

US Biochar Initiative Newsletter March 2023

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Impressive Growth in Biochar Production and Carbon Removal by Tom Miles, Executive Director

The European Biochar Industry Consortium (EBI) inspires us all with the 2022/2023 Market Report that they have just released. The report provides an overview and projections for biochar production in the fastest growing biochar and carbon removal markets.



We will also attend the National Conference of the <u>Center for Watershed Protection</u> (CWP) in San Diego, California in April. USBI is partnering with CWP to incorporate biochar in best management practices for urban and agricultural applications.

USBI in the Landscaping Industry Canadian cities and institutions have reached out for collaboration on biochar standards for use in landscaping. USBI recognizes the importance of biochar in landscaping and guidance from landscape architects interested in biochar and biochar based products.

Congratulations to Dr. Gertrudis Penton Fernandez and her team at Estacion Experimental Indio Hatuey, Cuba, for conducting a very inspiring workshop, "Biochar en la agricultura sostenible" with presentations from Cuba, Mexico, Colombia and Switzerland, and for launching a Red Latina del Biochar. We look forward to learning and sharing productive experiences throughout the Americas. As you can see below, Bio-Restorative Ideas has begun to produce biochar from invasive bamboo in Puerto Rico.

The USDA Forest Service Wood Innovations or Community Wood Grant Programs Deadline Is March 23 – Have you considered applying? These programs have been invaluable for financing biochar production and renewable wood energy projects that support hazardous fuel reduction and sustainable forest management. The deadline is March 23 at 5:00 pm local time in your region.

IBI Biochar Academy – If you're new to biochar, please consider attending this program on June 13-19 in New York. It will be a two-week course packed with the fundamentals of biochar production and use. See the calendar below.

NRCS 808/336 Soil Carbon Amendment Practice Update USBI continues to collaborate with the USDA Agricultural Research Service (USDA ARS), the Natural Resource Conservation Service (NRCS), and the American Farmland Trust to promote the use of biochar as a soil carbon amendment which has been adopted in 28 states. Let us know if you are currently suppling biochar to farmers using this practice. We hope to demonstrate the value of 808/336 at key sites and will develop guidance documents, videos, and webinars for biochar and compost producers and users.

USBI will form an **Industry Advisory Committee** to help guide our standards and marketing strategies. Please contact us if you are a biochar producer and willing to participate on the committee. Send your ideas for how we can collectively build biochar markets and promote biochar standards and practices to info@biochar-us.org.

BIOCHAR EVENTS CALENDAR

Draper and John Webster, in Anaheim, California. Learn, collaborate, and network on carbon markets and climate policy at NACW, North America's largest carbon event. #NACW2023

March 24 HVFS Field Day (in person, 12-4 PM) – Check out a rotational grazing system, a manure management system, and a biochar operation in Ulster County, NY., free Register here. For more information, contact <u>iw2254@cornell.edu</u> or <u>travis.ferry@ny.nacdnet.net</u>.

March 28 Biochar Initiatives in Minnesota, talks by local experts and practitioners in the production and use of biochar hosted by the Minnesota Composting Council, 10-11:30 am CST, \$10 MNCC Member/\$25 Non-Members. <u>View speaker bios</u>. <u>Register here.</u> <u>Become a member here.</u>

April 19 Field Day in Utah to test emissions of the Conservation Burn, Ring of Fire, Big Box Kiln and Char Boss organized by the US Forest Service and Utah State. Check for more details on the Biochar in the Woods discussion group as they become available. Join the group here - it's free!

June 19-30 *IBI Biochar Academy* 2023 is your chance to immerse yourself in all things biochar. Led by IBI Board Chair Kathleen Draper and other upstate NY biochar experts and practitioners as well as world-renowned experts from around the globe, this two week, in-person program will provide a unique opportunity to quickly connect with and contribute to scaling the biochar industry. **Register here.**

SCROLL DOWN TO SEE MORE NEED-TO-KNOW BIOCHAR NEWS!

- USBI at bio360 Expo in France
- USBI Trade Show Connections Lead to Opportunities
- Biochar Newslinks
- Get a Directory Listing, Ads

Quebec Company Raises \$38 Million

Airex Energy has raised record-breaking funding that will accelerate plans to expand production of low-carbon industrial and agricultural products made from biomass. "Raising capital to build biochar production capacity is a significant milestone not only for us, but for the whole biochar industry...investors are finally waking up to the scale needed to harness biochar's carbon-removing potential and impact on climate change," says Co-founder and COO Sylvain Bertrand.



OUTREACH & EDUCATION

INTEREST IN BIOCHAR BOOMING AT bio360 Expo!



by John Webster, USBI Communications Director



Booming is the only way to describe biochar interest at the bio360 Expo in Nantes, France last month! This event is the premier International bioenergy conference for business organizations dedicated to accelerating the biotransition.

USBI and a contingent of biochar teams attended bio360Expo with the goal of promoting biochar in

- Bipartisan Biochar Research Network
- Inflation Reduction Act (offers a tax credit on combined heat and power system property) Look for a USBI webinar on this opportunity in April or May.
- 45Q The Carbon Capture Tax Credit
- Biochar in the Infrastructure Bill
- USFS Wood Innovations Program
- Friendly State-level Policy & Incentives
- Industrial Decarbonization Programs

Through events like bio360 Expo, USBI is able to provide our supporters with exciting connections and support.

At this show, we discovered yet another funder looking to finance NA biochar

the Americas and make connections. The show was packed with thousands of attendees and

hundreds of vendors. The North America pavilion included <u>Arti, Airex Energy</u>, <u>Biomass Controls</u>, and USBI.

Beyond our crew, there were biochar organizations from all around the world in attendance; IBI, European Biochar Industry Consortium (EBI), ANZ Biochar Industry Group (ANZBIG), Nordic Biochar Network (NBN) — an alphabet soup of biochar teams!

Outreach and education was IBI's and USBI's top priority. Board Member Kathleen Draper



moderated a biochar panel. I presented *Scaling Biochar in North America — A Big Win for Soil Carbon!*, a review of biochar soil application practices and highlights of friendly US government policies and financial incentives poised to radically transform the US biochar industry. These include:

- projects. If you have a biochar project and would like to learn more about this opportunity, <u>reach out here</u>.
- Upcoming US Farm BillNRCS Conservation Programs Code 336
- Or can USBI support your upcoming event, webinar, or project and help you grow your business? Contact us at communications@biochar-us.org.

Biochar Equipment Contract Opportunity

The City of Cinncinnati is seeking a biochar equipment vendorto efficiently move heterogenous wood waste from its raw state to a finished biochar product. <u>Contractor proposals are due April 6.</u>

BIOCHAR NEWSLINKS

/808



- CharBoss at Holiday Farm Fire Site Turns Woody Debris Into Biochar The Bureau of Land Management (BLM) unveiled a new project in February that will turn leftover woody debris from the Holiday Farm Fire into biochar. The BLM and the U.S. Forest Service hope to find a safer, cleaner way to burn the unusable woody waste from the 2020 fire and study how biochar can be used to benefit soil.
- New Forest Technology Offers Alternative to Burning Slash Piles
 The Rocky Mountain Research Station and the Flathead National Forest
 demonstrated Char Boss technology near Coram, MT. Debbie PageDumroese, a researcher with the USDA Forest Service Rocky Mountain

Research Station and the Flathead National Forest demonstrated Char Boss technology near Coram, MT. Debbie Page-Dumroese, a researcher with the USDA Forest Service Rocky Mountain Research Station, helped develop and patent the CharBoss technology. "This allows us to put a pulse of organic matter back into the soil so the soil can do everything we expect it to do," she said.

The CharBoss February demo showed how woody material is >> converted into biochar. Photo from Kate Heston/Daily Inter Lake.



- Researchers Promote Biochar for Climate-Smart Agriculture in Connecticut "Through the global data synthesis, you can see that across different soil and climate conditions, biochar, together with other practices, can help farmers to sustain food production. It can also reduce greenhouse gas emissions, reduce nitrogen leaching, and save soil water," says Yawen Huang, the study's lead author.
- <u>Colorado Considers Trapping Greenhouse Gases in Abandoned Oil And Gas Wells With</u>
 <u>Biochar</u> Colorado lawmakers approved funding for a study to see if biochar can be used to plug the hundreds of deserted oil and gas wells across the state. The material could also be used to filter and absorb pollutants that leak from the wells. Sinking biochar into a portion of the over 3 million abandoned

oil wells nationwide could help tackle climate change.

<u>Using Activated Biochar to Stabilize PFAS-contaminated Soil</u> In this podcast, learn about Norwegian research that presents activated biochar as a sustainable opportunity for waste management and environmental remediation.

<u>Using Biochar to Remove Antibiotics from Wastewater</u> Michael Schmidt, a researcher at the U.S. Salinity Laboratory in Riverside, California has shown biochar could be used to remove antibiotics from municipal wastewater so it can be safely used to irrigate crops. Biochar removed more than 97% of three antibiotics from municipal wastewater through adsorption.

Fire Safe Council and Volunteers Demo
Biochar in Northern California The Butte County
Fire Safe Council and volunteers joined forces to
demonstrate the positive effects of biochar via the
Biochar Demonstration and Fuels Reduction Work
Day in Paradise for the mission of protecting our
natural resources such as forests.



Butte County demo in California >>

Char Boss Rules the Woods Research scientists from the U.S. Forest Service and a private company have teamed up to create equipment that could result in cleaner burning of logging slash piles while producing a soil amendment. Debbie Page-Dumroese, a soil

scientist at the Forest Service Rocky Mountain Research Station in Moscow, ID, said biochar can help rehabilitate soil at logging sites while sequestering some of the carbon from the wood waste.

<u>The Magic Combination of Biochar and Compost</u>As an additive or component in nature's processes, biochar positives can far outweigh its negatives. The organic feedstock used to make biochar needs to be agricultural or forestry waste, not a monoculture product.

Bipartisan Biochar Research Network Act Introduced in Congress If passed as part of the next Farm Bill, the Act would allocate \$50 million annually to establish a network of up to 20 research facilities across the nation to test the effectiveness of biochar. Meanwhile, many other new and existing biochar programs are being funded across the nation.



<u>USDA Research Project Asks How Biochar Can</u> <u>Contribute to Climate-Smart Agriculture</u>

"The technology is there and companies are already commercially producing biochar, so we want to improve the science, make definitive recommendations for farmers, and make its use more prevalent than it is now," said research lead Rohan Tikekar. "It won't fully replace traditional fertilizers but it could reduce the amount needed, and if a farmer can reduce their fertilizer use by a certain percentage, that can have an economic advantage."

Minnesota Poised to Become Biochar Leader Using Abundant Balsam Fir Resource In partnership with energy provider Minnesota Power, the Natural Resources Research Institute is applying charred balsam fir to a capped coal ash landfill at the Boswell Energy Center in Cohassett, Minn. The goal is to improve the soil so that native grasses can revegetate this space for new uses.



Spreading biochar on ash landfill. Photo courtesy of Alexander Messenger. >>

American Farmland Trust Research Fellow Studies Biochar

Elena Bischak is a University of California Merced Ph.D. student researching resource recovery from sanitation systems for reuse in agriculture, with a specific focus on urine fertilization. She is also interested in the many uses for biochar, from nutrient adsorption to use as soil amendment that can improve soil health and sequester soil carbon. As an AFT fellow, she will be researching the effects of biochar derived from agricultural wastes on soil carbon storage, nutrient cycling, and soil health



in a local almond orchard.

<u>Cooking Bamboo to Remove Carbon in</u> <u>Puerto Rico</u> With a new pyrolyzer, San Juanbased Bio Restorative Ideas (BRi) hopes to transform about 13,000 metric tons of invasive bamboo into 3,000 metric tons of high-quality biochar, says Operations Director Edwin Rodriguez. <u>Watch a short documentary.</u>



- biochar suppliers
 equipment manufacturers
- researchersconsultants
- consultantsorganizations



Listings are more than just an ad - they include information about your sector, products, applications, technology, and scale of your operation.

DIRECTORY LISTING

<u>Welcome to the USBI Directory!</u> Beston Group Co. Ltd., a Chinese equipment manufacturer, joinedus in February!

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JOB OPPORTUNITY - <u>Part-time Doctoral Research Assistant</u> (m/f/d) at the Department of Applied Ecology (Professorship for Research into Climate Impacts in Germany's Rheingau region (50 km west of Frankfurt/Main); three-year position starts immediately



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