



News from the International Biochar Initiative

IBI is a non-profit organization supporting researchers, commercial entities, policy makers, farmers & gardeners, development agents and others committed to sustainable biochar production and use.

Help put the Earth **Back in the Black**

September 2015 News from the International Biochar Initiative

Reminder: Participate in the 2015 IBI Biochar Business Survey

Thank you to those businesses who have already submitted information for our annual survey used to produce the [State of the Biochar Industry Report](#). We conduct this survey to collect data on activities related to the commercial production, distribution, and marketing of biochar and biochar-related products and services. We plan to use the data collected in this survey to produce a 2015 *State of the Biochar Industry Report*. This survey should take, at most, 20 minutes to complete. **The deadline for input is October 15, 2015.** You may review the published results from prior years at: <http://www.biochar-international.org/commercialization>.

The survey is intended to gather information from three biochar business sectors: biochar production and/or sales; biochar production equipment manufacturers; and other biochar-related enterprises. Once you start the survey, you will be directed to survey questions related to your sector selection.

We recognize that many biochar enterprises want to be sure that the information they submit is private. **IBI will maintain the confidentiality of all information collected in this survey.** Data will be presented in aggregate for trending analysis and the only personal information shared will be basic contact information such as website and location, in order to illustrate the growth in biochar/biochar-related businesses. In addition, [we are launching a 4-question anonymous survey to ask biochar producers about the volume of biochar produced and sold.](#) To access the 2015 business survey, please go to: <http://www.surveygizmo.com/s3/2260737/Biochar-Business-Survey-for-2015>

Community Power Corporation receives IBI Biochar Certification for BioMax Walnut-Shell Biochar

IBI is pleased to announce that Community Power Corporation has received IBI certification for their biochar product, BioMax Walnut-Shell Biochar, under the *IBI Biochar Certification Program*.



To achieve IBI certification, Community Power Corporation submitted an application for BioMax Walnut-Shell Biochar that met all of the conditions of the *IBI Biochar Certification Program*, including passing all of the physicochemical testing requirements specified by the *IBI Biochar Standards*, the foundation for IBI Biochar Certification Program. Although several biochar products produced from softwood and hardwood feedstocks have been previously certified by IBI, Community Power Corporation's BioMax Walnut-Shell Biochar is the first biochar produced from a nutshell feedstock to receive IBI biochar certification.

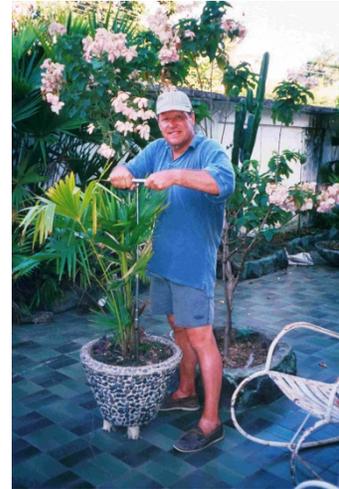
For further information on the *IBI Biochar Certification Program* and to view a list of IBI certified biochar manufacturers, please see:

http://www.biochar-international.org/certification/manufacturer_directory

For further information on Community Power Corporation, please see: <http://www.gocpc.com>; or contact James Diebold at jdiebold@gocpc.com; (303) 577-2965.

The Biochar Community Loses a Pioneer in Terra Preta Studies with the Passing of Dr. William Woods

Anyone who had the opportunity to hear Dr. William “Bill” Woods present on terra preta research was in for a treat—Dr. Woods was an excellent and enthusiastic speaker mapping out the origins and current study of anthropogenic soils in Belgium and Amazonia. Starting in the 1990s, Dr. Woods published some of the most cited texts on terra preta soils and continued this research throughout his career. He spent a majority of his research and teaching career at Southern Illinois University Edwardsville (SIUE) (United States) as a professor in the Department of Geography and as Director of the Contract Archaeology Program. In 2005, Dr. Woods moved to the University of Kansas (KU), where he served as Director of the Environmental Studies Program from 2005 to 2008; concurrently, he was a Professor in the Department of Geography at KU until his retirement in 2014 as Professor Emeritus. In 2013, he received one of the Geological Society of America’s most prestigious awards: the Rip Rapp Award for outstanding contributions to the interdisciplinary field of archaeological geology.



IBI has created a Memorial page for Dr. Woods at:

http://www.biochar-international.org/Dr_William_Woods. If you would like to share a memory of Dr. Woods, please submit it to Thayer Tomlinson at info@biochar-international.org for posting online.

“We all have lost a great friend and colleague with the passing of Bill Woods. I know him not only as an astute observer of the Amazonian environment, but also as a mentor and supporter of emergent scientists. He was always available to help and lend advice. Anyone who knew him shares memories of hilarious conversations until the early hours. I vividly remember the infectious enthusiasm when he showed off ‘his’ excavations at Cahokia, or the fun we had on the boat trips down the Amazonas. I will miss Bill.” – *Johannes Lehmann*

New Business Member: Airex Energy

A listing of all current IBI [Business](#) and [Organization](#) Members can be found on our website. For more information on membership opportunities and benefits, or to join, please see: <http://www.biochar-international.org/join>. Please note, Business and Organization descriptions are submitted by each individual entity, and are not developed or written by IBI.

Airex Energy

Airex Energy is a technology provider of biomass carbonization systems and a producer of high quality



biochar. Based in Quebec, Canada, Airex has developed a proprietary technology called CarbonFX, which allows the production of biochar, activated biocarbon, and biocoal. The company started operation of a full commercial plant in the fall of 2015, with a production capacity of 15,000 tons/year and is supplying its biochar to third parties who are commercializing pure and blended biochar under their brand. Airex Energy is involved in numerous biochar R&D initiatives with Canadian research centres and industry partners, namely FPInnovations, CTRI, Innofibre, Laval University, and Agriculture Canada.

Airex Energy is a spin-off of Airex Industries, an established manufacturer of dust collectors and industrial ovens, and includes investors like Cycle Capital Management and Desjardins Capital de Risque. Airex Energy is also supported by the Canadian government through Sustainable Development Technology Canada (SDTC), and the Quebec government through Technoclimat and Investissement Québec. For more information and for biochar sales, please contact Sylvain Bertrand (sbertrand@airex-energy.com).

IBI Board Members Attend the Annual IBI Board Retreat

The IBI Board of Directors held its annual meeting in early September to discuss the strategic goals of the organization and determine how it can best serve the growing biochar industry, IBI members, the research community, non-profit project-based community, and others. Board members joined from around the globe, in-person and via teleconference, for two days of energetic discussion in Worcester College in Oxford, England. As IBI furthers its mission to promote good industry practices, stakeholder collaboration, and environmental and ethical standards to foster economically viable biochar systems, this meeting was another step to ensure IBI stays closely connected to the existing and future biochar community.



Photo: IBI Board Members Saran Sohi, Guy Reinaud, Marta Camps, David Wayne, John Lewis and IBI General Manager Shiva Scotti

October IBI Webinar Series Event: Dr. Stephen Joseph presents "Making biochar commercially viable for horticulture and animal feed. Case studies in China and Australia"

IBI is pleased to welcome Dr. Stephen Joseph, visiting professor at the University of New South Wales (Australia) and Nanjing Agricultural University (China), for our [October IBI Webinar Series event](#). Dr. Joseph will outline innovative companies that are commercializing biochar and will present case studies of farmers who are reaping profits from the biochar, while exploring how biochar is a growing industry in both China and Australia. In China, considerable support has been given to the development of the biochar industry whereas in Australia, the current government has not been supportive. In China, over 100,000 tonnes of biochar has been produced in the last year and a range of products are being sold where biochar is a minor component in either a chemical or organic product. Most of the biochar has been produced in either bio-energy plants or from more traditional charcoal kilns, although there are some companies offering equipment that only makes biochar.



In Australia, although considerable research has been done, much of the production comes from either waste charcoal from a silicon smelting plant or from farm production. There are five companies who are offering equipment that make biochar ranging from a version of the KonTiki kiln to continuous pyrolyzers.

One of the most exciting developments is the use of biochar as an animal feed and the burying of the biochar/dung using dung beetles.

[Registration is open now](#). The webinar will be held on Tuesday, October 27th at 22:00 GMT (which is Tuesday, October 27th at 6:00p.m. Eastern Time or the time in New York City). Note: Please convert the 6:00p.m. ET start time to [your local time by using this time converter tool](#). You must be a dues-paying member to participate in these special events. If you are not an IBI member and would like to join, [please click here](#).

IBI members can view this and all prior *IBI Webinar Series* presentations by logging into the IBI member's only site at <https://ibi.memberclicks.net/login>. If you are not an IBI member and would like to join in order to view presentations, [please click here](#). For more information on *IBI's Webinar Series*, please see: http://www.biochar-international.org/webinar_series.

Profile: Intuitive Biochar: Making Low-Tech Biochar/Compost Blends

Doug Clayton is a permaculturist with a bountiful two-acre garden and orchard located at the base of Mount Monadnock in Jaffrey, New Hampshire (United States). A constant tinkerer, known by some for his [videos on constructing 30-gallon retorts fired with 55-gallon Top Lit Up-Draft \(TLUD\) gasifiers](#), he calls his efforts "Intuitive Biochar". Clayton started separating charcoal from his wood stove ash in 2007 and has been working to incorporate biochar into his permaculture practices ever since. His rural homestead in New Hampshire is a perfect spot to experiment with biochar production and utilization systems.



Producing Biochar Using Local Materials

In 2008, Clayton began making biochar by the simple "barrel in a barrel" retort method and continued working with ever more sophisticated retorts until 2011, when he built his first 55-gallon TLUD. He immediately realized that the TLUD would be an excellent way to heat a retort and as a result created a retort/TLUD hybrid. The hybrid uses two so-called "waste streams", woodchips in the TLUD and miscellaneous prunings (the ubiquitous brush piles of country life) in the retort, to make two different biochars simultaneously. Clayton doesn't need to make woodchips for the TLUD; simply keeping eyes and ears open in his area provides a bountiful and free supply. For the retort feedstock, he bundles and chops brush piles into small pieces with a chainsaw. Air drying of both feed stocks is important and this is achieved with various loose fitting tarps and tin roofed shelters. Wood chip piles left uncovered *or* tightly covered begin decomposing quickly. For Clayton, time spent drying and staging biochar feedstocks rivals the time spent hand-turning compost piles.

To read the remainder of this story, please see: http://www.biochar-international.org/Profile_Intuitive_Biochar.

Photo: Doug Clayton shoveling his biochar-rich compost

Did you know that the IBI Online Biochar Training Course is Ongoing?

If you are interested in gaining more in-depth knowledge on biochar and biochar systems, consider registering for IBI's recently launched online course, [Biochar Training for Environmental Sustainability and Economic Development](#). This ten week, ongoing course provides participants an intensive training series on all aspects of biochar, presented by leading biochar experts. Participants have the opportunity to learn about best-science updates on biochar to promote the uptake of biochar production and use, and actions necessary to overcome the barriers to commercialization of the biochar industry. The course contains 19 separate lessons—each with a subject overview, a recorded audio/video presentation lasting 30 – 45 minutes (some lessons contain more than one video), and quizzes to test comprehension and retention. There is also an optional introductory presentation on the basics of biochar and the IBI so that all participants start the course with a common understanding of both. Course materials are presented in a user-friendly online format and participants can access the course at their convenience over ten weeks and will receive a certificate of completion at the conclusion of the course.

Course materials are based on presentations from the June 2014 in-person biochar training course titled, "*Biochar for Environmental Sustainability and Economic Development*," hosted by the University of Santiago de Compostela, Spain, and developed and presented by IBI and collaborators. For more information on member and non-member pricing and registration, please see www.biochar-international.org/online_course.

Stockholm Vatten AB invites Pyrolysis Plant sellers to submit a tender

Stockholm Vatten AB, a Swedish-based municipal company, invites suppliers to submit tenders for the purchase and delivery of a pyrolysis plant that can produce heat and certified biochar (from park and garden waste); the biochar needs to be in compliance with the *European Biochar Certificate* (EBC). The heat shall be able to be distributed through a district heating network. The pyrolysis plant is scheduled to be in operation in the first quarter, 2016. Interested suppliers will need to submit tenders through Visma TendSign; to register and continue, please see <https://tendsign.com/doc.aspx?ID=76713>. The deadline for submissions is October 14, 2015. For any questions, please contact petter.ljungstrom@stockholmvatten.se.

Opportunities in Biochar

- Support the implementation of clean cookstoves by contributing to Servals India cookstove project; for more information, see <http://www.biochar-international.org/node/7120>
- Propose a special session for the upcoming Asia Pacific Biochar Conference 2016; for more information, see <http://www.biochar.co.kr/>
- Take advantage of a free subscription to Biomass Magazine. More information is available at <http://www.biochar-international.org/node/5537>
- Download the open access biochar book: *Biochar Culture*, by Dr Sai Bhaskar Reddy Nakka. The text highlights the use of biochar in communities and its potential for increased sustainable agriculture in smaller scale farmsteads and homes, focusing on work in India. The book can be accessed at <http://www.biocharculture.com>

- Job postings in biochar (as well as research/educational opportunities) can be accessed at <http://www.biochar-international.org/network/jobs>
- Looking for potential grant funding? Check out the Terra Viva Grants Directory which develops and manages information about grants for agriculture, energy, environment, and natural resources in the world's developing countries at <http://www.terravivagrants.org/Home>

Upcoming Calendar Events

- October 16 – 18: Restoring Water Cycles to Reverse Global Warming. Location: Tufts University, MA, USA. For more information: <http://www.biochar-international.org/node/7205>
- October 27: IBI Webinar Series: Dr. Stephen Joseph presents "Making biochar commercially viable for horticulture and animal feed. Case studies in China and Australia". For more information: <http://www.biochar-international.org/node/7399>
- November 15 – 18: 2015 American Society of Agronomy meeting (includes 5 biochar sessions). Location: Minneapolis, MN, USA. For more information: <http://www.biochar-international.org/node/6553>

See the [IBI Calendar page](#) for more events. To add an event to the calendar, send the information to info@biochar-international.org.

Recently Published Biochar Research

IBI tracks all published research on biochar and includes it in our [online bibliography](#). The following articles were added in the last month. Please visit the website bibliography for more information on any of these articles. Due to copyright infringement laws, we cannot provide full copies of articles unless we have permission from the publisher. If you have published work that is not included, [please email us](#).

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