

INSTITUTIONAL ARRANGEMENTS FOR WORKING FORESTS

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This research asks: what are the forest management priorities of actors in the Northern Forest? How do community economic orientation, professional roles and recreational interests influence values people place on goods and services forests provide? And, what meanings are embedded in the increasingly popular development model referred to as “working forest?”

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<http://www.uvm.edu/envnr/nsrc/>

Project Summary

Traditional roles of the forest are changing in New York and throughout the much of the eastern United States. To cope with the new and changing demands of diverse actors in the Northern Forest, policymakers have sought a “multifunctional landscape,” in which multiple priorities are realized within the forest. We analyze those priorities and the attributes that structure them. We also study how these priorities are discussed by looking at the term “working forest,” a phrase increasingly central to policy and popular literature. Collectively, these analyses allow us to identify the priorities of a range of central actors in the forest and understand the political climate in which these priorities are articulated.

Our analysis is based on a mail survey (n=183, response rate=63%) sent to actors occupying nine distinct roles in two communities of New York’s Northern Forest. These communities were selected to compare forest management priorities across places with divergent economic orientations. One of our sites has a substantial tourism and amenity-based economy. The other remains more squarely focused on traditional industries engaged in wood processing. Respondents were asked to rank several priorities of forest management and we used statistical analysis to explain variance in these rankings. Results indicate four orientations to management priorities that we label *environment*, *recreation*, *large-scale timber*, and *small-scale timber*. Regression showed that environmental orientations were higher in the amenity-oriented community, and that actors roles vis a vis livelihoods (*i.e.* forester, real estate broker, tourism provider, *etc.*) were significant in explaining variance in management priorities. The forest-based activities of respondents explained the most variance, suggesting that self-interest is an important driver of forest management priorities (*i.e.*, people will support management priorities that reflect their personal use of the forest). While our hypotheses regarding factors shaping forest management priorities were generally supported, suggesting that current social science thinking regarding forest politics has some explanatory power and corresponding value to policy makers, our results suggest that people’s priorities cannot be strongly predicted from information on their communities, their professional roles or their recreational patterns. More research is needed to understand actors’ interests and how these interests are changing in response to shifting character of their communities, their socioeconomic roles and their access to forest based recreation.

Discourse analysis suggests that the phrase “working forest” is defined predominantly by personal priorities rather than a generally shared definition. Based on review of forest politics, we identified three principle definitions of working forest: a middle ground between timber harvest and multiple use of forests; a re-legitimation of timber harvesting (*i.e.*, environmental backlash) with little regard for other priorities; and a formalization of ecosystem services (*e.g.*, carbon sequestration, enhancing biodiversity) as types of “work,” which only healthy, intact forests can provide. While all three types of response were observed, a focus on timber harvest dominates conceptions of what defines a working forest. This result suggests that working forest should not be confused with more balanced concepts such as multifunctionality or integrated territorial development, which seek to define sustainable development models.

Background: A Changing Region

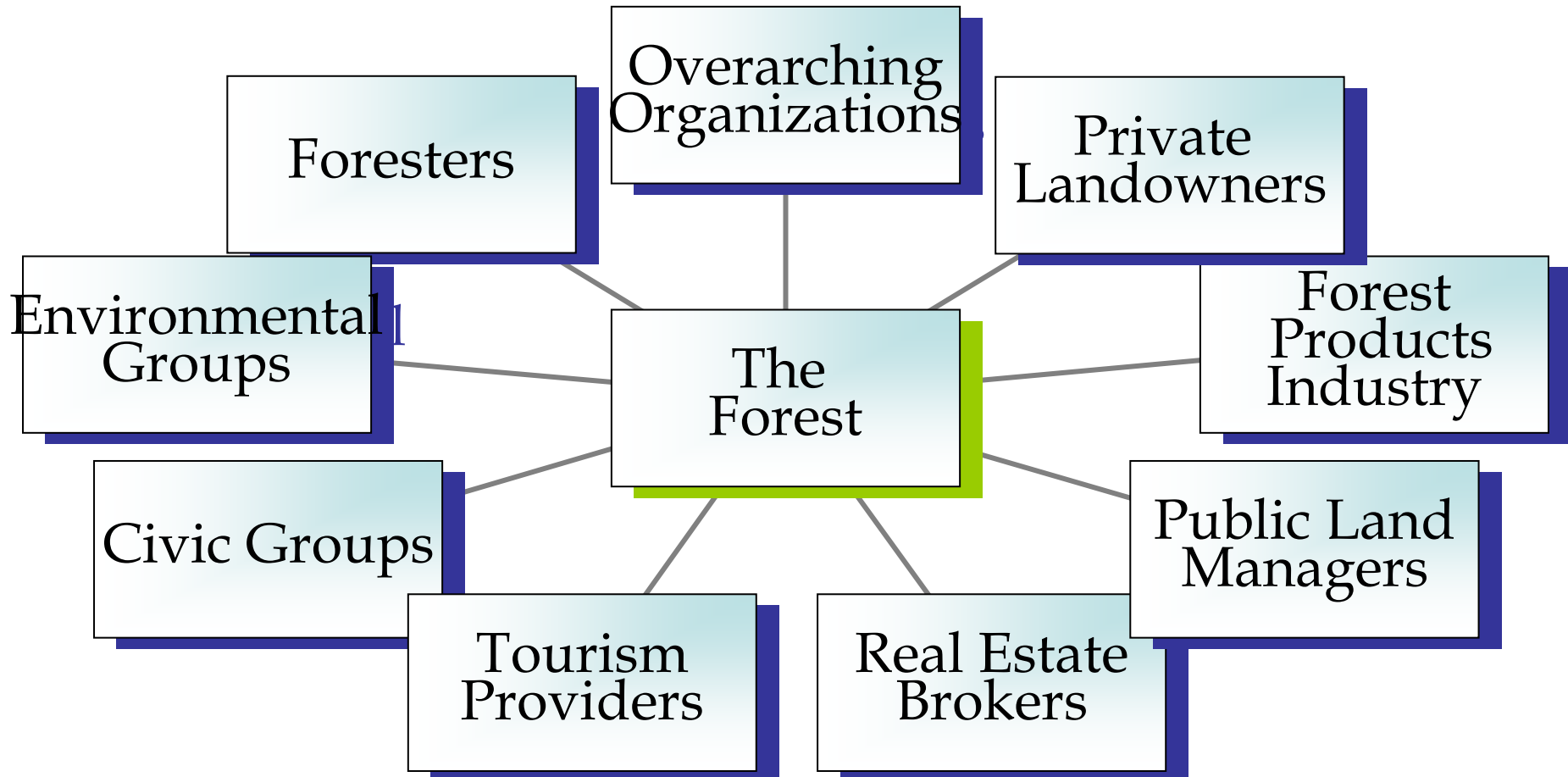
The priorities in the Northern Forest are changing due to new demands and expectations

- Increased amenity-based growth
 - Tourism and recreation opportunities
- Timber industry consolidation
 - Large sales of former timber land
 - Job losses and factory closures
- Pressure from development
 - Increasing property taxes
 - Loss of forestland to subdivision
- Threats to ecological integrity
 - Fragmentation and degradation of remaining forests



Changing Actors

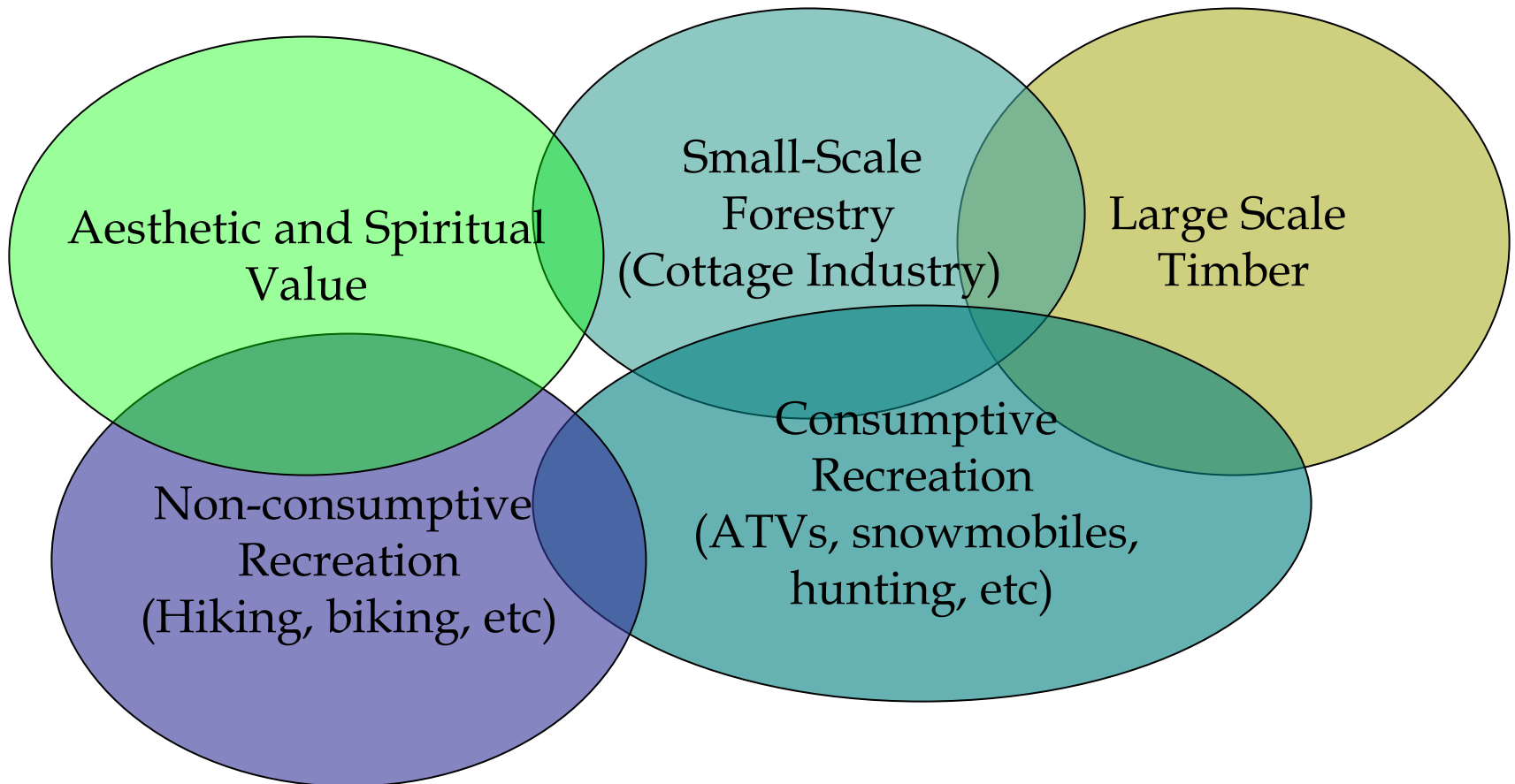
New actors and new priorities engage in the process of forest management.



Increased Usage

New priorities also mean new uses of the forest. Certain uses complement one another, while others conflict.

Some Examples:



Goals of the study

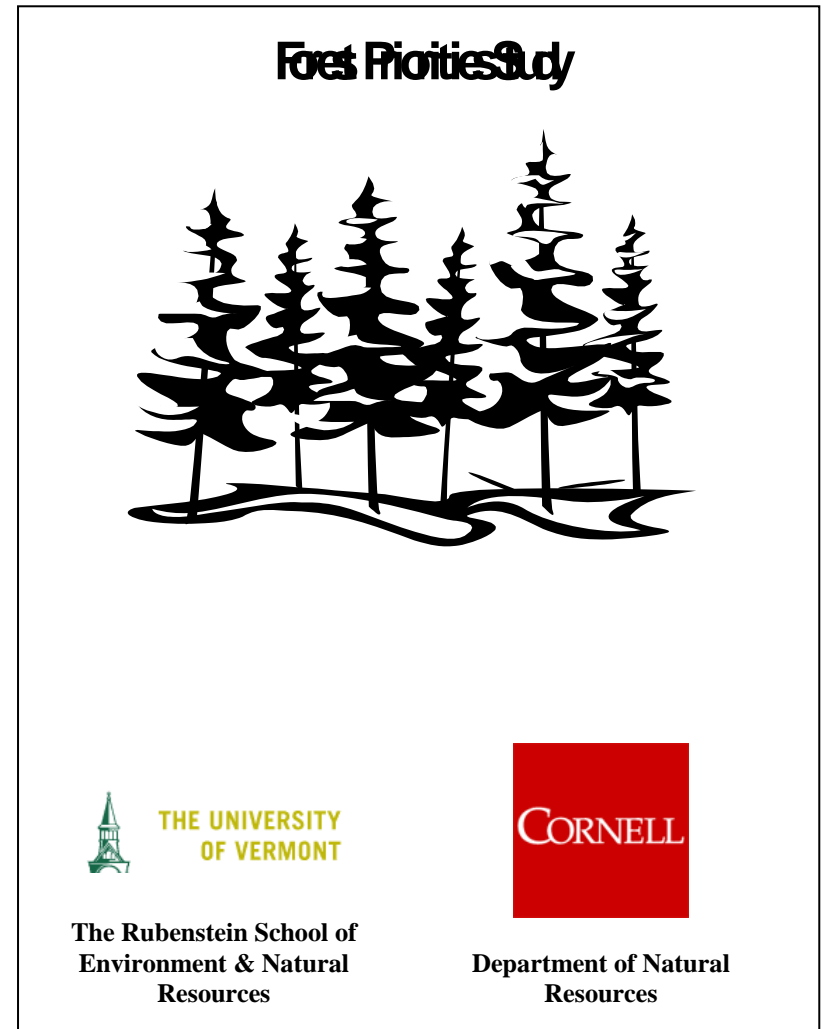
Our goal is to understand and explain how such new actors, new uses, and diverging economic futures affect the politics of the Northern Forest.

- What are the key priorities of different actors?
- How do they relate to current patterns of use?
- What role does economics play in priorities?

- How is forest management discussed?
- Who's voices are heard the loudest?
- Which voices may be getting short shrift?

Overview of Methods

- Mail Survey
 - Key informant interviews
 - Site selection
 - Sampling
 - 63% Response rate (n=183)
- Statistical analysis
 - Evaluating forest priorities
 - Comparing effect of economics, forest uses, and differing roles
- Qualitative analysis
 - Interpreting politics through dialogue
 - Understanding how the phrase “working forest” is used in policy
 - Evaluating how respondents define “working forests”



Saranac Lake and Boonville

Surveys were conducted in two sites to compare towns with diverging economic paths:



Saranac Lake:
transitional
amenity-
based
economy



Boonville:
traditional
timber-
dependent
economy

Sampling and questions

- In each site, each group of actors (from earlier slide) were surveyed (n=300)

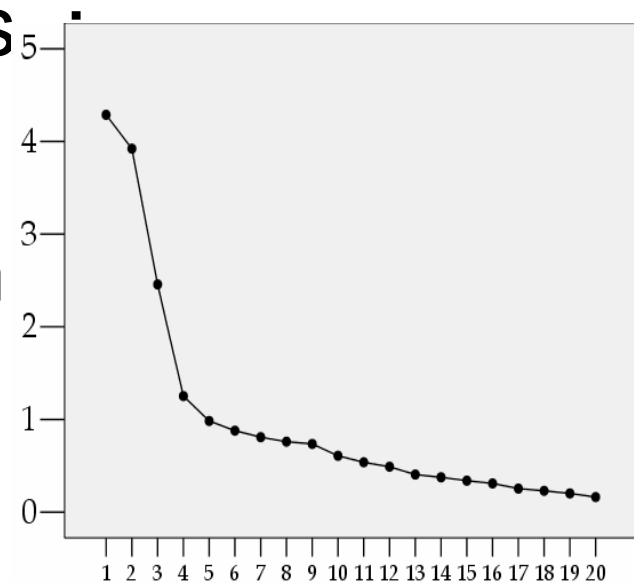
Each respondent was asked:

- To rank the importance of 20+ benefits of the forest (e.g. timber employment, biodiversity, recreation access, etc.)
- What forest-based activities they personally engaged in
- If they have heard the term “working forest,” and to define it, if so

Four Groups of Management Priorities

Respondents found tended to rank similar priorities in the same way. Factor analysis yielded four orientations to management priorities

- Environmental Orientation
- Recreation Orientation
- Large Scale Timber
- Small Scale Timber



Scree plot showing Eigenvalues for factor analysis

Explaining factor scores: regression

To determine what factors increased or decreased a respondents' environmental, recreational, large-scale, or small-scale timber orientation, we ran regressions on each.

- Each regression looked at the factors of location, role (which group), and personal use of the forest

Explaining factor scores:

regression

Environmental Orientation is:

Higher for residents of Saranac Lake

Higher among those engaged in low-impact recreation

Highest for participants in environmental and overarching groups

Recreation Orientation is:

Highest among those engaged in high-impact recreation

Lower for landowners than other actors

Large-scale Timber Orientation is:

Lower among those engaged in low-impact recreation

Higher among those engaged in high impact recreation

Highest among participants in civic groups

Lowest for overarching and environmental groups

Small-scale Timber Orientation is:

Higher for those engaged in small-scale timber activities

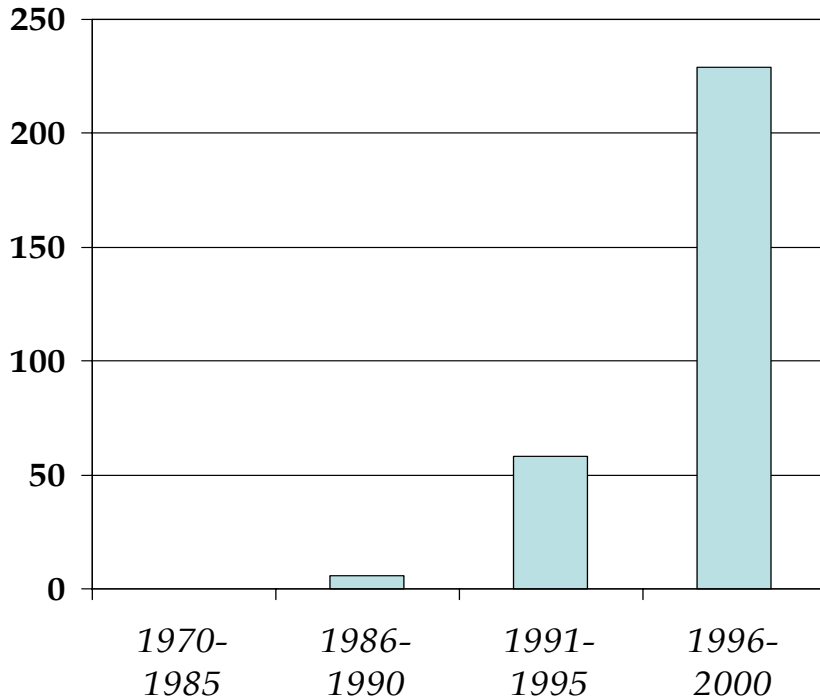
Lower among older respondents

Highest among participants in civic groups

Lowest for public land managers and participants in environmental groups

“Working forests” in the debate

While the phrase “working forest” has come to be used a great deal, no precise definition exists



**References to “working forest”
in Northeastern newspapers
since 1970**



“Working forests” in the debate

Most (57%) defined the term as a middle ground:

“A forest that is managed to provide timber and firewood and yet provide wildlife habitat and recreation opportunity.”

Some (24%) use it to discuss purely timber interests:

“A forest from which timber is harvested.”

Few (10%) defined it without referencing timber harvest:

“A forest which is allowed to exist and function naturally with only minimal human management/involvement.”

Implications: Management priorities

- Nuanced alignment of priorities
 - Not just “loggers vs. environmentalists”
 - Recreation, small-scale timber stand apart
 - New actors in the Northern Forest bring new concerns and interests to the table
- Economic development affects priorities
 - Management priorities reflect local shifts toward amenity-based development
- Personal forest activities inform how actors rank priorities
 - Respondents may perceive their activities as threatened

Implications: “Working forests”

- Multiple definitions for “working forest” exist in the Northern Forest
- Managers should carefully use the term “working forest” in debate
- Majority of respondents understand it as a middle ground, but many do not
 - Certain interests have tried to “co-opt” the term and redefine it as either a synonym for harvesting or an anti-harvesting phrase

Bottom Line

Policymakers in the Northern Forest should understand how nuanced the multiple positions can be. In both language and prioritization, opinions vary in terms of who the actors are, what they do, and what the economic future of their region is. Understanding this is a critical component to anticipating how new policies will be shaped and received in the coming years.

Future Directions

- Analysis could be expanded to multiple sites representing a broader cross section of communities and a broader array of positions on the hypothesized timber-dependent and amenity-oriented spectrum.
- Detailed interviews with actors in the region would advance our understanding of contemporary forest politics in the Northern Forest and serve to further evaluate meaning of regional development model founded on popular conceptions of what constitutes a “working forest.”

List of Products

Presentations:

- Steven Wolf and Jeffrey Klein “*Working Forests in the Northern Forest of NY.*” 11th Annual Conference of the Adirondacks. Saranac Lake, NY. May 2004.
- Jeffrey Klein and Steven Wolf “*Understanding variance in forest management priorities in NY’s Northern Forest*” Graduate Student Association Symposium. Cornell University. January 2005.
- Steven Wolf and Jeffrey Klein “*Understanding variance in forest management priorities in New York’s Northern Forest*” Rural Sociological Association Annual Meeting. Tampa, Florida. August 2005.

Papers:

- In Manuscript. Jeffrey Klein and Steven Wolf “*Factors underlying variance in the management priorities of actors in the Northern Forest*”
- In Manuscript. Steven Wolf and Jeffrey Klein “*Discursive analysis of ‘working forest’ in the Northern Forest*”