



BUILDING KNOWLEDGE FOR NORTHERN FOREST COMMUNITIES



University of
New Hampshire



State University of New York College of
Environmental Science and Forestry



1865 THE UNIVERSITY OF
MAINE



The University of Vermont

The Northeastern States Research Cooperative (NSRC)

is a competitive grant program supporting cross-disciplinary, collaborative research in the Northern Forest—a 30-million-acre working landscape that is home to more than two million residents and stretches from eastern Maine through New Hampshire and Vermont and into northern New York. NSRC addresses the importance of the Northern Forest to society and the need to work collaboratively with the people who live within its boundaries, work with its resources, use its products, visit it, and care about it.

**NSRC connects
USFS and non-USFS
researchers with stakeholders
to benefit the environment and
economy of the Northern Forest
region.**

**NSRC engagement, collaboration,
and coordination extend the
impacts of USFS priorities.**

Congressional Authorization:

Forest and Rangeland Renewable Resources
Research Act (Public Law 105-185).

Federal Funding Source:

USDA Forest Service

FY 2020 Funding: \$1.95 million

FY 2021 Funding: \$2.47 million

FY 2022 Authorized: \$5 million
(awaiting final funding from USFS)

FY 2023 Authorized: \$5 million
(awaiting final funding from USFS)

FY 2021 Research Competition

In May 2022, NSRC announced 13 awards totaling nearly \$2 million of federal funding and close to \$1.1 million of matching funds for research that focuses on areas of concern identified by forest stakeholders in the Northern Forest region. Three additional projects were granted funding in September 2022 as part of the Indigenous Forest Knowledge Fund competitive program.

The projects cover a broad range of concerns related to forest biodiversity & connectivity, climate change & energy, invasive pests & diseases, recreation & tourism, and traditional ecological knowledge about forest systems.

The request for proposals drew a strong response from researchers representing 18 different institutions across the region. A total of 33 project proposals requesting \$5.2 million in funding were submitted to the NSRC.

Focus Areas

- State of the Forest
- Measuring & Quantifying Impacts
- Developing Tools for Response
- Rural Community & Economic Development



NSRC Projects Awarded 2020-2022

2022 Projects

- **Eastern White Pine Health Monitoring through Remote Sensing.** PI Parinaz Rahimzadeh-Bajgiran, University of Maine
- **Effects of Timber Harvesting on Wetland Ecology.** PI Christina Murphy, USGS Maine Cooperative Fish & Wildlife Unit
- **Fire as a Tool in Oak Regeneration and Management.** PI Matthew Vadeboncoeur, UNH
- **Forest Characteristics and Impacts on Mammalian Diversity.** PI Daniel Bogan, Siena College, New York
- **Forest Management to Increase Northern Forest Climate and Pest Adaptation.** PI Anthony D'Amato, University of Vermont (UVM)
- **Impacts of Extreme Climate Events on Tree Regeneration.** PI Jay Wason, University of Maine
- **Invasive Pest Effects on Tree Demographics Across the Northeastern US.** PI Jeff Garnas, University of New Hampshire (UNH)
- **Jumping Worm Invasion and Impact in the Northern Forest.** PI Timothy McCay, Colgate University, New York
- **Quantifying Forest Using Geospatial and Remotely Sensed Data.** PI Melissa Clark, The Nature Conservancy
- **Role of Mycorrhizal Fungi in New England Forest Management.** PI Caitlin Hicks Pries, Dartmouth College, New Hampshire
- **Social impacts from Recreational Mountain Biking.** PI Kimberly Coleman, SUNY Plattsburgh

2021 Projects

- **A New Silvicultural Guide for Northern Conifers in the Northeast.** PI Laura Kenefic, U.S. Forest Service Northern Research Station, University of Maine
- **Adaptation of Northern Forest Trees Species to a Warmer, Drier Future.** PI Heidi Asbjornsen, UNH
- **Drone-based LiDAR to Predict Umbrella Species.** PI Alexej Sirén, UNH
- **Escaping to the Northern Forest: Migration and Community Implications During COVID.** PI Jessica A. Carson, UNH
- **Evaluating the Efficacy of Audubon's Bird-friendly Maple.** PI Steven D. Faccio, Vermont Center for Ecostudies
- **Genetic Impacts of Forest Management Strategies on Sugar Maple.** PI Danilo D. Fernando, SUNY ESF
- **Impact of Increased Use on Visitor Experience in the Adirondack Park.** PI Elizabeth S. Vidon, SUNY College of Environmental Science and Forestry (SUNY ESF)
- **Integrating Genetic and Ecological Data to Measure and Map Wildlife Connectivity across the Northeast.** PI James D. Murdoch, UVM
- **Pheromone-Based Monitoring and Control Program for Browntail Moth.** PI Angela Mech, University of Maine
- **The Forest Carbon Cycle and High-Resolution Carbon Accounting for the Northeast States.** PI Daniel J Hayes, University of Maine
- **Updated Inventory and Maps of Vermont Town Forests.** PI Cecilia M. Danks, UVM

Indigenous Forest Knowledge Fund Projects Awarded

The NSRC Indigenous Forest Knowledge Fund grants support education and training of Indigenous youth in applied forest research and applied forest research to advance communications, outreach, and economic programs for Tribal Nations and Indigenous communities.

- **Monitoring Culturally Important Wildlife on Penobscot Nation Lands.** (2022). PI Benjamin Simpson, Penobscot Indian Nation
- **Protecting the Brown Ash.** (2022). PI John Daigle, University of Maine
- **Supporting Abenaki Stewardship of Atlantic White Cedar Swamp Ecosystem.** (2022). PI Heidi Asbjornsen, UNH
- **Haudenosaunee Forest Principles.** (2021). PI Robin Kimmerer, SUNY College of Environmental Science and Forestry
- **NEBI (Water): Connecting N'dakinna (Land), Bilowagizegad (Climate), and Alnobak (People).** (2021). PI Adam Wymore, UNH

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The Northeastern States Research Cooperative (NSRC) is a partnership of the Northern Forest states of Maine, New Hampshire, New York, and Vermont, in coordination with and with funding provided by the USDA Forest Service, an equal opportunity provider.

www.nsrcforest.org