

Draft Agenda for January Meeting of the HBES

Meeting is online via [Zoom](#)

Hubbard Brook Quarterly Project Meeting: Thursday January 7, 2021 (Day 1: morning)

Begin	End	Last name	Topic
10:00	10:04	Pam/Peter	Welcome to Lightning Talks
10:04	10:08	Ayres	Global change and the heterotrophs of Hubbard Brook
10:08	10:12	Battles	Measuring and monitoring canopy structure in Hubbard Brook Valley: New insights to old questions
10:12	10:16	Beier	A Virtual Reality Forest Visualization Toolkit for Public Engagement
10:16	10:20	Bernhardt	A vision for basin-wide stream ecology at Hubbard Brook
10:20	10:24	Bhatnagar	Understanding soil microbial ecology through long-term research at Hubbard Brook
10:24	10:28	Burchstead	Instream log tracking
10:28	10:32	Campbell	Measuring and monitoring canopy structure in Hubbard Brook Valley: New insights to old questions.
10:32	10:36	Chandler	Shifts in edaphic thermodynamics for seasonally snow-covered forest sites: A comparative analysis
10:36	10:40	Christenson	Monitoring large heterotrophs across Hubbard Brook
10:40	10:44	Cleavitt	Annual tree growth measures: the missing link to integration
10:44	10:48	Contosta	Exploring changing resilience at Hubbard Brook using novel analytical or experimental approaches
10:48	10:52	Fahey	Multiple Element Limitation in Northern Hardwood Ecosystems (MELNHE)
10:52	11:00	ALL	BREAK
11:00	11:04	Gannon	Developing data visualization and analysis tools for researchers and the public
11:04	11:08	Garlick	Can the Hubbard Brook LTER program be both discovery-driven and solutions-oriented
11:08	11:12	Goodale	Have plant N demand and nitrogen gas fluxes changed at Hubbard Brook?
11:12	11:16	Green	Pursuing drivers of recent increases in evapotranspiration
11:16	11:20	Green	Quantifying total P in streams
11:20	11:24	Groffman	The changing carbon cycle
11:24	11:28	Hallworth	Foliar N - the missing link between biogeochemistry, population dynamics and biodiversity
11:28	11:32	Kaiser	Effects of a lengthening green season on breeding strategies of a migratory bird
11:32	11:36	Keeton	Future Forest-Future Streams (FUFOR) project
11:36	11:40	Kelsey	Do Horizontal Fluxes Explain the Energy and Water Budget Gaps
11:40	11:44	Lavalle	The Role of the HBRF in Outreach, Education, and Community Relations
11:44	11:48	Low	Ecology and Evolution in an Era of Increasing Climate Variability
11:48	11:52	McGuire	Implications on the limits and dynamics of temporary and perennial streams at Hubbard Brook
11:52	11:56	Ollinger	Does Hubbard Brook need a new model of the nitrogen cycle
11:56	12:30	ALL	LUNCH in randomly assigned break-out rooms

Hubbard Brook Quarterly Project Meeting: Thursday January 7, 2021 (Day 1: afternoon)

Begin	End	Last name	Topic
12:30	1:00	Goodale	COS business meeting
1:00	1:10	Pardo	Brief update on DEI activities
1:10	1:27	Break-out #1	Select topic from:
			1. Increasing social interaction
			2. Inclusive recruiting for this field season
			3. Increasing diversity in PIs (better language) CLG
			4. Indigenous knowledge—ways to build a regional coalition
			5. Creating a mechanism for anonymous feedback
			6. Code of Conduct
			7. Intentional Community Building
1:27	1:30	Pardo	Introduction to Break-out #2
1:30	1:40	Break-out #2	Brainstorm: Increasing scientific interaction at HBES. Random room assignment
1:40	1:50	Pardo (facilitator)	Report from Break-out #2
1:50	2:00	Pardo (facilitator)	Prioritizing next steps

Friday January 8, 2021 (Day 2: morning)

Meeting is online via [Zoom](#)

Building an N Budget (Moderator: Linda Pardo)

<i>Time</i>	<i>Topic</i>	<i>#</i>	<i>Calculations and Methods</i>	<i>Presenter</i>
10:00 to 12:00	Soil pools	1	Total N Pools labile microbial* readily mineralizable	Chris Johnson
		2	Cold water Hot water extractions	Chris Johnson
		3	N in weathered rocks	Chris Johnson
		4	(More from Chris)	Chris Johnson
	Soil fluxes	5	Annual flux from N min and Nitrif in the field (buried bag) & potentials from lab incubations	Groffman
		6	Depth profiles	Christy Goodale
			Recent gross and net N min Scaled across depth**	Christy Goodale
		7	Summing W3 extractions (lab incubations) by horizon * HPU	Pardo
		8	Resin N data	Fisk
		9	Gaseous N flux	Groffman
	Internal	10	15N tracer	Fuss
	Stream fluxes	11	Snow & winter export	Campbell
		12	winter natural abundance	Campbell
		13	Stream flux in small Disturbances-all WS	Pardo
		14	N pool transferred from stream to forest (Main HB)	Burchsted
		15	Spatial patterns of high DOC	Green
	Soil solution	16	Calculate fluxes by HPU and scale up to catchment	Driscoll/LoRusso
		17	Groundwater N pool Snapshots in time	Strahm
	Plant	18	Forest n uptake estimate	Yanai
		19	Foliar pools + resorption	Hong
20		Moose N budget?	Christenson?	
12:00 – 12:30	LUNCH in randomly assigned break-out rooms			

Hubbard Brook Quarterly Project Meeting: Friday January 8, 2021 (Day 2: afternoon)

Begin	End	Last name	Topic
12:30	12:34	Pardo	Linking long-term stream chemistry to a high-resolution solution chemistry network: tools for predicting catchment-scale response to climate change
12:34	12:38	Pardo	Using the LTER renewal to shape the HB of the future - diversity, inclusion, and developing new leaders
12:38	12:42	Richardson	Phenology, growing season length, and forest productivity
12:42	12:46	Rosi	Sustaining the long-term precipitation and stream chemistry and stream ecology records of HB watersheds
12:46	12:50	Rustad	Following Canopy Recovery at the HB Ice Storm Experiment: Watching and Waiting for a Midlife Crisis?
12:50	12:54	Rustad	The HBR ArtSci Program: Blending Art and Science to Address Socio-Ecological Issues of the 21st Century
12:54	12:58	Templer	Climate change across seasons (CCASE) experiment and nitrogen oligotrophication/winter climate change
12:58	1:02	Vadeboncoeur	Sapflow and tree-ring isotope measurements to understand recent changes in small-watershed evapotranspiration
1:02	1:04	Yanai	Quantifying Uncertainty in Ecosystem Studies (QUEST) and ecosystem P budgets with uncertainty
1:04	1:08	Young	Luring the NEON AOP to Hubbard Brook with the assignable asset program
1:08	2:00	Peter/Pam	DISCUSSION