

## **Project #1: Improving Vermont's Forest Integrity Through Empowerment of Woman Forest Landowners**

*Community Partners: Caitlin Cusack, Forester, Vermont Land Trust and Lisa Sausville, Executive Director, Vermont Coverts*

### Introduction

Women represent an important part of Vermont's landowner population. They serve as the primary decision makers for 20% (475,000 acres) of the state's forestland and co-own just over another 1 million acres. Their significance relative to land management and influence over the forest landscape in Vermont is only anticipated to increase as, statistically speaking, women have longer lifespans. Research to date has shown that women have a strong interest in land conservation but are much less engaged with land management and decision-making activities.

The lead collaborators on this research project see this gap as an important opportunity to engage women landowners around the most pressing issues facing Vermont's forests. These include fragmentation and parcelization, both of which are driven by a range of demographic and economic factors; protecting soil and water quality; and creating a more resilient forest landscape in the face of climate change. They hope to "engage and empower women to implement forest stewardship activities in their woods in ways that simultaneously support Vermont's Forest Action Plan (VFAP) goals and women landowners' goals." The core VFAP goal is minimizing "the loss of forest cover to conversion to other uses."<sup>1,2</sup>

With funding from the High Meadows Fund, the project collaborators plan to design a program in Vermont modeled after successful "Women Owning Woodlands" (WOW) programs elsewhere in the country.<sup>3</sup> Their key objectives are to, "address gender-related differences in how women approach estate and succession planning, gaps in confidence and knowledge regarding woodland stewardship, and differences in participation rates in forest landowner outreach and educational programs in Vermont."<sup>4</sup>

To date, interviews, focus group conversations, and student projects from the Fall 2019 ENVS 0442 Transnational Feminist Conservation class allowed organizers to develop and pilot a survey that is being administered this month. Further, research on existing WOW and Becoming an Outdoors-Woman (BOW) programs has been undertaken both by ENVS 0442 students as well as an AmeriCorps intern in order to learn from the successes, barriers, and challenges of administering these existing programs.

### Project Objectives

Your contributions to these efforts will further work to date and will form an important part of information shared at a planned June 2020 Summit. Our partners have expressed the following needs, listed in order of priority:

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<sup>1</sup> High Meadows Forest Health Grant Proposal

<sup>2</sup> [https://fpr.vermont.gov/forest/vermonts\\_forests/action\\_plan](https://fpr.vermont.gov/forest/vermonts_forests/action_plan)

<sup>3</sup> <http://www.womenowningwoodlands.net/>

<sup>4</sup> High Meadows Forest Health Grant Proposal

- *Analysis and aggregation of survey data.* This will include, but is not limited to, designing with your partners creative ways to analyze survey data, conducting these analyses, and presenting a summary of results in a visually compelling way.
- *Continued research on optimal institutional configurations.* Building on what has been learned to date about the structure, successes, and barriers of existing WOW and BOW programs, your efforts here will help inform the optimal configuration of a Vermont-based WOW program. Outstanding questions include:
  - Can a new program be managed without additional staffing?
  - Can management rotate amongst conservation organizations?
  - Should it be a statewide entity or follow a local chapter or network model?
  - What kind of tools would a coalition of organizations need to develop so that others could use for hosting local events and/or coordinating with existing events?
  - If a serving as a clearinghouse for information emerges as a priority based on survey data, where should this live / what organization should host, or should this rotate as well?
  - What can we learn from the programs and organizations that haven't been studied to date – i.e. programs such as [Vermont Invasives](#), the [Forest Ecosystem Monitoring Cooperative](#), and other collaborative programs regardless of their topical focus. See also a final report from the Fall 2019 ENVS0401 class entitled, "A Commons Conservation Collaboration Network".
- *Begin developing advertising / marketing / outreach materials.* Bringing these types of materials to fruition will likely be the work of the next phase of WOW program development, but based on your work on the above two bullets, you will be well poised to make suggestions as to what a marketing and advertising plan / campaign should include, and how/if multiple approaches need to be developed to reach folks across different age groups or other demographic variations. Other creative skill sets that exist in your group could also be brought to bear here to draft example materials.

## **Project #2: Transportation Access to Recreation Opportunities**

*Community Partners: Jessica Savage, Recreation Program Manager and Hannah Phillips, State Lands Administration Program Manager, Vermont Department of Forest, Parks and Recreation*

### Introduction:

“The Vermont Department of Forests, Parks and Recreation (FPR) is responsible for the conservation and management of Vermont's forest resources, the operation and maintenance of the State Park system, and the promotion and support of outdoor recreation for Vermonters and our visitors. In addition, FPR is responsible for the acquisition, planning coordination and administration of all Agency of Natural Resources lands.”<sup>5</sup>

For the recreation arm of FPR’s work, they have recently completed the 2020 Statewide Comprehensive Outdoor Recreation Plan (SCORP). Given continually shifting demographics, environmental conditions, public interests, and recreation trends the state develops a new plan every five years. Through a public survey and public comment opportunities, FPR staff craft a plan that identifies outdoor recreation strategies that help to address the needs and desires expressed by Vermonters.<sup>6</sup> The five priorities of the 2020 SCORP are:

1. Stewardship of Natural Resources and Recreation Areas
2. Stakeholder Communication, Coordination, and Engagement
3. Public Participation and Access for All
4. Community Connection, Health, and Wellness
5. Economic Vitality and Tourism

### Project Objectives:

Your team’s efforts will be focused on priorities #1: Stewardship of Natural Resources and Recreation Areas, and #3, Public Participation and Access for All. This is a rich and nuanced area for exploration and there are several large and interrelated questions that our partners have posed for you to help them address. The overarching question you partners want you to explore is:

- How can we promote energy efficient public transportation and ridership, such as shuttle buses, in heavy-use recreation corridors?

Other related questions to consider include:

- How can we best address the multi-layered challenge of equitable access to recreational opportunities from a transportation standpoint in order to reduce barriers to access for those without vehicles, decrease personal vehicle carbon emissions, and help land managers address challenging parking situations?
- How can both rural areas and population centers be best served?

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<sup>5</sup> <https://anr.vermont.gov/forests-parks-rec>

<sup>6</sup> <https://fpr.vermont.gov/news/shaping-future-outdoor-recreation-scorp>

- How can a system be best designed to be inclusive and inviting and comfortable for demographics currently underrepresented in the recreation space to utilize?
- Do we need more public lands closer to the public? That is, do we need new transportation options to serve existing recreation areas or new recreation areas along transit lines?
- What might the public policy and/or cost implications be of any new solutions (e.g. public or private shuttle systems, more weekend service for public transit, new land conservation initiatives, etc.) you propose?

While you have the freedom to design additional approaches to addressing these interrelated questions our partners have identified two deliverables:

- *Case Study Research*: Developing robust case studies for how equity of access to recreational opportunities has been addressed elsewhere, identifying what is transferable to the VT context, and offering recommendations for how VT might move forward. Our partners already have several ideas in mind for programs they are interested in learning more about.
- *Geographic Analysis*: Central to answering many of these questions will be to conduct a spatial analysis of the challenges presented including, but not limited to, overlaying transportation opportunities (both public transit and bike/ped access) with public and private conserved lands on which recreation is available for gap and opportunity identification.

### **Project #3: Recreational Trail Density and Wildlife Impacts**

*Community Partner: Northeast Wilderness Trust— Sophi Veltrop, Outreach Coordinator*

#### **Introduction:**

The Northeast Wilderness Trust is a regional land trust unique in its exclusive focus on preserving wilderness areas. The Trust currently safeguards more than 35,000 forever-wild acres across New England and the Adirondacks. This focus on wilderness is informed by the Trust’s belief that wilderness has intrinsic value and the right to exist for its own sake; offers experiential benefits to hikers, hunters, paddlers, and wildlife watchers; and affords multiple societal benefits including the provision of wildlife habitat, climate regulation, clean air and water, and a scientific benchmark against which progress toward sustainable use of the managed landscape can be measured.<sup>7</sup>

As stated in their 2020-2025 Strategic Plan, the Trust’s vision is to cultivate “a landscape of connected, resilient wildlands shared by a human culture that recognizes the benefits of wild places.”<sup>8</sup> Their key priority areas, or “pillars” of their strategic plan include:

1. Protect: Accelerate and expand wilderness preservation for the benefit of all life
2. Connect: Strengthen our region’s collective wilderness ethic by connecting people with meaningful wildlands experiences
3. Champion: Elevate the understanding of and support for wilderness
4. Sustain: Through organizational excellence, build an enduring institution that can deliver on the promise of perpetuity.

Through a focus on these four areas, the NE Wilderness Trust has a goal of preserving an additional 25,000 acres of wildlands by 2025. The Wilderness Trust protects land in two ways: by owning Wilderness Preserves and Sanctuaries, or by holding legal restrictions (conservation easements) primarily on land owned by other conservation organizations, and to a lesser extent on land owned by individuals. Generally, this means that a landowner gives up the rights to build structures and roads, subdivide, conduct commercial or industrial activities, farm, and cut timber. Landowners generally retain the rights to use the land for non-motorized, non-mechanized recreation, scientific research, and sometimes hunting and fishing.<sup>9</sup>

#### **Project Objectives:**

This project team will grapple with a question that many public and private land management agencies and conservation organizations are also grappling with: How do the density of trail networks and recreational trail usage impact wildlife behavior and habitat connectivity? In collaboration with the Vermont Department of Forest Parks and Recreation as well as the Department of Fish and Wildlife, UVM Field Naturalist graduate student Meredith Naughton is conducting an extensive literature review on the ecological impacts of recreation trails and developing a decision-making framework so that state agencies can make consistent and responsible decisions when designing and approving new trails.

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<sup>7</sup> <http://www.newildernesstrust.org/mission-and-history/about-wilderness/>

<sup>8</sup> <http://www.newildernesstrust.org/2019/12/18/strategic-plan/>

<sup>9</sup> <http://www.newildernesstrust.org/conserving-your-land/conservation-easements/>

Through the course of her research, she has identified that there is little to no research specific to the types of forests, forms of recreation, and species that are unique to Vermont.

The Northeast Wilderness Trust is also interested in this question for several reasons. First, they would like to strengthen the scientific / ecological underpinnings to the restrictions they incorporate into their Forever-Wild easements to more effectively communicate with landowners, partner organizations, funders, and the general public (including outdoorspeople who use the Preserves). Second, new information could help them cultivate a shift in public thinking from “these are the things I can’t do here” to “this is one of the few places I *can* experience and witness nature most deeply, because these restrictions are in place”. Lastly, there is a pronounced funding bias towards supporting conservation projects on lands with recreational trails. How might new information shift funders’ priorities if the importance of conserving lands without trails can be demonstrated?

This project represents an opportunity to combine field research, spatial analyses, and the translation of your findings for audiences such as landowners who might choose to preserve their land, funding entities, and land managers.

- While the specifics of a field study will be developed collaboratively with your partner and through tapping the expertise of our colleagues in Conservation Biology, the type of pilot study our partners are interested would include 1) the selection of focal species (number of species or focus on species diversity TBD by your team) for which you can gather observational (e.g. tracks, scat, counts) and anecdotal data and compare these data across similar forests / natural community types with a high density of trails and without trails (form of recreation TBD by your team). If feasible, a third comparator could be an area with regular logging. We know that there will be lots of room for error in such a study designed and implemented in a short time frame, but our partners still feel it will be of value as a pilot study as well as to inform what the design of a longer term research project could look like.
- A starting point for this work also needs to include a spatial analysis. A comprehensive map of existing trails in Vermont (public, private, rogue, etc.) does not exist, and, as you can imagine, a single map of all trails would be incredibly useful when land managers and conservation organizations discuss and make decisions around trail density impacts. This of course is too daunting of a task for the whole state, but for a bounded area (feasible scope TBD by your team) *with your field study areas included*, start this work by collecting dispersed data files and mapping some trails yourselves. In addition to informing your field study, this will also allow you to think about how / if trail density varies across forest or natural community type and what the wildlife implications of this might be.
- Lastly, as noted above, translate your findings for the target audiences of landowners who might choose to preserve their land, funding entities, and land managers. This type of translation work speaks directly to the Trust’s third pillar in their strategic plan, elevating the understanding of and support for wilderness.

## **Project #4: Carbon Offset Opportunities for Vermont Forests**

*Community Partners: Becca Washburn, Director of Lands Administration and Recreation and Danielle Fitzko, Director of Forests, Vermont Department of Forests, Parks, and Recreation*

### **Introduction:**

Forests represent approximately 78% of Vermont's land cover, with the majority of forestlands privately owned and in relatively small parcels. Despite a 20-year period of relatively stable land cover, recent data show an average of 20,000 acres per year loss in Vermont's forest land base between 2012 and 2017.<sup>10</sup> Other threats to forest integrity include invasive insect pests, plants, and pathogens; changing landowner demographics; unpredictable and globally complicated forest products markets; and increasing ownership costs. In order to protect and enhance forests and the many values and benefits they provide, the state is interested in exploring forest carbon offset programs as one potential tool to help preserve Vermont forests by providing additional revenues to landowners and creating a financial incentive for the goal of keeping forestlands forested.

The Vermont legislature passed Act 83 in 2019 to establish a Vermont Forest Carbon Sequestration Working Group.<sup>11</sup> The stated goal of the working group was "to study how to create a statewide program to facilitate the enrollment of Vermont forestlands in carbon sequestration markets."<sup>12</sup>

The Working Group's efforts were aimed at evaluating the "opportunities for public and private landowners to create forest carbon sequestration offset projects with their forestland and enroll such projects in carbon offset markets, including ways in which the State could play a role in facilitating landowner participation. Ideally, landowners, including private landowners and state or local governments, would receive financial payments for a newly quantified forest product (carbon), while the State could support policies that maintain or increase the levels of carbon sequestration and storage in Vermont forests, thus promoting climate stabilization."<sup>13</sup> The Working Group conducted their research from September 2019 through the end of the year and published their findings and recommendations in Jan 2020. Among the key recommendations were to:

- 1) "Develop public information materials regarding the components of forest carbon offset protocols and markets, appropriate silvicultural practices, project development, and additional resources available for assistance and information. These materials should be designed for use by the general public, forest landowners, municipalities, and private organizations and businesses.
- 2) Analyze the feasibility of developing a forest carbon offset project for at least one parcel of state land.
- 3) Work with municipalities to explore opportunities to develop a pilot carbon offset project that includes town forests and/or urban forestry activities
- 4) Explore partnerships with private sector organizations that have experience in carbon offset projects in order to create statewide public-private partnerships that could work to minimize

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<sup>10</sup> Morin, Robert, (2018) "Vermont Forests, 2017," U.S. Department of Agriculture, Forest Service

<sup>11</sup> <https://legislature.vermont.gov/Documents/2020/Docs/ACTS/ACT083/ACT083%20Act%20Summary.pdf>

<sup>12</sup> Vermont Forest Carbon Sequestration Working Group Final Report, January 4, 2020

<sup>13</sup> *ibid*

the costs and maximize the benefits of enrolling public and private lands in carbon offset market programs.

- 5) If the State of Vermont were to create a state carbon accounting system or protocols as a component of a greenhouse gas emissions reduction program or climate initiative, the State should develop and adopt rules that prevent double counting of carbon.”

### Project Objectives:

The Working Group found that, “for a variety of reasons, there are very few forest carbon offset projects to date in Vermont. Vermont forestland owners generally hold parcels too small to enter into carbon markets without significant aggregation of parcels. Vermont forestland owners also may not be aware of carbon market opportunities, may hold misconceptions about carbon projects, may prefer other alternatives for preserving and managing their forestland, and/or may feel uncertain about navigating the complex process of developing carbon offset projects.”

Participation in carbon markets by private landowners would be entirely voluntary, but there is interest in gathering, preparing, and sharing information about carbon market opportunities for and with private landowners as one potential tool for not only maintaining more intact forest parcels in VT but also making a contribution to addressing climate change. Your partners at FPR identified that assistance around outreach and communications to private landowners would be a helpful contribution to this important initiative.

The goal of this project team is to develop outreach and communication tools (e.g. story map, website, video, etc.) designed to build a deeper understanding among Vermont’s private landowners of carbon sequestration and storage and carbon markets. Specific project goals include:

- Gaining an understanding of the audience
  - Characteristics of private landownership in Vermont
  - Conversations with County Foresters
  - Review data from resources like the National Woodland Owners Survey and Tools for Engaging Landowners
- Compiling Content
  - Much already exists but may need to be adapted for Vermont landowners
  - What messages do private landowners need to hear about the interplay between the Use Value Appraisal/Current Use Program<sup>14</sup> and carbon markets
- Identifying how information transfer will be most effective
  - Digital media, County Foresters, other?

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<sup>14</sup> <https://fpr.vermont.gov/forest/managing-your-woodlands/use-value-appraisal>; “Vermont’s UVA Program enables eligible private landowners who practice long-term forestry or agriculture to have their land appraised based on the property’s value of production of wood or food rather than its residential or commercial development value.”