wetland, coastal and ocean ecosystems - along with the associated carbon, water and nutrient cycles - to draw down excess atmospheric greenhouse gases, cool the biosphere, and reverse global warming, for the benefit of all people and all life on earth.

Learn more about our ongoing projects and upcoming events and find additional information and resources at bio4climate.org.

Holistic Management



Photo: Bruce Ward Legacy Trust

Although Holistic Management (HM) was developed in Africa in the mid-1950s by wildlife biologist Allan Savory, it sprouted deep roots among ranchers and farmers in Australia. Bruce Ward was its leading proponent in Oz, and trained thousands of practitioners, from beginners to professionals.

That HM thrives as a practice on the desiccated and abused ranges of Australia would come as no surprise to those who understand how it opens soils, leads to absorption of massive amounts of water, restores abundant fertility, and brings back biodiversity and resilience to the land. All the while turning a profit for hard-working farmers without toxic chemicals and expensive machinery.

Bruce passed away in 2012, and in his honor the [Bruce Ward Legacy Trust](#) opened his website, brimming with guidance and wisdom and useful tools, free to the public.

Healthy Soils Australia



!!Announcing!!

Our Compendium of Scientific and Practical Findings Supporting Eco-Restoration to Address Global Warming is available now.

The evidence is powerful and it's growing by leaps and bounds. We're collecting it in a comprehensive document that will be updated every six months. The power of Nature is out of the closet - let's welcome her with open arms!

Download it [here](#), pass it around!

Christine Jones



Christine Jones is a wonderful Australian soil scientist who introduced the world to the liquid carbon pathway:

"Liquid carbon is basically dissolved sugar. Sugars are formed in plant chloroplasts during photosynthesis. Some of the sugars are used for growth and some are exuded into soil by plant roots to support the microbes involved in nutrient acquisition. . . . perhaps the most significant finding, at least from a human

On the leading edge of science and practice is [Healthy Soils Australia](#) (HSA). Connecting soil, biodiversity, human health, water and climate, HSA produces materials for a wide range of viewers, emphasizing best practices and practical results.

HSA is led by Walter Jehne (pronounced yay-neh), a retired soil biologist and scientific polymath who has taken a leading role in promoting sound water and land management, and creating a ubiquitous soil-carbon sponge. Excess atmospheric carbon is a symptom, lethal though it may be, and we'll only address our mounting environmental disasters by getting to root causes.

Check out papers by Walter and others on HSA's [Research page](#). Have a look at HSA's excellent brief introductory video, [Regeneration - An Earth-Saving Evolution](#). Finally, view Walter's talk, [The Natural History of Water on Earth](#), at our 2015 [Restoring Water Cycles](#) conference.

perspective, is that the flow of liquid carbon to soil is the primary pathway by which new topsoil is formed."

Christine goes on to describe the liquid carbon pathway in a [March 2015 article in Acres USA](#), how our understanding of it enlightens our approach to soils as complex living ecosystems, and how to use it to improve our land management practices.

Be sure to visit her website, [AmazingCarbon.com](#), for a wealth of information from this outstanding soil pioneer.