

**HUBBARD BROOK ECOSYSTEM STUDY
54TH ANNUAL COOPERATORS' MEETING**

Wednesday, 12 July 2017		
8:00	Rustad, Lindsey	Welcome and Announcements
Session I: Vegetation Dynamics		
8:10	Battles, John	Calculating biomass at Hubbard Brook: A simple, unified approach
8:20	Yanai, Ruth	Uncertain about uncertainty in forest biomass models?
8:30	Schaberg, Paul	Expanding a dendroecology database to better understand tree growth at Hubbard Brook and beyond
8:32	Matthes, Jackie	Tree demography, ecosystem processes, and insect x climate disturbance
8:34	Woodall, Christopher	The Adaptive Silviculture Experiment in New Hampshire
8:36	Valipour, Mahnaz	Comparison of impacts of various logging regimes on biomass accumulation, hydrology and biogeochemistry in the northeastern US through modified ecosystem model, PnET-BGC
8:46	Cleavitt, Natalie	Regeneration dynamics following whole-tree harvesting: Insights from a 30-year record of tree establishment and persistence
8:56	Lovett, Gary	Imported forest pests: Science applied to policy
9:06	Box, Olivia	Beech bark disease fungus: Which <i>Neonectria</i> species are found at Hubbard Brook Forest?
9:16	Minocha, Rakesh	Long-term trends in changes of foliar metabolism at Watershed 1 relative to the reference watershed in response to Ca-supplementation
9:26	Richardson, Andrew	Enhancement of photosynthetic uptake by diffuse radiation: Model-data fusion analysis for the Bartlett AmeriFlux tower
9:31	Murray, Georgia	Tools for tracking fall phenology in the White Mountains
9:41		INTRODUCTIONS
10:01		BREAK
Session II: Soil Biogeochemistry		
10:40	Johnson, Chris	Woody debris on Watershed 6, 1978-2016
10:50	Crowley, Katherine	How will recent changes in tree species composition affect long-term carbon and nitrogen cycling?
11:00	Fuss, Colin	Isotopic tracers help reveal how soil organic matter nitrogen storage changes during forest succession
11:10	Zhou, Zaixing	Modeling N cycling during succession after forest disturbance: An analysis of N mining and retention hypothesis
11:15	LoRusso, Nicholas	Temporal patterns of nitrogen retention in calcium treated and reference watersheds
11:25	Pardo, Linda	Variations and controls on streamwater nitrate concentrations
11:35	Lang, Ashley	The mycorrhizal dimension of niche complementarity in forest soils
11:40	Possinger, Angela	Soil organic matter stabilization via mineral interactions in Hubbard Brook hydrogeological units
11:50	Yang, Yang	Does climate change alter mercury cycling in northern hardwood forests?
11:55	Matt Vadeboncoeur	A 36-year record of changing soil C and N at Bald Mountain
12:05	Dutton, Emily	Updating the record of post-agricultural succession at Bald Mountain
12:10	Rodenhouse, Nick	Integrating biogeochemistry and biodiversity: Exploring the unknowns
12:20		DISCUSSION

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12:35	Announcements, Photo, Lunch	
Session III: Heterotrophs (including us)		
14:00	Woodall, Christopher	Forest service leadership update
14:05	Lavallee, Anthea	The HBRF: Who we are & what we do
14:10	Martin, Mary	Hubbard Brook information management report
14:20	Garlick, Sarah	What's new with WaterViz?
14:30	Diamond, Sol	Neurological evaluation of ecological data visualization
14:40	Lowe, Winsor	The spatial structure of eco-evolutionary interactions in Hubbard Brook streams
14:50	Hallworth, Michael	The cost of reproduction in a greening world
15:00	Filiberti, Emily	Is global change driving distributional shifts of birds breeding in the White Mountain National Forest?
15:05	Ralston, Jessica	Impact of nitrogen fertilization on habitat use by neotropical migrant song birds
15:10	Harris, Jenn	Creepy crawlies and climate change: How beetles in forest floor have changed since the 1970s
15:20	Christenson, Lynn	Update on wildlife camera survey
15:25	Studer, Liz	Above and belowground biodiversity: Understanding drivers of green and brown food web arthropod assemblages in a changing world
15:27	BREAK	
Session IV: Ice Storm Experiment		
16:00	Rustad, Lindsey	Why ice storms aren't cool: updates from the Hubbard Brook Ice Storm Experiment (I)
16:10	Campbell, John	Why ice storms aren't cool: updates from the Hubbard Brook Ice Storm Experiment (II)
16:20	Stoner, Anne	High resolution climate projections for ecological modeling
16:30	Burns, Simone	Soil solution DOC response to experimental ice storm
16:35	Fakhræi, Habibollah	Modeling impact of the ice storm of 1998 on nutrient loss from the south-facing watersheds at the Hubbard Brook Experimental Forest
16:45	Weitzman, Julie	Soil nitrogen responses to an ice storm manipulation experiment in a temperate forested ecosystem
16:50	Bhushan Animakshi	Ice Storm Experiment and the bats of Hubbard Brook
16:55	DISCUSSION	
18:00	Dinner and Barn Dance	

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Thursday, 13 July 2017		
8:00	Rustad, Lindsey	Announcements
Session V. Catchment Biogeochemistry		
8:05	Barton, Christopher	Scaling analysis of the temporal signal of the chemical concentration in precipitation input and stream output in Watershed 6
8:15	Lee, David	Quantifying solute transport in surface and subsurface water using passive flux meters
8:20	Bernhardt, Emily	Tighter cycling and leakier watersheds? Reconciling divergent findings on HBEF N cycling
8:25	Driscoll, Charles	Legacies of acid deposition
8:35	Bailey, Scott	Soil and human influences on the fate of plagioclase weathering products
8:45	Malcomb, Jacob	A catchment-based approach to examining acid deposition and forest water use efficiency
Session VI: Multiple Element Limitation		
8:50	Fisk, Melany	What is co-limitation, really?
9:00	Shan Shan	Soil enzyme activity indicates microbial P limitation
9:10	Fahey, Tim	Nitrogen, phosphorus, and fine roots
9:16	Li, Shiyi	Nitrogen, phosphorus, and soil respiration
9:22	Turnblacer, Trey	Hot or not? Rating beech bark disease
9:27	Hong, Daniel	Battle of the babies: Beech interference with sugar maple regeneration
9:32	Lasser, Gretchen	More about BBD: Will Gretchen find any <i>Neonectria</i> ?
9:33	Victoroff, Claudia	Will Claudia find any mushrooms by mid July?
9:34	Rice, Alex	Nitrogen, phosphorus, and sap flow. And calcium, too.
9:35	Ojo, Paul	Nitrogen suppresses microbial respiration
9:36	Haynes, Grace	The hitchhiker's guide to stem mapping
9:37	Morley, Maddy and Griffin Walsh	Phenology of leaf senescence and what have you
9:43	Young, Alex	How sun and shade leaves respond to N and P
9:48	Kristupaitis, Milda	Fake tasty treats in the canopy: Who pecked that?
9:50		DISCUSSION
10:00		BREAK
Session VII: Climate and Responses		
10:45	Green, Mark	Last year's soil heat flux patterns
10:55	Kelsey, Eric	Processes impacting the formation and evolution of a cold air pool in Hubbard Brook Valley
11:05	Groffman, Peter	Shooting at a moving target: Evaluating ecosystem response to extreme events in a changing world
11:15	Dickinson, Todd	Comparing multiple methods of measuring stream discharge within Hubbard Brook
11:25	Berton, Rouzbeh	The differences in hydrologic response of forested, sub-urban, and urban basins
11:35	Templer, Pamela	Effects of warmer growing season temperatures and a reduced winter snowpack on non-structural carbohydrates of northern hardwood forest trees

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11:45	Harrison, Jamie	Effects of warmer growing season soils and winter soil freeze/thaw cycles on water uptake, photosynthesis and water use efficiency
11:50	Schultz, Kyle	Effects of warmer growing season temperatures and a reduced winter snowpack on in situ net nitrification and mineralization rates in a northern hardwood forest
11:55	Asbjornsen, Heidi	Pushing ecological thresholds? Response of northern forests to the 2016 drought and a throughfall removal experiment
12:00		DISCUSSION
12:10	Rustad, Lindsey	Announcements
12:15		LUNCH