



Carbon, Biodiversity & Agency Partnerships Focus of Summer Meeting

The 59th annual Hubbard Brook Cooperators' Meeting and Quarterly Project Meeting took place July 14–16 at Plymouth State University. Students, scientists, educators, and artists shared updates in presentations, followed by an afternoon of field trips into the Hubbard Brook Experimental Forest, and a cook-out and tent dance at Pleasant View Farm, organized by Hazel Westney, Peter Groffman, and partners at the Cary Institute of Ecosystem Studies.

The Quarterly Project Meeting on July 15 focused on the themes of carbon, biodiversity, and agency partnerships.

Jameson French, CEO of Northland Products, Inc. and Board Chair of the American Forest Foundation, spoke on a panel about carbon forestry and natural climate solutions alongside HBRF's Executive Director Anthea Lavalley, USDA Forest Service Research Forester Chris Woodall, and University of Vermont Professor William Keeton. In the afternoon, Hubbard Brook scientists and students discussed management priorities and biodiversity conservation goals with White Mountain National Forest (WMNF) Forest Supervisor Derek Ibarguen, WMNF Forest Botanist Daniel Spurduto, and Aaron Weed, Ecologist with the National Park Service.

"At HBRF, one of our top priorities is linking ecosystem science with current policy and management decisions. Having dedicated sessions in our regular scientific meetings to discuss those topics directly with managers and industry leaders is so essential," says Sarah Garlick, HBRF Director of Science Policy and Outreach, one of the organizers of the Quarterly Project Meeting.





Top Right: White Mountain National Forest Supervisor Derek Ibarguen shares management priorities with Hubbard Brook scientists. Above: Hennecys Perez Castro, Jessee Steele, and Scott Dai present during the 59th annual Hubbard Brook Cooperators' Meeting. Photos by Raisa Kochmaruk.

Research Highlight

Ash Protection Experiment Kicks Off



A new experiment at the Hubbard Brook Experimental Forest began this summer to investigate the long-term effects of ash mortality on the forest due to the Emerald Ash Borer (EAB). Led by a team of investigators, including Matt Ayres, Professor at Dartmouth College, and Jeff Garnas, Associate Professor at the University of New Hampshire, the

experiment involves injecting the outer sapwood layer of ~300 ash trees in the Hubbard Brook Valley with emamectin benzoate, a pesticide that targets the nervous system of the invasive wood-boring beetle. Injected trees will be protected from the

larval infestations of EAB that destroy trees' water- and nutrient-conducting tissues. The Hubbard Brook Valley is home to approximately 26,000 ash trees in total—almost all of them white ash, *Fraxinus americana*.

"It's the reverse of a typical large-scale Hubbard Brook experiment," Ayers explains. "Most of our large-scale manipulations involve the removal of trees. EAB is creating that for us already—we are looking at what happens to the forest under trees which remain." EAB was first discovered in the U.S. in Michigan in 2002, and first identified at Hubbard Brook in 2021 by John Deitsch, a student researcher from Cornell University.



Top photo by Maria Romay, following photos by John Deitsch.

Outreach Highlight

HBRF Leads New \$1.7 Million NSF Public Engagement Project

HBRF is leading a collaborative research project to advance evidence-based public engagement with science in the [Long Term Ecological Research \(LTER\) Network](#). The new award from the National Science Foundation will support HBRF and collaborators from Michigan State University, Oregon State University, Catalyst Consulting Group, the LTER Network Office, Boston University, and the City University of New York, as well as community partners from the Hubbard Brook, Luquillo, and Virginia Coast Reserve LTER sites.

The project will explore how scientists, institutional leaders, and staff at LTER sites view and make decisions about public engagement activities, and how the interests and assets of local communities align with those decisions. "We need to remove the barriers between science and society," says Sarah Garlick, Principal Investigator of the new project. "This project focuses on what we can do at the organizational level of long-term studies to facilitate ongoing, trusting relationships among scientists, community members, and decision makers." To learn more, please [contact Sarah Garlick](#).

Announcement

Apply for Fall 2022 Young Voices of Science

The [application process](#) for the Fall 2022 Young Voices of Science program is now open through September 25, 2022. Please share this announcement widely with your networks!

[Young Voices of Science](#) is a free science communication training program for graduate, undergraduate, and high school students from environmental fields. Weekly workshops with invited

experts and one-on-one mentorship with staff prepare and empower young science scholars to share their knowledge, concerns, and hopes for the future on the public stage.

Class size is limited to 20 participants. Participants must attend all workshops and carry out at least one outreach activity with the support of a staff mentor. YVoS is supported by An Anonymous Foundation, the Bailey Charitable Foundation, the Canaday Family Charitable Trust, and the Cotyledon Fund.



To apply, please visit <https://youngvoicesofscience.org>

In Case You Missed It New Hubbard Brook Website Launched



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Research Foundation

SUPPORT

Hubbard Brook Ecosystem Study

Long-term ecological research in the northern
hardwood forest.

People

We are a multidisciplinary community of
scientists, students, technicians, educators,

Science

We combine long-term monitoring and
ecological experiments to build knowledge

Impact

Our outreach programs bridge the gaps
between science and education, policy, land

A new HubbardBrook.org website was launched this July to update from an outdated platform and share new content about the Hubbard Brook Ecosystem Study. We will continue to make improvements to the new site. Please share your feedback using this form: <https://forms.gle/Ukk47TcHyaAJMTz56>

Parting Shot



Summer bird crews enjoy dinner at the Moosilauke Ravine Lodge this July. Photo courtesy Miranda Zammarelli.

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

