

NSRC Progress Report 2021

Vermont Town Forest Census for Covid, Carbon, and Capacity-Building

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Project abstract

Town forests not only contribute to forest integrity, ecosystem services, and community well-being, but they also can serve as models of sustainable forest management and conservation for diverse goals to family forest owners. Town forest acquisitions often add strategic pieces to regional conservation strategies to counteract the growing fragmentation of the Northern Forest and help sustain the forest products industry. Many communities, however, find that managing these parcels can also bring challenges, as communities try to accommodate diverse public demands with limited resources. Town forests are identified in the Vermont Forest Action Plan as a priority landscape, and public and private initiatives in recent years have sought to build capacity of communities to meet the challenges.

NSRC project collaborators have identified several needs hampering these efforts: lack of a complete inventory and key contacts for town forests, inadequate public maps and information on town forests, and uneven knowledge of community needs. This research project will help fill these gaps while asking novel questions about impacts of the COVID-19 pandemic and potential for forest carbon markets to help finance stewardship activities. NSRC researchers with deep knowledge of town forests will provide a complete inventory of community forests in Vermont, a census of Vermont town forests that can be repeated in the future, an updated database with public interface, and an interactive, publicly available map. These products will enhance efforts to bolster the ability of communities to steward their forest resources to produce benefits that extend beyond their borders.

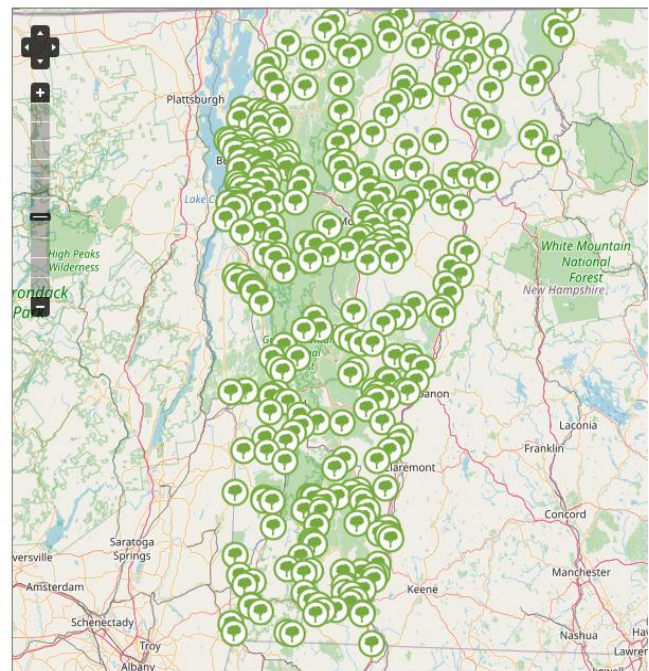


Figure 19: Current online map of Vermont Town Forests, which this research project will help redesign and update

Summary of Progress in 2021

The research team examined existing town forest databases used by the state to identify information gaps and create a strategy for collecting more comprehensive data and maintaining it over time. We coordinated with a complementary survey of town forests led by the Northern Forest Center, which focused on governance structures. While that effort did not attempt do a complete census of all town forests, it provides a starting database of contact information upon which we can build, and it helps hone selection and wording of census questions. We seek not only to contact all Vermont town forests for this census, but also to collect baseline data and provide the infrastructure to periodically (~5 years) repeat the census with some permanent questions for monitoring and additional novel questions that target topical issues and capacity-building needs. To that end, we discussed with data managers at the Vermont Agency of Natural Resources and affiliates at the University of Vermont where the database would best be housed, how it should be structured, and the feasibility of automating updates in the future.

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We began development of survey questions and, in particular, novel questions related to land acknowledgements and indigenous place names. We identified members to serve on an advisory committee, who will help prioritize the topics covered, review the survey drafts, and provide insights into securing a complete count.

Problems or Changes

We were not successful in recruiting a graduate student to begin in fall 2021. We are seeking a student from this year's round of applicants. To make progress on first year project goals absent a graduate student, the PI engaged her fall 2021 service-learning class (ENVS 295 Community-based Conservation) to address some project tasks. They took the lead in researching best practices in land acknowledgments for town forests and related actions of recognizing Indigenous use rights, using Indigenous place names, incorporating traditional ecological knowledge, and engaging Indigenous people in decision-making processes. They drafted a report on this topic intended for town forest managers.

We also ran into challenges with identifying the specific database structure and the capacity to host and maintain the database. While there was initial support from the state and the Forest Ecosystem Monitoring Cooperative, both institutions experienced transitions, which have led to minor delays.

Alignment with Forest Service

This project complements USFS-funded work led by the state to assist local municipalities in Vermont with town forest governance.

Plans for 2022

We will recruit a graduate student and possibly an undergraduate summer research intern to catch up on project tasks and help the graduate student hit the ground running in the fall. In particular, we need updated information for the sampling frame, which builds upon the earlier governance survey. We will convene the advisory committee to review a first draft of the census and finalize database structure, storage, and access. We plan to build out the project website and have a survey ready to deploy by the end of the year. Collection of census responses may continue into 2023, as we anticipate the need for repeated contacts to solicit responses from all municipalities with forests.



Figure 20: University of Vermont service-learning students on field trip to a community forest