

IBI 2010**Rio de Janeiro, Brazil, Sept. 2010**

IBI announces IBI 2010—the 3rd International Biochar Conference—will be in Rio de Janeiro, September 12–15. We expect the largest international biochar conference to date, building on the agenda and activities of the past two international events, and the excellent regional and national biochar conferences.

The 4-day conference includes oral and poster presentations, ample network opportunities, side meetings, discussion groups, display booths, and a field trip to Amazon Terra Preta sites (Sept. 16–18).

IBI 2010 will feature internationally-renowned speakers covering all aspects of biochar, including production and utilization, field trials, commercial and user experience, policy, education, new research, Terra Preta, and future trends.

Delegates will be leading biochar visionaries, scientists, producers, policy makers, farmers, gardeners, academics, inventors, investors, developers. Program organizers and science committees are selecting talks and papers from abstracts:

- **Biochar production & new products**
- **Integrated biochar systems**
- **Characterizing fresh & aged biochar**
- **Biochar quantification in environment**
- **Biochar amendments to soils**
- **Terra Preta de Índios: state of the art**
- **Climate change mitigation**
- **Sustainability, certification, legislation**
- **Commercial biochar and dissemination**
- **Emissions trading & climate policy**

www.ibi2010.org

Cornell University**Power from trash & biomass could save cash and carbon**

Lauren Chambliss, May 3, 2010

www.news.cornell.edu/stories/May10/CURBIfeasibility.html

Cornell University Renewable Bioenergy Initiative (CURBI) will produce \$2 million a year in energy using campus-area renewable resources to heat and power part of Cornell's greenhouse complex, according to an 18-month feasibility study by engineering firm Stearns & Wheeler.

The \$250,000 study, co-funded by the NY Energy Research and Development Authority, recommended CURBI be built close to Guterman greenhouses to pipe heat direct to greenhouses, replacing Cornell's fossil fuel central combined heat & power plant, reducing Cornell's carbon footprint by over 9,000 tons per year.

The study assessed engineering, economic and environmental viability of a four-acre research & operations facility encompassing five pioneering energy technologies that will use organic waste from 57 campus waste streams, and biomass from Cornell farms and forests.

CURBI design is a fully operational demonstration project to provide significant renewable energy to Cornell and reduce greenhouse gas emissions, while at the same time serving as cutting-edge research by Cornell faculty from multiple disciplines, and for education and outreach opportunities.

"The feasibility study confirms we can build a renewable energy tech platform with several different but complementary

technologies so communities, institutions, business leaders, and farmers with access to significant biomass or organic waste can compare options, while faculty simultaneously work to advance renewable energy technology design for our region," says Drew Lewis, operations director, Cornell University Agricultural Experiment Station (CUAES).

The study surveyed Cornell resources, calculating a wide variety of biomass, from organic wastes such as food, campus wastes, animal bedding, wood, and energy crops grown sustainably on College of Agriculture and Life Sciences (CAL S) land, operated by CAUES within 25 miles of campus. Those lands could sustainably produce about 16,000 dry tons of organic matter annually, the study estimates.

The 200-page report says CURBI will further commercial applicability of several technologies, including high-efficiency direct combustion, dry fermentation, anaerobic digestion, and **slow pyrolysis, a process which produces heat, combustible gases and a valuable byproduct called biochar. Biochar is generating attention in White House and Congress because it enriches soil and locks carbon in its charcoal structure. This makes slow pyrolysis a potential "carbon-negative" energy technology, sequestering more carbon than it releases into the atmosphere in production. The study found tremendous research interest in biochar, but no current production capacity in the United States.**

The report notes CURBI's 32,000-ton annual input stream will fluctuate day to day—an engineering challenge. Some weeks, CURBI will have tons of "dry" matter (woody or field crops), other times "wet" food waste or animal manure. This "real-world" problem must be solved to develop renewable energy in the Northeast, says Michael Hoffmann, CAUES director and associate CAL S dean.

"Consistent with the Cornell Climate Action Plan, CURBI will help to reduce Cornell's fossil fuel use," says Hoffmann. "But more important, CURBI will enable us to demonstrate how renewable energy can work in upstate New York with smaller, locally owned and operated energy systems that can handle a variety of inputs."

Lauren Chambliss is CAUES assistant communications director.

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Grower Gathering How to Make & Use Biochar

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9am – noon, **Saturday, June 19**
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Route 29 west, Schuylerville, NY

Biochar is the key to a new carbon-negative strategy to sequester carbon, create sustainable soil fertility, grow nutrient-dense crops, produce renewable biofuels, and reverse global climate change.

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This gathering will teach growers simple methods to acquire biochar and incorporate it in soil.



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for information:
David Yarrow

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to register:

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Saratoga Apple

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ACTIVITIES

Making Biochar

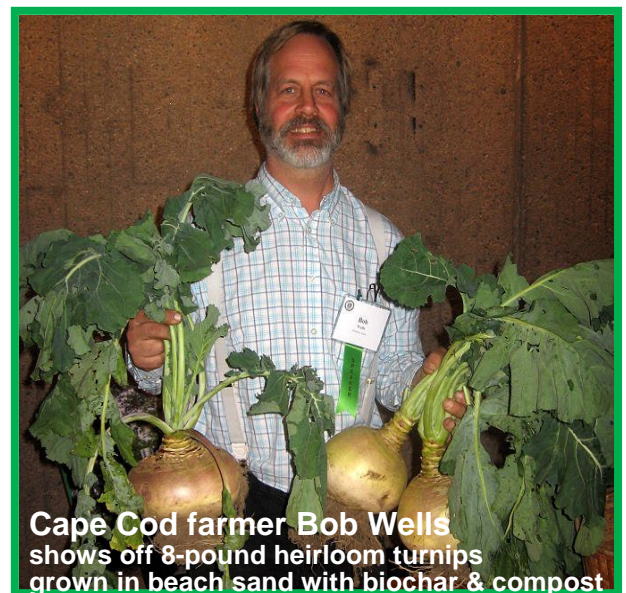
Show 'n Tell equipment & operation
BYOB = bring your own burner

Network Discussion

How to continue to explore & implement
this carbon-negative strategy as growers

Using Biochar in Soil

Demonstration of preparing biochar for soil,
and proper ways to inoculate with microbiology



Cape Cod farmer Bob Wells
shows off 8-pound heirloom turnips
grown in beach sand with biochar & compost