NORTHEASTERN STATES RESEARCH COOPERATIVE

NSRC

Building Knowledge in Northern Forest Communities

University of New Hampshire

FOREST SERVICE — US — DEPARTMENT OF AGRICULTURE

ESF — State University of New York College of Environmental Science and Forestry

HUBBARD BROOK RESEARCH FOUNDATION

1865 THE UNIVERSITY OF MAINE

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 connects United States Forest Service (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.

Focus Areas

- Community & Economic Resilience
- Decision Support & Management Tools
- Forest Health & Resilience
- Social Science for Effective Public Engagement

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

Federal Funding Source:
USDA Forest Service

Funding authorized/Actual received
FY2025 $6 million/$0
FY2024 $6 million/$4.5 million
FY2022&23 $10 million/$7.1 million
FY2021 $3 million/$2.47 million

NSRC plays an essential role in advancing forest science and supporting sustainable forestry across the Northeast, investing **over $14 million** *into forest-ecosystem research.*

Spring 2025 awards distributed ~$2.2M for research with clear links to application and use by stakeholders in the Northern Forest region. These projects include collaborations with multiple academic institutions, US Forest Service researchers, and nonprofit organizations. An additional $1.2M will be distributed thru the Indigenous Forest Research Fund (IFKF) in the fall.

The projects cover a broad range of concerns related to forest biodiversity and connectivity; invasive species and forest pests; land use and sustainable forestry; recreation, tourism, and land use impacts; and wood products innovation and market development.

By The Numbers
Over the years, NSRC funding has supported:

335	53	1,000+
Projects	Institutions	Collaborators

2025 Research Portfolio

The following research projects, led by researchers from all four states, will begin in 2025:

- **Investigating the Decoupling of Overstory and Understory Trees and Drivers of Forest Regeneration Dynamics in the Northern Forest.** PI Eddie Bevilacqua, SUNY College of Environmental Science and Forestry.

- **Restoration and Climate Adaptation Potential of Red Spruce in Northern Forests.** PI Peter Clark, University of Vermont.

- **Integrating Ecology and Economy: A Spatial Optimization Framework for Spruce Budworm (SBW) Management.** PI Adam Daigneault, University of Maine.

- **Quantifying Forest Carbon Pools and Fluxes Following Partial Harvest in Northern Conifer Forests.** PI Shawn Fraver, University of Maine.

- **Understanding the Landscape for Species of Greatest Conservation Need by Uniting Coarse- and Fine-filter Strategies for Conservation.** PI Brian Kron, Vermont Center for Ecostudies.

- **Eco-Friendly Packaging Innovations: Developing Biocomposites from Nanocellulose, Polyhydroxybutyrate, and Lignin Obtained from Forest Biomass.** PI Deepak Kumar, SUNY College of Environmental Science and Forestry.

- **Power in the Patchwork? Enhancing Biodiversity and Resilience by Using Summertime Patch Cutting to Create Uneven-Aged Northern Forests.** PI Stacy McNulty, SUNY College of Environmental Science and Forestry.

- **Trialing Best Management Practices for Preserving or Extending Frozen Ground Conditions during Winter Harvesting Operations.** PI Steven Roberge, University of New Hampshire.

- **Just How Hard Is it Raining?** PI Jamie Shanley, U.S. Geological Survey.

- **Forest Management at the Frontline: Silviculture and Belowground Ecology Drive Responses to an Imminent Invasion of** *Adelges tsugae***.** PI Kurt Smemo, Skidmore College.

- **Next-Generation Wood Products Carbon Estimator: A Tool for Comprehensive Stakeholder Collaboration and Decision-making.** PI Xinyuan Wei, University of Maine.

NSRC's Indigenous Forest Knowledge Fund program supports applied forest research that advances Tribal priorities, including the education and training of Indigenous youth in forest-related traditional ecological knowledge. The following projects were award 2024.

- **Ecosystem responses to the interacting forces of bridge improvements and beavers.** PI Benjamin Simpson, Penobscot Nation

- **Integrating advanced geospatial analysis and indigenous forest knowledge for protecting ash species.** PI Parinaz Rahimzadeh-Bajgiran, University of Maine

- **Managing for tomorrow's Panawahpskek forests today.** PI Carolyn Ziegra, Appalachian Mountain Club

- **Partnership with Abenaki for conservation and restoration of the threatened, declining Butternut Tree.** PI Sean Hoban, The Morton Arboretum

- **Restoring tribal relations and forest knowledge.** PI Les Benedict, Saint Regis Mohawk Tribe

- **WaYS to utilize indigenous knowledge and technology.** PI tish carr, Wabanaki Youth in Science (WaYS)

The 2025 IFKF Award Competition Is Currently Underway.