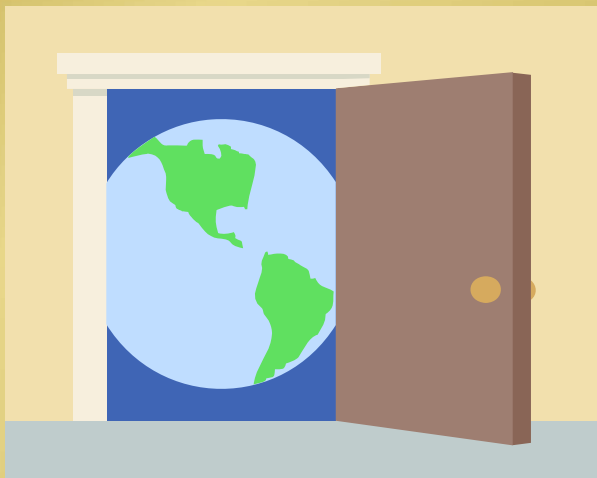


Traditional Hardwood Market Structure

Opportunities for Small Producers



by
Daniel Cassens
Professor of
Wood Products
Purdue University

Different Ways to Look at Hardwood Lumber Markets

- **Seasoning Level**
 - Green lumber
 - Air-dried lumber
 - Kiln-dried lumber
- **Market Categories**
 - Hardwood grade lumber
 - Industrial lumber
 - General construction
 - Misc.
- **Types of Suppliers**
 - Large and small sawmills
 - Wholesalers
 - Concentration yards
 - Distribution yards
 - Retail outlets

Green Lumber

- ▲ **Quick turn over**
- ▼ **Heavy**
- ▼ **Shrinks and warps**
- ▼ **Low strength**
- ▼ **Will mold, stain and decay**
- ▼ **Insect vulnerable**
- ▼ **Limited markets**
- ▼ **Low value**

Green Lumber Uses

- Sell to Other Mills
- Custom Drying
- Farm Lumber
- Timbers
- Railroad Ties
- Truck & Trailer Flooring
- Dunnage
- Bows
- Bridges
- Posts & Corner Posts
- Fence Boards
- Pallets & Crates
- Tobacco Stakes
- Guard Rails



Air-Dried Lumber

- ▲ **Lighter**
- ▲ **Higher strength**
- ▲ **Will not mold, stain or decay**

- ◆ **Some shrinking, warping, and checking has occurred**
- ◆ **Value somewhat increased**

- ▼ **Seasoning time - one to several months**
- ▼ **Insect vulnerable**
- ▼ **Limited markets**

Air-Dried Lumber Uses

- Unheated Buildings
- Utility Trailer Decking
- Recreational Uses
- Sofa Frames
- Country Crafts
- Woodworkers
- Bending Stock
- Boat Builders
- Wagon Tongues
- Farm Uses
- Parks



Kiln-Dried Lumber

- ▲ Light
- ▲ Highest strength
- ▲ Will not mold, stain or decay
- ▲ Shrinking, warping, and checking have occurred
- ▲ Highest value
- ▲ Many high-valued applications
- ▼ Increased cost of drying
- ▼ Increased seasoning time
- ▼ Will regain moisture
- ▼ May still be insect vulnerable

Kiln-Dried Lumber Uses

- Manufactured Products
- Furniture
- Cabinets
- Millwork
- Molding
- Reproductions
- Specialty Uses
- Country Crafts
- Plaques & Trophies
- Custom Woodworkers
- Signs



Major Domestic Market Categories Hardwood Grade

Lumber

- Wholesale quantities
 - Types of Buyers
 - *End manufacturers*
 - *Larger mills*
 - *Concentration yards*
 - “Retail”
 - Types of Buyers
 - *Custom manufacturers*
 - *Institutions*
 - *Contractors*
 - *Weekend woodworkers*
 - *Hobbyists*
 - “Buy Local”

Major Domestic Market Categories

Industrial Lumber

- Pallets and Crates
- Blocking
- Timbers
- Railroad ties
- Truck and trailer flooring
 - Types of Buyers
 - *Manufacturing plants*

Major Domestic Market Categories General Construction

- Framing lumber
- Post and beam
- Farm lumber
- Types of Buyers
 - *Farmers*
 - *Contractors*
 - *Recreational properties*
 - *Rustic applications*

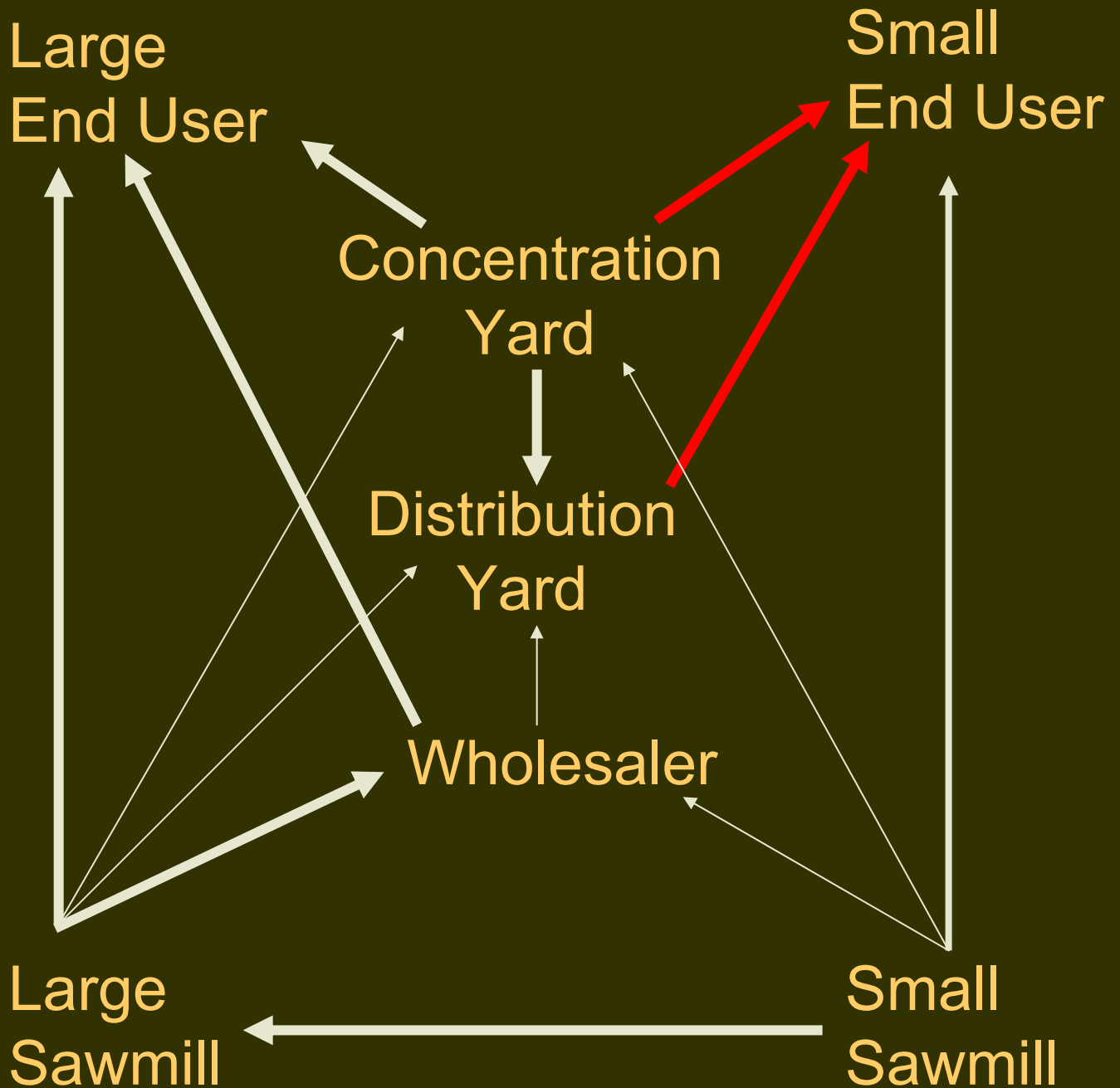
Major Domestic Market Categories

Miscellaneous

- Bending stock
- Sofa frames
- Boat builders
- Signs



Types of Suppliers



Domestic Markets for Kiln Dried Grade Hardwood Lumber

- Past and Present ?
- Residential furniture
- Institutional Furniture
- Stock Cabinet manufacturing
- Millwork
- Flooring
- Office and Store Fixtures
- Musical Instruments
- Games and Toys
- Sporting Goods
- Caskets
- Custom Woodworkers
- Retail

Trade Journal Industry

Secondary

- Target Audience of Larger Secondary Companies
 - Wood Digest → *out of business*
 - Modern Woodworking → *out of business, Purchased*
 - Furniture Design and Manufacturing → *combined*
 - Cabinet Maker → *combined*
 - Wood and Wood Products
- Target Audience of Smaller Custom Woodworking Business
 - Woodshop News
 - Custom Woodworking Business
- Target Audience of General Public
 - Fine Woodworking

Trade Journal Industry Primary

- Northern Logger
- Southern Lumberman
- Sawmill and Wood Lot Management

Opportunities



Factor	Large Sawmills	Small Sawmills
Business atmosphere	Good	Limited
Inventory	Good	Limited
Services	Good	Limited
Industry contacts	Good	Limited
Specialty items	Limited	Good
Quality	Mostly known	Known
Price	Competitive	Negotiable
Timber base required	Large	Small (portable mills)
Custom sawing	No	Yes
Mobility	No	Usually (portable mills)
Small quantity sales	No	Yes

General Capabilities of Large and Small Hardwood Sawmills, by Marketing Factors

Summary

- Large mills and traditional industry structure will continue but probably at a reduced level
- New generation of thin Kerf mills continue to expand (WM at 40,000)
- Scaled down woodworking equipment readily available
- Some smaller equipment is versatile and efficient
- Markets for small quantities, local available lumber at reasonable prices exist

Summary⁽¹⁾

*“Using urban timber may provide a further opportunity to open a **retail store** in the community, where some of the less commercially appealing lumber might be offered to local woodworkers.”*

⁽¹⁾Hardwood Review Weekly, April 9, 2010