

Northeastern States Research Cooperative: Past, Present, and Future

Anne Jefferson¹, Anthea Lavallee², Mark Ducey³,
Rene Germain⁴, Aaron Weiskittel⁵, and Dan Dey⁶



FEMC Annual Meeting
14 December 2023



- ¹ Rubenstein School of Environment and Natural Resources, University of Vermont, Burlington, VT
- ² Hubbard Brook Research Foundation, Woodstock, VT
- ³ Department of Natural Resources and the Environment, University of New Hampshire, Durham, NH
- ⁴ Forest and Natural Resources Management, SUNY-ESF, Syracuse, NY
- ⁵ Center for Research on Sustainable Forests, University of Maine, Orono, ME
- ⁶ Northern Research Station, USDA Forest Service, Columbia, MO



NSRC Mission

Address the importance of the Northern Forest to society and the need for research to have relevance and benefit to the people who live there, work with its resources, use its products, visit it, and care about it.

US Public Law 105-185

The Northern Forest of New England and New York



Northeastern States Research Cooperative
Knowledge to guide the future of Northern Forest communities

Home About Interest Areas Resources Grants Contacts

Impacts of Recreation Activity on Wildlife Communities in the Adirondacks
Researchers in the Adirondacks found that numbers of loons and their number of years on a lake were related to timing of aquatic recreational activity between ice out and Memorial Day and to activities such as Jet Ski, paddle board, swimming, waterskiing, and tubing. [Read More](#)

INTEREST AREAS: [Conservation & Biodiversity](#), [Land Use Planning & Development](#), [Recreation & Tourism](#), [Wildlife](#)

Recent Project Findings
[Beaver Impacts on Adirondack Forest and Bird Communities](#)
[Sustainable Tapping Guidelines for Birch Syrup Production in the Northern Forest](#)

<https://nsrcforest.org/>

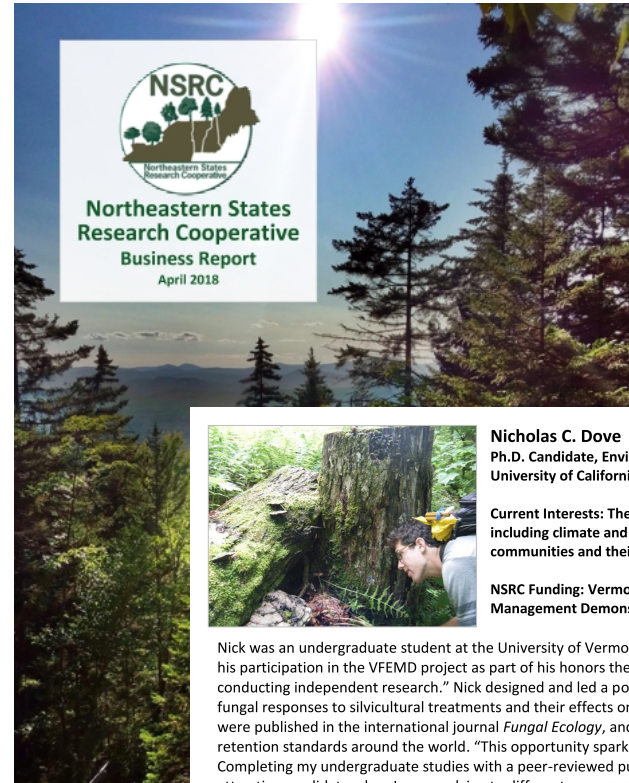


NSRC Business Report

-Released in spring of 2018

-Provides an overview of the organization's history, past accomplishments, key projects, and future direction

-Annual reports also available online at NSRC website



Nicholas C. Dove
Ph.D. Candidate, Environmental Systems
University of California, Merced

Current Interests: The effects of global change, including climate and fire regimes, on soil microbial communities and their biogeochemical processes

NSRC Funding: Vermont Forest Ecosystem Management Demonstration Project (VFEMD)

Nick was an undergraduate student at the University of Vermont when NSRC funding supported his participation in the VFEMD project as part of his honors thesis. "This was my first experience conducting independent research." Nick designed and led a portion of the project focused on fungal responses to silvicultural treatments and their effects on forest health. Nick's results were published in the international journal *Fungal Ecology*, and have informed woody debris retention standards around the world. "This opportunity sparked my interest in research. Completing my undergraduate studies with a peer-reviewed publication made me a more attractive candidate when I was applying to different programs. The NSRC was integral to my development as a researcher. The project was the defining experience of my undergraduate training. I hope that it has a snowballing effect over my whole career."



Dr. Patrick Hiesl
Associate Professor of Forest Operations,
Paul Smith's College
Former University of Maine Master's and Ph.D. student

As a graduate student I received a small grant from NSRC to conduct some additional time and motion studies for a productivity study I did for my master's project. I think without this grant the work that I did would not have been as detailed as it was. Because of the work I did with the NSRC funds, I basically set the stage for a further study that I used for my Ph.D. project. NSRC funds were the seed money to start a much larger project. Even now that I am working for Paul Smith's College, I am still involved in a project that continues the work started with NSRC funds. As a student it was great to have NSRC as a grant listed on my CV, and it probably helped to secure my current position as an associate professor.



NSRC Cross-Regional Partnerships



The University of Vermont

Anne Jefferson
Anna Marchessault



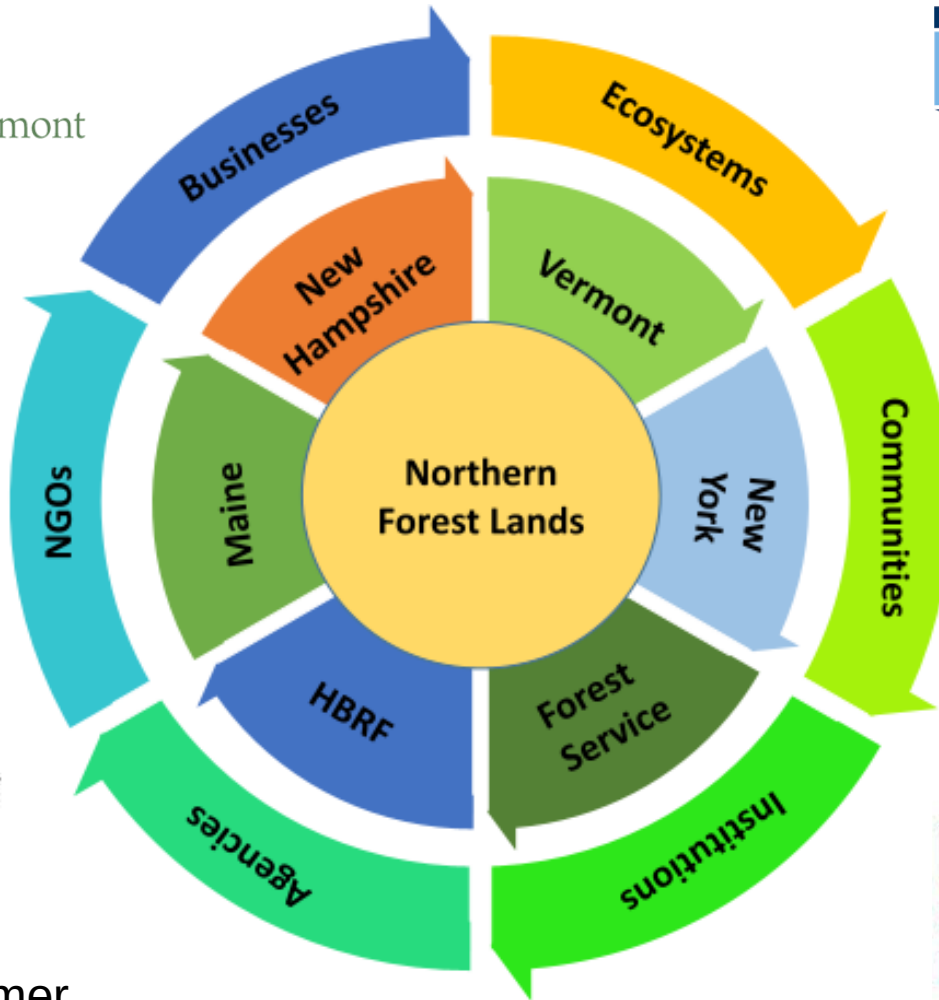
University of
New Hampshire

Mark Ducey
Ben Fraser



The State University
of New York

Rene Germain
Mary Beth Malmsheimer



Aaron Weiskittel
Meg Fergusson

HUBBARD
BROOK



RESEARCH
FOUNDATION

Anthea Lavalley
Mike Snyder

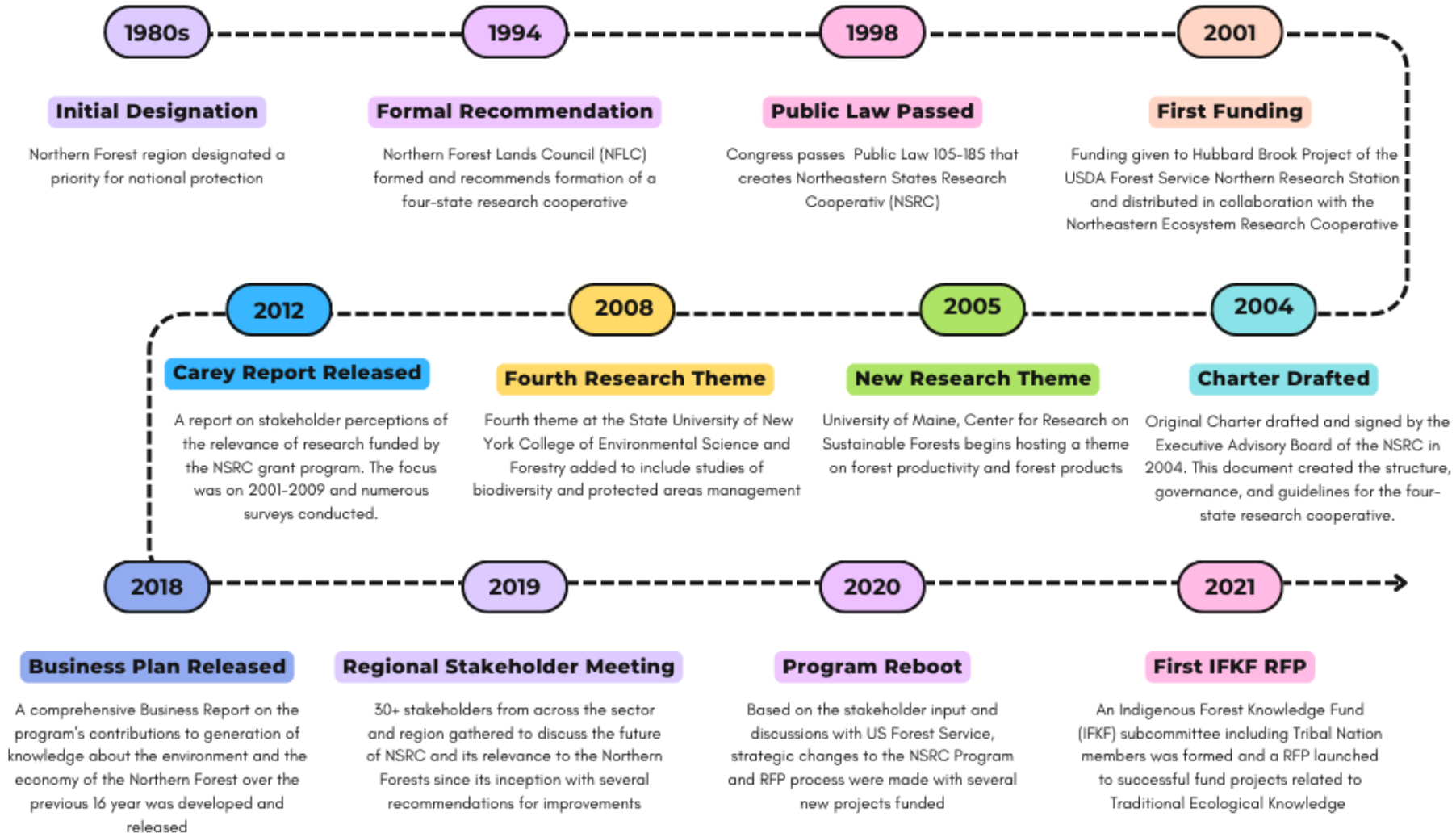


Dan Dey

Long history of extensive private-public-academic partnerships across the region



NSRC History

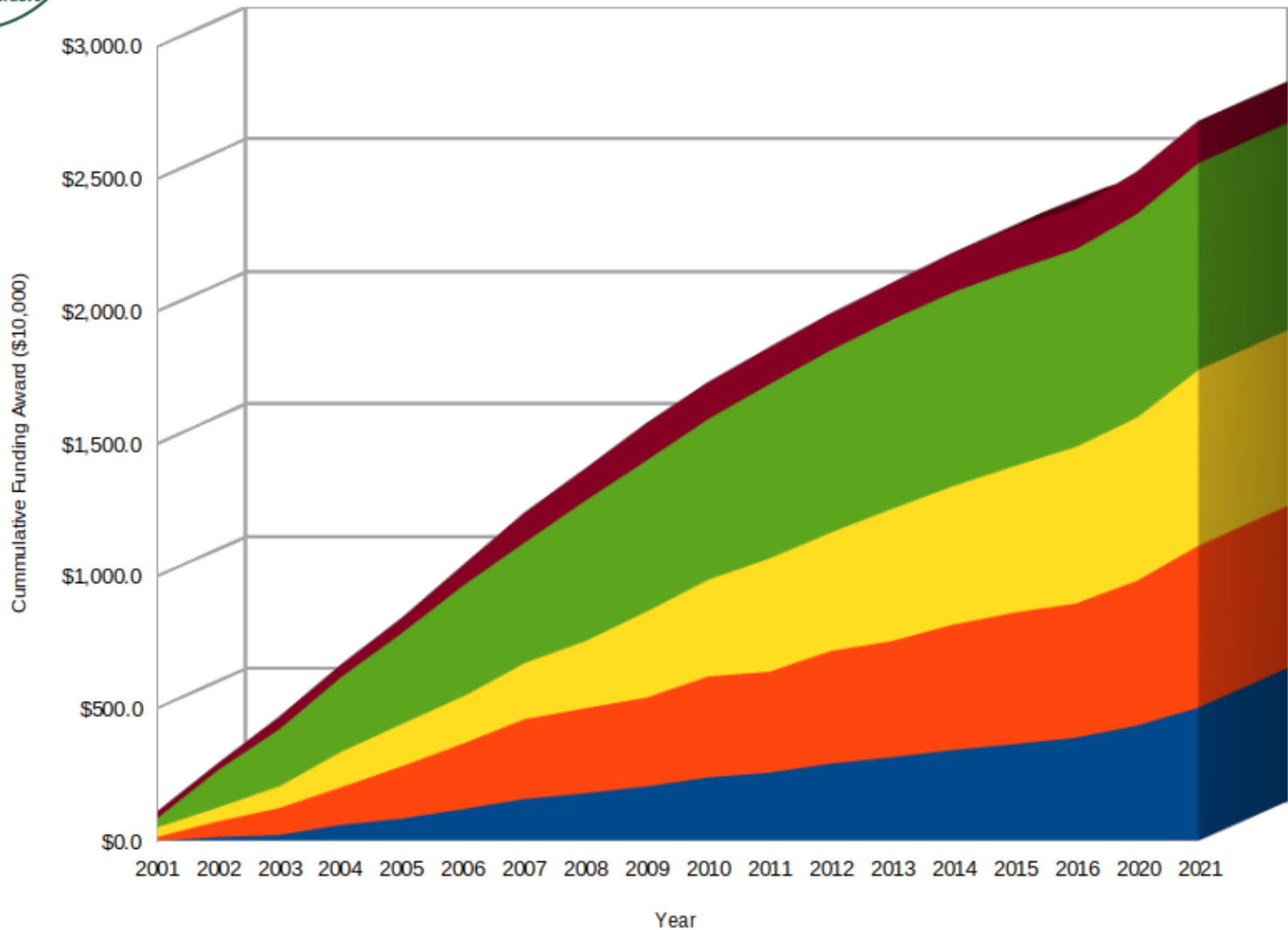


A long and variety history with continual evolution and refinement over time



NSRC Funding

■ ME ■ NH ■ NY ■ VT ■ Other

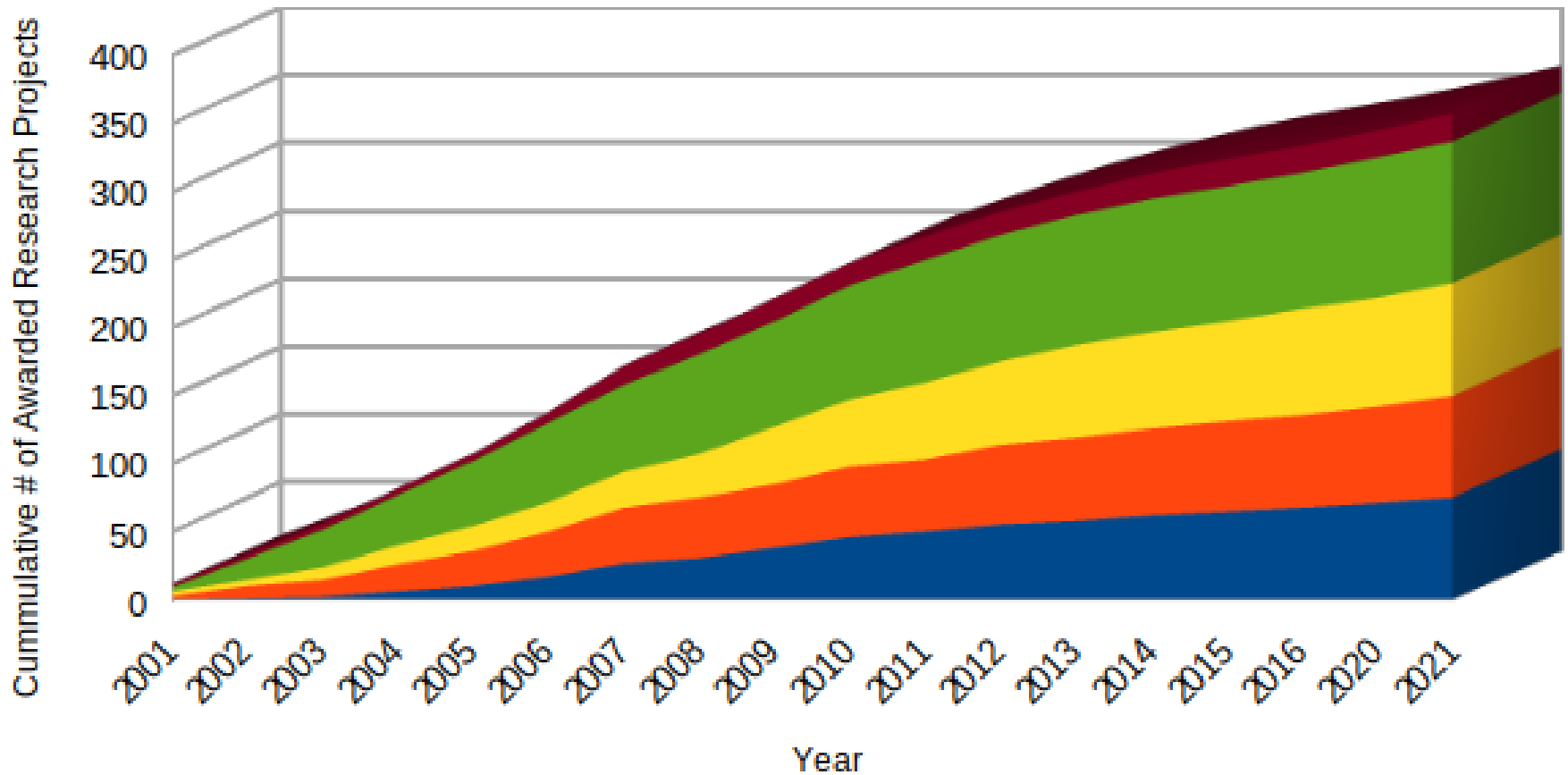


NSRC has awarded nearly \$28M with nearly equal allocation across the 4 states



NSRC Projects

■ ME ■ NH ■ NY ■ VT ■ Other



Over 350 research projects with nearly equal allocation across the 4 states



NSRC Outcomes



334 Awards



300+ Publications



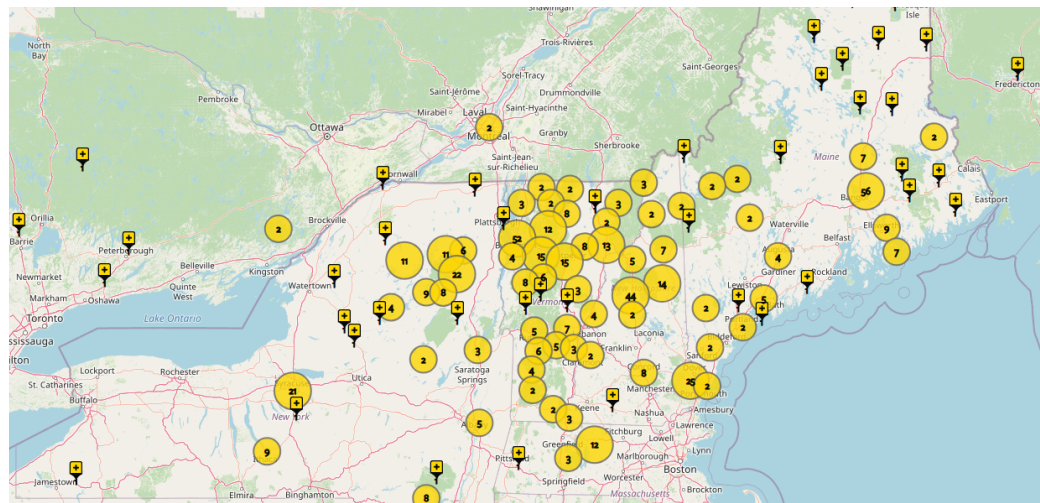
176 Pis



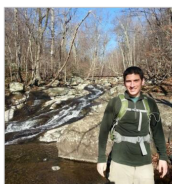
53 Institutions



1,000+ Collaborators



Graduate Students



Mark Castle
Former University of Maine Master's student

Current Interests: Biometrician for US Forest Service, Forest Management Service Center

The Northeastern States Research Cooperative has played a pivotal role in my Master's program at the University of Maine. In addition to partially supporting my graduate assistantship and tuition costs, funding provided by the NSRC allowed me to be involved in an exciting research project centered around hardwood growth and yield. My involvement with the project encompassed leading field crews to collect forest inventory data across Maine and New Hampshire and using this data to develop quantitative models to determine the influence of stem quality on hardwood product potential, growth, and survival. The experience I have gained through this research has been invaluable and allowed me to further develop my skills in leadership, communication, and quantitative analysis. Finally, the experience that I have gained through this research has helped me obtain a USDA pathways internship position with the Forest Management Service Center in Fort Collins, Colorado.



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University of California, Merced

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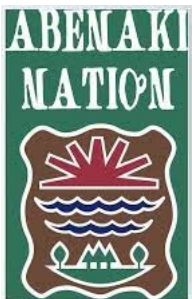
Numerous cross-regional outcomes (especially students) of an applied research program



NSRC IFKF

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

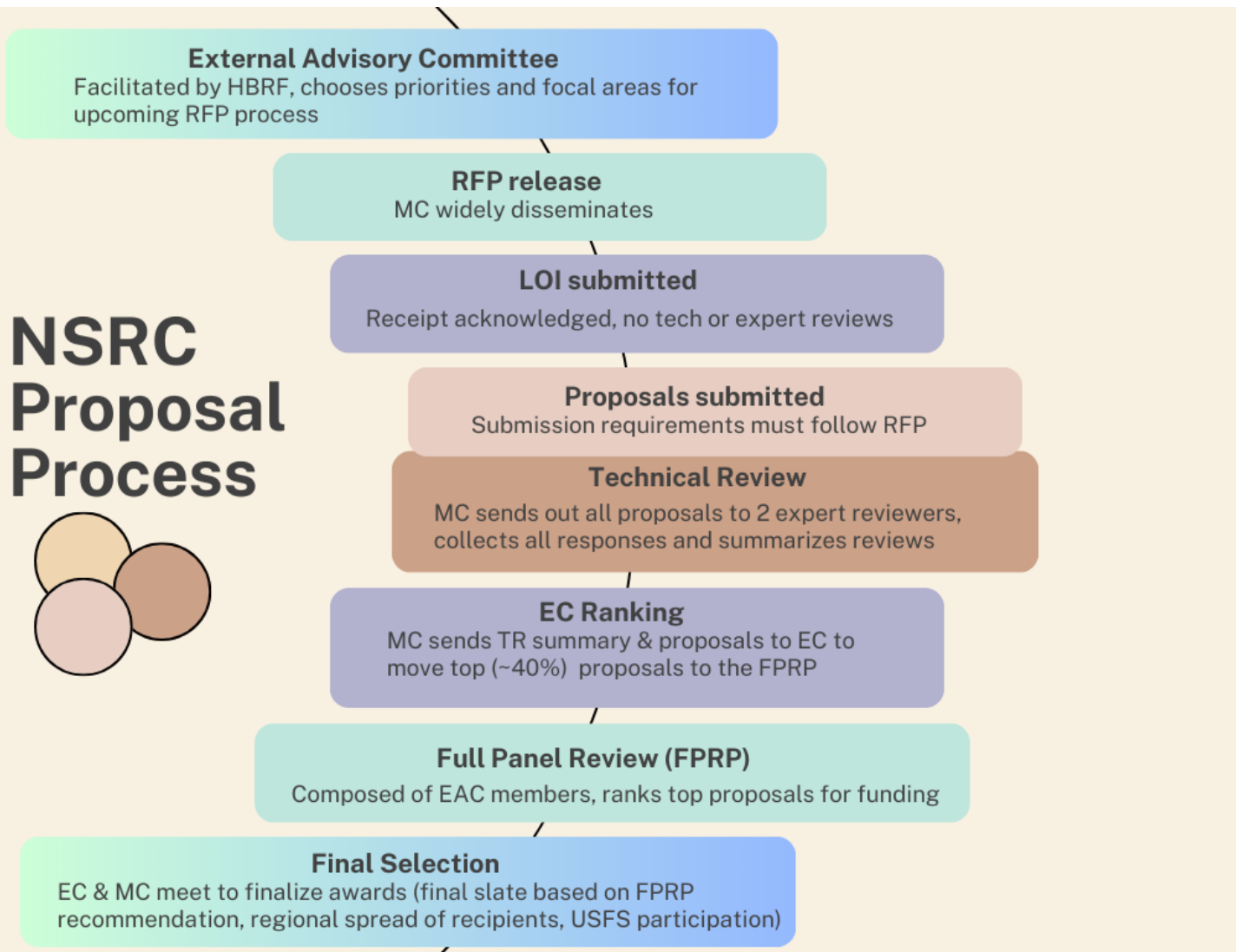
PI	Organization	Project
Benjamin Simpson	Penobscot Indian Nation	Monitoring Culturally Important Wildlife on Penobscot Nation Lands
John Daigle	University of Maine	Protecting the Brown Ash
Heidi Asbjornsen	University of New Hampshire	Supporting Abenaki Stewardship of Atlantic White Cedar Swamp Ecosystem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



Launched in 2021 by Anthea LaVelle with a two RFPs and several funded projects with growing interest



NSRC RFP Process

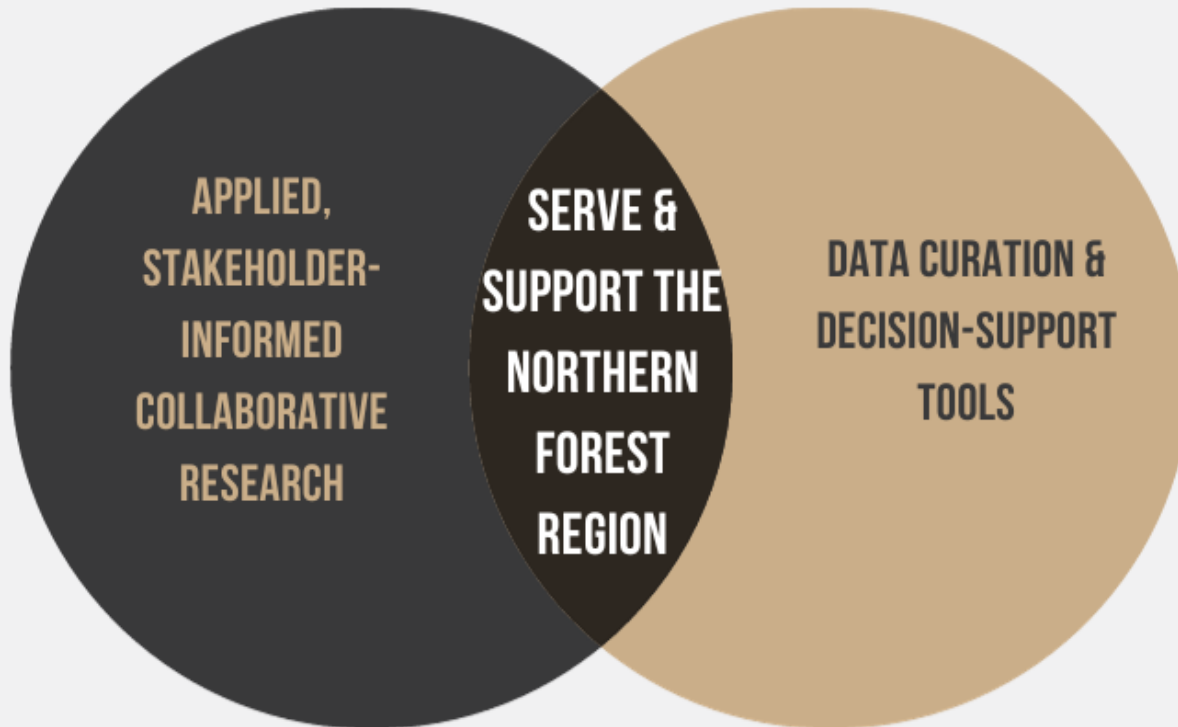


Proposal evaluation and selection process most significant update in reboot

A NSRC & FEMC Partnership



To support cross-disciplinary, collaborative research in the Northern Forest that is relevant to and benefits the people who live within its boundaries, work with its resources, use its products, visit it, and care about it.



To serve the northeast temperate forest region through improved understanding of long-term trends, annual conditions, and interdisciplinary relationships of the physical, chemical, and biological components of forested ecosystems.

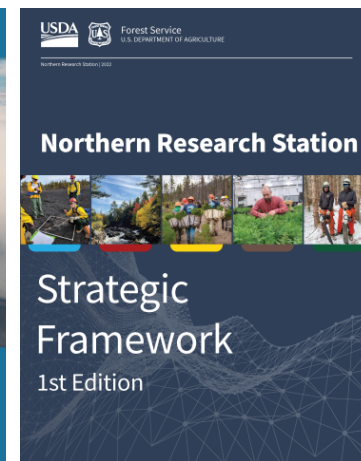
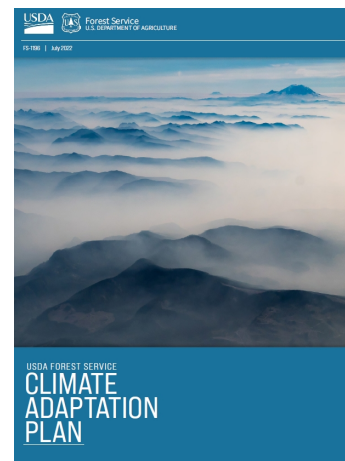
A formal partnership between the organizations has been established and can grow in the future



NSRC & USFS



- The US Forest Service values its partnership in the NSRC
- We have mutual interests in providing the science to support management of the diversity of forest ecosystems and landscapes in the Northeast and throughout the Eastern Region
- We are guided by strategic direction from several national & regional program areas:





Summary

- NSRC has been a vital regional program with a long and productive history
- Given current transitions in the region, the need for NSRC likely has not been higher
- Future of the organization remains strong, but needs continued engagement and support
- Partnership with FEMC is logical and leverages strengths of both organizations



Thank you!

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- Mark Ducey (mark.ducey@unh.edu)
- Aaron Weiskittel (aaron.weiskittel@maine.edu)
- Rene Germain (rhgermai@esf.edu)
- Anthea Lavalley (alavalee@hbresearchfoundation.org)
- Dan Dey (daniel.c.dey@usda.gov)

nsrcforest.org

