

Pioneer Valley Biochar Initiative presents:

# 2013 USBI NORTH AMERICAN BIOCHAR SYMPOSIUM

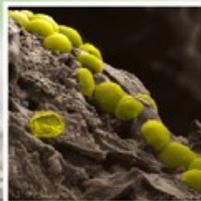
## HARVESTING HOPE: The Science and Synergies of Biochar



Credit: Peter King



Credit: Doug Clayton



Credit: Bob Cerino



Credit: David Lenn



Credit: Bob Cerino

October 13-16, 2013 @ UMass Amherst

## What Do You Think??

On Wednesday, October 16th, 2013, the biochar community gathered at UMass Amherst after 3.5 days of leading edge presentations delivered by researchers and practitioners to recap ideas for sustaining and building the biochar movement. Here are the highlights shared:

- Joanna Campe – research project with rock dust and biochar – encourage combination; publishing book with Tom Goreau
- Christoph Pollatos – build a constituency for policy makers; use Doris Hamill's work and build on it
- David Yarrow – Farmer Workshop – start a Cool Food Label task force for carbon smart farming using biochar; join his table!
- Paul Taylor – idea of creating a standard presentation for people to use (see Kathleen Draper) what is possible, land use, buildings, standard energy; non profit org with volunteers presenting documented research – activist organization
- Ramon Bacre Gonzalez– government of Mexico working on climate change technologies without the debate and deniers here in US. Get a biochar public policy. Gloria Flora helped develop climate action plans in Mexico - adaptation
- John Bonitz – challenges of production are not the greatest barriers we have; small and medium production technologies are impressive. High C wood ash session featured quality of material available; commoditization is in sight. Redouble our efforts in a transparent process to explore as many markets and uses as possible.
- Erich Knight – biochar peanuts
- Dick Stein – UMass Amherst 63 years – get higher education leadership involved in biochar
- Johannes Lehmann – USBI conferences so valuable – multi sectorial contributions over the years; regional groups hosting excellent workshops; international conferences feature different topics – makes sense for regional conferences. Interactions between these groups can be explored. Some science conferences – soil organic matter and neighboring disciplines – joint conference and cross pollinate
- Hugh McLaughlin – bottom up biochar use. Build low tech \$20 use it and show your neighbor. This will drive traffic into our garden centers and grow the demand, not coming from policy. What tools can we create/disseminate? Community Supported Biochar with J-Ro's. Viral push
- Josiah Hunt – should national conferences be annual or bi-annual? Every 18 months
- Jim Bush – found biochar at a farmers market (medicinal) now has greater appreciation for uses and

benefits – e.g. Doris Hamill's education kit is great

- Tom Goreau – millions of reasons why biochar needs to be made and applied locally and it must be realized as a climate mitigation solution; pledged to put pressure on small island states; UN meeting in Jamaica “how do we prevent N from contaminating ocean?” many avenues to explore - geotherapy
- Rob Lerner – this is a great opportunity for collaboration; exponential curve; leverage interests
- David Yarrow – 1,000 lb angel whispering in his ear; using Doris' presentation in MO with Future Farmers of America and 4H. Thayer will post this on IBI website; Gloria will post on USBI
- Mark – complimenting presenters for their incredible work (Doris' education kit) – lots of great exchanges and real need to communicate out to the rest of the world; small regional events could encourage more participation/education
- Bob Cirino – appreciates warm welcome to “Biochar Bob”; wants to make a video of the cook stove by Estufa Finca – Indiegogo campaign launch soon
- Olivier Kolmel – importance of policy work; former chair of largest environmental group in Canada – funding pulled and huge network crushed (2009). Caucuses of regional and national groups – get grants funded; appreciates face to face connection
- Kelpie Wilson – bring other agencies/orgs in as co-sponsors; Bio-stimulants (humic acids and microbial activators) everyone might want to search for peers/aligned organizations to collaborate with
- Greg Mori – forestry industry; sees agroforestry and biochar as natural linkages, sharing same goals of reversing climate change and restoring soil carbon – feedstock for biochar and synergies with market products that support agroforestry
- Paul Anderson – need conferences to recharge; IL Biochar Group meets 3x/yr and works regionally but when all the groups get together we have critical mass that builds a movement. Many different interests that can be enlisted to support biochar cook stoves, etc.
- Michael Gardjian – biofuels production facility in W. MA – fuel and biochar; knows biochar industry is growing quickly like the solid state industry grew; cut 50% in 8 mos.? If we aren't up on the research we may limit our ability to achieve the potential we otherwise could. Intent is to license tech around the world and build prototype facility in W. Ma but as the industry grows, need to adapt to the changing needs of communities.
- Jock Gil – talk to our local school committees and align with STEM programs (as well as STEAM (arts)) – give all kids biochar; John Bonitz mentioned Oak Ridge Laboratory connection
- Wilson Hago – selling biochar to farmers is difficult with the vastness of the field. What is the future landscape? National Academy of Sciences Studies – create a synthesis/outline of what is known – 00's of media outlets will make biochar a household word
- Jeff Wallin – SoCap conference was unique (people not impressed about biochar) you have to tell them what impact you make in the world. The Char Alliance videos. So many here not in it for the money – social impact will be The Biochar Company's brand – triple bottom line!
- Michael Harte – every summer he shows his grandchildren around the farm (swimming, horse back riding) and asks them “what was your favorite activity” his grandson said “making biochar!”
- Gloria Flora – stay connected through Social Media (p.3 on your program); we are all responsible for the care and feeding of the growth of the biochar industry and we are all called to act with integrity, honesty, transparency and be ambassadors of good will for our children. We are all in this to save ourselves and our communities now and in the future.
- Karen Ribeiro - so much has already been researched about the properties and benefits of many biochar formulations and yet there remains such a strong need to synthesize this research and present it to our legislators, the greater public and affiliate markets in order to keep the biochar market - and its impact in the world - advancing. One step is to support the development of a database of state by state policies for pyrolysis, certification, etc. alongside another database of unique biochars with feedstocks that demonstrate beneficial results in particular soils/regions.