Hubbard Brook Quarterly Project Meeting: Thursday January 7, 2021 (Day 1: Morning) Meeting is online via **Zoom**

Renewal Proposal Lightning Talks: Round 1					
Begin	End	Presenter	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	Burchstad	Instream log tracking		
10:28	10:32	Campbell	Forest response to wind disturbance: The next big climate change experiment?		
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	Driscoll	Analysis of factors driving long-term biogeochemical patterns in soil and streamwater at HBEF		
10:52	10:56	Fahey	Multiple Element Limitation in Northern Hardwood Ecosystems (MELNHE)		
10:56	11:04	ALL	BREAK		
11:04	11:08	Gannon	Developing data visualization and analysis tools for researchers and the public		
11:08	11:12	Garlick	Can the Hubbard Brook LTER program be both discovery-driven and solutions-oriented		
11:12	11:16	Goodale	Have plant N demand and nitrogen gas fluxes changed at Hubbard Brook?		
11:16	11:20	Green	Pursuing drivers of recent increases in evapotranspiration		
11:20	11:24	Green	Quantifying total P in streams		
11:24	11:28	Groffman	The changing carbon cycle		
11:28	11:32	Hallworth	Foliar N - the missing link between biogeochemistry, population dynamics and biodiversity		
11:32	11:36	Kaiser	Effects of a lengthening green season on breeding strategies of a migratory bird		
11:36	11:40	Keeton	Future Forest-Future Streams (FUFOR) project		
11:40	11:44	Kelsey	Do Horizontal Fluxes Explain the Energy and Water Budget Gaps		
11:44	11:48	Lavallee	The Role of the HBRF in Outreach, Education, and Community Relations		
11:48	11:52	Lowe	Ecology and Evolution in an Era of Increasing Climate Variability		
11:52	11:56	McGuire	Implications on the limits and dynamics of temporary and perennial streams at Hubbard Brook		
11:56	12:00	Ollinger	Does Hubbard Brook need a new model of the nitrogen cycle		
12:00	12:30	ALL	LUNCH in randomly assigned break-out rooms		

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

Begin	End	Presenter	Topic		
12:30	1:00	Goodale	COS business meeting		
Diversity, Ed	Diversity, Equity & Inclusion Update				
1:00	1:10	Pardo	Brief update on DEI activities		
1:10	1:12	Rubenstein	Intro to Break-out groups		
1:12	1:27	Break-out #1	Select topic from:		
			1. Increasing social interaction		
			2. Inclusive recruiting for this field season		
			3. Inclusive recruiting of scientists		
			4. Indigenous knowledge—ways to build a regional coalition		
			5. Creating a mechanism for anonymous feedback		
			6. Code of Conduct		
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	Lavallee (facilitator)	Prioritizing next steps		

Hubbard Brook Quarterly Project Meeting: Thursday January 8, 2021 (Day 2: Morning) Meeting is online via **Zoom**

How big	How big is the Available N Pool? (Moderator: Linda Pardo)				
Begin	End	Presenter	Topic		
10:00	10:10	Linda Pardo	Introduction		
		Estimates	of the available N pool size		
		C. Johnson	Soil pools		
10:10		Groffman, Goodale, Pardo, Fisk	Soil fluxes		
	11:15	Fuss	Internal fluxes		
	11.13	Campbell, Pardo, Burchsted, Green	Stream fluxes		
		Driscoll, LoRusso, Strahm	Soil Solution		
		Yanai, Hong, Goodale	Plant		
11:15	11:20	Linda Pardo	Summary of key findings		
11:20	11:25	Mark Green	Considering a window of influence for the available N pool		
11:25	11:30	Linda Pardo	Promising Next steps		
11:30	11:35	Linda Pardo	N synthesis current and future		
11:35	12:00	Discussion	Priorities for LTER renewal		
12:00	12:30	LUNCH in randomly assigned break-out ro	ooms		

Hubbard Brook Quarterly Project Meeting: Friday January 8, 2021 (Day 2: afternoon) Meeting is online via **Zoom**

Renewa	Renewal Proposal Lightning Talks: Round 2				
Begin	End	Presenter	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	Groffman	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		