

TUESDAY, August 23rd

TUESDAY, AUGUST 23RD Concurrent Sessions

Track:	1 - Agriculture & Horticulture	2 - Forestry & Biomass	3- Policy & Production	4 - Stormwater & Remediation
Location:	Willamette Room	Elle/Burlingham Room	Trysting Tree Room	Johnson Lounge
Moderator:	Claire Phillips, USDA ARS	David Smith, Oregon State University	Ronal Larson, Larson Consulting	Myles Gray, Geosyntec Consultants
11-11:25am	Suduan Gao USDA Agricultural Research Service Effects of soil amendment with biochar and irrigation on the fate of nitrogen fertilizer	1.1.1 James Archuleta USDA Forest Service Forestry Operations, Soil Management Needs, and Biochar Applications	2.1.1 Ghasideh Pourhashem Rice University Reducing public health cost through agricultural soil application of biochar	3.1.1 Jeff Novak USDA Agricultural Research Service Overview of designing biochars to improve soil health characteristics at two Superfund mine sites
11:25-11:50am	David Olszyk Environmental Protection Agency Carrot, Corn, Lettuce and Soybean Nutrient Contents are Affected by Biochar	1.1.2 John Field Colorado State University Beetle-kill to biochar carbon; good climate sense?	2.1.2 Jeff Hallowell Biomass Controls Policy Requirements and Challenges for Commercial Biochar Producers	3.1.2 Mark Johnson Environmental Protection Agency Effects of biochar amended metal-contaminated mine soil on germination of Blue Wildrye
11:50am-12:15pm	William Lynn Washington Department of Ecology Adding Biochar to Capture Compost Emissions	1.1.3 Maureen Puettmann WoodLife Environmental Consultants LCA of Biochar- How feedstocks and production systems stack up	2.1.3 Raymond Baltar Sonoma Ecology Center Closing the Circle: Using Biochar for an Integrated Response to California's Critical Environmental Challenges	3.1.3 Kristin Trippe USDA Agricultural Research Service Biochar amendments influence the microbial community dynamics in mine soils
12:15pm LUNCH				
Plenary Presentation: Alberta Biochar Initiative and Introduction to the North American Biochar Working Group Presented by Don Harfield, Alberta Innovates				
Concurrent Sessions				
	Moderator: Kristin Trippe, USDA ARS	Moderator: Ron Saranich, US Forest Service	Moderator: Noah Deich, Center for Carbon Removal	Moderator: Mark Johnson, Environmental Protection Agency
1-1:25pm	Abdulrasoul Alomran King Saud University Impact of Biochar and Compost on Hydro-physical Properties and Yield Grown on Sandy Soil	1.2.1 David Carter Schatz Energy Research Center Biochar Production Using Multiple Feedstocks, Lessons Learned	2.2.1 Jerry Adams Evaluation and Development Institute How We Can Make Forests to Farms Work?	3.2.1 Christopher Peltz Research Services LLC Biochar for Mine Lands Reclamation
1:25-1:50pm	M. Bayan Lincoln University in Missouri Biochars Effects on Water Consumption by Soybean on Claypan and Cultivated Alfisols from Central Missouri	1.2.2 Darren McAvoy Utah State University Scale-up and Demonstration of a Mobile Pyrolysis Kiln and Other Activities of the Utah Biomass Resources Group	2.2.2 Peter Huntington University of Massachusetts Amherst Green Mountain Biochar: An exploration of the potential for biochar production to help Vermont achieve zero-waste by 2020	3.2.2 Matthew Smith Washington State University Spectroscopic Determination of the Chemical Structure of Biochar
1:50-2:15pm	Boris Merlin Djousse kanouo Quantifying the influence of Eucalyptus bark and corncob biochars on the physical properties of an oxisol under maize cultivation	1.2.3 Don Morrison Planning and Implementation of a Forest Service Stewardship Contract to Produce Biochar from Vegetation Management Using Hand Crews and Simple Kilns	2.2.3 Ronal Larson Larson Consulting Discussions on the Yahoo Biochar-Policy List	3.2.3 Myles Gray Geosyntec Consultants Biochar for Stormwater Treatment: Technology Overview and Case Study
2:15-2:40pm	Rick Lentz USDA Agricultural Research Service Long-term influences of biochar, manure, or sawdust additions on soil water retention in silt loam	1.2.4 Sean Thomas University of Toronto Long-term effects of biochar additions in a managed deciduous hardwood forest	2.2.4 Tom Miles TR Miles Technical Consultants Is it time for a Biochar Industry Association?	3.2.4 Bridget Ulrich Colorado School of Mines Biochar for Enhanced Trace Organic Contaminant Retention in Stormwater Biofilters
2:40-3:00pm BREAK				
	Moderator: Kristin Trippe, USDA ARS	Moderator: Dusty Moller, Washington State University	Moderator: Ghasideh Pourhashem, Rice University	Moderator: Jeff Nason, Oregon State University
3:05-3:30pm	Gilbert Sigua USDA Agricultural Research Service Ameliorating Effects of Biochar Application in Hard-Setting Subsoil Layer: Quality of Leached Water and Soil Chemical Properties	1.3.1 Paul Sicurezza Brad Thompson Company Project Development: Identifying a Path Through Obstacles and Risks	2.3.1 Erich J. Knight The Civilization of Soil: Hall Marks of The Unintended and Intended Anthropocene	3.3.1 Sarah Burch Oregon State University Evaluating Biochar in Sustainable Stormwater Treatment of Heavy Metals
3:30-3:55pm	Kurt Spokas USDA Agricultural Research Service Biochar: Is it inert or reactive?	1.3.2 Jim Dooley Forest Concepts, LLC Reactor-Ready Biochar Feedstocks from Forest Biomass	2.3.2 Patrick Binns Westbrook Associates, LLC Possible pathways for establishing sequestration credits in Carbon Cap and Trade Markets for biochars produced from PNW forest and agricultural wastes	3.3.2 Waled Suliman Washington State University Role of Biochar Surface Properties on the Removal of Waterborne Pathogenic Escherichia coli from Stormwater
3:55-4:20pm	No scheduled talk	1.3.3 Greg Shipley BioEnergy Development, LLC Engineered and Designed Biochar for Specific Soils and Crops	2.3.3 David Timmons University of Massachusetts Boston Biochar Economics: A Cost-Effectiveness Analysis	3.3.3 Seokyoung Oh University of Ulsan Polymer/biomass-derived biochar for environmental application: Sorbent and electron transfer mediator

WEDNESDAY, August 24th

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Location:	Willamette Room	Elle/Burlingham Room	Trysting Tree Room	Johnson Lounge
Moderator:	Steve Vaughn, USDA ARS	Chuck Hersey, WA State Dept of Natural Resources	Hugh McLaughlin, NextChar, LLC	Sarah Burch, Oregon State University
10:30-10:55am	Niles Brinton Charborn LLC Biochar and Compost Blends for Enhancing Crop Production in California 1.4.1	John Sessions Oregon State University Opportunities for biochar production to reduce forest wildfire hazard, sequester carbon, and increase agricultural productivity of dryland soils 2.4.1	Michael Low Vermont Biochar Biochar as the keystone for regenerative agriculture and industry 3.4.1	Kathleen Hall University of Minnesota Understanding mechanisms to predict and optimize biochar for agrochemical sorption 4.4.1
10:55-11:20am	James Doten Minneapolis Health Department Growing Relationships: Biochar applications to address health disparities in the urban Native American community 1.4.2	Mahesh Talwar Karr Group Sustaining Human Life with Biochar - Karr Solution 2.4.2	Norman Baker 55 Gallon TLUD Progress and Developments 3.4.2	Stefanie Gugolz University of Georgia Evaluation of a Biochar Enhanced Constructed Treatment Wetland for the removal of Contaminants from Agricultural Wastewater 4.4.2
11:20-11:45am	Kathleen Draper Ithaka Institute Closed-loop biochar cascades 1.4.3	Harry Groot Dovetail Partner's, Inc. Aggregating and Marketing Biochar from a Network of Distributed Producers 2.4.3	Hugh McLaughlin NextChar, LLC NextChar Characterization Matrix - Measuring biochar properties to establish Valuation 3.4.3	Mohammad Boshir Ahmed University of Technology Sydney Removal of sulfamethazole and sulfamethazole from water using modified bamboo biochar 4.4.3
11:45am-12:10pm	Isabel Lima USDA Agricultural Research Service Sugarcane residue and bagasse as biochar precursors for soil amendment applications 1.4.4	Marius van der Merwe NewCarbon NewCarbon Innovation to produce biochar in a novel, clean and cost effective way using biomass from forestry and sawmill waste 2.4.4	Hugh McLaughlin (Jeff Licht) NextChar, LLC Cardboard and chipboard biochar: not a waste of energy or time 3.4.4	No scheduled talk
12:15pm LUNCH				
	Moderator: Tom Ducey, USDA ARS	Moderator: David Smith, Oregon State University	Moderator: John Bonitz, Celebrity Goat Dairy, LLC	Moderator: Josh Kearns, Aqueous Solutions
1-1:25pm	Claire Phillips USDA Agricultural Research Service Feasibility of biochar production and utilization at a farm-scale: a case-study in non-irrigated seed production 1.5.1	Peter Hirst New England Biochar Biochar in Context: How and Why to Perform An Integrated Whole Systems Holistic Management (TM) Analysis, Evaluation and (Possible) Rejection of Biochar as Land Stewardship Tool. 2.5.1	Allison Talley Enginuity Worldwide LLC Rotary Compression Unit: A novel technology to produce biochar in a continuous state using various biomass streams 3.5.1	Kyle Thompson University of Colorado Boulder Environmental comparison between activated carbon and biochar for tertiary wastewater treatment 4.5.1
1:25-1:50pm	Steven Vaughn USDA Agricultural Research Service Biochar-compost mixtures added to simulated golf greens increases creeping bentgrass growth 1.5.2	Marco Mosciarello Bioforcetech Corporation Cost effective, constant, and reliable biochar production from organic waste and biosolids 2.5.2	Josiah Hunt Pacific Biochar A simple and natural means of improving plant growth promoting characteristics of biochar materials. 3.5.2	Josh Kearns Aqueous Solutions Biochar water treatment: state of the science 4.5.2
1:50-2:15pm	Catherine Brewer New Mexico State University Biochars in the Desert Southwest: Challenges and Opportunities 1.5.3	Jonah Levine Confluence Energy LLC Integrated Biochar Production - 10 MMBTU/hr Thermal & Inline Biochar 2.5.3	John Bonitz Celebrity Goat Dairy, LLC Fast Composting of High Value Biochar 3.5.3	Matthew Bentley University of Colorado Boulder Ash Activation as a Means of Improving Biochars for Aqueous Removal of Organic Contaminants 4.5.3
2:15-2:40pm	Kelpie Wilson Wilson Biochar Associates On-Farm Biochar Production and Use with Manure Composting 1.5.4	Jerry Whitfield Whitfield Biochar Biochar Pellet Stove 2.5.4	David Laird Iowa State University Innovations at the Epicenter of the Food, Energy, and Water Nexus 3.5.4	Rob Lerner Rainforest Capital Biochar Filter Media to Mitigate Arsenic- and Fluoride-Contaminated Drinking Water 4.5.4
2:40-3:00pm BREAK				
	Moderator: Susan Crow, University of Hawaii Manoa	Moderator: Dusty Moller, Washington State University	Moderator: Tom Miles, TR Miles Technical Consultants	Moderator: John Miedema, Biological Solutions, LLC
3:05-3:30pm	Robin Cook PermaMatrix PermaMatrix in agricultural soils as a carbon offset to address climate change 1.6.1	Paul Taylor Simple biochar production for garden and farm-scale biochar usage: Kon-Tiki flame cap kiln development, operation, and testing 2.6.1	Ron Alexander R. Alexander Associates, Inc. Biochar Market Development and Product Registration 3.6.1	Aimee Navickis-Brasch University of Idaho Evaluating the Suitability of Biochar as a Filter Media for Stormwater Treatment 4.6.1
3:30-3:55pm	Lauren Deem University of Hawaii at Manoa Biochar increases temperature sensitivity of soil respiration and N2O flux 1.6.2	Daron Norris Norris Thermal Technologies Biogreen torrefaction and pyrolysis mobile model 600 2.6.2	Timothy Ewing Washington State University From dairy farm to bio-refinery: developing technologies to produce environmentally friendly fuels, power, and value added products 3.6.2	Jing Tian University of Delaware Biochar addition to stormwater treatment media for enhanced nitrogen removal and hydraulic performance 4.6.2
3:55-4:20pm	Matt Ramlow Colorado State University Exploring the Mechanisms of Biochar: Effect on GHG Emissions across Agricultural Soils 1.6.3	James Sabo TSI, Inc. TSI Systems for Carbonization 2.6.3	David Yarrow Marketing Biochar: Carbon-Smart Farming to grow Nutrient-Dense Cool-Food 3.6.3	Joseph Brown University of Delaware A Field Study of Biochar Amended Soils: Water Retention and Nutrient Removal from Stormwater Runoff 4.6.3
4:20-4:45pm	Thomas Ducey USDA Agricultural Research Service Effects of manure feedstock biochars on micronutrient and heavy metal accumulations in cotton 1.6.4	Chris Olson Innovative Reduction Strategies Inc. IRSI's Ulysses Pyrolysis System 2.6.4	Tom Miles TR Miles Technical Consultants Discussion - Biochar Production, Quality, and Standards 3.6.4	Ryan Holman Sunmark Environmental Services Biochar for Heavy Metals removal for Industrial Sites 4.6.4