

## US Biochar Initiative Newsletter May 2022

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### TELL YOUR STORY AT BIOCHAR 2022 by Tom Miles, Executive Director

Join us in Morgantown, August 8-11, 2022 for the North American Biochar and Bioenergy Conference. <u>Submit an abstract</u> of your presentation by May 31 so that we can further develop the program. As markets and production grow in North America, we hear of more successes in project financing through carbon markets, green infrastructure sales, and on-farm uses. Tell us your story. <u>Sign up for the</u> <u>workshops</u>, take the field trip to see the CharBoss demo, and exchange ideas.



Changes to the USDA Natural Resource Conservation Service Soil Carbon Amendment Practice CPS 336 were announced in the <u>Federal Register</u> this week. Follow the links in the Federal Register to view the changes which are open for public comment until June 16. Biochar suppliers will find new opportunities as states adopt this new practice which will provide cost share to farmers who want to use biochar to increase carbon in their soils.

# **REGISTRATION IS NOW OPEN**



### **BIOCHAR EVENTS CALENDAR**



May 25 and May 26 Forest Biomass Utilization in the Pacific Northwest - Innovative Research Enables Business Success 1pm-5pm EDT US Forest Service virtual workshop Day 1 (Wed. May 25) - Research FocusLeading Forest Service researchers share

perspectives and findings on cost-effective biomass utilization. <u>Click here to join the meeting</u> Day 2 (Thurs. May 26) - Business and Practitioner Focus Biomass business leaders discuss successful products, processes, and opportunities. <u>Click here to join the meeting</u> (Links may not be active until day of event.)



June 3-5 Facing The Fire: Innovative Uses of Biochar and Permaculture Design to Mitigate Wildfire Risk, Steamboat, CO - weekend of lectures, demos, interactive discussions, networking, and best practices. <u>Details and</u> tickets here.

June 21-23 Managing Carbon through Healthy Forests and Forest Products, Wichita, Kansas - regionally focused workshops to discuss emerging trends in forestry

and climate, including biochar. This in-person event will feature expert panels on the latest insights and break-out sessions to collect participant feedback on needs and the future of Great Plains forestry. See agenda and **register** <u>here.</u>

August 8-11 North American Biochar and Bioenergy Conference 2022, Morgantown, WV Building bridges between scientific, industrial, practitioner, and policy gaps for using biomass for biochar and bioenergy production. Register, submit an abstract by May 31, or sponsor here.



Oct 24-26 Sustainable Energy for a Sustainable Future, San Jose, Costa Rica, third in a series. This ASABE (American Society of Agricultural and Biological Engineers) Global Initiative Conference will promote interdisciplinary dialogues and present regional energy innovations with a global perspective. More details are available here.

### MEET FRED HORTON President & CEO Standard Biocarbon East Millinocket, ME

**Q** Why has Maine a been a good place to start your biochar business? **A** My brother and I grew up in Portland and our parents were environmental entrepreneurs, importing woodstoves from Norway in the 1970s. Generations of Mainers have been managing and harvesting wood for lumber, paper, and biomass power production. Our state is known for its sound forest stewardship. Biochar production leverages Maine's natural and human resources and legacy infrastructure in a new, scalable industry.



### **Q** What does the future of biochar look like to you?

A I think the future has more promise for large-scale, high-quality biochar

producers, rather than small, one-off, customized facilities because they can ensure commercial biochar product users high enough volumes to warrant investment in developing profitable applications. "You can't expect someone to design an internal combustion engine until you can ensure them you have a supply of gasoline." Our two-year-old company's business goal is to build a clear path to scale to 1 million

tons or more of biochar.

### **Q** How can biochar help restore the demand for low-grade wood?

**A** Maine paper mills and biomass powerplants have closed and moved out of the region causing the demand for low-grade wood to drop and the economy to decline. This lack of demand has had an impact on forest land and mill owners who have lost a market for their waste by-product. Our biochar industry could replace the paper industry as a user of low-grade wood products – an option that could appeal to local, state, and federal governments who want to bring more jobs to the area.

# **Q** Some people criticize biochar production because they believe it reduces the tree canopy and wildlife habitat.

**A** We don't believe in cutting trees. We use waste by-product – low-grade wood – that would otherwise be combusted or made into paper or compost. There's enough thinning, excess, waste, and low-grade wood that is being harvested anyway. We also process this waste by-product on existing saw mill sites which eliminates the need to transport it using fossil fuels. When paper mills or power plants buy this wood, they incur the cost and labor of hauling it from sawmills to their or mill or plant.

" YOU CAN'T EXPECT SOMEONE TO DESIGN AN INTERNAL COMBUSTION ENGINE until you can ensure them a supply of gasoline ." FH



A Pleasant River Lumber site in Maine

# **Q** Why does Standard Biocarbon locate processing facilities on sawmill sites?

**A** Partnering with sawmills is key to our business model. There's a great deal of waste wood in the woodshed. Also, the energy used to produce biochar on-site can deliver thermoenergy that our sawmill partners need to help them operate 24X7 365 days per year. One of <u>Standard Biocarbon</u>'s critical partners is Pleasant River Lumber (PRL) which operates five Maine sawmills and is one of the state's largest private employers. PRL uses our thermal energy to run their kiln systems as well as a diversified biochar product line that will someday be an important product for their business.

### <u>SCROLL ALL THE WAY DOWN TO SEE THE</u> <u>LATEST!</u>

• Biochar Learning Center

- Ads and opportunities
- Biochar Newslinks

### WE'RE COUNTING ON YOU.

Our volunteers and board are chock full of great ideas this spring to help your business grow. We need your help to bring them to life.

Learn about the Cares Act Relief Tax, your employer match program, or an IRA distribution to reduce your taxable income.



### **GIVE GENEROUSLY**

### **USBI LEARNING CENTER**

Researchers have found that the benefits of co-composting with biochar far outweigh any drawbacks or side effects when compared with other amendments. Learn how Oregon-based Environmental Services at Rexius achieved higher nutrient values in their biochar-compost than compost without. Published by USBI in partnership with the Nebraska Forest and US Forest Services.

### Video presentations are now available for last January's Biochar in the Woods Webinar that featured over 15

speakers on project logistics and economics, environmental and social impacts, and technology development.

So much is happening in our industry now!USBI's Learning Center makes it easy to stay up to date on the latest news. Take our digital database for a spin! There's sure to be a media format that will be a good fit for your busy schedule.

### **BIOCHAR NEWSLINKS**

Iowa State University Receives XPRIZE Carbon Removal Award for using biochar to remove carbon from the atmosphere. An ISU research team that helped develop a demonstration-scale pyrolyzer, capable of sequestering thousands of tons of carbon dioxide a year, has received a \$1 million milestone award from XPRIZE Carbon Removal.

GlanrisTechnology Declared Net CO2 Negative. Glanris has announced that its biochar filtration product has been proclaimed carbon negative following the recent completion of a Life Cycle Assessment (LCA) with Accend, a partner of Puro.Earth. These findings will allow Glanris' addition to the Puro.Earth CORC exchange (Carbon Removal Certificate).

Paper and Packaging-Maker DS Smith Converts Even More Paper Waste to Biochar. Atlanta-based DS Smith has tripled its biochar production over last





year. The company works with partner Wakefield BioChar to augment the paper waste biochar with additional nutrients, doing even more to improve crop yield.

A Focus on Pyrolysis Coproducts. With three projects in development, Toronto-headquartered CHAR Technologies is poised for commercialization of its high-temperature pyrolysis (HTP) process, producing biocarbon and renewable gases. "We're in the right time with the right technology, and the opportunities are pretty substantial," CEO Andrew White says.

How to Profitably Create Carbon-Negative Energy from Biomass. Existing biomass-fueled power plants can be upgraded with new processing equipment so that these plants can produce biochar and more electrical power by combining them with renewable energy farms and energy storage.

### > Master Gardeners Master Ancient Technique for Use in Modern

<u>Gardens.</u> It's not enough to just dump dry biochar onto your garden bed. In order to make the biochar ready for use in our gardens, it must be energized or charged. This inoculation is easy. Mix the biochar, water, compost, soil or other sources of microbes such as worm castings in a bucket, add water and let it sit for two weeks.

**Community Questions Biochar Facility Emissions.** In 2021, Saratoga Biochar Solutions filed a site plan application in Moreau, New York to build a \$29 million state-of-the-art facility to convert biosolids to biochar. The company now needs to address community members concerned with emissions.

### Canada Invests in Innovation and Growth - Support for Basques Hardwood Charcoal

Basques Hardwood Charcoal specializes in manufacturing charcoal to cook food for the consumer and restaurant markets, and biochar for use in horticulture and metallurgy. Assistance from the government will allow the company to acquire three new uniquely designed ovens to manufacture more charcoal and biochar to meet market demand.

Biochar: More Carbon, Better Water and Nutrient Capacity Enhancing systems that produce and apply biochar as crop amendments should be a



Tina Ehrig mixes biochar with water. (Courtesy of Tina Ehrig)



focus of carbon sequestration policies, according to University of Alberta researcher Carl Gross. When one-time additions of manure compost and biochar were compared in a 3-year study to assess their effects on soil organic carbon and greenhouse gas emissions, biochar was found to be superior. Adding biochar to the soil surface increases soil organic carbon, nitrogen, and pH, and can improve water and nutrient holding capacities.

### WELCOME TO THE USBI DIRECTORY!



Santa Fe-based Earthcrew, Inc. is a bulk wholesale supplier of nutshell and woody waste biochars. The company provides certified organic

nutrients and pure strain microbial organisms to customize our biochar.

----- promotional section ------

Newsletter ads reach nearly 5000 readers per month! Contact <u>admin@biochar-us.org</u> to become a sponsor.





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Proceeds go to the International Biochar Initiative



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