

HUBBARD BROOK RESEARCH FOUNDATION E-NEWS

November 2022

Promoting the understanding and stewardship of forest ecosystems through scientific research and monitoring, policy outreach, and education



"Things we're thankful for" by Raisa Kochmaruk

Season of Gratitude

Dear Friends,

It's been a productive year at HBRF, as you'll read in our report for 2022. On each page, we tell the story of our work through the people who bring the mission to life.

Our partners include scientists, students, communicators, artists, industry and NGO leaders, donors, and engaged citizens.

Together, we strive to create a culture of environmental awareness that is scholarly and practical; reality-based and creative; equitable, actionable, and hopeful.

Your generosity makes this work possible. We'd be honored to count your year-end gift among our good fortunes this Thanksgiving. Please join me in giving what you can, and thank you for supporting us through this exciting growth phase.

Sincerely grateful,



Anthea Lavallee
Executive Director



Click the image above to read our annual report for 2022.

DONATE TODAY

**Make your year-end gift today!
Every dollar makes a
difference!**

Award-winning ESA SEEDS program chooses Hubbard Brook for 2022 field trip



Above: SEEDS participants at Mirror Lake in mid-October. Photo by Fred Abbott. Below: Alexandra Contosta, Research Assistant Professor at the University of New Hampshire, leads a group of students to

This October, Hubbard Brook hosted the Ecological Society of America's (ESA) first national SEEDS field trip since the pandemic. SEEDS, which stands for Strategies for Ecology Education, Diversity and Sustainability, is an [award-winning education program](#), launched by ESA in 1996 to connect students from historically underrepresented backgrounds in ecology with hands-on field experiences and networking opportunities. Undergraduate students with strong interests in ecology are recruited from across the U.S. to participate.



Hubbard Brook investigator and Environmental Engineer for the USDA Forest Service Linda Pardo spearheaded the national field trip, working with Fred Abbott, ESA's Diversity Programs Manager, and members of Hubbard Brook's Diversity, Equity, Inclusion, and Anti-Racism Committee. Last month, 17 SEEDS participants spent several days at Hubbard Brook, interacting with scientists, learning about long-term research and sampling techniques, and building connections with peers. Many of the students were from the southwestern U.S. and had never before been to a northern hardwood ecosystem. HBRF Executive Director Anthea Lavalley spoke on a career panel, and Hubbard Brook scientists Matt Ayres (Dartmouth College), Alexandra Contosta (University of New Hampshire), and Natalie Cleavitt (Cornell University) led data-collection excursions and mentored student research projects. Projects were presented on the final evening of the field trip. In addition to the scientific content, HBRF's Communication Specialist, Raisa Kochmaruk, led a scientific illustration workshop, and students spent free time canoeing on Mirror Lake.

Outreach Highlight

Welcome to the Woods!

2022 W2tW Field Trip
By The Numbers

68
participants

6
languages

5
Countries

3
Field Trip Stops

1
hike safe
presentation

Through the generous support of public and private funders, HBRF launched an exciting new initiative this year called *Welcome to the Woods* (W2tW). One component of the program is a partnership with the U.S. Forest Service and [Building Community in New Hampshire](#), a Manchester-based nonprofit organization, serving refugee families from Afghanistan, Bhutan, Burundi, the Democratic Republic of the Congo, and Rwanda.

In September, environmental educators from HBRF, the U.S. Forest Service, and the White Mountain National Forest led the first of a series of field trips and picnics in the White Mountains for New Americans.

For more information on this component or the other elements of W2tW, see [page six](#) of HBRF's Annual Report for 2022.

Research Highlight

New synthesis work highlights role of Hubbard Brook and other LTER sites in understanding ecological responses to climate change

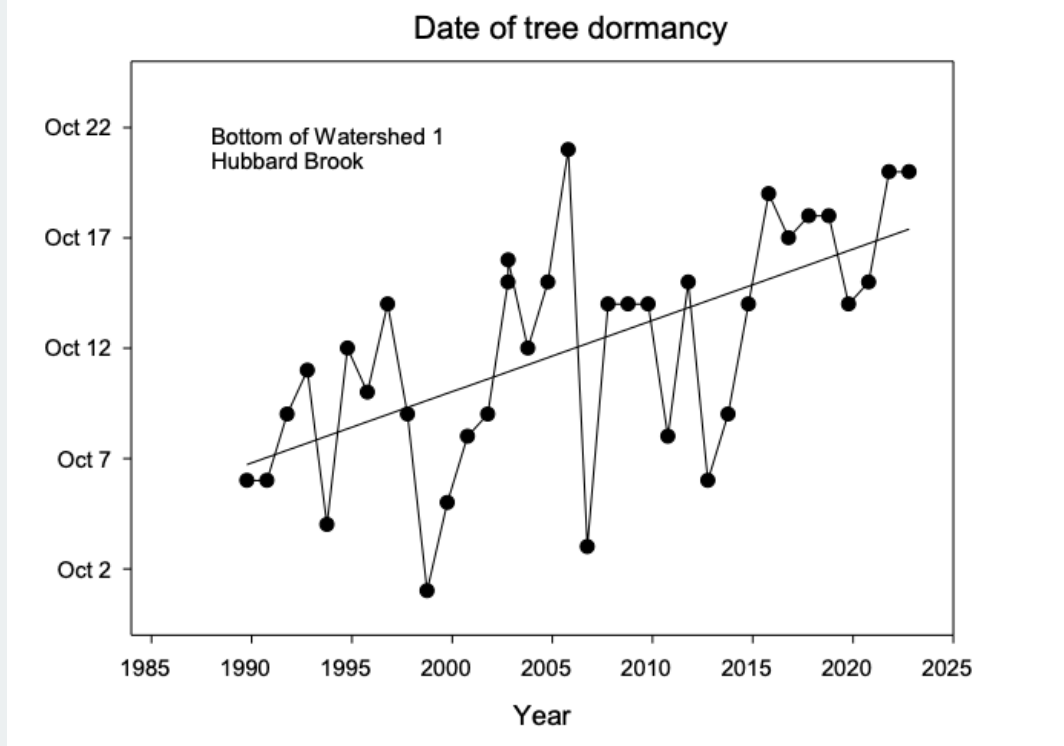
Two recent synthesis papers, publicly available in the journal *BioScience*, detail the importance of Hubbard Brook and other Long Term Ecological Research (LTER) sites in revealing ecosystem responses to climate change. In a [special feature article](#), Syracuse University Distinguished Professor and Hubbard Brook investigator Charles Driscoll, and Oregon State University Distinguished Professor Julia Jones, present 40 years of data from 28 LTER sites, comparing climate trends, ecosystem responses, and feedback loops at the continental scale. “LTER sites are poised to influence government decisions regarding the environment,” says Driscoll, “and we have a responsibility to share findings among our sites to have the largest possible impact.”



In [an article focused on freshwater and forested ecosystems](#), led by U.S. Forest Service Research Ecologist John Campbell, long-term climate trends and ecosystem changes from nine sites across the U.S. are compared. Air temperature has increased at all sites, and sites from the northeastern U.S., including Hubbard Brook, have become wetter, while sites in the Northwest and Alaska have become drier. These changes in climate affect plant growth and the capacity for ecosystems to sequester carbon. Please [email HBRF staff](#) if you'd like to learn more.

Above: Fall foliage near the Robert S. Pierce Laboratory, Hubbard Brook Experimental Forest. Photo by Amey Bailey.

Timing of Fall



Climate change is affecting the dormancy date of trees at Hubbard Brook—the date when leaves stop providing energy and begin to change color. Long-term measurements by USDA Forest Service Forest Technician Amey Bailey, show later dormancy dates at Hubbard Brook since 1990. Graph by Amey Bailey.

Announcement

New museum show features Hubbard Brook art-science collaborations



From November 19 to February 1, the Museum of the White Mountains, located in Plymouth, New Hampshire, will feature Hubbard Brook-affiliated artwork in an exhibition titled: "Field Station: Art-Science in the White Mountains."

The exhibition features collaborations between artists and scientists, including Scott Bailey, Rich Blundell, Jenny Bower, Xavier Cortada, Joe Klementovich, Raisa Kochmaruk, Rita Leduc, Nikki Lindt, Marty Quinn, Lindsey Rustad, and Rebecca Schultz. For more information and directions, please visit [the museum website here](#).

Above: "Water Paintings" by Xavier Cortada; "Rangeley Schist Two" by Rebecca Schultz, "Giant in the Forest" by Rita Leduc

Parting Shot



Highlight from the SEEDS field trip: students enjoyed an afternoon canoeing on Mirror Lake. For many participants, it was the first experience on a lake in the Northeast. Photo by Raisa Kochmaruk.

As always, thanks for your interest in Hubbard Brook. Please feel free to contact us with any questions, ideas, or suggestions, and help us to spread the word by forwarding this email to a friend.

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Anthea Lavallee
HBRF Executive Director

The Hubbard Brook Research Foundation is a nonprofit organization dedicated to supporting the Hubbard Brook Ecosystem Study.

