



2024 USBI Board Members at the North American Biochar Conference. L-R Kathleen Draper, Kim Chaffee, Tom Miles, Executive Director, Albert Bates, Kristen Trippe, Debbie Aller, Chuck Hegberg, Josiah Hunt (Missing Board Members; Jeff Waldon and Dr. Ronal Larson)

Biochar Means Business

Thank you to the biochar community for attending the 2024 North American Biochar Conference! We were honored to host over 650 biochar producers, technology suppliers, researchers, public agencies, and financial supporters at our tenth and largest conference. Attendees traveled from 29 countries, 46 US states, 6 Canadian provinces, Mexico, and Puerto Rico. Representatives from the European Biochar Industry Consortium, the Australia New Zealand Biochar Industry Group, the new Latin American Biochar Institute, and the Africa Biochar Partnership were also present. This event could not have been successful without the help of our dedicated conference team, board members, sponsors, exhibitors, volunteers, speakers, and attendees.

The conference showcased the growth of the biochar industry. We welcomed many of the 143 North American biochar producers who collectively supply more than 150,000 tons of biochar per year, as well as equipment manufacturers, carbon industry leaders, feedstock suppliers, and lenders and investors. Attendees took advantage of networking opportunities, project posters, and a lively trade show. The emerging US Biochar Coalition was also welcomed, and we look forward to leveraging their expertise in promoting biochar policy.

Market development emerged as a key priority to scaling the industry, especially among biochar producers who are working hard to grow the market. Interim results presented from the Global Biochar Industry Survey supported a focus on market development which was identified as one of the key obstacles to industry growth. USBI has long-focused on markets for biochar, and is developing new programs and projects to accelerate this work. Past and current projects at USBI have focused on growing the agricultural market for biochar including collaborations with American Farmland Trust, US Forest Service, Natural Resources Conservation Service, USDA Agricultural Research Service, and Washington State University. As we grow our market development program, soil and agriculture will continue to form the core of our efforts, but we will also continue to work on emerging end-use markets including water filtration, remediation and restoration, concrete and asphalt, and other building materials.

Creation of biochar standards for North America emerged as a clear priority to support market development. USBI is commencing a process to create a North American standard for biochar, starting with the development of a laboratory analysis standard in collaboration with industry experts. Details will be released in Spring 2024.

We were proud to introduce two new awards at the conference. The Climate Impact Award was presented to Dr. Johannes Lehmann for his contributions to promoting biochar, and the Larson Founders Award was given to two enterprising students.

Following the success of the North American Biochar Conference, USBI is focused on expanding its impact and reach by enhancing its organizational approach, developing new programs, and revamping its business model. A new membership program is in development, with levels for general observers, academia, non-profits, government, and industry. Details about membership programs will be announced in Summer 2024.



Tom Miles
Executive Director

LOOKING TO THE FUTURE

Myles Gray
USBI Program Director



I want to thank all of you who attended the 2024 North American Biochar Conference in Sacramento. There was so much energy and opportunity, and the growth of the biochar sector into an industry was on full display. I came away from the conference enthusiastic and optimistic, but I also came away recognizing the many critical needs USBI can and should fill to support growth in the industry. Building on the success of the 2024 North American Biochar Conference, we will be focused on:

- Completing the Global Biochar Industry Survey final report in collaboration with International Biochar Initiative, with a release date of March 21st. This report will be freely available from both USBI and IBI.
- Supporting upgrades to USBI's approach and organization, including identifying collaboration opportunities with US Biochar Coalition, International Biochar Initiative, and Latin American Biochar Initiative.
- **Developing North American standards for biochar** laboratory analysis and use, which will form the basis for a biochar certification program.
- Creating clear guidance for Biochar Insetting in value-chain emissions frameworks, including recommendations for physical biochar coupled and de-coupled from biochar carbon removal credits.
- Building out our soil and agriculture program to increase market demand for physical

biochar in the agricultural sector which is, and will remain, the largest end-use market for biochar for the foreseeable future.

TAKE THE POST-CONFERENCE SURVEY FOR CHANCE TO WIN!

Help USBI make the 2025 event even better. All surveys completed by end of March will be entered into a drawing for \$250 off their 2025 Biochar Conference pass.

"Diversity Is Not Something That Just Happens"

An article about Women in Biochar

by Abby Crisp, Fellow, UC Berkeley

"Diversity is not something that stays - it is work and it is hard work," says USBI Board Member Kristin Trippe. Trippe was one of five women on the Women in Biochar Panel that I had the pleasure of interviewing at last month's 2024 North American Biochar Conference. See highlights of their interviews below. A special shoutout to Annie Nichols, Director of Operations and Carbon Management, Pacific Biochar PBC.



Image: Women of Biochar 2024 Meetup!

"Like <u>Dr. Asmeret Berhe...</u> I believe it's essential to call out [barriers to diversity] at every turn."



Kristin Trippe, Microbiologist, US Department of Agriculture (USDA) Agricultural Research Service (ARS) I think the most impactful contribution I've made is the development of the Biochar Atlas which assists users in selecting the appropriate biochar for their specific crop types and soil requirements.

Read full interview here

Luisa Marin de Block, Country Director, General Biochar Systems | I consider the formation of the Latin American Biochar Institute and rallying the team for the broader biochar initiative as our most significant achievements. Forming LABI was a response to the noticeable biochar knowledge gap and both USBI and IBI supported us from the start.

Read full interview here

"Even if you're not "an engineer, biologist, physicist, or agronomist...you can discover how to contribute."



"Having mentors is crucial, ... someone to look up to and feel comfortable speaking with."



<u>Deborah Aller</u> PhD, Soil and Crop Scientist, Cornell

University | My work in agricultural extension, leading onfarm trials, and disseminating information to aid in the broader adoption of biochar on actual working farms is what truly resonates with me.

Read full interview here

Mechi del Campo, Arti Marketing Director Attending IBI Academy was a highlight for me last year. All participants were housed in the same area at a university which allowed us to engage in conversations throughout the day with people from Africa, Latin America, Europe, and beyond.

"the first step...to empowering women[in biochar] is to showcase their achievements."

Read full interview here



"If you come across a woman who is exceptional and would be a great addition to your team, reach out to her."



Annie Nichols, Director of Operations and Carbon Management, Pacific Biochar Benefit Corporation | A recent achievement for Pacific Biochar was being named the #1 durable CDR supplier in 2023 with 21% of total global deliveries (by cdr.fyi, a carbon removal market company which focuses on trusted reporting).

Read full interview here

Thanks to North American Biochar Conference Exhibitors & Sponsors!



We could not have done this without your support!



SAVE THE DATE! Next year's North American Biochar Conference is slated for the week of September 15th, 2025, in Minneapolis, Minnesota.

Climate Impact Award

The Climate Action Award honors outstanding achievements in the biochar industry that significantly and measurably impact mitigation of climate change through biochar initiatives, as well as advocacy for biochar's role in climate solutions.



2024 Climate Impact Award Recipient

Dr. Johannes Lehmann, Liberty Hyde Bailey and International Professor of soil fertility management and soil biogeochemistry at Cornell University. Dr. Lehman has been the educator and inspiration for a generation of biochar research and development. He has been instrumental in the formation of the International Biochar Initiative and the US Biochar Initiative and a guide in our continued search for soil based climate solutions.

Larson Founders Award Winners

We are proud to present awards in the name of Dr. Ronal Larson who organized the first North American Biochar Conference in 2009. He is a founder and has been a board USBI Board Member since 2010. The awards were presented by Ron's granddaughter, **Raina Larson**.

The Larson Founders Award is a scholarship aimed at honoring the remarkable achievements and dedication of students within the biochar field. This scholarship provides free registration to the North American Biochar Conference, enabling student recipients to enrich their understanding, create meaningful connections, and contribute to the advancement of the industry.



Congratulations to the following students for outstanding work in biochar whose exceptional contributions to biochar have earned them this esteemed recognition.

- <u>Emilio Patricio Suarez</u>, is a Master of Science student in Horticulture at The University of Georgia.
- <u>Yvan Hernandez</u> is a Ph.D. Candidate in Sustainability at Rochester Institute of Technology.
 He has a BS in Mechanical Engineering and a BS in Physics from Los Andes University in
 Bogota, Colombia.

Biochar Funding Opportunities

DOE Funding

The DOE Office of Fossil Energy and Carbon Management (FECM) announced a funding opportunity focused on carbon removal projects such as Small Biomass Carbon Removal and Storage (BiCRS) Pilots, including biochar. BiCRS Pilots must have a CDR and storage design capacity at least 1,000 tonnes of CO2-equivalent per year. Successful applicants will test their respective pilots for at least 500 hours of continuous operation. Biochar equipment manufacturers or innovative project developers testing new production systems are great candidates to this program. *Note:* Applications for funding are due to DOE by April 16. <u>DOE</u> FedConnect Information Page

USDA NRCS Biochar Funding Programs
Find the USBI NRCS Biochar Funding Quick Guide and other Fact Sheets in our Biochar Learning Center.

USBI Board Member Corner Kathleen Draper

USBI is so grateful to the many talented, experienced, biochar pioneers who serve on our Board.

In addition to serving as USBI Board Member, Kathleen Draper has been Board Chair for the International Biochar Initiative (IBI) and been in the biochar industry for more than a decade. She has written and spoken about biochar to audiences around the globe.



Kathleen Draper, Director Finger Lakes Institute

What to Watch!

American Farmland Trust - Practical Implementation of Biochar Webinar Series https://farmlandinfo.org/media/practical-biochar-implementation-webinar-series/
Watch past videos by Tom Miles, Kristin Trippe, and Deborah Aller.
Links to their presentation slides: - Tom - Kristin - Debbie

Ag Compost and Biochar Hauling, Spreading, and Vertical Tillage Fiechter Brothers

Biochar deployment into newly planted vineyard using single-tillage planting Sitos Group

Biochar seed coating and cover crops in the garden High Plains Biochar



Connect & Collaborate at In-person or Online Events

March 2024

March 13

<u>Unlocking the Potential of Biochar: Impacts on Soil Health & Productivity</u> I Rodale Institute | Free Virtual Webinar 2-3 pm EST

March 15 Smart Gasifiers Recycle Biomass at the Molecular Level I Minnesota Biochar Initiative | Free Virtual Webinar 12-1 pm Central

March 19-21

2024 North American Carbon World | Climate Action Reserve | San Francisco, California --> Join Myles Gray on Tuesday 2:45 - 3:35 pm PST for Scaling Biochar: State of the Industry and Opportunities for Growth

March 21-22

Intermountain Sustainability Summit | WSU Sustainability Practices and Research Center | Ogden, Utah --> Look for John Webster at the USBI booth!

March 27 <u>Considerations for Biochar in Beef Cattle Systems</u> | American Farmland Trust & USBI | Free Virtual Webinar 3-4 pm EST - Another installation in the *Practical Biochar Implementation* webinar series.

April 2024

April 8-11

National Watershed and Stormwater Conference | Center for Watershed Protection | Kansas City, Missouri --> Join USBI Board Member, Chuck Hegberg. 4/8 workshop & then 4/9 presentation @ 9:45 am

April 21-27

SF Climate Week - I CLIMATEBASE I San Francisto, California

Puro SF CDR Summit during SF Climate Week I Puro I San Francisco, California



Looking for biochar industry career opportunities?

Check out LinkedIn for sales, research, internship postings, and more!

<u>Davey Tree pyrolysis unit operator</u> job opening









<u>Financial Times Highlights Biochar - Video</u> The Financial Times has released an engaging and informative overview of biochar! Their video focuses on decarbonization as well as its emerging novel applications beyond soil.

<u>Texas A&M Study Shows Biochar Enhances Soil Health</u> A study, led by Dr. Amit Dhingra from the Texas A&M Department of Horticultural Sciences, further solidifies that biochar derived from wheat crop residue improves soil microbiome and plant root interactions.





Biomass Removals Are Luring Investors This Industry Insight from *Ethical Corporation Magazine* article discusses the growing interest of investors in biomass removals credits, such as biochar, and their impact on land use and biodiversity.

North Carolina's College of Agriculture and Life Sciences "Quest for Net Zero" Podcast | This podcast features Assistant Professor Dr. Joe

Sagues who discusses the "Roads to Removal" project which identifies cost-effective bioprocessing technologies for carbon removal that address climate change.





Organic Growers See New Role in The Age of Climate Change | With food systems accounting for 20% to 30% of global greenhouse gas emissions, implementing sustainable agricultural practices could make a massive impact to address climate change.

Students Partner with Poultry Farmers Collective on Biochar Methods | Students at James Madison University are learning to think sustainably and exploring how biochar can improve soil health, retain water, enhance crop growth and address environmental challenges.





Major Dairy Companies Sign Up for Methane Alliance at COP28 | At COP28, six of the largest names in diary including US' General Mills, Kraft Heinz, and Nestle have all agreed to report and reduce methane emissions starting in 2024. Studies show biochar has the potential to significantly cut methane emissions.

Join the USBI Directory Services!

We are building the most comprehensive biochar directory for the US market.

Welcome to our newest directory listings - <u>Proton Power</u> and <u>Regen!</u> Now it's your turn to register! Use the directory to connect with others in the North American biochar network. Together we are putting the world's carbon budget back in the black!

Contact john@biochar-us.org with questions.

Get Your Directory Listing

FREE TESTING: We encourage all US biochar producers to submit for a no cost biochar analysis with the Biochar Atlas Project. Learn how to submit your sample.

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