HUBBARD BROOK MONTHLY March 2022 issue

Recent Publications

Bryant, AR, CR Gabor, LK Swartz, R Wagner, MM Cochrane, WH Lowe. 2022. Differences in corticosterone release rates of larval spring salamanders (*Gyrinophilus porphyriticus*) in response to native fish presence. Biology. https://doi.org/10.3390/biology11040484

Doser, JW, W Leuenberger, TS Sillett, MT Hallworth, EF Zipkin. 2022. Integrated community occupancy models: A framework to assess occurrence and biodiversity dynamics using multiple data sources. Methods in Ecology and Evolution. https://doi.org/10.1111/2041-210X.13811

Fahey, TJ, NL Cleavitt, JJ Battles. 2022. Long term variation of leaf abundance in a northern hardwood forest. Ecological Indicators. https://doi.org/10.1016/j.ecolind.2022.108746

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

Hubbard Brook in the News

While you were shoveling the driveway they were shoveling in the woods – for science! Concord Monitor

Windham woman honored in national STEM exhibit News Center Maine

Forest Service STEM innovator depicted in Smithsonian's Women's Futures Month exhibit US Forest Service

Outreach and Education Update

Lindsey Rustad was honored in an IF/THEN Exhibit in Washington D.C. during March for Women's History Month. The exhibit featured 120 statues of women in STEM, with their personal stories linked by QR code near each stature. Read more here.

On Thursday, March 24, a panel of Hubbard Brook scientists engaged with the British Consulate General in Boston and her colleagues in the UK on the topics of climate change, carbon markets, and the benefits of working within a large LTER system. We look forward to further collaboration with UK researchers.

Sarah Garlick, John Besley, and Anthony Dudo (University of Texas) led a workshop at the national Science Talk conference that took place March 23-25 called 'Being more Strategic in Science Communication: A Social Scientific Approach to Effective Public Engagement'

On Friday, March 25, Nat Cleavitt was interviewed for the NHPR program Outside/In to answer a listener question: 'Does walking on moss damage it in any way?' Nat sends a shout-out to John Campbell for referring her to the show.

On March 30, Lindsey Rustad gave a talk titled "WaterViz: the Confluence of Science, Art and Music" at the Nature of Cities Festival.

Shout-Outs

Nat gives a shout-out to Peter and Pam for, in her words, 'getting the LTER renewal proposal submitted and the amazing figure artwork therein'

Lindsey gives a shout-out to the HBNO shoveling team, who, in her words, 'spent several days moving mountains of snow around plots in the deep dark of winter to make the HBNO experiment a success! You folks are truly the 'backbone' and 'strength' of our project!'

Announcements

The next Hubbard Brook Quarterly Project Meeting will be held on April 13 from 10am to 3pm ET. The topic is Soil Respiration - CO2 Fluxes from Soil.

NSF's <u>NEON</u> is looking for members for its Scientific Technical Advisory Council (STEAC). <u>Here</u> is a link to the nomination form. Self-nominations are accepted.

The following proposals for new research at Hubbard Brook are currently under consideration by the Research Approval Committee:

- Phenotyping functional hydraulic traits across NH (Vadeboncoeur)
- Canopy phenology and litter decomposition monitoring at the APE plots (Vadeboncoeur)
- Salvage dendrochronology of white ash across the Hubbard Brook valley (Vadeboncoeur)
- Evaluation of Soil Erosion in Small Scale Watersheds using 239 + 240Pu, 7Be, and 210Pb as Soil Erosion Tracers (de Castro Portes)

The Forest Ecosystem Monitoring Cooperative (FEMC) program is seeking 9-12 undergraduate field technicians for Summer 2022. Students will conduct surveys for the Forest Health Monitoring (FHM) program. Please share with your network: https://www.uvm.edu/femc/attachments/project/999/

Hubbard Brook Data Report

We continue to have a steady stream of data submitted to the Environmental Data Initiative Repository (EDI; https://portal.edirepository.org) – the list below contains both new datasets and updates to Hubbard Brook's core long-term data. With new data collections about to start for this field season, you may find some helpful material on the DataONE Data Management Skillbuilding Hub (https://dataoneorg.github.io/Education/). You will find great tips under the 'Collect' and 'Describe' lessons that will make your eventual data submission to EDI a breeze!

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, instructions, and assistance in submitting your data to the repository.

New datasets:

USDA Forest Service, Northern Research Station. 2022. Hubbard Brook Experimental Forest: 15 Minute Wind Speed and Direction Measurements, 2012 – present ver 1. Environmental Data Initiative.

 $\frac{https://doi.org/10.6073/pasta/94980cedbcc81ac86b6d008a89b86aef}{(Accessed~2022-04-05)}.$

USDA Forest Service, Northern Research Station. 2022. Hubbard Brook Experimental Forest: Watershed 4 Vegetation Inventory ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/450a271f6e408d777c377460fae272d9 (Accessed 2022-04-05).

Yanai, R.D., M. Fisk, and T.J. Fahey. 2022. Multiple Element Limitation in Northeast Hardwood Ecosystems (MELNHE): Project description, plot characteristics and design ver 1. Environmental Data Initiative.

https://doi.org/10.6073/pasta/bcfc628d26e78b3dff648c34a33da1a3 (Accessed 2022-04-05).

Fisk, M.C., R.D. Yanai, and T.J. Fahey. 2022. Tree DBH response to nitrogen and phosphorus fertilization in the MELNHE study, Hubbard Brook Experimental Forest, Bartlett Experimental Forest, and Jeffers Brook ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/377b1fd44bd88a58e9654ab207e50706 (Accessed 2022-04-05).

Fisk, M.C., R.D. Yanai, S.D. Hong, C.R. See, and S. Goswami. 2022. Litter chemistry and masses for the MELNHE NxP fertilization experiment ver 1. Environmental Data Initiative. https://doi.org/10.6073/pasta/8b2975a3a02cbcfb1b0a12ac954576d4 (Accessed 2022-04-05).

Updated datasets:

USDA Forest Service, Northern Research Station. 2022. Hubbard Brook Experimental Forest (USDA Forest Service): Wind Speed and Wind Direction Measurements, 1965 - present ver 9. Environmental Data Initiative.

https://doi.org/10.6073/pasta/61b16218902a3ae764a3179c383132e0 (Accessed 2022-04-05).

Holmes, R.T., N.L. Rodenhouse, and M.T. Hallworth. 2022. Bird Abundances at the Hubbard Brook Experimental Forest (1969-present) and on three replicate plots (1986-2000) in the White Mountain National Forest ver 8. Environmental Data Initiative. https://doi.org/10.6073/pasta/6422a72893616ce9020086de5a5714cd (Accessed 2022-04-05).

Hallworth, M.T., S.A. Kaiser, S. Sillett, M.S. Webster, R.T. Holmes, and N.L. Rodenhouse. 2022. Black-throated Blue Warbler capture histories, Hubbard Brook Experimental Forest ver 5. Environmental Data Initiative.

https://doi.org/10.6073/pasta/d4137fae50280b91d95c9fc099f7ccd7 (Accessed 2022-04-05).

Hallworth, M.T., S.A. Kaiser, S. Sillett, M.S. Webster, R.T. Holmes, and N.L. Rodenhouse. 2022. Counts of potential nest predators from Black-throated Blue Warbler territories, Hubbard Brook Experimental Forest, 1997 – 2019 ver 5. Environmental Data Initiative. https://doi.org/10.6073/pasta/af6ac21436f2e0f080f987c4ed56e2f8 (Accessed 2022-04-05).

Thanks for reading!