January 2009 International Biochar Initiative News

Looking Forward to 2009: Projects and Events

After a busy year in 2008, IBI is ready for a productive 2009 with many projects and events on the agenda: The United Nations Climate Change Conference (COP 15) December 7 - 18, 2009 in Copenhagen Denmark; moving forward with the 9 country projects; the Asia Pacific Regional Conference May 17 - 20, 2009 in Gold Coast Australia and the North American Biochar 2009 Conference August 9 - 12, 2009 in Boulder CO, USA; and the increased visibility of biochar around the world to name a few. The IBI network membership has grown from just over 100 at the end of 2007 to 750 at the end of 2008.

Additionally, IBI will be unveiling a new website in March with additional features such as a searchable member directory for locating members and reading about projects, expanded policy and technology information, a searchable bibliography database, increased multimedia, and networking opportunities through regional networks and a series of bulletin boards.

Network members wishing to post questions or information requests to the bulletin board at this time are welcome to send an email to info@biochar-international.org. As of January 2009, the bulletin board has many new postings (including a separate page for job postings)--to read more, go to: http://www.biochar-international.org/ibimemberbulletinboard.html.

New Biochar Stoves at the 2009 Ethos Conference in Washington State, USA

Kelpie Wilson, IBI Press Liaison

On January 23 - 25, about 100 "stovers" gathered in Kirkland, Washington for the annual ETHOS (Engineers in Technical and Humanitarian Opportunities of Service) conference devoted to meeting household energy needs in the developing world. Improved stove technology was only part of a program that included discussion of standards and testing, distribution and manufacturing, and the intricacies of carbon credit financing.

The highlight of the conference occurred at the ceremonial "lighting of the stoves" late on Sunday afternoon on the concrete steps outside the conference hall under a light flurry of snow. A variety of innovative designs were on display, but only two of the stoves were able to operate in a pyrolysis mode to produce charcoal. Click here to read the full article: http://www.biochar-international.org/projectsandprograms/memberprojects.html

Above photo: Paul Anderson's "artisan" top-lit updraft (TLUD) gasifer stove demonstrated at the ETHOS 2009 conference in Kirkland, WA. This stove produces char at the end of a cooking session that can be saved in a covered metal bucket or ceramic pot. Photo courtesy of Kelpie Wilson.

Updates from the Asia Pacific Regional Biochar Conference

This upcoming regional IBI conference May 17 - 20, 2009 in Gold Coast, Australia will feature speakers from the Asia Pacific region on the latest scientific research and business opportunities for development of the biochar industry. It will bring together academics, farmers, media, policy makers, and industry from around the region.

Scholarship Opportunities:

Scholarship opportunities exist for developing country delegates in Asia Pacific. Applicants must have submitted an abstract to the conference, and demonstrate clear benefits from attending the conference. An application form is available at the link below.

Important Dates in 2009:

February 6: Deadline to Submit Abstracts

February 27: Notification of Abstract Acceptance

February 27: Deadline for Scholarship Applications

April 3: Early Registration Closes

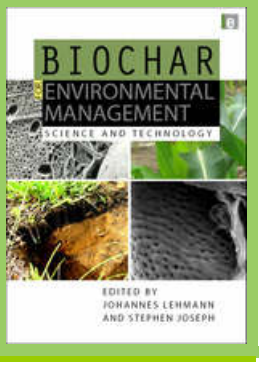
May 17 - 20 Conference

For more information, to register, or to submit an application for sponsorship go to: http://www.biochar-international.org/upcomingibiconferences/2009asiapacificregion.html

Pre-order *Biochar for Environmental Management*

Earthscan Publishers now has ***Biochar for Environmental Management*** available for pre-order on its website. This essential volume on biochar is edited by IBI Board members Johannes Lehmann and Stephen Joseph. Chapters written by the leading researchers, policymakers, and practitioners in the field cover engineering, environmental sciences, agricultural sciences, economics, and policy.

The volume will be be available February 2009 (ISBN 978-1-84407-658-1). To pre-order a copy, go to the following link at the Earthscan website: http://www.earthscan.co.uk/?TabId=49381&v=451582.



IBI and Biochar in the News

Below is a quick roundup of biochar in the news in January 2009 highlighted by a large number of articles from the Australian press on bringing farming and forestry into carbon emissions trading and the role of biochar.

Popular Press

http://www.newscientist.com/article/dn16495-most-effective-climate-engineering-solutions-revealed.html
1-28-09, New Scientist, Most Effective Climate Engineering Solutions Revealed. Report on a study published in Atmospheric Chemistry and Physics by researcher Tim Lenton of the University of East Anglia, UK comparing geoengineering proposals for climate mitigation. "Lenton says turning agricultural waste into charcoal and burying it may hold the most promise. Although it would only reduce radiative forcing by 0.4 W/m2 by 2100, the method is cheap, low tech, and would have the added advantage of fertilising the soil." Dozens more articles on this study have appeared in publications ranging from Wired http://blog.wired.com/sterling/2009/01/we-are-as-lousy.html to MIT's Technology Review http://www.technologyreview.com/blog/energy/22536/. One of the more indepth stories appears at Planet Earth Online, http://planetearth.nerc.ac.uk/news/story.aspx?id=302

http://www.newscientist.com/article/mg20126921.500-one-last-chance-to-save-mankind.html?page=1
1-23-09, New Scientist, One Last Chance to Save Mankind. New Scientist interviews climate change giant James Lovelock, originator of the Gaia theory. Lovelock believes that biochar is one of the only answers to climate change we have. He says, "There is one way we could save ourselves and that is through the massive burial of charcoal...you can start shifting really hefty quantities of carbon out of the system and pull the CO2 down quite fast."

http://www.bestwaytoinvest.com/stories/number-us-soil-science-students-decline-even-though-soil-science-holds-great-future
1-20-09, Best Way to Invest, Number of U.S. Soil Science Students in Decline - Even Though Soil Science Holds Great Future. Although the number of students in soil science is declining, it is estimated that this trend will reverse as this field becomes an increasingly important topic in renewable energy, climate change, and economic development. Features a photo of IBI's Johannes Lehmann.

http://www.swissinfo.ch/eng/front/The_climate_farmer_who_grows_a_mean_pinot.html?siteSec

t=107&sid=10207923&cKey=1232126955000&ty=st
1-16-2009, Swiss Info, The Climate Farmer Who Grows a Mean Pinot. Profile of vinter Hans-Peter Schmidt who is growing organic grapes using biochar as a central tool to increase soil health and diversity. Article includes a good explanation of the benefits of pyrolysis over composting. Schmidt plans to expand his production to 1000 tons of biochar a year with an energy yield of about $90,000 worth of electricity.

http://cleantechnica.com/2009/01/16/biochar-a-soil-additive-that-fights-global-warming-and-is-environmentally-friendly/
1-16-09, Green Options Media, Biochar. A short, basic info piece on biochar by Amiel Blajchman appears in this online publication.

http://www.taipeitimes.com/News/editorials/archives/2009/01/15/2003433780
1-15-09, The Observer, London, Twenty Big Green Ideas. Writer Lucy Siegle takes the occasion of the Observer Ethical Awards to "highlight 20 of the biggest ethical ideas around at the moment, affording some respite to the prevailing jam-side-down version of life on offer almost everywhere else." Coming up number one in this assessment is biochar which is explained, "In a nutshell: a way of trapping carbon with 'green coal.'"

http://environmentalresearchweb.org/cws/article/futures/37275
1-12-09, Environmental Research Web, Going Nuts for Biochar. Contributing editor Kate Ravilious interviews University of Georgia researcher KC Das for this article on the basics of biochar. Includes a quote from Das on the challenges of biochar production: "The scaleability of the technology is what is holding us back at the moment," said Das.

http://evworld.com/EVWORLD_TV.CFM?storyid=1614
1-8-09, EV World, Terra Preta, What? This article relates biochar to the world of electric vehicles: "The connection to alternative fuel vehicles, including EVs, is not as tenuous as it might seem. The process of creating terra preta or biochar as it is also know (another name is agrichar) involves the combusting biomass into a biogas. That biogas and the resulting heat can be used to produce a synthetic liquid fuel or power thermal turbines to generate electric power."

http://www.huffingtonpost.com/jessica-catto/plant-power-to-the-planet_b_156355.html
1-08-09, The Huffington Post, Plant Power to the Planet. Blogger Jessica Catto writes: "To offset harmful carbon emissions, which make us sick and ratchet up the speed of global warming, we should conjure up a giant terrarium: a safe harbor for earth's ecosystems. Biology is the answer." She says that biochar is one example of biological solutions to climate change.

http://www.popularmechanics.com/science/research/4297513.html
12-30-08, Popular Mechanics, Can a Kind of Ancient Charcoal Put the Brakes on Global Warming? Jeremy Jacquot writes "Today, private companies, universities and government organizations in nine countries - Vietnam, Belize, Cameroon, Chile, Costa Rica, Egypt, India, Kenya and Mongolia - are setting up demonstration trials to evaluate biochar's ability to improve various types of soils while trapping carbon and making fuel to find out if this ancient substance is an economically viable solution to global warming."

http://www.theage.com.au/environment/coalition-targets-carbon-policy-gap-20081229-76ts.html
12-30-08, The Age, Australia, Coalition Targets Carbon Policy Gap. Katharine Murphy reports on a new initiative to bring farming and forestry into carbon emissions trading. The policy will include tax breaks for farmers who can sequester carbon in soil. Biochar is being considered as a soil sequestration technique. In January, a large number of stories in the Australian press followed the politics of this proposal:
http://www.abc.net.au/news/stories/2009/01/26/2474588.htm
http://www.canberratimes.com.au/news/opinion/editorial/general/turnbull-turns-up-heat-on-emissions/1416768.aspx

http://www.weeklytimesnow.com.au/article/2009/01/26/45315_national-news.html
http://www.abc.net.au/news/stories/2009/01/26/2474067.htm
http://www.theherald.com.au/news/local/news/general/turnbull-pushes-cleancoal-role-for-region/1415862.aspx
http://www.theaustralian.news.com.au/story/0,25197,24962519-11949,00.html
http://www.smh.com.au/news/environment/turnbull-plan-stirs-dustup/2009/01/25/1232818248036.html
http://www.theage.com.au/environment/turnbull-to-go-hard-on-emissions-20090123-7org.html

http://gristmill.grist.org/story/2008/12/24/14238/309/
12-27-08, Grist Magazine, Biochar: Magic Bullet? Chief Grist blogger David Roberts has a rundown on potential drawbacks of biochar, including pollution from low tech charcoal making. Roberts also asserts that "Net gains from biochar not equal to gross. Adding biochar to soil lowers ability of rest of soil to hold carbon. Still net gain, but not as big of one." An active comments section follows the article.

Local News

http://www.onlineathens.com/stories/011809/uga_378507633.shtml
1-18-09, Athens Banner-Herald, Scientist Hopes Terra Preta Will Slow Climate Change. Lea Shearer's profile of terra preta researchers at University of Georgia includes an interview with researcher Christoph Steiner and information on the U.N. Convention to Combat Desertification's endorsement of biochar at the climate meeting in Poland last month.

http://www.commercialappeal.com/news/2009/jan/16/its-only-natural/
1-16-09, Memphis Commercial Appeal, Mississippi Family Uses 'Permaculture' Methods for Sustainable Food Source. Reporter Lisa Kelly Eason profiles a local family whose permaculture garden includes biochar. The gardener is quoted saying: "It increases agricultural production and stores carbon in the ground. It's rare that the environment and the 'bottom line' can both be accomplished together."

http://www.nj.com/reporter/index.ssf/2009/01/new_jersey_audubon_and_local_f.html
1-13-09, Somerset Reporter, New Jersey Audubon and Local Farmers Bring Green Seed to Birdseed Market. Article describes a partnership to reduce the carbon footprint of birdseed by growing it locally and by using biochar in the fields.

http://media.www.ricethresher.org/media/storage/paper1290/news/2009/01/09/News/Rice-Team.Wins.Ike.Contest-3582682.shtml
1-9-09, The Rice Thresher, Rice Team Wins Ike Contest. The Rice student newspaper talks about its victorious science team coming out on top over 200 competitors with their biochar idea for recycling waste debris generated by Hurricane Ike. Includes a picture of the student team leader, senior Jeremy Caves.

http://www.paloaltoonline.com/news/show_story.php?id=10594
1-2-09, Palo Alto Online, Palo Alto Examines New Compost Technologies. Composting is controversial in Palo Alto, where the city is grappling with alternatives to the current system. This article reports that "Robert Niederman, a long-time organic gardener, said city leaders should consider switching to a 'biochar' system, which involves burning organic waste at temperatures of 500-degrees Fahrenheit in a low-oxygen container."

http://www.weeklytimesnow.com.au/article/2008/12/31/37355_on-farm.html
12-31-08, Weekly Times Now, Australia, Bio-char Chicken a Tasty Alternative. Report on poultry farmer Rob Kestel who "is confident a large-scale pyrolysis plant proposed for Western Australia will provide an effective way of disposing chicken litter." One complication to poultry manure disposal there is a biting fly. Converting manure to biochar will reduce the population of

the biting stable fly.

http://northdenvernews.com/content/view/1553/2/
12-30-08, North Denver News, A 'Black Magic' CO2 Fix. This short, informative article on biochar quotes Tim Flannery.

Farm and Trade News

http://www.istockanalyst.com/article/viewiStockNews/articleid/2972265
1-21-09, istockanalyst, SynGest Chooses Iowa for Its First Nitrogen Fertilizer Plant. Syngest, Inc projects that its plant producing 150 tons per day of ammonia and 20 tons per day of biochar from 450 tons per day of corn stover will be online in three years. The plant will use a pressurized oxygen-blown gasifier. A Des Moines Register article on the project is here: http://www.desmoinesregister.com/article/20090122/BUSINESS/901220359/1030/BUSINESS01

http://ecosystemmarketplace.com/pages/article.news.php?component_id=6484&component_version_id=9668&language_id=12
1-13-09, Ecosystem Marketplace, How to Save the Amazon Rainforest. Forest analyst Rhett A. Butler does a thorough job in this article of assessing carbon market mechanisms such as REDD (Reduced Emissions from Deforestation and Degradation) that could help save native forests and biodiversity. One part of the answer, Butler says, is better use of land that has already been cleared. He says, "A particularly promising path for boosting fertility and productivity in Amazonia is biochar farming techniques similar to those used by pre-Colombian populations. The so-called 'terra preta' soils offer the additional benefit of sequestering carbon, helping reduce atmospheric concentrations of CO2."

http://www.biomassmagazine.com/article.jsp?article_id=2334
January 2009 Issue, Colorado ACRE Awards Grants to Biomass Projects. Report on $250,000 of grants by the Colorado Dept. of Agriculture for biomass research, including $50,000 that will help the Flux Farm Foundation study the effects of biochar on rangeland. The project will look at different types of char and different applicatIon methods. "We really think that western Colorado and the interior West can be this big platform for carbon sequestration," a Flux Farm representative said.

In Other Languages

http://www.italiachiamaitalia.net/news/133/ARTICLE/12876/2009-01-07.html
1-7-09, Italia Chiama Italia, Carbon Negative, se il carbonio diventa "negativo" - di Marco Fattorini

http://g1.globo.com/Amazonia/0,,MUL942585-16052,00-FERTILIZANTE+DE+ORIGEM+AMAZONICA+PODE+AJUDAR+NO+COMBATE+AO+AQUECIMENTO+GLOB.html 1-4-09, Globo.com, Fertilizante de origem amazônica pode ajudar no combate ao aquecimento global

Coming Up in the February 2009 Newsletter

News, Articles, and More

The Second Practitioner's Profile