In FY 2022, the project focused on forest conservation extension activities and outcomes. Here is a summary of the key aspects:

**Project Director:** Paul Catanzaro

**Organization Project Number:** -

**Accession Number:** 7002101

**Start & End Date:** 10/01/2020

**Organization:** University of Massachusetts

**To Project / Program:** "Forest Conservation"

**Fiscal Year:** 2022

**Status:** NIFA REVIEW

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**Primary Critical Issue:** Environmental Stewardship

In 2-3 sentences, briefly describe the issue or problem that your project addresses.

There are over approximately 50,000 family forest owners (FFOs) who own 10 or more acres of land, living in 351 communities across Massachusetts. I am charged with increasing forest conservation by informing the decisions of these FFOs who collectively own 70% of our forests. I have a 9-month appointment with a 55% extension allocation. That translates into .4 FTE dedicated to reaching the many FFOs deciding the future of our landscapes. In order to effectively inform these decisions in my limited time, I focus on research-based outreach strategies that can amplify my efforts, productive partnerships, and strategic critical issues. Below are descriptions of my change of duty station to Joensuu, Finland and my four main extension initiatives.

Briefly describe in non-technical terms how your major activities helped you achieve, or make significant progress toward, the goals and objectives described in your non-technical summary.

In Fall of 2021 I was given permission to temporarily change duty stations to Joensuu, Finland to learn more about the Finnish approach to forest conservation. During this 3 month period I had over 27 meetings with Finnish forestry specialists and conservationists. The amount of forest cover in Finland (76%) is remarkably similar to that of New England (80%). In addition, with 52% of Finnish forests owned by family forest owners (FFOs), the ownership pattern of Finland’s forests is also quite similar to that of New England, which has an FFO ownership of more than 40%. Despite New England and Finland having very similar amounts of forest cover and a comparable ownership pattern, each region has developed different approaches and policies for the stewardship of their forests.

**Initiative 1: Conservation-based Estate Planning Outreach for Landowners**

Over 70% of the forests of Massachusetts are family forests. 73% of forested parcels in Massachusetts are owned by people over 55 years old. We are in the midst of the largest transfer of land that we have ever seen. It is at these times of land transfer that forests stand the greatest chance of being converted to other uses (e.g., houses) or parcelized into smaller properties. The decisions these landowners make about the future of their land will shape our landscapes and the benefits they provide (or don’t provide!) in the future. This is the critical issue of our time. However, our experience has demonstrated that outreach to landowners alone is not enough to increase the pace and scale of conservation-based estate planning. In addition, we worked to strengthen the infrastructure necessary to handle the needs of more landowners by working to strengthen open space committees and land trusts. I have developed a tightly integrated research/extension program to help landowners understand their conservation-based estate planning options. The work of this initiative is done in collaboration with the Mount Grace Land Conservation Trust and is funded by the MA Department of Conservation and Recreation. This work also provides fertile ground for the development of a robust research program investigating how families make decisions about their land. The work of this initiative is having national impact as other states use my work as a model for the development of their programs.

**Initiative 2: Keystone Project**


The Keystone Project invests education and reference materials in important, keystone people, such as large landowners, members of municipal board members, watershed associations, and land trusts. See attached list of those trained this year. There is a competitive application process (60-80 applications a year for 20-25 spots) that allows us to choose those people with the highest likelihood of informing decisions, such as those who are involved in multiple organizations and a history of community activism. Keystone was cancelled once again due to the pandemic. I was able to maintain periodic contact with the Keystone Cooperators through our list serve and constant contact updates. We are currently planning an in-person Keystone training.
for April of 2023 and have secured the venue.

**Initiative 3: Forest Resiliency**

Restoring Old Growth Characteristics - Old growth forests covered 90% of the land area of New England, but now occupies <.1%. Although old growth forests cannot be recreated, there are both passive and active strategies to restore old-growth characteristics to our current ecologically young second growth forests. The structural complexity of those forests with old-growth characteristics provide many wildlife and carbon storage benefits and also increases forest resiliency. Working in collaboration with Anthony D’Amato at University of Vermont, we developed an outreach publication outlining strategies for restoring old-growth characteristics to the major forest types of New England and New York. Our webinar to present our new publication had 700 participants. More outreach and marketing is planned for this coming year. A PDF can be downloaded at: https://masswoods.org/caring-your-land/restoring-old-growth-characteristics.

**Ash Preservation for Cultural and Ecological Benefit** Over the past year, I have been working with a regional team of forest researchers and practitioners, which includes indigenous partners, to integrate both traditional ecological knowledge and western science to promote the preservation of ash from emerald ash borer for both its cultural and ecological values.

**Briefly describe how your target audience benefited from your project’s activities.**

Over 70% of the forests of Massachusetts are family forests. 73% of forested parcels in Massachusetts are owned by people over 55 years old. We are in the midst of the largest transfer of land that we have ever seen. It is at these times of land transfer that forests stand the greatest chance of being converted to other uses (e.g., houses) or parcelized into smaller properties. The decisions these landowners make about the future of their land will shape our landscapes and the benefits they provide (or don’t provide!) in the future. This is the critical issue of our time. However, our experience has demonstrated that outreach to landowners alone is not enough to increase the pace and scale of conservation-based estate planning. In addition we worked to strengthen the infrastructure necessary to handle the needs of more landowners by working to strengthen open space committees and land trusts. I have developed a tightly integrated research/extension program to help landowners understand their conservation-based estate planning options.

**Briefly describe how the broader public benefited from your project’s activities.**

By investigating the social, political, and economic dimensions of family forest ownership, we seek to improve forest conservation in order to better meet the current and future needs of forest owners, communities, and society.

**Comments (optional)**

- Landowner Webinar Series (1) 279 Participants
- Landowner Webinar Series direct mailing (1) - 5000 participants
- Statewide Open Space Committee Conference (1) - 275 participants
- Open Space Handbook (1) 1050 participants
- Mass Mapper Trainings (3) 74 Participants
- Neighborhood Outreach Small Grant Program (70+) Participants
- Women on the Land Network Facilitation (1) - 9 Participants
- Forests are for the Birds Webinar (1) - 79 Participants
- 2 Day Chainsaw Safety Training (1) - 11 Participants
- Develop and maintain Open Space Network (OSN) https://www.massopenspace.org/ (1)
- Restoring Old Growth Characteristics to New England’s and New York’s Forests presentation webinar (1) - 700 participants
- www.Masswoods.org website maintenance (1) - 32035 participants
- Catanzaro, Paul, D’Amato, Anthony 2022/12/07 10.13140/RG.2.2.22226.84163 “Restoring Old-Growth Characteristics to New England’s and New York’s Forests”