

# HUBBARD BROOK ECOSYSTEM STUDY 46<sup>th</sup> ANNUAL COOPERATORS' MEETING

**Tuesday, 7 JULY 2009**

8:15 Chris Eagar Welcome

**Session I: It happened at the Brook one day...**

**Moderator: Nat Cleavitt**

8:25 Nat Cleavitt Introduction

8:30 Herb Bormann

8:40 Ian Halm

8:50 Don Buso

9:00 Nat Cleavitt Wrap-up and call for stories

9:10 Introductions

**STRETCH**

**Session II: Heterotrophs**

**Moderator: Don Buso**

9:30 Mason Cline Correlates and consequences of breeding dispersal in the black-throated blue warbler

9:40 Sara Kaiser Effects of weather and climate on the mating pattern of a migratory bird

9:50 Christopher Tonra The role of breeding hormones in seasonal interactions in a Neotropical migrant songbird

10:00 Nicholas Rodenhouse Is the abundance of arthropods in the forests changing?

10:10 Erik Stange Can the nutrient dynamics of a northern hardwood forest explain interannual variation in lepidoptera community abundance?

10:20 Don Buso The bikini-cam incident and other attempts to capture the wild life at Hubbard Brook

**BREAK**

**Session III: Hydrology**

**Moderator: Scott Bailey**

11:00 Scott Bailey Shining a light into the black box – hydrogeology of Watershed Three

11:10 Sam Werner Landscape patterns of stream and soil trace gases in Watershed three

11:20 Kaitland Harvey / Maggie Zimmer  
Is there a riparian zone in headwater catchments at HBEF?  
Evidence from groundwater hydrology and soil morphology/chemistry

11:30 Bob McKane Modeling Hubbard Brook ecohydrologic processes: Stream discharge and chemistry initial results.

11:40 Beverley Wemple Forest influence on peak snow accumulation and snowmelt in the Hubbard Brook Experimental Forest, New Hampshire

11:50 Koji Tominaga Predicting future soil and stream chemistry using an ensemble of acidification models at Hubbard Brook

12:00 Amey Bailey Rejuvenating the Hubbard Brook sample archives

12:10 Chris Eagar Announcements

**LUNCH BREAK & PHOTO**

**Session IV: Biogeochemistry****Moderator: Chris Johnson**

- 1:30 Steve Kahl Defining 'recovery' of surface waters from acidic deposition
- 1:40 Charles Driscoll Critical loads of acidity at Hubbard Brook
- 1:50 Chris Barton Temporal scaling of dissolved oxygen concentration in lakes, rivers, and streams
- 2:00 Gene E. Likens Biogeochemical legacies of disturbance
- 2:10 Afshin Pourmokhtarian Could long-term CO<sub>2</sub> fertilization offset future effects of increases in temperature on soil and surface water chemistry at Hubbard Brook Experimental Forest?

**STRETCH**

- 2:30 Linda Pardo Does age matter? Patterns in  $\delta^{15}\text{N}$  in roots, stems, and leaves of seedlings and trees.
- 2:40 Tim Fahey Litter carbon and nitrogen: a double-labeling experiment
- 2:50 Chris Johnson Are "quantitative" soil pits still necessary at Hubbard Brook?
- 3:00 Steven Hamburg From digging quantitative pits to writing climate legislation
- 3:10 Chris Eagar Announcements

**6:00 Dinner and Barn Dance**

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**Wednesday, 8 JULY 2009**

- 8:25 Chris Eagar Announcements

**Session V: Vegetation****Moderator: John Battles**

- 8:30 John Battles Update: Tree population dynamics in Hubbard Brook Valley
- 8:40 David Peart Disease, regeneration and implications for the future of American beech
- 8:50 Gary Lovett Changes in vegetation and soil chemistry caused by beech bark disease
- 9:00 Michele Pruyn Water properties of yellow birch, *Betula alleghaniensis* along an elevation gradient on Mt. Kineo in the Hubbard Brook Experimental Forest
- 9:10 Pamela Templer Impacts of winter climate change on plant dynamics
- 9:20 Andrew Reinmann Effects of soil freezing on C and N fluxes from northern forests during snowmelt: A microcosm study

**STRETCH**

- 9:40 Carrie Rose Levine Quick but dirty: Can power coring replace soil pits?
- 9:50 Tyler Refsland Don't underestimate the young: Leaf production and root biomass
- 10:00 Ruth Yanai Multi-element limitation modeling predicts P limitation in young Hubbard Brook forests
- 10:10 Julian Jenkins County based carbon storage and radiative forcing for northeastern forests: Current and with changing climate

**BREAK**

**Session VI: Watershed One / Calcium****Moderator: Joel Blum**

10:40	Joel Blum	Changing foliar chemistry and throughfall chemistry in Watershed One
10:50	Youngil Cho	Changes in element fluxes in Watershed One
11:00	Colin Fuss	Changes in streamwater chemistry during storm events in Watershed Six and One
11:10	Peter Groffman	Soil pH and soil microbial activity
11:20	Rick Boyce	Effect of aluminum and calcium soil availability on chlorophyll fluorescence of red spruce and balsam fir at Hubbard Brook, Jeffers Brook, and Sleepers River
11:30	Ankit Balaria	Effect of Ca-treatment on the bioavailability of soil organic matter in the forest floor at Hubbard Brook Experimental Forest, New Hampshire
11:40	Nat Cleavitt	Sugar babies: causes of mortality and correlates to survival
11:50	Heidi Webb	Needs assessment of the website, databases, and other information sources related to the Hubbard Brook Ecosystem Study
12:00	Chris Eagar	Announcements

**LUNCH****POSTERS**

Jessica Ebert	The effects of watershed calcium addition on pH and ANC during storm events
Rae Melloh	Spatially continuous snow property interpolations for HBEF, a new approach
Jamie Shanley	Use of in situ sensors as proxies for stream DOC and mercury fluxes

**WORKING GROUP AND COMMITTEE MEETINGS****6 July 2009 (Monday)**

noon – 3:00 pm	Board of Trustees Meeting	(Sleeper)
3:30 pm – 5:30 pm	HBEF Tours	(Sleeper)
4:00 pm - 5:30 pm	Meeting with LTER investigators and Jim Collins, Robert S. Pierce Ecosystem Laboratory	
5:30 pm – 7:30 pm	HBRF annual reception and dinner	(Sleeper)

**7 July 2009 (Tuesday)**

8:15 am ~ 3:30 pm	Cooperators' Meeting Scientific Sessions
6:00 pm – late	HBRF sponsored dinner and barn dance

**8 July 2009 (Wednesday)**

8:25 am ~ noon	Cooperators' Meeting Scientific Sessions	
1:30 pm – 3:00 pm	Information Oversight Committee (IOC)	(Likens)
1:30 pm – ? pm	Brook Book planning meeting	(Cleavitt)
3:00 pm – 4:30 pm	Education Committee (EOC)	(A. Bailey)

**9 July 2009 (Thursday)**

8:30 am ~ 2:00 pm	Committee of Scientists (COS) meeting	(Fahey)
2:00 pm – 5:00 pm	HBES Scientific Coordinating Committee (SCC) Meeting	(Groffman)

**10 July 2009 (Friday)**

Open

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