December 7th, 2023

HUBBARD BROOK MONTHLY November 2023 issue

Recent Publications

Green, MB, LH Pardo, JL Campbell, E Rosi, ES Bernhardt, CT Driscoll, TJ Fahey, N LoRusso, J Matthes, and PH Templer. 2023. Combination of factors rather than single disturbance drives perturbation of the nitrogen cycle in a temperate forest. Biogeochemistry.

https://doi.org/10.1007/s10533-023-01105-z

Kaiser, SA, KC Grabenstein, TS Sillett, and MS Webster. 2023. No evidence of sex ratio manipulation by black-throated blue warblers in response to food availability. Behavioral Ecology and Sociobiology. https://doi.org/10.1007/s00265-023-03401-v

Lewis, WB, RJ Cooper, MT Hallworth, AR Brunner, and TS Sillett. 2023. Light-level geolocation reveals moderate levels of migratory connectivity for declining and stable populations of Black-throated Blue Warblers (Setophaga caerulescens). Avian Conservation and Ecology.

https://doi.org/10.5751/ACE-02526-180212

Hubbard Brook in the News

As world warms, researchers see shift in New Hampshire's seasons WMUR

Extending Ecology: Making meaning with the White Mountains Oika

Field Trip to the Museum of the White Mountains The Clock, a Plymouth State University Student Paper

The "APE" at Hubbard Brook Garnas Lab UNH

Education and Outreach

From October 14 to November 18, Lindsey Rustad helped facilitate Project INSPIRE, an online course designed to increase the STEM potential of individuals in middle and high school who read Braille. Project INSPIRE collaborated with the USDA Forest Service to offer the WaterViz STEAM Program: A Creative Approach to Understanding Water Cycle & Climate Data. In the course, students with visual impairments had the opportunity to learn about how a team of artists, musicians, and scientists use animated digital art and musical sonification to represent real-time water cycle data from the Hubbard Brook Experimental Forest. They teamed up with students from around the country to analyze, interpret, and build 3-D scale models of real scientific data, and created their own data representation to present at the Water Showcase. The course was taught by Tina Herzberg and Mary Robbins, with guest lectures and advice from Lindsey Rustad. For more information, see: Free Online Program for Braille Readers in Middle and High School – Paths to Literacy. Project Inspire is funded by the US Department of Education.

Lindsey Rustad and co-authors (Marty Quinn, Xavier Cortada, Mary Martin, Mary Robbins, Tina Herzberg and the WaterViz Team) showcased the WaterViz as a kickoff for a special session of "Music About, For, and From Soils" at the Soil Science Society of America Meetings, October 30, 2023 (Talk title: Waterviz: A Data-Derived Musical Symphony and Visualization of the Water Cycle). They also highlighted the WaterViz Lesson Plans in a talk on "Integrating Science, Art & Music to Understand Water Cycle Science" in a second session on "Using Music and Other Art in Soils Education and Outreach". Thanks to everyone who has helped make the WaterViz a success!

The exhibit "Extending Ecology: Making meaning with the White Mountains" will be on display at the Museum of the White Mountains until December 15. Admission is free.

Announcements

NEW Job Posting:

The Hubbard Brook Research Foundation is accepting applications for a new Director of Communications. You can learn more about the position and share with your networks <u>here</u>.

2024 Youth Forum on Climate Action and Clean Energy

January 18, 2024 in Concord, NH

Days before the NH presidential primary, students and public figures will explore policies and solutions for building a robust and resilient climate economy.

The Hubbard Brook Research Foundation, the League of Conservation Voters, and the Irving Institute for Energy & Society at Dartmouth College will host a youth forum at the intersection of public policy, climate action, and the clean energy economy. Through this public in-person event, NH students will engage with policy and corporate leaders, U.S. presidential candidates, celebrated authors and actors, philanthropists, and entrepreneurs to explore opportunities for building an economically strong and environmentally secure future.

Contact <u>Anthea Lavallee</u> for more information, and stay tuned for opportunities to participate or to attend.

News from the LTER Network Office:

Join the NEW LTER Community Forum! Filtering through information about the 28 LTER sites can be overwhelming when you're looking for people, research methods, and experiences relevant to your project or idea. This new <u>forum</u> can help you navigate the wealth of knowledge and connections available to you in the LTER Network. Register to connect with your peers from other sites!

LTER Community Calls are another new initiative from the LTER Network starting in January 2024. These open discussions will focus on community-proposed topics. Learn more or propose a topic <u>here</u>.

Upcoming Quarterly Project Meetings:

The **Winter** Hubbard Brook Quarterly Project Meeting will take place January 3-4, 2024, **in person** at the Environmental Cooperative at the <u>Vassar Barns</u> (50 Vassar Farm Lane, Poughkeepsie NY 12603 - the same venue as last January.)

Day 1 of the January meeting (Wednesday, January 3rd) will run 1:00 - 5:00 pm, will feature the topic **LTER Proposal Process and Reviews**, and will be co-led by Peter Groffman and Pam Templer.

Day 2 (Thursday, January 4th) will run 9:00 am - 3:00 pm, will feature the topic "**Preparing** for **Beech Leaf Disease**" and will be co-led by Nat Cleavitt and John Campbell.

Click here for a list of local hotels near Vassar College!

The **Spring** Quarterly Project Meeting will be held virtually on Wednesday, April10, 2024, from 10am to 3pm, with a possible earlier end time. The topic will be Carbon (with more details to come) and the the organizers will be Lynn Christenson, Christy Goodale, and Pam Templer.

Dayna's DEI Digest

The Hubbard Brook Guidelines & Expectation Checklist: A tool for improving communication

Dayna De La Cruz (She/They)

Community Relations Specialist

You heard about the The Hubbard Brook Hiring Checklist in last month's piece, but we have more! Introducing the Hubbard Brook Guidelines & Expectation Checklist.

While the Hiring Checklist is focused on promoting communication during the hiring process, the Hubbard Brook Guidelines & Expectation Checklist is meant to continue this communication into the field season. On site, each field crew tends to have its own "culture." And we would like to encourage crews to discuss values and standards at the beginning of the season in order to set guidelines for behavior and interactions and to clarify expectations across the community.

This tool will be provided to field crews and individuals to facilitate communication about expectations and help prevent or mitigate friction within field crews and among residents. This includes topics relating to responsibility clarity, power dynamics, living details or anything else related to communal living and work/life balance. There are two sections to this tool: The Housing Dynamics and the Work Dynamics. Some of the checklist questions include:

Housing

- What are the expectations of the living space? What boundaries will we implement? What are some house rules we would like to enforce?
- How are chores divided? What's the plan with cooking/meals? When are quiet hours? Should there be a limit on discussions of work in the living space (i.e., limited to certain times or upon asking first, etc.)

Work/Crew

- What are some general goals of the season (academic, work, personal)?
- How often will we check in about our project? How often will we check in about our field experience on site? About our group dynamics? Where will these check-ins happen?
- What to do if we have a grievance? What if I would like to stay anonymous?

We will encourage PIs/crew leaders to send these completed checklists to the Community Relations Specialist (that's me!) prior to or upon arrival to the site so that they can be discussed during the first house meeting. This tool is still in its development stage and we hope it evolves into a helpful hand that increases communication across our community. Feel free to provide any feedback to <u>ddelacruz@hubbardbrookfoundation.org</u>.

Shout-outs

Lindsey Rustad received the USDA Forest Serve R&D Gifford Pinchot Award for Excellence in Interpretation and Conservation Education at an awards ceremony in Little Rock, Arkansas on November 8, 2023. Lindsey gives a shout out to all the folks at Hubbard Brook because it takes a village and this award is really for all of us!

Hubbard Brook Data Report

This is a great time to make an end-of-year check to confirm that all of your Hubbard Brook related publications are in our bibliography. It will be easiest to check this by looking at your profile page where your publications will be listed at the bottom (<u>https://hubbardbrook.org/people</u>). The best way to help us keep the bibliography current is to respond to the Call for Hubbard Brook Monthly updates. Once we know about a publication it is added to the Zotero bibliography, tagged for each author, and should show up on the appropriate profile pages.

The datasets listed below are either new or updated and have been submitted to the Environmental Data Initiative Repository (EDI). If you are collecting new data at Hubbard Brook, please reach out to the Information Manager (<u>mary.martin@unh.edu</u>) - by beginning this conversation early in the data lifecycle we can plan a smooth path to data publication at the completion of your project.

Fisk, M. 2023. Resin-available nutrients in the O horizon in the MELNHE study at Hubbard Brook Experimental Forest, Bartlett Experimental Forest and Jeffers Brook, central NH

USA, 2011- ongoing ver 2. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/3b4a83378686decca2c2d5c1f0709444</u> (Accessed 2023-12-04).

Fisk, M. 2023. Multiple Element Limitation in Northeast Hardwood Ecosystems (MELNHE): Net N mineralization at Hubbard Brook Experimental Forest, Bartlett Experimental Forest and Jeffers Brook, central NH USA, 2009 - 2017 ver 4. Environmental Data

Initiative. <u>https://doi.org/10.6073/pasta/826e44994e01aba173fae30115478584</u> (Accessed 2023-12-04).

Kaiser, S.A., K.C. Grabenstein, T.S. Sillett, and M.S. Webster. 2023. Data and code from "No evidence of sex ratio manipulation by black-throated blue warblers in response to food availability" Kaiser et al. 2023 Behavioral Ecology and Sociobiology ver 1. Environmental Data

Initiative. <u>https://doi.org/10.6073/pasta/37bcca63dea73a0b1386c7a134dedc6b</u> (Accessed 2023-12-04).

Marinos, R.E. and E. Bernhardt. 2023. Hubbard Brook Experimental Forest: Soil Acid-Base Properties and Microbial Activity, Watershed 1 and West of Watershed 6 (2015-2016) ver 1. Environmental Data

Initiative. <u>https://doi.org/10.6073/pasta/67c4e89f4c195029e3ff6062366143ba</u> (Accessed 2023-12-04).

Hubbard Brook Watershed Ecosystem Record (HBWatER). 2023. Hubbard Brook Experimental Forest: Mirror Lake Ice Cover 1968 - ongoing ver 8. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/6a639854709c27e423fa5bc99f0c6180</u> (Accessed 2023-12-04).

Thanks for reading!

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