





# Welcome to the 2024 North American Biochar Conference

---

Tom Miles  
Executive Director  
US Biochar Initiative





Concerns about the high cost of growing media, recent supply chain issues, and unease about the environmental impacts of peat have spurred interest in alternative media for the horticultural and turf industries. Biochar offers the potential of a natural, local, and sustainably sourced alternative to peat and other common growing ingredients including:

**Economic benefits**

- Increase plant survival: Increase plant survival. Certain types of biochar have shown an increase in water holding

**Fact Sheets**



**Online Producers Directory**



**Equipment & Technology Development**

# ABOUT USBI

**Established 2009**

USBI is a not-for-profit organization promoting the sustainable production and use of biochar for sustainable food security, improved soil fertility, environment, and climate resilience.

**Networking - Education - Demonstration  
Industry-Agriculture-Research-Public Policy**

**Activities:**

North America Conferences, Workshops, Demos, Fact Sheets, Newsletter, Website, Provider Directory, Social Media, Biochar Advocacy, Referrals, Forestry Partner, Technical Advisory Team, Research, Outreach & Education, [biochar.groups.io](http://biochar.groups.io)



**In-field Workshops**



**Trade shows & Conferences**



[biochar-us.org/biochar-crop-application-guidelines](http://biochar-us.org/biochar-crop-application-guidelines)



# Problems worth solving

- Soil Health
- Climate Change
- Water Quality
- Nutrient Management
- Organic recycling,  
biomass management

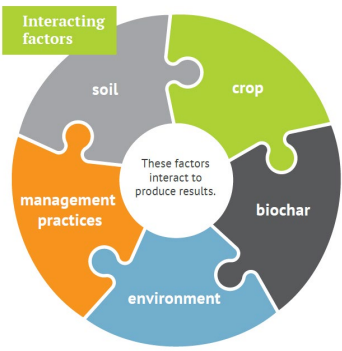


# Our Solutions



- Fully engage the scientific, agriculture, and biomass communities to produce and use safe, stable, sustainable biochar.
- Research, educate, promote, demonstrate, develop markets, policy incentives, and quality standards.





US BIOCHAR INITIATIVE

BIOCHAR-US.ORG

# BIOCHAR GUIDELINES FOR AGRICULTURE APPLICATIONS

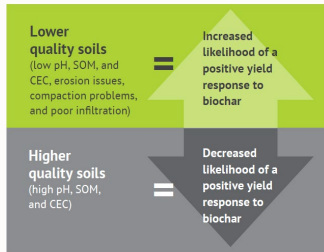
Practical insights for applying biochar to annual and perennial crops

## Right source

Selecting the best biochar for your crop

## Right place

Applying biochar to the soils that need it



## Right rate

Applying the right amount

## Right time

Identifying when to apply



Photo by Britt Fossum



Photo by David Laird

## A sustainable soil amendment that:<sup>1-4</sup>

- builds soil organic carbon and soil health
- increases crop yields and soil moisture
- improves nutrient retention
- boosts microbial activity
- alleviates compaction
- reduces soil acidity
- sequesters carbon



# North American Biochar Conferences 2009-2025

- 2009 – Boulder, Colorado
- 2010 – Ames, Iowa
- 2012 – Sonoma, California
- 2013 – Amherst, Massachusetts
- 2016 – Corvallis, Oregon
- 2018 – Wilmington, Delaware
- 2019 – Fort Collins, Colorado
- 2020 – Virtual “National Biochar Week”
- 2021 – Virtual “Business of Biochar” w/IBI
- 2022 – Morgantown, West Virginia
- 2024 – Sacramento, California
- **2025 – Minneapolis, Minnesota (Sept 10-13)**

- Research explosion
- Industry growth in scale and capacity
- Market development from ag to building products and carbon
- Technology development and adaptation - mobile and stationary
- Public financing and support
- Public policy support (2008-2024)



# Regional and International Collaboration



- American Farmland Trust
- Australia New Zealand Industry Group (ANZBIG)
- Canadian Biochar Initiative
- China Biochar Technology Group
- Eastern Biochar
- European Biochar Industry Council (EBI)
- Great Lakes Biochar Network
- Great Plains Biochar -> Nebraska Biochar
- International Biochar Initiative
- Latin American Biochar Institute
- Minnesota Biochar Initiative
- Sonoma Biochar Initiative
- US Composting Council
- USBI Urban Task Group
- US Biochar Coalition





# 2019-2024 Goals

---



Rogue Biochar



Pacific Biochar



- **Biochar Production** – >100,000 tons per year
  - ✓ Industry needs and opportunities
  - ✓ Reduce Production Costs (materials, transport, conversion)
  - ✓ Standardize methods of analysis
- **Biochar Markets and Use**
  - ✓ Update Biochar Strategic Plan
  - ✓ Industry Directory to connect users with suppliers
  - ✓ Fit biochar qualities to appropriate uses (designer biochars)
  - ✓ Key sector strategic alliances: USCC, C&D RA, Biomass Power
  - ✓ Support users through communications, projects (USFS USDA ARS, AFT)
  - ✓ Research and demonstrate uses, e.g. stormwater, remediation
  - ✓ Policy (Legislation, state CA, CO, WA, WV, PA; federal NCAT, USBC)
    - Enable Biochar for Feed
    - Develop Incentive Programs for use (NRCS Soil Carbon 336)
    - Promote biochar as part of solutions or solutions to biomass residues, soil health, water quality, climate change



# 2019-2024 Strategies

---



Pacific Biochar



ICM Inc



- **Conferences**

- **Outreach**

- Market and Technical Support (2018-2024)
- Communications: Website, Directory, Links, Email, Social Media
- Test Methods and Protocols; Labelling, definitions, standards (AAPFCO). International Standards Organization (ISO), IBI
- Workshops and Demonstrations, IBI Academy, Chesapeake Bay BMPs, Biochar in the Woods, CharBoss Demos
- Projects: Biochar Atlas (USDA ARS), Scaling Biochar (Chesapeake), Climate Smart (AFT), Soil Carbon Amendment (NRCS)
- Policy Support – Water Quality (East Biochar) Biomass Management and Carbon (CA, CO), Feed, Biochar research Policy Project (NCAT), US Biochar Coalition



# Meet Our Platinum & Diamond Sponsors



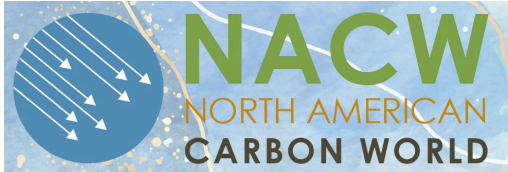
# Meet Our Premier Support Partner



# Meet Our Gold and Silver Sponsors



# Meet Our Supporting Organizations



# Conference Team Leaders



**Tina Metzger**

Co-Founder NCRD & RuralRISE Tech



**John Webster aka Johnny Biochar**

USBI - Director of Communications



**Myles Gray**

USBI Program Director



# The Conference Team



**Thomas Miles**  
Executive Director of USBI and Owner of TR Miles, Inc.



**Charles Hegberg**  
USBI - Board Chair & Environmental Restoration Specialist



**Jeff Waldon**  
USBI Board Treasurer & Restoration Bioproducts



**Kristin Trippe, Ph.D.**  
USBI - Board & USDA Agricultural Research Service



**Kathleen Draper**  
USBI Board Member, IBI Board Chair & Finger Lakes Biochar / Ithaca Institute



**Josiah Hunt**  
Pacific Biochar



**Isabel Lima, Ph.D.**  
USBI Board & USDA ARS Research Chemist



**Benjamin Von Wong**  
IBI Biochar Academy Class of 2023 & Biochar 2024 Event Photographer

# Contributing Board Members



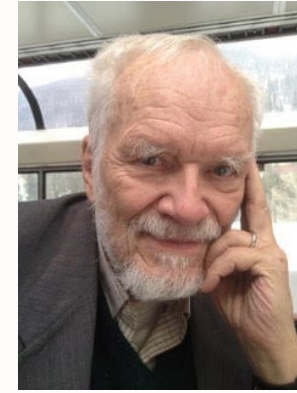
**DEBBIE ALLER, PhD**  
Extension Associate,  
Cornell University



**ALBERT BATES**  
Author,  
Global  
Ecovillage  
Network



**KIM CHAFFEE**  
Board Member



**RONAL LARSON, PhD**  
Larson Associates



# How You Can Help



***Engage  
Volunteer  
Sponsor  
Donate***

[www.biochar-us.org](http://www.biochar-us.org)  
[info@biochar-us.org](mailto:info@biochar-us.org)

***Just Add Biochar!***

