

## Introduction to Wood Procurement Systems

### Objectives for Today

- Overview of how primary forest products companies secure their wood supply
- What is a woodshed?
- Factors determining the size of a woodshed?

## Woodshed (wood basin)

## Factors Influencing Size of Woodshed

## Sources of Roundwood

## Fee Simple Lands

- Provide insulation, control log costs, insurance policy

## Direct Purchase of Roundwood from logging contractors “open market”

## Direct Purchase of Roundwood from brokers and dealers

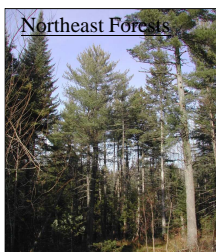
- Brokers act as middlemen and sell to the mill by:

## Land Use Change in the Northern Forest and Its Impact on the Region's Sawmills and Loggers



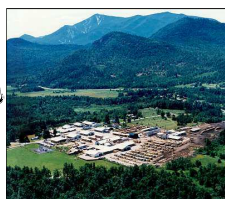
Nate Anderson, René Germain, and  
Eddie Bevilacqua  
State University of New York

## Industry and Private Forest in the NF (Consider New York, Vermont, New Hampshire and Maine)



White pine woodlands, NY  
Photo: René Germain

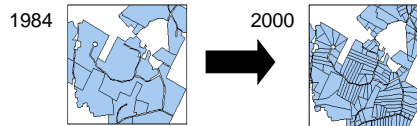
### Northeast Forest Industry



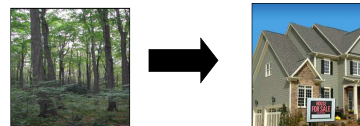
Ward Lumber, Jay, NY  
Photo: www.wardlumber.com

## Focus on Land Use Change

- Parcelization



- Urbanization



## Research Questions

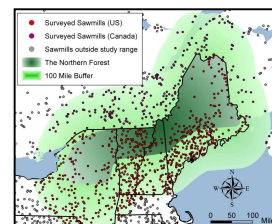
How are these trends affecting sawmills?

### The BIG questions:

- Can we characterize wood procurement for sawmills in the Northern Forest?
- What trends do sawmill managers perceive?
- Can we identify and quantify effects spatially?
- Can we predict where effects will be most intense in the future?

## Survey Methods

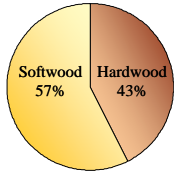
- Dillman's Tailored Design Method (2000)
- Sawmills within 100 mi of the Northern Forest
- All production levels
- Sample Frame:
  - Government Sources
  - Industry Associations
  - NGO sources
  - Internet sources



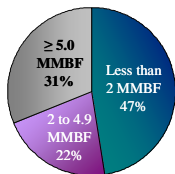
## Respondents: 211 U.S. sawmills

Sample Frame	Responses	Response rate	Roundwood volume reported
379	211	56%	1.2 billion board ft

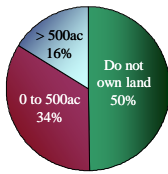
Mill Type



Annual Volume



Land Ownership

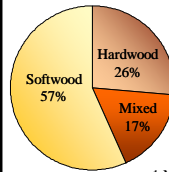


\* Charts show percent of respondents in each category

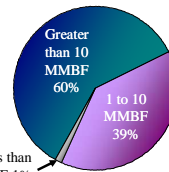
## Respondents: 76 Canadian sawmills

Sample Frame	Responses	Response rate	Roundwood volume reported
400	76	19%	5.1 million m <sup>3</sup>

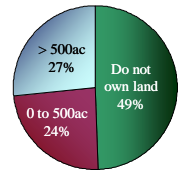
Mill Type



Annual Volume



Land Ownership

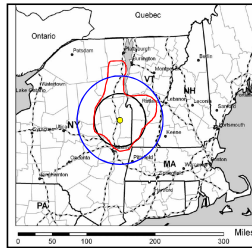


\* Charts show percent of respondents in each category

## Survey Results: Woodshed boundary

3 measurements of the geographic extent of procurement region:

- n = 287 sawmills
- distance encompassing 90% of total roundwood supply
- max distance to stumpage
- max log trucking distance

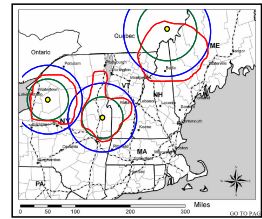


## Woodshed boundaries

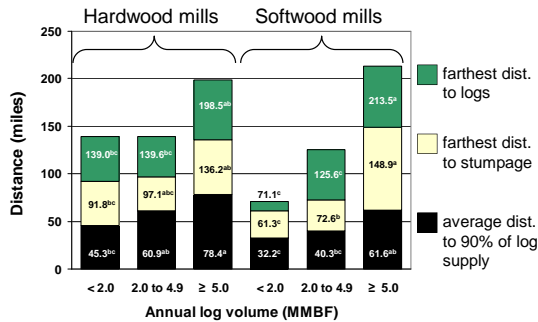
Geographic extent of wood procurement region

DISTANCE	USA mi ± 95% CI	CAN mi ± 95% CI
Farthest distance for logs	154 ± 31.3	194 ± 41.2
Farthest distance to stumpage	99 ± 11.9	137 ± 25.5
Mean distance encompassing 90% of total log volume	51 ± 5.1	105 ± 20.5

● n = 287 sawmills



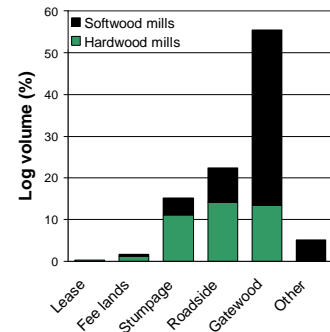
## Survey Results: Woodshed boundary



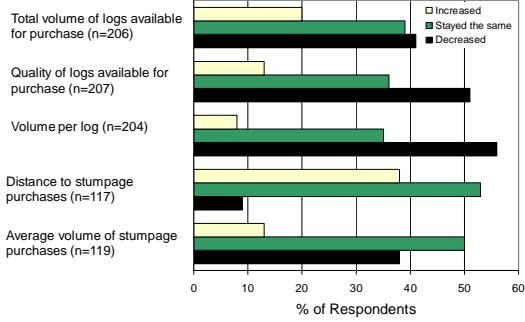
\*Means of the same variable (bar color) that share letters are not significantly different (Tukey's HSD).

## Survey Results: Roundwood Sources

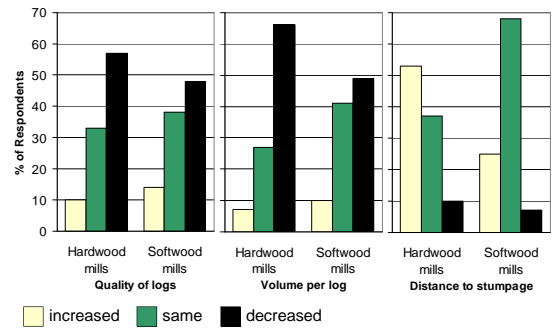
Six roundwood sources as % of the 1.2 billion bf reported in the survey



## Survey Results: Perceptions of



## Differences between Mill Types



## Differences among Mill Sizes

