HUBBARD BROOK MONTHLY July 2021 issue

Recent Publications

Besley, JC, S Garlick, KF Lambert, LA Tiffany. 2021. The role of communication professionals in fostering a culture of public engagement. *International Journal of Science Education*.

https://doi.org/10.1080/21548455.2021.1943763

LoRusso, NA, SW Bailey, T Zeng, M Montesdeoca, CT Driscoll. 2021. Dissolved Organic Matter Dynamics in Reference and Calcium Silicate-Treated Watersheds at Hubbard Brook Experimental Forest, NH, USA. *JGR Biogeosciences*. https://doi.org/10.1029/2021JG006352

Wentzell-Brehme, S. 2021. Factors influencing red oak (*Quercus rubra*) seedling survival at the northern edge of the species range. *Honors thesis, Wellesley College*. https://repository.wellesley.edu/islandora/object/ir%3A1638/datastream/PDF/view

If your publication is missing from this list, please let us know: sciencelinks@hubbardbrookfoundation.org

Hubbard Brook in the News

N.H. Summer Weather Swings Strain Ecosystems And Animals New Hampshire Public Radio

My Career Path Following Water from the Mountain to the Sea and Across an Ocean* by Jeeban Panthi, University of Rhode Island
Stories in Science

*This piece is an outreach project by a participant in HBRF's new *Young Voices of Science* program.

Outreach and Education Update

The full-length version of Dayna De La Cruz's video "Imposter Syndrome in the Sciences" is now available on YouTube. Dayna created the video while participating in HBRF's *Young Voices of Science* program.

https://www.youtube.com/watch?v=TAAFQtSjZEI

Tim Fahey participated in a webinar for New York State legislators: "The Science Behind Forest Carbon Sequestration: Nature-Based Solutions to Climate Change." The recording is available at the following link:

https://www.youtube.com/watch?v=GC54Y8zXXI4

Rebecca Schultz, Hubbard Brook's 2020 artist in residence, is exhibiting her work inspired by studies of Hubbard Brook bedrock and its role in supporting the ecosystem at the Patricia Ladd Carega Gallery in Center Sandwich, NH. Rebecca gave an artist's talk at the opening reception on July 10; Jenny Bower and Scott Bailey also spoke. https://www.patricialaddcaregagallery.com/rebecca-schultz.html

On July 15, a crew from the CBS show "Mission Unstoppable" filmed a segment at Hubbard Brook highlighting Lindsey Rustad's work and women in STEM. Brendan Leonardi, Amey Bailey, Sam Tower, and Ian Halm were all on site to help make it happen. The episode will air in the fall—stay tuned for an exact date and time!

Lindsey Rustad participated in "Story Collider Presents: Women Who Adventure, with IF/THEN Ambassadors" on July 22, sharing a personal story about the Ice Storm Experiment at Hubbard Brook.

https://www.storycollider.org/shows/2021/7/22/ifthen-adventure

Lindsey Rustad led a virtual job shadowing event for the Girl Scouts of Northeast Texas on July 22.

Brendan Leonardi hosted a group from St. Anselm College's summer program for a tour of Hubbard Brook on July 22. The program is designed to help prepare first generation college students and those from diverse backgrounds to college life through a three-week summer course.

Shout-outs!

Geoff Wilson gives a shout-out to **Matt Ayres** for his frequent presence on site at Hubbard Brook this summer and invaluable interactions with the students and field crews.

Geoff Wilson gives a shout-out to **Linda Pardo** for both taking on the heroic organization of the archives and helming the DEI committee (and also being around the site so much this summer).

Lindsey Rustad gives a shout-out to USFS summer intern **Samantha Tower** "for overcoming her nervousness in front of a camera and appearing with me in an upcoming episode of Mission Unstoppable highlighting women in STEM! And thanks to **Amey Bailey** and **Brendan Leonardi** for traipsing along after us all day, offering encouragement and helping us show off all the cool science we do here at HBEF!"

Announcements

Emerald Ash Borer has been <u>found at Hubbard Brook</u> (thanks to Cornell student John Deitsch's sharp eyes and excellent field work). Kyle Lombard, Bill Davidson, and Jeff Garnas will be visiting Hubbard Brook on Tuesday, August 10 at 10am to see some ash trees and consider the possibility of experimentally protecting selected groves. Anyone is welcome to join—meet in the parking lot above the headquarters building. Contact Matt Ayres for more information: Matthew.P.Ayres@dartmouth.edu.

In case you missed it, recordings of the third annual Moss Storytelling Hour and the inaugural Hubbard Brook Community Showcase (aka talent show) are available on YouTube at the following links.

The Moss:

https://www.youtube.com/watch?v=ga6uUaBbPz0

Community Showcase:

https://www.youtube.com/watch?v=uhYSgcpBA4k&t=4s

Hubbard Brook Data Report

We continue to add new data to the Hubbard Brook Data Catalog through submissions to the Environmental Data Initiative Repository. In addition to completely new datasets, we also update or many long-term datasets (some date back to the mid 1950s). You will find examples of both below.

For questions about Hubbard Brook data, please contact: nina.lany@usda.gov – for questions about data collected by the US Forest Service mary.martin@unh.edu – for questions and instructions on submitting your data to the repository.

This recent release on EDI is a reconfiguration of earlier Hubbard Brook snow and frost data. In this new format, snow depth, snow water content and frost depth are all merged into one single data table, and a new table contains snowcourse coordinates and additional information.

USDA Forest Service, Northern Research Station. 2021. Hubbard Brook Experimental Forest: Weekly Snow and Frost Measurements, 1955 - present ver 16. Environmental Data Initiative. https://doi.org/10.6073/pasta/f448b4b563d3f59b2058291459ce5926.

The following are new datasets submitted to EDI.

Venterea, R., G. Lovett, and P. Groffman. 2021. Hubbard Brook Experimental Forest: Landscape scale (valley-wide) soil carbon and nitrogen cycling data ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/bd97ffb0294fc844cd0a09df95038044.

Johnson, A.H. and C.E. Johnson. 2021. Hubbard Brook Experimental Forest: Soil Profile Maps and Horizon Thicknesses on Watershed 5, 1983-1998 ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/64db0cd6d007ca9c111b9e0eb1b71738.

Minocha, R., M. Blagden, J.L. Harrison, R. Sanders-DeMott, S. Long, and P.H. Templer. 2021. Climate Change Across Seasons Experiment (CCASE) at the Hubbard Brook Experimental Forest; concentrations of foliar metabolites: polyamines, amino acids, chlorophyll, carotenoids, soluble proteins, soluble elements, sugars, and total nitrogen and carbon in red maple (Acer rubrum) trees. ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/f1c686538b00ca5a42f748dfe9ec2d0d.

Bailey, S.W., J.P. Gannon, K.J. McGuire, and L.H. Pardo. 2021. Hubbard Brook Experimental Forest: Watershed 3 Subsurface Water Chemistry ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/ed3c561b4a15364bf9172f2cc7d7911c.

Fahey, T.J., R.D. Yanai, S. Li, and T. Mann. 2021. Multiple Element Limitation in Northern Hardwood Experiment (MELNHE): Soil respiration at Hubbard Brook Experimental Forest, Bartlett Experimental Forest and Jeffers Brook, central NH USA, 2008 - present ver 2. Environmental Data Initiative.

https://doi.org/10.6073/pasta/eb37cd72ccaa3e9197c461f0c1c734eb.

Thanks for reading!