

HUBBARD BROOK MONTHLY December 2021 issue

Recent Publications

Hall, RO, S Fiske. 2021. Ecoregion 5.3.1 Northern Appalachian and Atlantic Maritime Highlands: Hubbard Brook Experimental Forest, New Hampshire, *in* Ryan, DF, ed., Biological responses to stream nutrients: a synthesis of science from experimental forests and ranges. Gen. Tech. Rep. PNW-GTR-981. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 522 p.
<https://www.fs.usda.gov/pnw/publications/biological-responses-stream-nutrients-synthesis-science-experimental-forests-and-ranges>

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

Hubbard Brook in the News

The Chicago Tribune featured Hubbard Brook research on snowpack decline in a [recent article](#) titled "How climate change impacts extreme weather across America".

New mural at Hubbard Brook Experimental Forest part of project to integrate art, science
[Inside the Forest Service](#)

Outreach and Education Update

Matt Ayres and Sarah Garlick led a town hall meeting on December 7 to discuss a proposed ash protection experiment at Hubbard Brook. Please [email Matt Ayres](#) if you would like more information.

Sarah Garlick co-led a workshop at the Forest Ecosystem Monitoring Cooperative annual meeting on December 16 with Pia Ruisi-Besares about the regional impacts of browse on forest regeneration. This was a follow-up to the [2021 Hubbard Brook Roundtable: Regeneration of Northern Hardwoods](#)

Lindsey Rustad authored an article for the USDA Climate Hubs on the impacts of insects on northern forests, and how scientists at Hubbard Brook are poised to study those changes:
[Insects Change the Story | USDA Climate Hubs](#)

Hanna Kirchmeir successfully defended her Master's thesis, *Remnant old-growth trees enhance large woody debris loading in low-order streams of northern hardwood forests*, at the University of Vienna, Austria on November 19. Committee members included Bill Keeton (U. Vermont), Karl Hülber (U. Vienna), Stefan Dullinger (U. Vienna).

Save the Date

The next Hubbard Brook Quarterly Project Meeting is scheduled for January 5-6, 2022, from 10am to 2pm via Zoom.

Hubbard Brook Data Report

Submissions to the Environmental Data Initiative Repository (EDI; <https://portal.edirepository.org>) this month include entirely new datasets and additions to long-term datasets. Please remember – when using any Hubbard Brook datasets in your publications, include the full citations in the reference section of your paper. These citations can be found on the EDI landing page for each dataset. If you are publishing work with new data, we can prepare those for EDI prior to submitting your manuscript, and they can go online before or at the time of your paper's acceptance.

Please note that the Hubbard Brook acknowledgement that we include with datasets and published papers needs a bit of an update. The USFS Northern Research Station is now in a different location, and the acknowledgement should read as follows:

"This work is a contribution of the Hubbard Brook Ecosystem Study. Hubbard Brook is part of the LTER network, which is supported by the US National Science Foundation. Hubbard Brook Experimental Forest is operated and maintained by the U.S. Department of Agriculture, Forest Service, Northern Research Station."

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:

Reinmann, A.B., T.H. Pamela, and J. Susser. 2021. Hubbard Brook Experimental Forest: Soil Freeze Study - Tree Growth ver 1. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/ebc7abeda4e87c0d7be8f0a1c67a7e8a>

(Accessed 2021-12-16).

Asbjornsen, H., M.A. Vadeboncoeur, K.A. Jennings, P.H. Templer, and L.E. Rustad. 2022. Hubbard Brook Experimental Forest: Droughtnet fine root production from ingrowth cores ver 1. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/384dc65fd09c51d61ffe1f25764f036f>

(Accessed 2022-01-03).

Cleavitt, N. and A. Clyne. 2021. Hubbard Brook Experimental Forest: Lichen grazing assessment on valleywide plots ver 1. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/25a88a88d698300f899f0a58132423b7>

(Accessed 2021-12-16).

Hong, S.D., K.E. Gonzales, C.R. See, and R.D. Yanai. 2021. MELNHE: Foliar Chemistry 2008-2016 in Bartlett, Hubbard Brook, and Jeffers Brook (12 stands) ver 1. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/b23deb8e1ccf1c1413382bf911c6be19>

(Accessed 2021-12-29).

Updated datasets:

Groffman, P.M. and L.D. Martel. 2021. Hubbard Brook Experimental Forest: Soil-atmosphere fluxes of carbon dioxide, nitrous oxide and methane on Watershed 1 and Bear Brook ver 12. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/140e9b608fe77efd595d1a243811d02b>

(Accessed 2021-12-16).

Groffman, P.M. and L.D. Martel. 2021. Long-term measurements of microbial biomass and activity at the Hubbard Brook Experimental Forest 1994 – present ver 23. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/87a42479bfcaaa2d3cea6dd087eba4a4> (Accessed 2021-12-17).

Hubbard Brook Watershed Ecosystem Record (HBWatER). 2021. Hubbard Brook Experimental Forest: Mirror Lake Ice Cover 1968 - present ver 7. Environmental Data Initiative.

<https://doi.org/10.6073/pasta/f1b334187d0e377f42ccf647523dddcc>

(Accessed 2021-12-16).

Thanks for reading!