Changing From Industrial to Non-Industrial Ownership in the Northern Forest: A Case Study

Part I: The Dynamics of Changing Forest Land Ownership in Northern New Hampshire and Vermont - Research Findings

Part II: Participatory Research In Action: Research Experiences

National Community Forestry Center
Northern Forest Region

February 2004
The National Community Forestry Center (NCFC) is a decentralized network with four regional centers and a national coordinator. The four regional centers are located in the Southwest, the Appalachians, the Pacific Northwest, and the Northeast. The Northern Forest Regional Center of the NCFC is administered by Yellow Wood Associates, Inc. of St. Albans, Vermont. The Northern Forest region, our primary area of service, is comprised of the states of Maine, New Hampshire, New York, and Vermont.

The core purpose of the Northern Forest Regional Center is to help rural people conduct and use research to inform decision-making about forest resources. Our goal is to add value to the work of communities, organizations, and institutions in our region who share a vision of healthy communities and healthy forests, now and for future generations.

The work of the Center includes:
• developing partnerships with existing organizations who share our vision
• assisting rural communities in defining research agendas and engaging scientists in participatory research
• conducting targeted research to address region-wide issues and opportunities
• responding to requests by rural people for information and technical assistance related to community forestry
• establishing mechanisms such as listservs, web page, newsletter, and conferences to facilitate information sharing and networking
• publishing fact sheets, reports, and other materials on forest-related topics
• working intensively with up to three communities per year based on priorities established by our Advisory Council.

We look forward to engaging you in this unique opportunity to support rural people in creating healthy communities and healthy forests. We would be happy to respond to your inquiries about the Center’s services, or about specific forest topics, and are prepared to assist you in locating forest-related information and resources.

The National Community Forestry Center is a program of the National Network of Forest Practitioners. Network members share an interest in rural community development based upon sustainable forestry, and, even more importantly, a conviction that healthy communities and healthy ecosystems are interdependent.
Case Studies in Community Forestry

The National Community Forestry Center, Northern Forest Region is committed to sharing information and lessons learned by practitioners of community forestry in our region. This document is part of a series of case studies we are publishing to illustrate the variety of approaches that can be taken to create healthy communities and healthy forests.

The timber industry has been a significant force in New England’s economic and community life. The research undertaken by the New Hampshire Timberland Owners Association (NHTOA) and Timber Harvesting Communities (THC) provides some useful lessons about changes in land ownership in the Northern Forest. These changes have numerous implications for the timber industry and the communities that depend upon it.

This report serves dual purposes: it reports on the findings of this research and also explores the process of participatory research using a case study approach. Part I discusses NHTOA’s research and the resulting answers to their research question. Part II follows the participatory research process as experienced by NHTOA.

The story of the New Hampshire Timberland Owners Association is one about a volatile industry looking for answers. It is also the story of how a regional advocacy and membership organization was able to conduct a participatory research project to answer members’ questions, despite a lack of experience. This case study illustrates the steps of the participatory research process through the lens of this organization.

Similar background information is provided in Part I and Part II so they may be used separately as well as in combination.
NASH STREAM FOREST
NO OPEN FIRES
NO CAMPING

STATE OF NEW HAMPSHIRE

DEPARTMENT OF AGRICULTURE AND ECONOMIC DEVELOPMENT

PLEASE HELP PREVENT FOREST FIRES

NASH STREAM FOREST

TOTAL ACREAGE 78.000
Part I

The Dynamics of Changing Forest Land Ownership in Northern New Hampshire and Vermont

National Community Forestry Center
Northern Forest Region

February 2004
Introduction

Over time, the real estate of northern New Hampshire and Vermont has had numerous owners that provided a stable base for forest production. Land ownerships in these areas are relatively large as compared to the rest of New Hampshire and Vermont; until recently the landowners have included many companies involved in the growing and processing of forest products. Now, a whole new spectrum of land owners is emerging. Land management goals and objectives are changing.

Through their production of wood, these lands have historically employed many individuals and companies involved in the cutting and transporting of harvested wood and the processing of wood into lumber, paper or veneer. With new ownership goals and objectives comes a great deal of uncertainty for individuals and companies involved in wood harvesting and processing. Where will they find work (trees to cut)? Where will their raw material (logs and pulpwood) come from?

In recent years, the communities represented by the New Hampshire Timberland Owners Association and New Hampshire Timber Harvesting Council (NHTOA/NHTHC) have expressed these concerns. In an effort to respond to these concerns, the NHTOA/NHTHC pursued and received assistance through the National Community Forestry Center, Northern Forest Region (NCFCNFR), to study how changes in landownership are impacting the forestry communities of northern New Hampshire and Vermont.

Through the use of participatory research methodology, members of the forestry community from northern New Hampshire and Vermont surveyed over 17 individuals and companies whose livelihoods and businesses have been affected by changes in land ownership of two large North Country tracts that have taken place within the last 15 years. The results of this research, while not based on a large, statistically reliable sample, offer an interesting glimpse into some of the changes that are occurring and provide further support for what many in the forestry community have observed in recent years.
Background

In 1988, local residents of northern New Hampshire were stunned upon hearing the news that the Diamond International lands had been sold to developers. For well over 100 years, these lands had been owned and managed by timber companies alone, providing jobs in the North Country and serving as the backbone for the local economy. Suddenly, residents of the North Country were faced with great change.

What would happen to these lands? Would they be subdivided and developed for retirement homes and hunting camps? Would logging be eliminated? Would hunting and fishing access to these grounds be terminated? In light of the recent closure of millions of forest land acres in the northwest at that time due to the spotted owl, and lobbying by environmental organizations, the threat of losing the “working forest” in the northeast was suddenly real. Thus, in 1990, the Northern Forest Lands Council was formed to study the Northern Forest, an area covering 26 million acres from northern New York to western Maine.

Since 1990, many other large parcels of land have transferred ownership in the Northern Forest. As discussed in Finding Common Ground, the acceleration in landowner turnover in the North Country is due primarily to changes within the paper and sawmill industry, historic owners of these parcels. Generally speaking, the paper mills in the northeast are older and less efficient than state-of-the-art paper mills that have been built recently in other parts of the world. One mill in Indonesia alone has annual production three times what the mill in Berlin, New Hampshire can produce at a significantly lower cost. Foreign competition benefits from a ready source of low-cost labor, inexpensive resources and lax environmental regulations; the opposite situation contributes to the strife of maintaining viable net returns to manufacturing companies in the United States. As U.S. companies struggle to survive, they frequently mine their capital reserves, including land. Fee land wood (i.e. wood cut from company-owned land) has always been cheaper than gatewood (i.e. round wood purchased from outside sources). The tight budgets of industrial landowners produced intensified cutting of fee land wood. Then markets for paper products further declined. Suddenly, trees could not provide the necessary means to cover the costs of managing these lands. These “non-strategic lands” have since been placed on the open market, where they remain to this day.

Environmental organizations, grassroots coalitions, and representatives from all factions of natural resource management have
been involved as industry lands transfer to state, federal or private ownership. With land ownership change comes change in overall goals and objectives for managing these timberlands. No longer is timber the primary objective. Environmental organizations are emphasizing the provision of recreational opportunities and large blocks of “protected areas” and “core reserves” to be protected from human intervention. Furthermore, the lands that remain in timber-designated zones are being managed differently, using a different set of management techniques. There is more emphasis on uneven-aged management now, in which trees of many ages grow side-by-side, compared to even-aged management of the past, in which trees were all planted and later harvested simultaneously. “Long-term sawlog production” is a term used often by policy leaders of various environmental organizations to refer to the goal of producing a greater proportion of higher quality sawlogs through long-term management. Some conservation easements even include rules about growing trees to diameter limits by species before harvesting can take place. These changes in management goals, objectives and techniques impact the amount of timber harvested, which also directly impacts the individuals and companies whose livelihood and business is the harvesting and processing of timber.

The Research Question

“How are changes in land ownership in northern New Hampshire and Vermont impacting the forest products and timber harvesting community?” was the original question. As NHTOA and NCFCNFR entered this project, they quickly realized the answer to such a question would be the subject of a doctoral thesis and therefore too complicated to pursue.

To boil this question down to something more readily answerable, NHTOA and NCFCNFR decided to use a case study approach to explore two large land ownerships, one in Vermont and one in New Hampshire. The new research question became “How has the forest products and timber harvesting community been affected by the new ownership and management objectives on the study parcels?” We were specifically interested in documenting changes in land management, logger activity, and deliveries to sawmills from the two parcels before and after their sale by industrial owners to non-industrial owners.
For the research of the two study parcels to have relevance and interest beyond their immediate areas, the study parcels needed to have attributes or characteristics similar to other parcels and real estate transactions in the Northern Forest. These characteristics are:

- Large ownerships (over 20,000 contiguous acres)
- Previous owner an entity involved in the forest products industry
- A lot of public involvement in the real estate transaction
- Current ownership that includes some “public interests.”

The parcels selected for study were the former Diamond International lands, now the Nash Stream Management Area in New Hampshire, and the former Champion Lands, a portion of which are now the Essex Timber Company lands in Vermont. Both parcels are over 39,000 acres in size, and were previously owned by paper companies. Their sale to the current owners, the State of New Hampshire for Nash Stream, and Essex Timber Company, LLC, with a publicly held conservation easement for the Champion Lands, included much public debate. The Diamond International sale took place in 1988. The Champion Land sale took place in 1998.

Methods

Through the course of many meetings with the project participants, a number of surveys were designed for three groups that form the forest products industry: land managers, loggers and sawmills. This was not an easy task. The surveys purposely focused on areas that were managed prior to the land sale and compared them to areas managed after the sale. Land managers active prior to the sale helped identify loggers that harvested wood and sawmills that received wood prior to the sale. Interviews with these individuals allowed NHTOA and NCFCNFR to pinpoint those parts of each parcel that were affected by activities prior to the sale, and then, with the help of current land managers, locate loggers that have harvested the same areas of each site after the sale.

It was critical to keep the surveys as objective as possible, realizing that there are still high emotions among some of the people being interviewed. Different personnel combined with different ownerships bring varying management skills and needs. Thus, the questions were formulated so as not to lead to biased answers; there was no area for additional comments by those being interviewed. However, the participants who conducted the interviews were encouraged to write their opinions down separately.
An important question for land managers concerned what the “allowable cut” was for each year prior to the sale and what the “allowable cut” is now. The allowable rate of cut on a given land parcel is the maximum amount targeted for removal given current stocking, age class distribution and growth rates. Allowable cut is usually described in cords per year or acre. If the allowable cut has been reduced, is it because of extensive prior harvesting? Or is it due to the reduced management areas and priorities from the new owners? These surveys did not compare silviculture techniques or stocking levels. The goal of the survey was to understand actual levels of timber harvesting before and after the sale. NHTOA was looking for concrete numbers on the actual change in timber harvesting on formerly owned industry lands.

The timber harvesting surveys asked loggers for the size of the companies, changes in the size and activities of their companies since the sale of the property, and where they operated. Again, silviculture and stocking were not discussed.

The sawmill surveys focused on the volume of wood processed before and after the sale of the lands, where logs came from, and how many suppliers delivered wood to the mills. What percentage of their volume came from these lands and what were the lands’ most valuable products from the mills’ perspective?

Findings of Fact

Information gathered through the interview process revealed several interesting trends and observations.

Changes in Land Management Goals and Objectives
Although the management styles used with each property have changed with the new ownership, some things have not. They include:

Diamond International now owned by the State of New Hampshire (Nash Stream)
- Management goal of the timber harvesting program is to produce high quality timber.
- Number of foresters actively managing the property has not changed.
- Target timber harvest volumes are calculated using current stand analysis methods. Forest inventory measurement techniques remain the same but ecosystem management and other constraints (such as riparian buffers, ecosystem reserves, etc.) are taken into account.
Most markets for log and pulpwood markets have not changed; the same mills are buying.
Lands are not enrolled in any “green certification” program.

Champion Lands now owned by Essex Timber Company
- Professional foresters supervised and managed the timber harvesting activities.
- Both owners had areas (2,000 to 3,000 acres) set aside for ecological reserves.

Changes in management on the parcels between the former and current owners include:

Diamond International now owned by the State of New Hampshire (Nash Stream)
- The target annual timber harvest numbers have dropped from Diamond International’s 2.57 cord equivalents/acre to the State of New Hampshire’s 0.28 cord equivalents/acre.
- Acreage available for active timber management decreased by 19,000 acres under the State of New Hampshire’s ownership due to the establishment of an ecological reserve.
- As part of a federal easement and the management plan, forestry operations under state ownership have operating constraints and monitoring requirements more restrictive than New Hampshire state law.
- The number of timber harvests per year dropped from Diamond International’s 42 per year to the State of New Hampshire’s 2 harvests in 13 years.
- The current management plan used by the State of New Hampshire was created through a public process.

Champion Lands now owned by Essex Timber Company
- Timber management objectives have become more focused from Champion International’s goal of managing to optimize timber investment to Essex Timber Company’s objective of managing for long-term, high-valued hardwood sawtimber in an ecologically sound manner.
- External environmental conditions impacting management played a role in timber management decisions. Specifically, Champion performed a good deal of salvage harvesting in response to a spruce budworm outbreak in the 1980s.
- Champion enrolled the land in the Tree Farm and Sustainable Forestry Initiative (SFI) “green certification” program. In December 2003, Essex Timber Company was granted Forest Management certification under the Forest Stewardship Council (FSC) by the SmartWood program of the Rainforest Alliance.
- On average, Champion cut more wood per year (approximately 31,000 cords per year) than Essex Timber Company (currently averaging between 7,000 and 10,000 cords per year).
- Currently Essex Timber Company operates under a conservation easement more restrictive than Vermont’s timber harvesting regulations.

**Changes to Logging Contractors Who Worked the Study Properties**

Trends/changes observed by logging contractors were similar regardless of which parcel they worked on. These trends/changes include:

- All logging contractors have experienced a decrease in their company size.
- There were quite a few logging companies that worked solely on industry lands prior to the sale of these properties. Some have gone out of business.
- With one exception, all logging contractors have diversified their business into earthwork, trucking or land clearing.
- All logging contractors, under both owners, performed various silvicultural treatments (e.g. thinnings, patch cuts).
- All logging contractors saw quality hardwood veneer and sawlogs as the most valuable products produced by the study properties.
- All loggers felt the study lands contained valuable hardwood sawlogs as well as low-grade wood. This depended on the specific piece of ground they were working.
- Loggers working under Champion, Diamond International and Essex Timber Company worked on a service contract basis where they cut the wood and moved it to the landing and, in some instances, hauled it to the mill selected by the landowner. Whereas loggers working for the State of New Hampshire on the Nash Stream properties would buy the stumpage through a competitive bid and also assume the responsibility for marketing the wood.
- Vermont loggers working for Champion were more critical of the forestry performed than were the land managers. It is also interesting to note that the Vermont loggers were more critical of land management on the Vermont property than New Hampshire loggers were of the forestry on the New Hampshire property.
- Loggers now need to travel far greater distances to find stumpage. For example, a logger from the Colebrook, New Hampshire area is currently doing land-clearing work on Cape Cod during the summer months.
Changes to Sawmills, Paper Mills and Wood Energy Plants
The following changes/trends were observed in the sawmills, paper mills and wood energy plants receiving wood from the study lands.

- Many mills (70%) have gone out of business or were unable or unwilling to provide information. The number of mills listed was 21. NHTOA was able to collect surveys from 5 of the 21. Of the remaining mills, three closed and 13 failed to respond.
- The procurement area for logs, pulpwood and wood chips has increased dramatically.
- Universally, all wood processors are dealing with more suppliers from further away. The number of suppliers increased significantly between 1980 and 1990 and has remained relatively constant since 1990.
- The overall volume being processed has increased.
- The volume of wood received from the study lands has significantly decreased.
- During the study period only two timber processing companies pursued business outside their original scope of work. One veneer mill got into the plywood business and one sawmill shifted the species mix.
- Similar to the loggers, all mills saw high quality hardwood veneer and sawlogs as the most valuable products produced by the study lands.

West Mountain, part of the Champion Lands in northeastern Vermont.
Interpretation of Facts

From the information gathered, the following conclusions can safely be made.

1. There is a great deal of passion among those interviewed over this subject.
   - The land base designated for timber harvesting has been reduced.
   - Timber management operations are more restrained by easement language or other controls.

3. Lack of local stumpage and timber is having an impact on logging contractors and area timber processors:
   - Logging contractors travel further to find work.
   - Timber processors work with more contractors and travel further to find raw material.
   - Many loggers have diversified beyond logging to remain employed.

4. Logging contractors have downsized their operations.

5. Many wood processors have left the area, but those remaining have grown.

6. Although there is much debate over the level of silviculture performed on the study lands by the previous and current owners, it is clear that previous owners gave some consideration to proper forestry practices. In other words, forestry was being performed on the land and consideration was given by previous owners to resource protection and future productivity. The land managers for the Vermont parcel noted a shift in management objectives as time progressed with reduced emphasis on forestry. However, the Diamond International foresters had test plots across the Nash Stream property monitoring tree growth and attrition. Yet the current owner, the State of New Hampshire, will tell you the land was basically liquidated by the previous owners.
Areas for further research

This project has raised at least as many questions as it has answered. Areas for further research include:

1. What are the economic and fiscal consequences to the region and its businesses of changing patterns of land ownership? How do land-based economic activities fit into the overall economic picture for the Northern Forest?

2. To what extent do shifting land management objectives create an “economic engine” in recreation or tourism that offsets the decrease in the timber-related economy?

3. What impact is the changing pattern of land ownership having on the social fabric of the region?

4. What impact is global competition having on the mills and land management, and what difference is this likely to make over time?

5. How much sustainable harvest is needed to maintain a critical mass of logging expertise and related investment in the region, and how will the changes in land ownership and land management impact these levels over time? What types of investment and disinvestment are occurring along with changes in land ownership?

6. How can public input in forest land acquisition and management be informed by an improved understanding of economic, fiscal, and social consequences? What types of new relationships can be created to sustain a timber-based economy during a period of resource recovery?
Implications for loggers and landowners

In the short-term, changing ownership in the Northern Forest is contributing to a decreasing timber basket in the region, forcing logging contractors to downsize their companies and travel further to find work. The short-term impacts of these changes to regional wood processors is that they are having to pay more to bring wood from further away while expanding their stable of suppliers.

What will happen in the long term? Will there be an equilibrium between the timber growth and harvest on these and other lands that can sustainably support a strong local logging and wood processing workforce? Will the timber basket in the region continue to shrink, contributing to further hardship among logging contractors and wood processors in their effort to find work and raw material? This study has confirmed that change is taking place and having real and measurable impact on the land, the logging community, and wood processors. More research is needed to better understand the extent and magnitude of these changes, their likely duration, and their significance with respect to the many external variables impacting the communities studied.
Part II

Participatory Research In Action:

Research Experiences of the New Hampshire Timberland Owners Association

National Community Forestry Center
Northern Forest Region

February 2004
Timeline of a Participatory Research Project

September 28, 2001  NHTOA contacted NCFCNFR regarding a possible research project.

October 24, 2001  NHTOA presented their proposal in writing to the NCFCNFR Advisory Council with preliminary timeline.

November 9, 2001  NHTOA presented their proposal in person. NCFCNFR Advisory Council approved project.

November 29, 2001  First agreement signed between NHTOA and NCFCNFR with goal to create a workplan.

January 21, 2002  Kick-off meeting with participants.

February 22, 2002  Workplan created.

May 30, 2002  Meeting with participants to investigate land management and management changes.

Summer 2002  Survey development begins.

September 6, 2002  Revised workplan created.

September 9, 2002  Meeting to review progress to-date.

Fall 2002  Draft surveys finalized.
  Background information on case study parcels collected.

January 16, 2003  Participant interviewers received training.

Spring 2003  Interviews conducted.

April 25, 2003  Second agreement for continued NCFCNFR support signed.

July 31, 2003  Second progress to-date meeting.

Late summer/early fall 2003  Research completed.

Fall 2003  Draft reports prepared.

January 5, 2004  Meeting to review findings with participants.

February 2004  Final report prepared.

2004  Meetings to share results publicly.
INTRODUCTION

A Changing Region

Land is changing hands in the 25 million acres of land comprising the Northern Forest of New York, Vermont, New Hampshire and Maine. Until recently, the primary owners of up to 80% of the land were industrial owners\(^3\). In the mid-1980s, a number of corporate takeovers and changes in global market conditions in the forest products industry led to increased sales of industrial lands. While some of this land has been sold to new industrial owners, much of it has gone to an entirely new spectrum of owners including land trusts, government agencies, timber management investment organizations, and private non-industrial owners of large tracts. With changes in ownership come changes in land management goals and objectives. This is a very early stage in trying to understand the consequences of these changes for the region.

The Causes

What is driving these changes? As discussed in Finding Common Ground\(^4\), the acceleration in landowner turnover in the North Country is due primarily to changes within the paper and sawmill industry, historic owners of these parcels. Generally speaking, the paper mills in the northeast are older and less efficient than state-of-the-art paper mills that have been built recently in other parts of the world. One mill in Indonesia alone has annual production of three times what the mill in Berlin, New Hampshire can produce at a significantly lower cost\(^5\). Foreign competition benefits from a ready source of low-cost labor, inexpensive resources and lax environmental regulations; the opposite situation contributes to the strife of maintaining viable net returns to manufacturing companies here in the United States. As the U.S. companies struggle to survive, they frequently mine their capital reserves, including land. Fee land wood (i.e. wood cut from company-owned land) has always been cheaper than gatewood (i.e. round wood purchased from outside sources). The tight budgets of industrial land owners produced intensified cutting of fee land wood. Then markets for paper products further declined. Suddenly, trees could not provide the necessary means to cover costs for managing the lands. These “non-strategic lands” have since been placed on the open market where they remain to this day.

Environmental organizations, grassroots coalitions, and representatives from all factions of natural resource management have been involved as industry lands transfer to state, federal or private
ownership. With land ownership change comes change in overall goals and objectives for managing these timberlands. No longer is timber the primary objective. Environmental organizations are emphasizing the provision of recreational opportunities and large blocks of “protected areas” and “core reserves” to be protected from human intervention. Furthermore, the lands that remained in timber-designated zones are being managed differently, using a different set of management techniques. These changes in management goals, objectives and techniques impact the amount of timber harvested, which also directly impacts the individuals and companies whose livelihood and business is the harvesting and processing of timber.

PROJECT BACKGROUND

The Diamond Land Sales

In 1988, local residents of northern New Hampshire were stunned upon hearing the news that the Diamond International lands had been sold to developers. For well over 100 years, these lands had been owned and managed solely by timber companies, providing jobs in the North Country and serving as the backbone of the local economy. Suddenly, residents of the North Country were faced with great change.

What would happen to these lands? Would they be subdivided and developed for retirement homes and hunting camps? Would logging be eliminated? Would hunting and fishing access to these grounds be terminated? The threat of losing the “working forest” in the northeast was suddenly real. In 1990, the Northern Forest Lands Council was created to study the Northern Forest, an area covering 25 million acres from northern New York to western Maine.

The Origin of a Research Project

The New Hampshire Timberland Owners Association (NHTOA) is a nonprofit organization of forest owners and users working together to promote better forest management and a healthy wood products industry. Founded in 1911, the NHTOA began as a small group of landowners concerned with forest fire detection and prevention. Today they are a state-wide coalition of over 1,500 landowners, foresters, loggers, truckers, and forest industries, working together to ensure that the working forest remains part of New Hampshire’s future.
In 2001, the New Hampshire Timberland Owners Association (NHTOA) and the New Hampshire Timber Harvesting Council (NHTHC) pursued and received assistance through the National Community Forestry Center, Northern Forest Region (NCFCNFR) to study how changes in landownership are impacting the forestry communities of northern New Hampshire and Vermont. The core purpose of the National Community Forestry Center, Northern Forest Region is to help people in rural communities make informed decisions about the use of forest resources. The Center has worked with a number of communities in the Northern Forest to develop participatory research projects in an effort to find answers to pressing questions.

**What is participatory research?**

Participatory research is a democratic method for identifying information needs, and then producing, collecting and analyzing information. While professional researchers sometimes play a role, community members themselves are engaged in the process of gaining and creating the knowledge they need. For more information about participatory research, see the report *What is Participatory Research, And Why Does it Matter?* by the National Community Forestry Center, Northern Forest Region (2001).

Using a participatory research methodology, members of the forestry community from northern New Hampshire and Vermont surveyed over 17 individuals and companies whose livelihood and business have been affected by changes in land ownership of two large North Country tracts that have taken place within the last 15 years. The results of this research offer an interesting glimpse into some of the changes that are occurring and provide further support for what many in the forestry community have observed in recent years.
The Research Question

The original question NHTOA wanted to answer was “How are changes in land ownership in northern New Hampshire and Vermont impacting the forest products and timber harvesting community?” To make the project less complicated, NHTOA and NCFCNFR decided to use a case study approach to explore two large land ownerships in Vermont and New Hampshire. The new research question became “How has the forest products and timber harvesting community been affected by the new ownership and management objectives in the study parcels?” NHTOA was specifically interested in documenting changes in land management, logger activity and deliveries to sawmills from the two parcels before and after their sale by industrial to non-industrial owners.

Study Area

For this research to have relevance and interest beyond the immediate study areas, the study parcels needed to have attributes or characteristics similar to other parcels and real estate transactions in the Northern Forest. These characteristics were:

- Large ownerships (over 20,000 contiguous acres)
- Previous owner an entity involved in the forest products industry
- A great deal of public involvement in the real estate transaction
- Current ownership that includes some “public interests.”

The parcels selected for study were the former Diamond International lands, now the Nash Stream Management Area in New Hampshire, and the portion of the former Champion Lands now owned by Essex Timber Company in Vermont. Both parcels are over 39,000 acres in size, and both were previously owned by paper companies. Their sale to the current owners, the State of New Hampshire for Nash Stream, and Essex Timber Company with a publicly held conservation easement for the Champion Lands, included significant public debate. The study timeframe was 13 years prior to the sale of the Nash Stream lands to 13 years after the sale. For the Champion Lands, the timeframe was 13 years before the sale to three years after the sale. The research involved studying the pre-sale and post-sale management of the two parcels. The findings from this research can be found in Part I of this report, entitled The Dynamics of Changing Forest Land Ownership In Northern New Hampshire and Vermont. The rest of this report will focus on the participatory research process itself.
The Five Stages of Research

In practice, most research occurs along a continuum between participatory and conventional research methods. As research becomes increasingly participatory, the role of the expert researcher changes. In the most conventional approaches, the professional researcher initiates and owns the process. In a more participatory approach, the researcher may act as a consultant to those desiring information. Finally, the researcher may become a facilitator to assist others in designing, conducting, and analyzing the results of the research. Community participants change roles as well from being the objects of study to advising and contributing, and, finally, to ownership and control of the research process and results. All research proceeds in stages.

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As can be seen in the timeline of this project (see page 18), the five steps of research, especially with participatory research, do not always unfold in a neat, linear manner. The rest of this report is organized using these five stages, to show how this particular project progressed.
THE PARTICIPATORY RESEARCH PROCESS

To appreciate the nature and scope of this project, the following is a description of the participatory research process beginning with the community nomination.

STEP 1: INITIATION

The first step of any research process is the initiation, which typically involves an entity identifying a problem or opportunity. As a result, this group decides to conduct research to solve or answer this problem. As can be seen below, the New Hampshire Timberland Owners Association and Timber Harvesting Communities (NHTOA/NHTHC) initiated this research process, after identifying the problem of land ownership changes in the Northern Forest region.

The Community Nomination Process

The National Community Forestry Center, Northern Forest Region (NCFCNFR) was committed to providing targeted assistance to three to five communities per year conducting participatory research. The primary purpose for working intensively with target communities was to generate products and/or processes that could be used by other communities facing similar issues or opportunities. Candidate communities were identified through an open nomination process with decisions made by the NCFCNFR Advisory Council. Criteria for communities to be considered for targeted assistance included:

- Does the community have an organizational capacity to construct and carry out a year-long workplan?
- Are they confronting an issue/opportunity common to other communities in the region or the nation?
- Is the community willing to engage in participatory research?
- Is the community willing to share results of their research process with others?

Each chosen community received up to $7,000 to hire a local coordinator as well as technical assistance from NCFCNFR staff and partners to engage community residents in conducting participatory research. Communities received training in participatory research methods and assistance in developing a workplan to complete their research. In return, they agreed to work with NCFCNFR to share their learning and results with other communities throughout the region.
NCFCNFR solicited community nominations from throughout the region through its website, its Advisory Council, partners, press releases, and other outreach activities.

Having witnessed tremendous changes in Vermont and New Hampshire’s land ownership patterns in recent years, Jasen Stock, Executive Director, and Hunter Carbee, Program Director and Timber Harvesting Communities Coordinator, put forth a proposal. The association had a fairly clear idea of what they wanted to know: how the ownership of forest land (and the rights that accompany its ownership) has an impact on how its resources (whether timber or recreation) are managed and, thereby, a profound impact on the surrounding communities. The issue of changing landownership is very important to the individuals who make their living off the land, hence the need for this kind of research. Jasen Stock heard from many sawmill owners and loggers throughout the state, “Where am I going to find work (or timber) in the future if all the land is sold to owners with little interest in harvesting wood or who sell conservation easements restricting timber harvesting?”

At the Advisory Council retreat in November 2001, the NHTOA presented their proposal before the NCFCNFR Advisory Council, which accepted it. An initial agreement was signed between NCFCNFR and NHTOA in November 2001, pending the development of a workplan.

In addition to helping NHTOA find answers to their research question, NCFCNFR and its Advisory Council felt that NHTOA and their constituents would learn much from the process itself. Through this project, NHTOA would have the opportunity to form a new set of relationships with current landowners, understand better how to move forward in the Northern Forest’s new atmosphere, and deal with the myths and fears about what was occurring.

**STEP 2: DEFINING THE RESEARCH QUESTION**

**Defining the Scope of the Research**

Defining the research necessarily involved identifying a research question, often the most difficult step in any research process. After identifying a wide range of information that would be nice to know, NCFCNFR helped NHTOA narrow their focus to create a manageable research question that could be answered:

> “How has the forest products and timber harvesting community been affected by the new ownership and management objectives on wo study parcels?”
Hurdles to Overcome
Unfamiliarity with Research and the Participatory Research Process

Most people are not that familiar with the research process in general. They tend to think that research is something done only by experts. As an advocacy organization, NHTOA does not conduct a great deal of research. Hunter and Jasen were accustomed to using facts that support their constituents’ point of view in order to influence legislators and other policy-makers. This was typically done by them without involving others. As a result, they recognized from the start that loggers and mill owners needed objective information in order to make good decisions about the future of their businesses.

The initial obstacle to working with any community or organization that has never undertaken participatory research is the learning curve. NHTOA had little to no idea what participatory research was about. As a result, they had to learn the who, what, why, when and how of a new approach to research. NHTOA staff learned quickly that this project would entail much more than basic research methods.

In an effort to enlighten NHTOA and their participants about participatory research, a January 2003 kickoff meeting was held. One exercise at the meeting involved all the attendees reflecting upon and examining research we do every day. Another exercise engaged participants in a discussion about their previous research experiences, and reflected on how participatory those experiences were, as well as how they might or might not have benefited from more participation.

The National Community Forestry Center, Northern Forest Region (NCFCNFR) provided support for this project, by helping NHTOA refine its research question, develop a research methodology, train volunteer researchers, gather background information, and assess research results. Debra Mason and Shanna Ratner of NCFCNFR were the staff most closely involved with this project. They repeatedly reminded Hunter and Jasen about the difference between fact and opinion... and later on, Jasen and Hunter began to play that role in reminding other participants.

Preconceptions about the Research Findings

Those involved with grassroots efforts many times have preconceptions about the findings of the research before beginning the research process itself. NCFCNFR worked with NHTOA to ensure that the group remained open to all potential outcomes of the project. For example, Debra Mason remembers continually reminding Hunter and Jasen about the purpose of the research and the
need for solid, unbiased information in order for loggers to make informed decisions.

**STEP 3: DOING THE RESEARCH**

In this third stage, many questions are answered, including who decides on the processes to be used, what kind of information needs to collected, how and where that information is gathered and by who, and who is building relationships with whom.

**Involving Participants in the Process**

Participatory research involves engaging people outside the project in the research process itself, which can help to ensure the objectivity of the results. One way to help ensure objectivity is to engage a wide range of participants in the research process.

Outreach to participants continued for the duration of the project. Participants, as researchers, were asked to help find contacts to speak with, to conduct surveys and interviews, and to gather additional information as needed. In the end, fourteen participants provided background information and eight helped conduct the interviews. One participant hosted the kickoff meeting and three provided a detailed review of the findings.

Those who were interviewed for this project came from the full realm of the forest products industry. Land managers (foresters), log buyers, loggers and sawmill representatives were contacted who lived and worked in the northern regions of Vermont and New Hampshire. As a result of the participatory research process, Jasen and Hunter and other participating researchers met individuals they had not known previously and learned things that sometimes confirmed, and sometimes confounded, their expectations.

**Hurdles to Overcome in Gaining Participation**

**Flexible Involvement**

The main hurdle that needed to be overcome with these research participants was keeping them involved and interested. Participatory research is a time-consuming endeavor, to which some of the participants were unable or unwilling to commit. This was sometimes due to the difficulty of securing a livelihood during a time of upheaval in the regional and national economies. Jasen noted that there was general panic at worst or malaise at best in the industry currently due to economic conditions. This affected the willingness and ability of people to participate in any extracurricular activities whatsoever. However, different people contributed at different times. For example, many who did not come to the kickoff meeting showed up to be trained as interviewers many months later.
Skepticism

From the project’s beginning, initial calls to prospective participants uncovered a high level of skepticism. This can be attributed to the high level of passion and mistrust created in the past decade by various land ownership changes and the resulting public processes. During public processes, philosophical differences and conflicts occurred between land conservation organizations and the forest products industry, as a result of disagreements about goals and outcomes. In Vermont, the situation was even more complicated as there has been mistrust between organizations within the forest products industry (e.g. logger organizations distrusting papermills, etc.). Thus, the level of trust of many Vermont contacts proved to be quite low and, in some circumstances, people refused to participate. Although these issues surfaced during the project’s initial stages, most people involved were able to overcome their skepticism and work productively together.

Official Kickoff

A January 21, 2002 meeting in Orford, New Hampshire was the official kickoff of the project. The initial goal of the meeting was to have attendees understand the project itself and how the participatory research process could be used to gain insight into changes occurring in the region. The outcomes of the meeting would form the basis for a workplan covering the first few months of the project. There were nine participants at the meeting other than NCFCNFR staff.

The first exercise involved asking two questions: (1) What role are you most accustomed to playing within the research process? (2) What role might you like to try on during this project? With such a varied group, there were a variety of roles that people were interested in and willing to play.

After this exercise, the specifics of the research project were discussed. To start, the group decided that the project should focus on two parcel study areas, the Nash Stream and Champion lands. Participants deliberated over questions that would need to be answered about the two land parcels before and after both sales. Suggestions ranged widely: data on truckers, equipment suppliers, harvest levels on adjacent lands, silviculture, use of Canadian labor, recreational use pre- and post-sale, air and water quality pre- and post-sale, and tourism employment pre- and post-sale, as well as those concerns ultimately addressed by the research.

A discussion of how the results might be used followed. Ideas for using the results included:
Presenting them to the Vermont and New Hampshire legislatures

♦ Writing and publicizing reports

♦ Telling the story in New Hampshire in relation to other proposed sales

♦ Helping loggers and sawmills and secondary processors answer the question “What’s going to happen to me and my livelihood?”

♦ Providing a reality check with respect to the lands

♦ Bringing information to bear on future land sales

♦ Comparing public fee ownership with public easements

♦ Possibly identifying and communicating new business opportunities to loggers, sawmills, and secondary processors.

According to Debra Mason of NCFCNFR, “A very interesting mix of industry reps showed up for the interactive session and discussed roles they’d like to play. This, hopefully, will help keep them engaged as the project moves forward. The key to success (from my perspective) in this project is to maintain and enhance involvement of an unlikely cast of characters including loggers, foresters, and state and private land managers and get them exchanging information with one another.”

**Overcoming Skepticism**

Participants’ skepticism was apparent in questions raised at the initial kickoff meetings. Participants were concerned about the purpose of the project and who would have access to and use of the data gathered. Throughout, participation levels corresponded directly with the amount of skepticism individuals exhibited.

Complicating this issue was the personal bias and opinion each individual brought to the table. Specifically, there were participants who felt very passionately that the study lands were managed in a sound manner under the former owners and, therefore, were hesitant to participate for fear that this project would cast doubts over the former owners’ management styles. A specific example of this phenomenon manifested itself when a former forester for Champion expressed concern that the study results would show heavy harvesting levels under the former owner, Champion, while ignoring the fact that, at that time, the harvest levels and the type of silviculture used were driven in large part by spruce budworm outbreaks. Therefore, the argument was that it would be impossible to have an objective comparison of current and former harvesting practices due to such extenuating circumstances.

Representatives of current owners raised similar concerns for fear this project would gloss over what they felt was mismanagement
by the previous owners, while at the same time criticizing the current owners’ management goals, objectives and efforts. A specific example of this is the criticism and debate that surrounds the current Nash Stream timber program. Since the State of New Hampshire purchased Nash Stream, they have had two timber sales. State foresters argue the land was cut heavily by the former owner, Diamond International, and there is little merchantable wood available. Yet the former foresters from Diamond International argue that there is plenty of wood growing in the Nash Stream area, and the state is just not managing the land actively enough, while using Diamond International as a scapegoat.

Throughout the project, there was a constant need for NHTOA to convince participants that this project would be an objective look at the management practices and their impacts on those who make their living off these lands. As a result, NHTOA had to take care in scheduling meetings to make sure that participants on polar extremes of opinion were not the only ones present. NHTOA also had to continually reiterate the need for the participants to separate the facts from personal opinion and bias; this project was intended to take an objective look at land management and its effect on loggers and mills.

**Refining a Research Question and Focusing the Research**

Between the January 2002 kickoff meeting and the next meeting in May 2002, NCFCNFR worked with Hunter Carbee and Jasen Stock to refine the research question. From the initial stages of the project, there were more questions than could be dealt with in the scope of the project. As a result, Hunter and Jasen, with the help of NCFCNFR, pared down the initial list to a manageable size. In the end, NHTOA chose three pieces to study: the change in land management approach, the differences from the perspective of loggers, and the differences from the perspective of sawmills.

**Preliminary Research**

Background data was collected from several locations. NHTOA obtained the Essex Timber Company (Vermont) management plan and maps from the internet, while the management plan and maps for Nash Stream came from the State of New Hampshire’s field office in Lancaster. Background data from the Northern Forest Lands Council study came from NHTOA’s archives. They also attempted to acquire demographic data from the US Census website.

A May meeting was held to check in about preliminary research. At this point, the coordinators, Jasen and Hunter, reported that they were having trouble finding the information on past tim-
ber harvest levels—partly because it was not easily available, and partly because their research participants were not doing what they had promised.

**Hurdles in Data Gathering**

Finding old harvesting data was especially difficult since the paper companies who once owned the lands no longer have any obligation to them. NCFCNFR and NHTOA determined that NHTOA would summarize the information gathered on the history of the properties and proceed to the interviews of those involved in past and current management and harvesting.

**Survey Creation/Interview Format**

After coming to consensus on the scope of the study, the next challenge was to develop surveys that were free of bias and would allow for meaningful and comparable responses. Because it was evident that there were still high emotions among some of the participants, much time was spent writing objective questions. Hunter and Jasen drafted interview questions and then showed them to loggers to get feedback on whether the questions would give them the information they needed to make decisions. With several surveys, this stage of the process was extensive, occurring over a six-month period and resulting in several versions of the survey instruments, until a final set of surveys was created to best fit the needs of the project. There were five different survey instruments: one each for land managers before the sales and after the sales on each property, loggers before the sales and after the sales on each property, and sawmills.

With NCFCNFR’s help, the research participants learned that how you ask the question is important. It is essential to ask questions in a neutral manner, so as not to bias the answers. NCFCNFR also helped Hunter and Jasen to realize the difference between data that is “nice to know” and data that is “need to know,” which helped to further refine the research questions. According to Debra Mason, “Hunter and Jasen seem really committed to producing good information that loggers can use to make decisions. It’s very useful to have a clear research question to refer back to.”

As the surveys were being developed, much thought was given to how to make sense of the information collected. Since each of the parcels is quite large, and conditions vary considerably from one section to another, it was important to be sure that information on harvesting by loggers came from similar sites, particularly since the surveys did not compare silvicultural techniques or stocking levels. To do this, the researchers needed a map of each parcel so they could
identify where loggers had worked prior to the sales and then find loggers who had worked the same or similar areas after the sales.

The first step in the research was to identify the former land managers and ask for their assistance in identifying loggers who had harvested the lands prior to the sales. Identifying contacts for former and current land managers, mills and loggers proved to be difficult, especially for the pre-sale contacts. The original list of contacts came from the participants at the kickoff meeting. There were many logging companies that worked solely on industry lands prior to the sale of these properties; some of these had since gone out of business.

The goal of the survey of land managers was to understand actual levels of timber harvesting before and after the sale. In order to do this, Jasen and Hunter needed data on the “allowable cut” over the timeframe of the project. NHTOA was looking for concrete numbers on the actual reduction of timber harvesting on former forest lands.

**Hurdles**

Refining the Survey Instrument

The actual creation of the survey instruments took considerable time and effort and involved many iterations. After a significant amount of time with no workable survey produced, Hunter and Jasen agreed to meet with Debra and Shanna. The result was a very productive working session where a clear methodology for the project was established and each survey was worked through, making sure questions were clear and necessary.

Seasonal Conflicts

Another obstacle in this project was the seasonality of the timber industry and the NHTOA. At different points in the year, for example in summer, loggers need to be back out in the woods. The schedules of Hunter and Jasen were seasonal as well. However, the seasons for loggers did not necessarily correspond with those of Hunter and Jasen, making it difficult to coordinate the work.

Pretesting the Surveys

Once the surveys were prepared, they needed to be pretested. Pretesting the surveys involved more work and obstacles. NCFCNFR had already advised Hunter and Jasen not to ask for price information, because financial information is always sensitive; it was also not clear how they would use the information if they had it. Gathering quality price information would also be difficult because it was unlikely the interviewees would remember, especially those being asked from before the sale, which could be almost 26
years ago. Also, general price information is available from secondary data sources. However, it took the pretest to help NHTOA to see the value in eliminating the price questions from the survey.

Comparing Parcels

Since both parcels were so large, the project focused on specific timber harvests within the study areas in order to ensure comparability. As a result, there was a real need for maps to delineate where these harvests, both pre- and post-real estate transaction, were located on the specific study properties.

The first people who were contacted were those who had managed the lands 13 years before the land sales. They were asked who the harvesters were at that time, as well as to which mills wood was delivered. Loggers were asked where they had worked. Once the pre-land sale data was obtained, NHTOA went to the current managers to ask about activity for the same parcel of land since the land changed hands.

Mid Course Correction Meeting – September 2002

It was at this meeting that NCFCNFR and NHTOA finalized the methodology. Survey development was completed and the necessary background information was collected.

Training Interviewers – January 16, 2003

NCFCNFR held a three-hour, interactive, interviewer training session on January 16, 2003 to prepare NHTOA and its research participants to conduct interviews and complete the surveys. The training focused on helping participants set up interviews, identify respondents using snowball sampling (which involves having respondents suggest other respondents), conduct the interviews, and keep reflections and personal opinions separate from the survey and interview results.

While all the participants undoubtedly had their own opinions concerning the land sales in this area, NCFCNFR instructed them to keep these opinions separate from the data collected and that “no opinions should be injected into the surveys, just a record of what is said.” Participants were encouraged to write down their opinions about what they were hearing on a separate sheet of paper from the survey sheets.

Unexpected Numbers

The real surprise was that ten people showed up for the training, some of whom had not been involved in the project previously. There were many people who had been on the mailing and email lists but had, until this point, remained uninvolved. Attendees in-
cluded timber buyers for International Paper, Champion International, and Ethan Allen; land managers for the State of New Hampshire, including the current land manager for the Nash Stream property; the Sustainable Forestry Initiative (SFI) coordinator for Vermont (who had attended two of the earlier meetings); the Extension Forester who had conducted the pretest; and a forester married to a land manager of one of the study properties.

As a result of the unexpected turnout at the meeting, Jasen spent a considerable amount of time explaining the goal of the project and reviewing the survey instruments. Because the surveys had been developed with such care and over such a long period of time, he was able to be quite clear about why each question was included and why other questions were left out. As to be expected, those new to the project took the opportunity to express skepticism about the purpose and the methods. Jasen patiently explained and listened to their criticisms. Their suggestions were integrated as much as possible at this late stage, and at the close of the meeting, three participants agreed to interview the remaining current land managers.

One concern expressed very adamantly at this meeting was that the results might be misinterpreted. The argument was that there may be many variables relating to why timber sales are fewer and different. One timber buyer insisted that there should be a review panel for the draft report, which made sense to the group. If a review panel was set up, the results would most likely be taken more seriously.

**Actual Research**

The research included interviewing timber parcel managers/owners, loggers, and mill owners that received wood from the study parcels.

**Hurdles**

**Enlisting Participants**

The most significant hurdle that NHTOA faced was enlisting participants to help conduct the interviews. According to Jasen and Hunter, “All the individuals who we speak with about this project are interested and feel this research is worthwhile yet they are satisfied with relying on NHTOA/THC staff to gather the data.”

The parties that were most likely to participate in the study were individuals who were either (1) still directly employed in the forest products industry (loggers and sawmillers), (2) living in the communities within the study areas, or (3) managing or purchased the lands or wood growing on them.
Gathering Quantitative Information

NHTOA wanted to gather data on harvest volumes before and after the transfers of ownership, to compare with stated management plans and objectives. Gathering data on harvest volumes prior to the sale of the two parcels was much easier in New Hampshire than Vermont. New Hampshire has a yield tax, so harvest volumes must be reported annually to the New Hampshire Department of Revenue Administration. However, there is no yield tax in Vermont, and current and former owners were unwilling or reluctant to provide this information. In the end, it turned out that harvesting information could be obtained at the county level by researching conformance reports that were filed as required through the Vermont Use-Value program. However, Champion did not participate in the Current Use Program, making it difficult to acquire this information.

Respecting Participants’ Business Relationships

Another wrinkle concerned recognizing and respecting the business relationships between participants and between participants and the people being interviewed. This issue slowed the project and, in some instances, hindered the ability to gather data. The following examples demonstrated how these business relationships affected this project:

1. One of the key participants in this project was a sawmill owner from northern Vermont. Because this sawmill owner purchases logs from the region, they have a good understanding of and acquaintance with area loggers including several loggers identified for interviews. Because of these business relationships, it was inappropriate to have the sawmill participant interview these loggers, since the interview contained information of a sensitive business relationship (e.g. where are you selling your logs, what type of contract do you have with the landowner, etc.).

2. On both study parcels, the former owners have faced criticism over how they managed the lands. This criticism includes the type of silviculture performed (e.g. use of clear cuts) and how aggressively they managed the lands (e.g. timber growth versus removal ratio). In seeking information on the volumes of wood removed and to what markets it went, there has been concern over how this information would be interpreted. Also due to institutional record-keeping procedures, much of the information sought was simply not available.
Industry Turmoil

The turmoil within the forest industry also created challenges for the project. Sawmills and paper mills slated for interviews have closed; loggers who would have been interviewed have gone out of business. For those loggers, sawmills and paper mills that were currently in business, getting their commitment to participate was difficult. A common response was “I would like to help you. The project sounds interesting, but I need to stay home and tend to business.”

According to Hunter Carbee, “There is great turmoil right now in the timber industry in this region. Paper mills are just about out of wood. Mill managers/owners are nervous, because the procurement folks need to get wood. They are trying to find loggers who can get wood. With consolidation, there is no productive capacity to have inventories of wood.” Carbee found, “the anecdotal stuff is sometimes more informative than the survey results.”

In addition, only some of the interviewees could help fill in the blanks of what happened. Carbee explained, “For loggers, the hurdle is: where did the wood go? They didn’t know. They were paid to get it on the landing. They didn’t keep track of where it went. You think the survey will answer everything, but there is so much information beyond the survey.” With regard to the Diamond Lands, Nash Stream is just one piece. The land managers of the Diamond Lands did not separate the parcels into Nash Stream and non-Nash Stream. This made it difficult for interviewers/interviewees to separate out the Nash Stream lands. However, Carbee was optimistic, “We’re getting the best guess/estimate.”

One of the most difficult hurdles was to have the participants implement the surveys. NHTOA handed them out to all parties and waited. This process continued over the course of the summer of 2003. The land manager surveys were processed fairly quickly. Hunter Carbee called and/or made site visits to gather further background information for both parcels and to confirm the logging contractors who had worked the lands both prior to and after the land transfer. Many calls and emails were placed to monitor the remainder of the surveys, but the results were slow to return. In part, this can be attributed to tough economic conditions for the forest products industry; people simply felt they did not have time to contribute to the project. Furthermore, summer is vacation time for many. Others did not complete their work, and the NHTOA staff completed the remaining surveys at the end of the Summer of 2003.

July 2003 Meeting
At this point in the process, Hunter and Jasen had been working on the project for a year and a half. They had reported that they were having difficulty keeping participants involved. NCFCNFR understood this, and, as a result, told them that people probably had been as involved as they were going to be, so it was acceptable for NHTOA to finish the rest of the surveys and interviews themselves. In addition, NCFCNFR discussed how important it was to document the process of participatory research.

**STEP 4: LEARNING FROM AND ANALYZING THE INFORMATION GATHERED**

At this point in the process, when all the information has been gathered, it must be determined how the data will be analyzed, who will interpret the results, and who develops the interpretive skills used to analyze the results. While Jasen Stock and Hunter Carbee of NHTOA analyzed the data and interpreted the results, participants were invited to a January 5, 2004 meeting to review the results and the analysis prior to the study’s final publication.

**Finishing the Project**

With a project like this one, there are two distinct strands of information that tell the story. One strand is the research question and the answer to that question. The second part is the story of how the research came to be, how participatory research was used, and the experiences of the participants in using participatory research to answer questions. Both stories are told in this report, in different sections.

**STEP 5: CONTROL OF INFORMATION AND USE FOR ACTION**

The final step of the research process involves how the research results are used and by whom, who decides, who benefits and who owns the results. The January 5, 2004 meeting, mentioned above, between the National Community Forestry Center, Northern Forest Region, the New Hampshire Timberland Owners Association/Timber Harvesting Communities, and the project participants dealt with some of these issues, specifically how the results would be used. NHTOA and their project participants decided how the results would be used. Since NHTOA is a membership and advocacy organization, participants decided that the results should be primarily used by them in their advocacy and membership efforts. However, NHTOA’s members and the project participants would benefit from the use of the results and would essentially own the results.
Research Results
For more information on the research results of this project, please see Part I of this report, *The Dynamics of Changing Forest Land Ownership in Northern New Hampshire and Vermont*.

**SUMMARY OF INSIGHTS AND LEARNINGS ON THE PARTICIPATORY RESEARCH PROCESS**

**Understanding Participatory Research**
At the beginning of this project, none of the participants, including NHTOA staff, understood the participatory research process. Participants assumed that this project would run like similar research projects where NHTOA staff would gather and interpret data, produce and distribute a report. Instead, when participants were asked to gather data through interviews, there was surprise and confusion over their role in this project. What has resulted, however, is a core group of individuals, who have emerged as the key participants with a second group of participants contributing to the project on and off.

**Impact of the Economic Climate**
According to Hunter Carbee, “In terms of the general participatory efforts, if times were good, the research would be much better. We’re at a low ebb in the cycle of this industry, making it hard for this research to happen.” The economic situation, in general and specific to the timber industry, made it difficult for participants to feel like they had time to do this work and for interviewees to feel like they could say what they wanted to say. However, if the economy had been perceived as “good,” there would not have been a motivation to conduct participatory research in an effort to answer a pressing problem.

**A Range of Attitudes**
Through this project, it has also come to light that landownership and how landowners manage their lands is very personal and subject to varying perceptions and personal biases. In the course of introducing this project to prospective participants, the response ranged from “it’s about time” to “it might be better to not open that can of worms.”

**Enlisting Participants**
Despite interest and enthusiasm for the project, the New Hampshire Timberland Owners Association (NHTOA) and the New Hampshire Timber Harvesting Council (NHTHC) constantly
struggled to find participants. This struggle was due to several factors, which arose throughout the project:

1. Skepticism over the project’s intent and how it might be used to color the debate over previous versus current land management practices.
2. Participants needing to dedicate all their resources to surviving in an industry suffering from poor markets and other operational challenges.
3. Not understanding the participatory research process and expecting NHTOA staff to do the research and data gathering.

Although Carbee and Stock were both disappointed with the extent of participation, the fact that 14 members of their community actively participated in the research process is a remarkable achievement, particularly given the challenges facing the wood products industry during the period of the research. Participation would not have been as high had NHTOA not kept everyone in the communications loop from beginning to end. By not narrowing the mailing list after the initial kickoff meeting, Carbee and Stock kept the door open for future participation. As a result, many chose to participate at a later stage. Many were motivated to participate once the surveys were drafted. They were reacting to concerns they had over potential results.

**Being Patient with the Process**

These factors turned a project that NHTOA thought they could complete in nine to twelve months into a project they struggled to wrap up two years later. This was a huge frustration and surprise for NHTOA as they watched deadlines come and go. Yet, what they have come to realize is that, as those deadlines passed, they were still producing an important portion of the final product – the methodology. Specifically, in addition to producing a report containing findings and results that are sure to be interesting, another significant product is the process, including how well the community became engaged in the process, and an understanding of the barriers limiting their involvement as well as those that motivate participation.

Overall, NHTOA’s experience with the participatory research method was mixed. They enjoyed working and involving the study communities in the work but found it very frustrating to acquire data. They also learned that the process needs structure and the tasks need definition. Lack of structure or defined tasks will result in variable results that are difficult to interpret.
Conclusion

This project confirmed for NHTOA staff that the passion for maintaining a viable forest products industry in the Northern Forest continues. This industry has been the backbone of the economy for so long that the sudden changes that have occurred over the past decade have overwhelmed a population that did not want to change their way of life. This heartburn continues, even though most of the largest industrial parcels, particularly in New Hampshire, have been sold and even re-sold. NHTOA has shown that, even under challenging circumstances, and where opinions are strongly held, industry participants can conduct credible research to improve their own and others’ understanding of the implications of changing land ownership patterns for land management, harvesting activities, and resource availability for wood processors.

Endnotes

2 Pulp and Paper Technology, 10/03/03.
3 In 2001, 171,000 acres of forestland was sold by International Paper to the Trust for Public Land.
5 Pulp and Paper Technology, 10/03/03.
7 The allowable rate of cut on a given land parcel given current stocking, age class distribution and growth rates. Allowable cut is usually described in cords per year or acre.
Appendix A: Project Participant List

In participatory research, community members identify the research questions, carry out research activities, analyze the information that was collected, and decide how it will be used. This project was no exception. While the New Hampshire Timberland Owners Association and Timber Harvesting Communities (NHTOA/THC) identified the research question, this was a response to the concern felt by their community of members. Members of this community carried out the interviews, helped to analyze the information and decided how it would be used. The list of project participants follows:

Andy Carlo, Forester, LandVest, VT.

Kevin Evans, Forester, Dartmouth College, NH.

Julie Evans, Forester.

Tom Frizzell, Log Buyer, Ethan Allen, VT.

Spencer Laramie Jr., Logger, past chair of NH Timber Harvesting Council. Member of the NCFCNFR Advisory Council.

Bob McGregor, Forester, Land Management, NH Division of Forests & Lands, Lancaster, NH.

Gary Moore, Associated Industries of VT.

John Morrissey, Manager, Ethan Allen, VT.

Brendan Prusik, Forester/Owner - Sustainable Forest Solutions. Previously with Champion International.

Monica Prusik, Procurement Forester, International Paper, NH.

Sam Stoddard, County Extension Forester, Coos County, NH.

Don Tase, Upland Forestry, West Stewartstown, NH (worked for Champion International for many years).

Tom Thomson, Landowner, NH.

Jim Wood, Forester, Essex Timber.