September 7th, 2022

HUBBARD BROOK MONTHLY August 2022 issue

Recent Publications

Benton, JR, KJ McGuire, and ME Schreiber. 2022. Subsurface permeability contrasts control shallow groundwater flow dynamics in the critical zone of a glaciated, headwater catchment. Hydrological Processes. https://doi.org/10.1002/hyp.14672

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

Outreach and Education Update

In mid-August, Anthea Lavallee and John Besley presented at the 2022 Annual Meeting of the Ecological Society of America in an oral session titled, "Exploring Public Engagement as a Transformative Force in Ecological Research." The session was organized by Sarah Garlick and Marty Downs, Director of the LTER Network Office.

Lindsey Rustad, in collaboration with the Hubbard Brook Research Foundation, received funding from The National Environmental Education Foundation (NEEF) 2022-2023 Forest Service Greening STEM Grant for a project titled: Integrating Science, Art & Music to Understand Water Cycle Science and Monitoring. Lindsey writes, "In partnering with Hubbard Brook Research Foundation, our overarching goal is to build partnerships and tools to integrate science, art and music to revolutionize access to "big" environmental data (here, water data) and enable more inclusive learning and participation opportunities in water and forest sciences."

On July 17-22, Dr. Nick Rodenhouse and Dr. Richard Holmes presented a talk titled, "Community-level change in insect abundance and biomass over 50 years in a northern hardwoods ecosystem," at the International Congress of Entomology, Helsinki, Finland. The talk was part of a symposium on "The Global Insect Decline Phenomenon."

Shout-Outs

Lindsey Rustad gives this shout out to Dr. Scott Bailey, who retired from the Forest Service on August 1, 2022: "Over a ~35 year career, Dr. Scott Bailey contributed to advances in soil, geologic and hydrologic sciences at HB. His most recent work on hydropedology has revolutionized the way we think about soils at Hubbard Brook and in the glaciated northeast! In addition to his stellar science, Scott served as Lead Scientist for the USFS, chair of the Research Advisory committee for many years, architect of many of the annual meeting agendas, mentor to countless grad students and friend to all. We thank him for his years of service, and look forward to continuing to work with Scott as he pursues his passion for science through other pathways!"

Announcements

Young Voices of Science

The <u>application process</u> for the Fall 2022 Young Voices of Science program is now open through September 25, 2022. Please share this announcement widely with your networks!

Fall 2022 Tour Season

Fall is quickly approaching, schools are back in session, and fall tours at Hubbard Brook have already begun! An average group's visit usually lasts for 2–3 hours and involves a walking tour through part of the experimental forest. Tour stops generally include atmospheric monitoring sites, experimental watersheds and weirs, and possibly other stops at the Headquarters or Archive buildings, and notable climate change experiments. Available days for tours and filling up fast, so schedule your tour before the leaves start to change! For more information, visit us at <u>Hubbardbrook.org</u> or email

educator@hubbardbrookfoundation.org.

The Hubbard Brook daily, and instantaneous, streamflow data in the EDI catalog has been updated through June 2022.

Hubbard Brook Data Report

Submissions to the Environmental Data Initiative Repository (EDI) this month include new datasets and updates to widely used long-term datasets (streamflow, precipitation chemistry, and stream chemistry). If you have an established workflow using these data, the EDIutils R package can identify the most recent data version and read these directly into your workflow. Contact<u>mary.martin@unh.ed</u>u if you want the code snippet to use this feature.

For questions about Hubbard Brook data, please contact: <u>nina.lany@usda.gov</u> – for questions about data collected by the US Forest Service <u>mary.martin@unh.edu</u> – for questions, instructions, and assistance in submitting your data

to the repository.

New datasets:

Johnson, C.E. 2022. Organic components of decomposing hardwood boles at the Hubbard Brook Experimental Forest, 1990-2016 ver 1. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/ad739cd417b1e44950c125c247e39104</u> (Accessed 2022-09-02).

Updated datasets:

Fahey, T.J. and N. Cleavitt. 2022. Hubbard Brook Experimental Forest: Leaf Area Index (LAI) Bear Brook Watershed (West of Watershed 6) ver 2. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/d7cd2a822cdf3f81ed9b598dede6804a</u> (Accessed 2022-09-02).

Fahey, T. and N. Cleavitt. 2022. Hubbard Brook Experimental Forest: Leaf Area Index (LAI) Throughfall Plots ver 2. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/e04b3901593cc240829c89360393840b</u> (Accessed 2022-09-02).

Fahey, T. and N. Cleavitt. 2022. Hubbard Brook Experimental Forest: Leaf Area Index (LAI) Watershed 1 ver 2. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/e902cd609d6b56260e133124615dd317</u> (Accessed 2022-09-02).

USDA Forest Service, Northern Research Station. 2022. Hubbard Brook Experimental Forest: Instantaneous Streamflow by Watershed, 1956 – present ver 15. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/3fb23a2cced495d48a939b5c9076d53c</u> (Accessed 2022-09-02).

USDA Forest Service, Northern Research Station. 2022. Hubbard Brook Experimental Forest: Daily Streamflow by Watershed, 1956 - present ver 12. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/15b300e96c2d2f9785d0155b3e18b0e9</u> (Accessed 2022-09-02).

Hubbard Brook Watershed Ecosystem Record (HBWatER). 2022. Continuous precipitation and stream chemistry data, Hubbard Brook Ecosystem Study, 1963 – present. ver 8. Environmental Data Initiative. https://doi.org/10.6073/pasta/5e9d1771f114913c2ca8c98520c230ad

(Accessed 2022-09-02).

Vadeboncoeur, M.A., K.A. Jennings, A.P. Ouimette, and H. Asbjornsen. 2022. Wood alpha-cellulose stable C and O isotope ratios from New Hampshire and Vermont ver 2. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/4f307ee004b8835a0dec16093a99e92b</u> (Accessed 2022-09-02).

Lowe, W.H. 2022. Mark-recapture data of the Northern Spring Salamander (Gyrinophilus

porphyriticus), Hubbard Brook Experimental Forest, 2012 – present ver 3. Environmental Data Initiative. <u>https://doi.org/10.6073/pasta/cd5f5a03df194930bf87eb12157b8182</u> (Accessed 2022-09-02).

Thanks for reading!