HUBBARD BROOK
RESEARCH FOUNDATION

E-NEWS

September 2021

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

Welcoming Our Two New Trustees!

HBRF Trustees voted in January to expand the Board by two members. In July, we welcomed Tyler Edwards and Amara Ifeji to the Board of Trustees.

Tyler Edwards (Duke University, 2022) is an aspiring ecologist and science communicator who envisions a future where community-informed research drives systematic changes in policy to better protect our planet.

Her previous work with Hubbard Brook includes helping to establish an ongoing record of aquatic insect emergence at the forest, creating a podcast about the research process at Hubbard Brook, participating in the *Young Voices of Science* initiative, and serving as a panelist during the 2021 Climate and Clean Energy Youth Forum.

As a Trustee, Tyler hopes to build networks of support for young scientists and encourage Hubbard Brook researchers to connect with their communities.

Amara Ifeji (Northeastern University, 2024) is a systems-thinker and climate justice activist committed to advancing equitable access to the outdoors for ALL youth.

Her experience of barriers to environmental learning drove her to lead community science learning efforts and conduct internationally-awarded climate change research.

In her role with the Maine Environmental Education Association, Amara strives to empower more than 400 youth environmental activists in the Maine Environmental Changemakers Network.

Amara also pushes for both state and federal environmental education policy reform through her roles with the Nature-Based Education Consortium and the Maine Climate Council Equity Subcommittee. In recognition of her work, she was awarded the 2021 National Geographic Young Explorer Award–one of only 24 in the world!

Outreach Highlight: Science Nights Return to Pleasant View Farm!

Dartmouth Professor Richard Holmes leads a Science Night at Pleasant View Farm. Photo: Matt Ayres

The 2020 summer field season at Hubbard Brook was significantly diminished by the COVID-19 pandemic. Few researchers traveled to Hubbard Brook, and the community faced challenging decisions about critical datasets. As Dartmouth Professor of Biology and Hubbard Brook Investigator Matt Ayres told New Hampshire Public Radio, "there'll always be an asterisk on 2020."

Thanks to vaccinations, pod-style housing, and careful planning by the Hubbard Brook COVID-19 Task Force, summer 2021 was a different story; we welcomed the safe return of students and researchers eager to continue their investigations.

2021 also marked the return of Science Nights, a long-standing Hubbard Brook tradition during which senior scientists and outreach professionals informally present and discuss their work during weekly summer gatherings.

The 2021 lineup of speakers included: Geoff Wilson, Scott Bailey, Matt Ayres, Mark Green, Anthea Lavallee, Sarah Garlick, Hannah ter Hofstede, and current graduate students—on topics ranging from bedrock geology to bats to science communication.

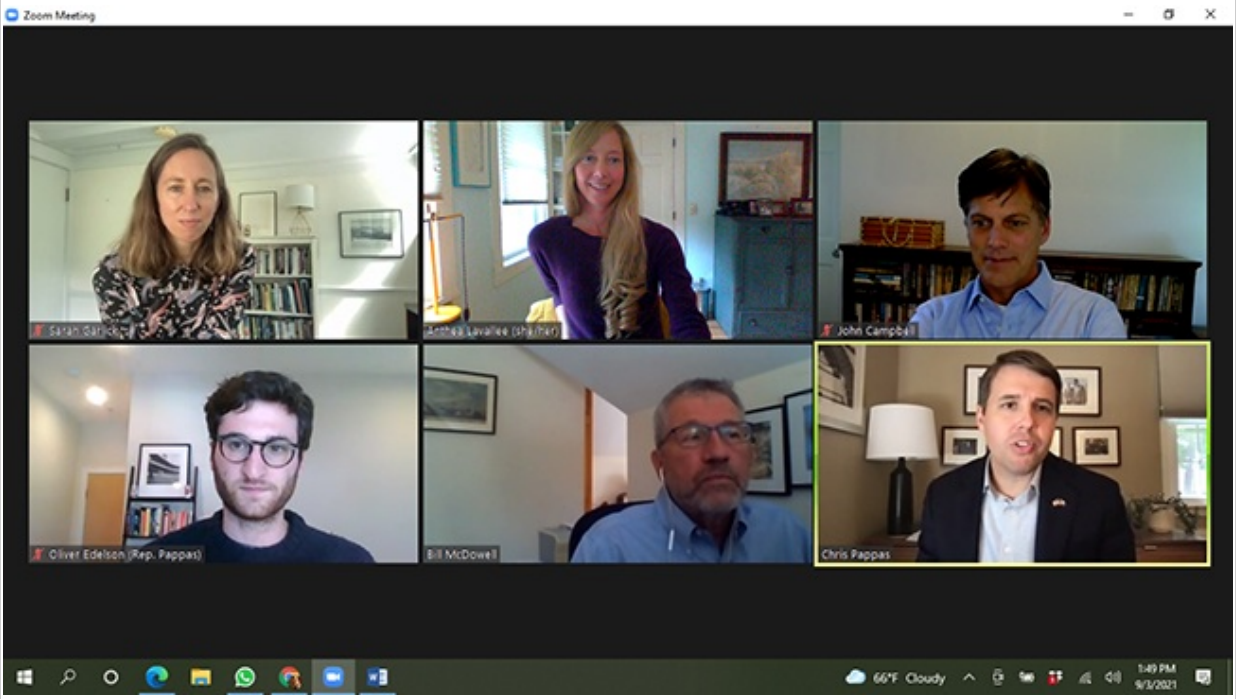
Geoff Wilson, who organized the series, says:

This was probably the most memorable year for Science Nights of all of the years I've been involved with them. COVID considerations led us to set up the porch so most of the site could comfortably gather in a well-ventilated space—something most of the students hadn't had the opportunity to do during the school year.

Matt Ayres had the brilliant idea of getting pizzas for everyone, so we could move the time early enough to appeal to the bird crew and take care of everyone's needs for dinner. The volleyball court even started getting use after the talks. We consistently had between 20-30 people each week. Special thanks go out to Matt and HBRF for picking up the tab for the pizzas and to all of the speakers who participated.

And special thanks right back to you, Geoff, for organizing!

Policy Highlight: Science Briefing for U.S. Congressman Chris Pappas



Clockwise from top left: Sarah Garlick, Anthea Lavallee, John Campbell, Chris Pappas, Bill McDowell, Oliver Edelson

HBRF Executive Director Anthea Lavallee hosted a Hubbard Brook science briefing on September 3 for U.S. Congressman Chris Pappas, who represents New Hampshire's 1st district.

Both based in his district, Forest Service Research Ecologist John Campbell and UNH Professor of Natural Resources Bill McDowell were the featured Hubbard Brook investigators.

Young Voices of Science Highlight: Imposter Syndrome in the Sciences

Dayna De La Cruz, a 2021 graduate of Wellesley College, completed her short video "Imposter Syndrome in the Sciences" for her *Young Voices of Science* outreach project.

Dayna's video focuses on the lack of diversity in ecology and how it drives higher rates of imposter syndrome among scientists from underrepresented groups. She speaks movingly from personal experience in this powerful and important piece.

WATCH

Hubbard Brook Researchers in the News

10 Years Later, What Tropical Storm Irene Says About Climate Change In N.H. Now
New Hampshire Public Radio

N.H. Summer Weather Swings Strain Ecosystems And Animals
New Hampshire Public Radio

Climate Change is Already Disrupting US Forests and Coasts—Here's What We're Seeing at 5 Long-term Research Sites
The Conversation

My Career Path Following Water from the Mountain to the Sea and Across an Ocean*
The Journal of Stories in Science

**Written by a spring participant in HBRF's* Young Voices of Science *program*

News from the Field: Emerald Ash Borer Identified at Hubbard Brook

Cornell student John Deitsch found the emerald ash borer pictured above while checking insect traps at HBEF this summer. Photo: John Deitsch

It was a matter of "when," not "if."

Dartmouth College PhD Candidate Liz Studer has spent the last five years collecting reams of baseline data at Hubbard Brook in anticipation of the inevitable arrival of the invasive emerald ash borer beetle.

Now, it's official: the emerald ash borer is at Hubbard Brook. John Deitsch, a senior at Cornell University who spent the summer at Hubbard Brook with the Cornell Lab of Ornithology's Hubbard Brook Field Ornithology Program, discovered an individual emerald ash borer in an insect trap on a research plot sampled on June 18. Bill Davidson, a forest health specialist with the New Hampshire Division of Forest and Lands, later confirmed the identification. The finding makes Hubbard Brook the farthest north that emerald ash borer has been detected in New Hampshire by about seven miles.

The potential impact of the unfolding invasion is immense. "This is a perturbation on the scale of the biggest experimental manipulations that have been done at Hubbard Brook," says Dartmouth Professor of Biology and Hubbard Brook Investigator Matt Ayres.

The Hubbard Brook Valley is home to approximately 26,000 ash trees, according to data collected by the vegetation crew. Based on the impacts of emerald ash borer in other forests, the mortality rate for the ash trees at Hubbard Brook is expected to be total or near total.

Researchers are in contact with state officials about the possibility of experimentally protecting a number of ash groves in the forest using the insecticide emamectin benzoate.

"Our job is to learn as much as we can," Ayres says.

READ MORE

In Case You Missed It:
The Hubbard Brook Community Showcase & The Third-Annual Moss Storytelling Hour

Field and Maintenance Technician Dan Clark demonstrates how to tie a fishing fly during the first-ever Hubbard Brook Community Showcase.

There is always plenty of scientific talent on display at Hubbard Brook's Annual Cooperators' Meeting.

But this year, Hubbard Brookers had a special opportunity to share some of their lesser-known abilities. HBRF Executive Director Anthea Lavallee and the Cary Institute's Maribeth Rubenstein hosted the inaugural Hubbard Brook Community Showcase—aka talent show—during July meetings week 2021.

Site Manager Ian Halm demonstrated proper chainsaw technique; Field and Maintenance Technician Dan Clark deftly tied a fishing fly on the fly; PhD Candidate Jenny Bower wowed the crowd with a Bach piano prelude; Forest Service Technician Amey Bailey filled the sample archives with the dulcet tones of a cello duet; guitar-strumming LTER Lead PI Peter Groffman had the Zoom room singing along to his original tune, "This Grant Is My Grant," and more.

The event highlighted never-before-seen dimensions of our wonderful community and was a ton of fun to boot!

WATCH RECORDING

Daouda Njie and Emily Bernhardt during the 2021 Moss Storytelling Hour

HBRF also continued our storytelling tradition during meetings week with the third annual Moss Storytelling Hour.

"Friends Like These: Stories of Strong Bonds and Unlikely Love Affairs," hosted by Anthea Lavallee, featured true, personal stories about science told by Nick LoRusso, Mike Hallworth, Emily Bernhardt, Daouda Njie, and Rebecca and Christine Bormann.

WATCH RECORDING

Mural Sneak Peek!

Detail of a black-throated blue warbler in Raisa Kochmaruk's mural at Hubbard Brook headquarters

As we shared in the previous e-newsletter (June 2021), scientific illustrator and Cornell alum Raisa Kochmaruk has been hard at work this summer painting a mural for Hubbard Brook headquarters.

The stunning piece, undertaken as part of Hubbard Brook's blossoming Art-Science program, celebrates many of the species found throughout the Hubbard Brook ecosystem —including the black-throated blue warbler pictured above.

Raisa will be adding final details over the coming weeks. Check her website, https://mondielle.com/hubbard-brook-mural/, for updates!

Fundraising Highlight: Successful Appeal to New and Renewing Donors

Linda Mirabile of RavenMark contributed original art for our spring appeal.

Thanks to your participation and generosity, we succeeded in winning the new and renewed support of more than 50 first-time and lapsed donors this spring!

Each gift from donors who hadn't contributed in 12+ months, or who contributed for the first time, got a $200 boost from a generous friend. We were thrilled to meet the challenge of 50 new or renewing donors, unlocking an additional $10,000 in essential funding for Hubbard Brook science, education, and outreach!

A Note From the Editor

Hi all! September 10 is my last day with HBRF, and before I leave I wanted to say a huge thank you to everyone at Hubbard Brook for your work and your collaboration. It has been such a joy to be a part of this intellectually stimulating, vibrant, and generous community for the last 3.5 years. I will absolutely continue to follow along with—and celebrate—all things Hubbard Brook. Please stay in touch! You can reach me at: clara.chaisson@gmail.com.

—Clara Chaisson, Outreach and Communications Manager

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.

VISIT OUR WEBSITE

JOIN OUR MAILING LIST

Corporate and Non-profit Sponsors

Chester Forest Products	The Lyme Timber Company
Chroma Technology Corp.	New England Forest Products

Durgin & Crowell Lumber Co., Inc.

FORECO LLC

King Forest Industries

Law Offices of Joyce E. Scott

Loveland Forestry

New Hampshire Timberland Owners Association

New Hampshire Sustainable Forestry Initiative

Northland Forest Products

Schiffman, Dattilio & Commpany, P.C.

HBRF Trustees

Charles Driscoll, Chair,
Syracuse University

Stan Williams, Vice Chair

John Smitka, Secretary

Michael Shoob, Treasurer

Deecie Denison

Tyler Edwards
Duke University

Peter Groffman
Cary Institute of Ecosystem Studies, CUNY Advanced Science Research Center, Brooklyn College

Dorothy B. Heinrichs
Dartmouth-Hitchcock

Amara Ifeji
Northeastern University

Ali Jackson
Sciencenter

Roger Larochelle
Squam Lakes Conservation Society

Gene E. Likens
Cary Institute of Ecosystem Studies

Peter Martin

Nicholas Rodenhouse
Wellesley College

Anant Sundaram
Tuck School of Business at Dartmouth College

Pamela Templer
Boston University

Harriet Van Vleck

Lindsey Rustad
U.S. Forest Service

Anthea Lavallee
HBRF Executive Director

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