# **HUBBARD BROOK MONTHLY September 2023 issue**

### **Recent Publications**

Marinos, RE, PM Groffman, C Driscoll, and ES Bernhardt. 2023. Accelerated soil nitrogen cycling in response to a whole ecosystem acid rain mitigation experiment. Social Science Research Network.

http://dx.doi.org/10.2139/ssrn.4579996

### **Hubbard Brook in the News**

DOE grant funds study of forests in changing climate The Cornell Chronicle

Experimental Forests of the Northern Research Station USDA Forest Service

Record rain and mosquitoes 'a window into the new normal' The Boston Globe

### **Education and Outreach**

Hubbard Brook's *Young Voices of Science* Program received a record-breaking number of applications this semester--the final number came in at 107! This number is largely due to YVoS Specialist Dayna De La Cruz's diligent outreach efforts on social media - thank you, Dayna!

Hubbard Brook is preparing for another *Welcome to the Woods* field trip, which will take place on October 21 and will feature a day of hiking, conversation, and forest education for refugee families from Ukraine. *WttW* is an initiative designed to help new Americans and their families learn more about the ecology, management, and recreational opportunities in northeastern forest regions.

Tour season in kicking off! In September, Brendan Leonardi and Amey Bailey led 10 collective tours for school groups including Worcester Polytechnic Institute, Johnsbury Academy (VT), and general public tours for local LinWood Middle School and Nashua High School.

#### **Announcements**

The **Fall** Hubbard Brook Quarterly Project Meeting will take place over Zoom on Wednesday, October 25, from 10:00 a.m. to 3:00 p.m. The topic is "**The Changing Hydroclimate**" and the co-leaders are John Campbell, JP Gannon, Mark Green, Nina Lany, and Kevin McGuire.

Click <u>here</u> to download the draft agenda for the October QPM.

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!

Christy Goodale, Peter Groffman, and collaborators at Cornell and the Lawrence Berkeley Lab have received funding from the Department of Energy for a new three-year research project on the seasonality of plant nitrogen uptake and its response to changing winter conditions. The <u>project</u> will support ongoing research in the Adirondack Mountains, a range of analyses with an Earth System Model, and new 15N-tracer studies at Hubbard Brook and Cornell's Arnot Forest. And yes, there will be more snow-shoveling!

<u>Dr. Danielle Hare</u> recently started as a postdoctoral fellow at the Cary Institute of Ecosystem Studies, where much of her research will focus on long term change in stream flow and watershed exports at Hubbard Brook. You can reach Danielle at <a href="mailto:hared@caryinstitute.org">hared@caryinstitute.org</a>.

The USDA Northeast Climate Hub is helping to support four Climate Justice Artist in Residence programs (2 in New York City and 2 at the Hubbard Brook Experimental Forest) for 2024! In collaboration with The Nature of Cities, the Urban Field Station has opened a call (linked <a href="here">here</a>) for the 2024 cohort of resident artists at the Urban Field Station Collaborative Arts Program.

## **Dayna's DEI Digest**

The Exit Survey: Betterment of the Hubbard Brook Experience

Dayna De La Cruz (She/They) Community Relations Specialist

As the season came to an end with dwindling field days and packed vehicles, I took the time to meet with our residents to talk about their summer at Hubbard Brook. These "Exit Surveys" were meant to capture the resident experience and for us to receive valuable feedback on improving the overall environment. Overall, Hubbard Brook received plenty of positive responses relating to the community building we were able to achieve this season. However, it is essential for our growth to still provide a platform for residents to individually voice their concerns, highlight what they considered as our achievements and share their hopes for the future of Hubbard Brook.

With the help of the existing questions created by our previous Community Relations Staffer and some new ones added by our Hubbard Brook DEI Committee, I was able to have a number of powerful conversations pertaining to orientation, housing, field work, social events, mentorship and much more. These interactions mainly occurred in the form of 1-hour informal discussions mainly alternating between the Pleasant View Farm Porch during sunny days or at Mad River Coffee House during rainy days.

By the end of the season, I managed to collect a total of 16 surveys which was about 50% of the residents who were on site for most of the season. I am currently in the process of summarizing all of the responses in order to ideally share the key points during the October Hubbard Brook Quarterly Project Meeting.

We are very grateful for everyone who took the time to open up about their experience which we hope will ultimately contribute to the betterment of the Hubbard Brook community. Your voices matter, and it's our job to listen.

# **Shout-outs**

Miranda Zammarelli gives a shout out to "the BTBW Crew and OVEN Crew for finding Ovenbird nests and supporting my dissertation research. Also special congratulations to OVEN Crew field tech, Frances Hurst Brubaker, for graduating from Chatham University."

## **Hubbard Brook Non-Sequitur**

Snippets of intriguing conversation and writing, taken out of context.

"Just so you know, we aren't a cult, even though we seem like one." -- Geoff Wilson to new friends of Hubbard Brook.

"This dragon is only a 9/10. It can't ever be a 10/10, it would have to be so much bigger." - feedback from young field-tripper to Raisa about her original dragon art.

"I like streams. In lakes, there is too much water." -- young visitor to Hubbard Brook.

# **Hubbard Brook Data Report**

Hubbard Brook's recent publications to the Environmental Data Initiative repository (EDI) are listed below. The new arthropod dataset (Ziadeh et al.) is a great example of publishing a dataset with the inclusion of additional supporting material. In this case, the dataset includes image-rich pdf files that served as "photo identification guides" for this study. These identification guides are very detailed and likely to be of value to other researchers studying arthropods at Hubbard Brook. Keep this in mind if you are studying arthropods, and more generally, consider other supporting resources that you might add to your data publications (code, maps, photographs, documents, etc). And remember....you should discuss your data collection and publication plans with the Hubbard Brook Information Manager (mary.martin@unh.edu) at the very beginning of your research project to make the end-to-end process as smooth as possible.

## New and updated datasets:

Ziadeh, C.P., S.B. Ziadeh, B.H. Aflague, M.A. Townley, M.P. Ayres, and J.R. Garnas. 2023. Arthropod communities in the Second College Grant, NH ver 1. Environmental Data Initiative. <a href="https://doi.org/10.6073/pasta/7333f727fc8396555d18913d6e8e6d52">https://doi.org/10.6073/pasta/7333f727fc8396555d18913d6e8e6d52</a> (Accessed 2023-10-04).

Groffman, P.M. and L.D. Martel. 2023. Hubbard Brook Experimental Forest: Soilatmosphere fluxes of carbon dioxide, nitrous oxide and methane on Watershed 1 and Bear Brook ver 13. Environmental Data Initiative. <a href="https://doi.org/10.6073/pasta/10d6e47ddf2c3c558f6a55b798032e91">https://doi.org/10.6073/pasta/10d6e47ddf2c3c558f6a55b798032e91</a> (Accessed 2023-10-04).

Cleavitt, N. 2023. Hubbard Brook Experimental Forest: Oak seedling demography, 2011 - ongoing ver 1. Environmental Data Initiative. <a href="https://doi.org/10.6073/pasta/a858d61204d0510bff114ed2e0d2e41b">https://doi.org/10.6073/pasta/a858d61204d0510bff114ed2e0d2e41b</a> (Accessed 2023-10-04).

Thanks for reading!

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