

# Potential for increased treated wood products usage in U.S. South residential construction

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Canadian Wood Preservation Association  
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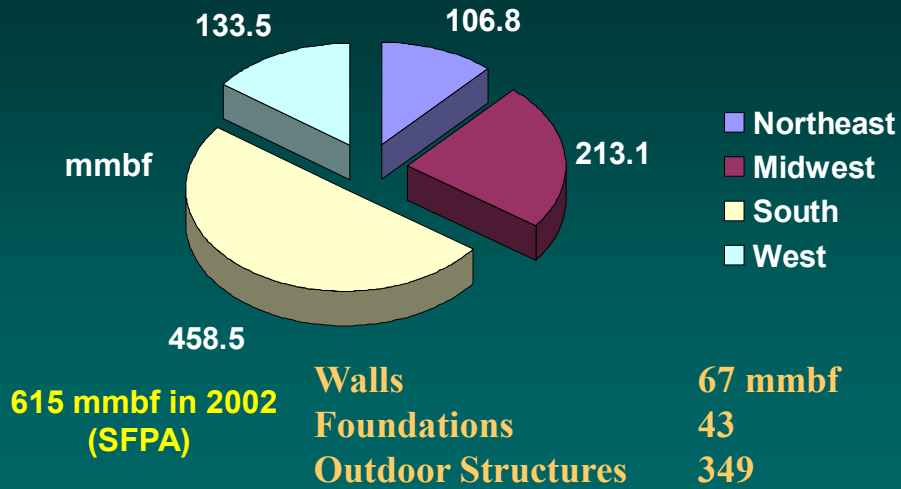


## Overview

- Background / rationale
- Results of U.S. South treated framing study
- Results of N.A. decking study



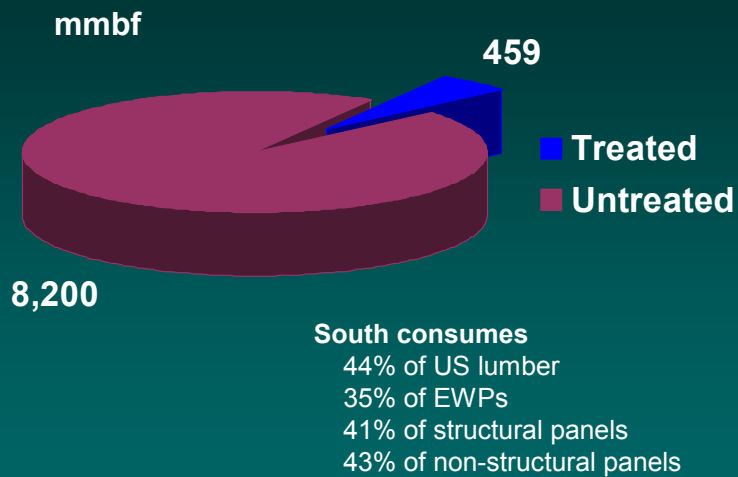
## US SF Use of Treated SW Lumber



NAHB 1998



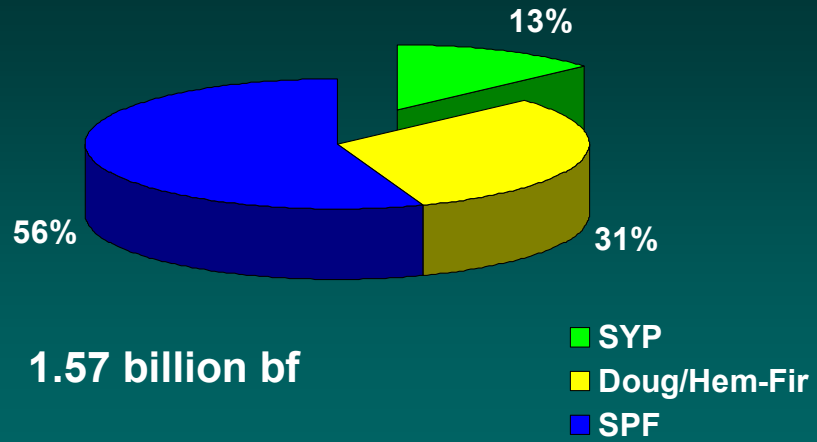
## US South SF Use of SW Lumber



NAHB, RISI 1998



## US South Wood Use in Walls



NAHB 1998

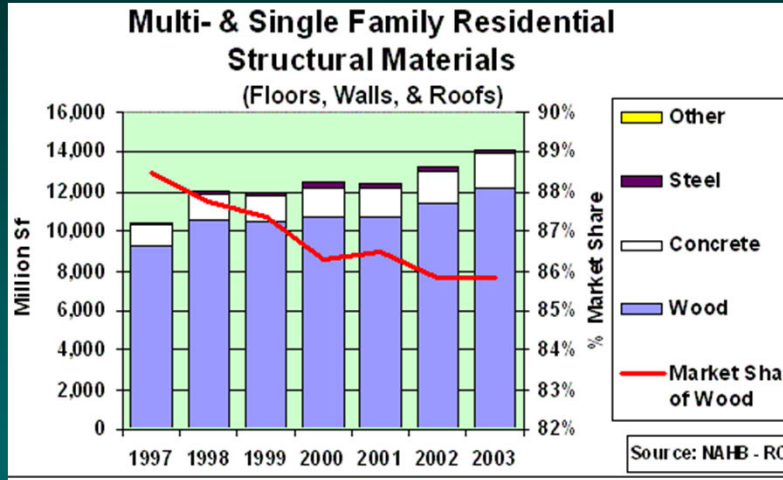


- US \$2 billion + in termite damage annually

USDA Forest Service, 2002



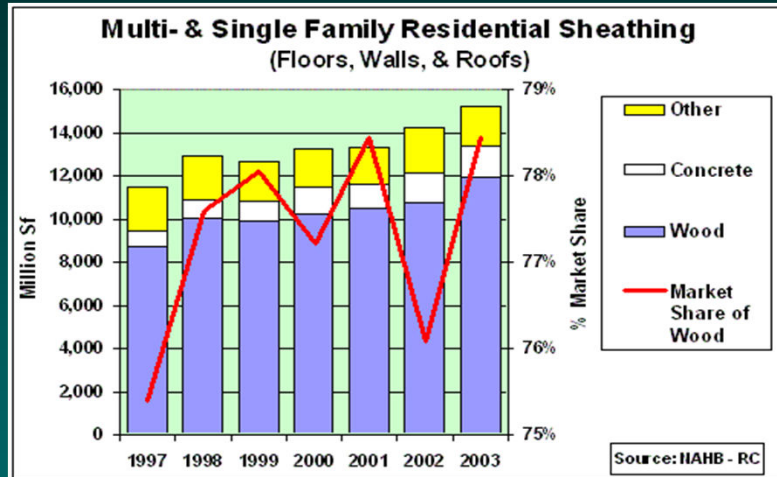
## Treated wood framing materials



WPN / NAHB



## Treated wood framing materials

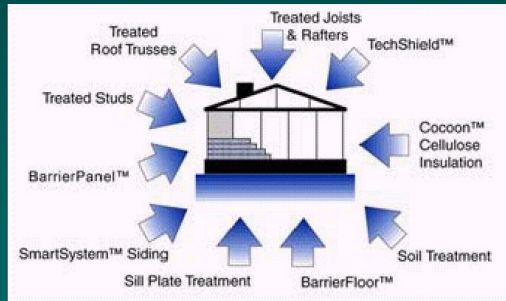


WPN / NAHB



## Cost of using treated framing lumber/panels

Untreated framing package	\$16,094 US
Treated framing package	\$19,511
	\$3,417 US



Shupe, et al. FPJ 05/2000



## 2003/2004 Forintek market study

Value to Wood Valeur au bois

**Potential for increased treated wood products usage in U.S. South residential construction**

Chris Gaston, Ph.D.  
Group Leader, Markets & Economics  
Western Division

[www.valuefowood.ca](http://www.valuefowood.ca)

[www.valeuraubois.ca](http://www.valeuraubois.ca)



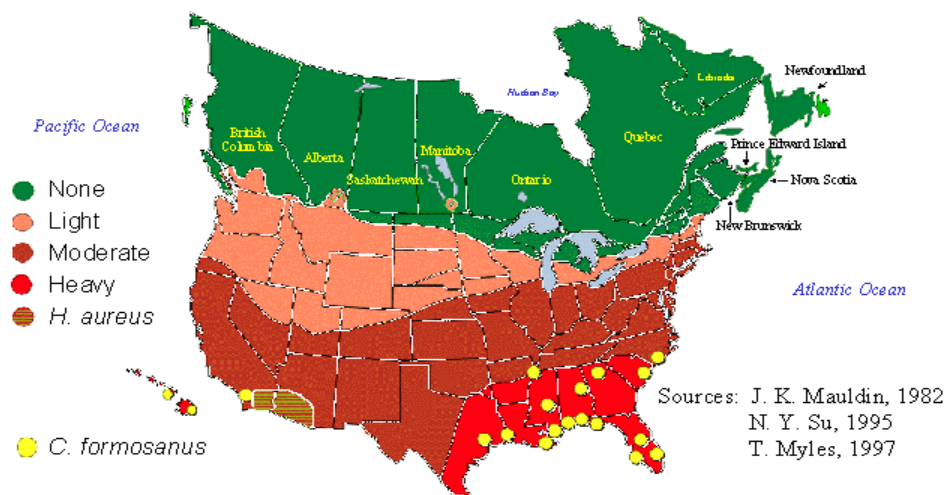
## 2003/2004 Forintek market study

### Key Objective is to document reasons for the lack of specification of treated wood for home framing

- Buyer/Supplier demographics information
- Criteria for treated wood home framing purchase or sales
- How treated wood perceptions were developed
- Awareness and performance perceptions of treated wood relative to other construction materials
- Awareness and perception of various chemicals and wood treating processes

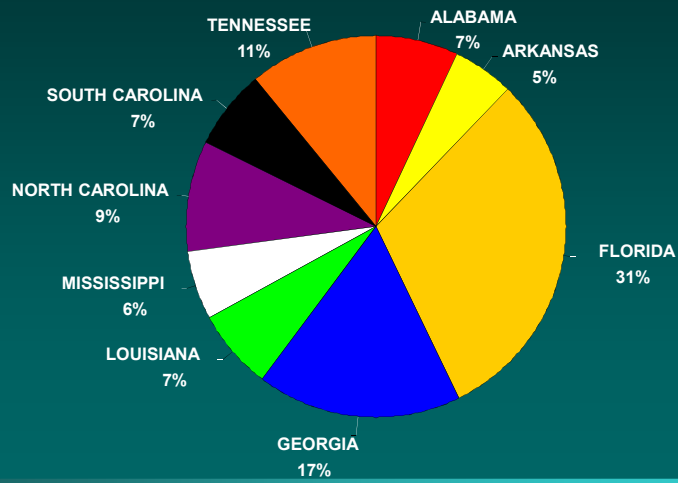


### Subterranean Termite Zones of North America



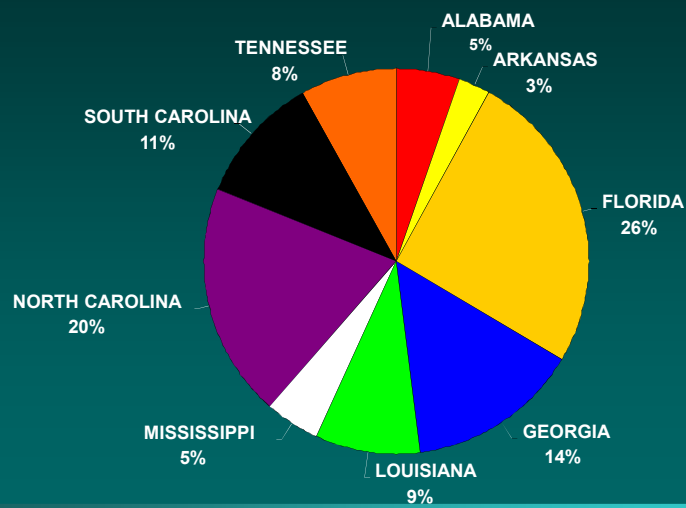
## Survey population

229 home owners

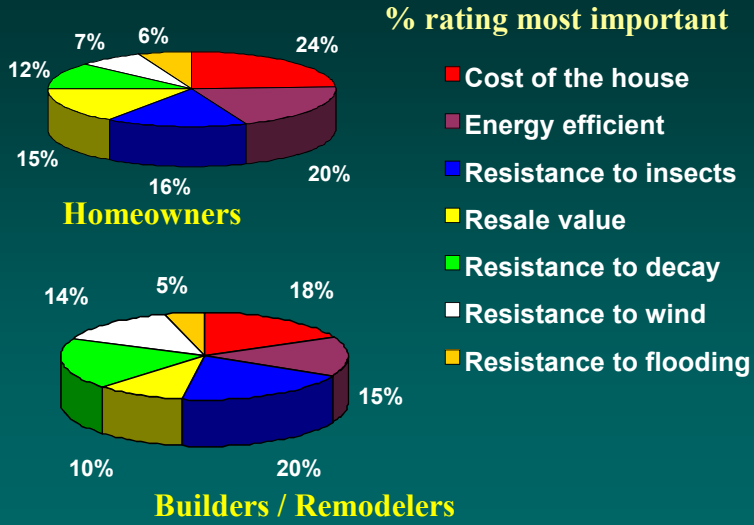


## Survey population

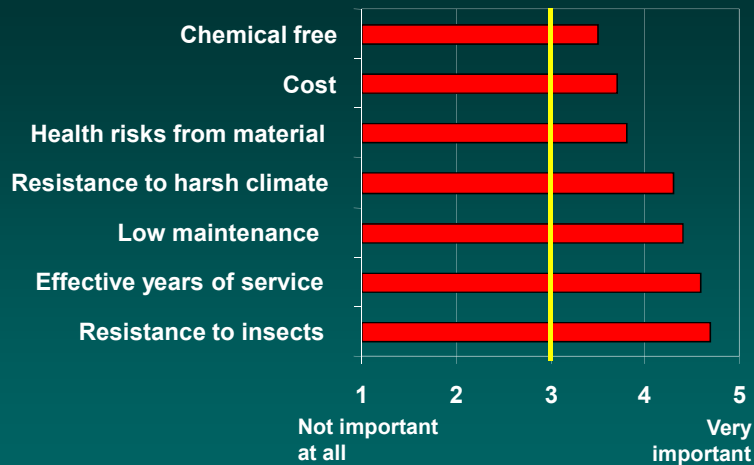
313 builders / remodelers



## Priority home purchase criteria



## Building material purchase criteria



**Builders / Remodelers**





## Attitudes

- treated lumber was believed by homeowners and builders / remodelers to be **less harmful to the environment** than plastic or steel
- 43% of homeowners and 41% of builders / remodelers stated they had an extremely **positive perception of treated wood products**



## Attitudes

- Treated wood is appropriate for new home framing (remodelling)
  - 54% (49%) of homeowners said yes
  - 49% (47%) of builders / remodellers said yes
- 81% of builders / remodellers did NOT have any concerns about using treated wood structurally
  - Of those that did, cost was the major concern



## Attitudes

- **Familiarity with borates**
  - 12% of homeowners
  - 38% of builders / remodellers
- **Are some types of treated wood safer than others?**
  - Homeowners: Yes 22% No 9% Unsure 69%
  - Builders / remodellers: Yes 26% No 20% Unsure 54%



## Attitudes

- 64% of homeowners stated that they **somewhat or strongly agree** that treated wood is an acceptable material for home framing
- 69% of homeowners **somewhat or strongly agree** that they would frame their house with treated wood if it was certified safe (Note small difference)
- 53% of homeowners **somewhat or strongly agree** that they would like more information on proper use, handling and disposal of treated wood

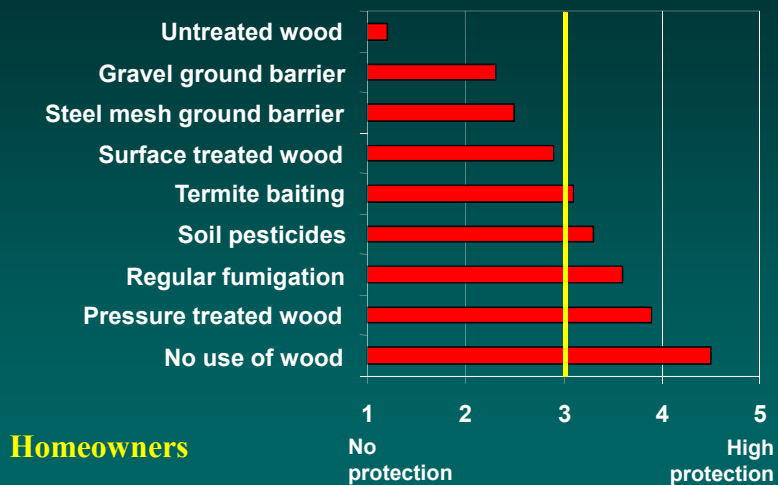


## Attitudes

- 62% of homeowners **somewhat or strongly agree** that they would pay a price premium for treated wood
- Only 24% of builders / remodellers stated that they would **not** pay a price premium
- 34% of homeowners have experienced termite damage to their homes, and 88% have taken action to prevent attack by some means



## Effectiveness of termite prevention options



Homeowners



## Effectiveness of termite prevention options

- 60% of **homeowners** stated that treated wood strongly or greatly protects against termites; 17% for preservative surface sprayed wood
- Comparative figures for **builders / remodelers** are 76% and 12%



## Conclusions

- Results suggest that we could see large increase in the use of treated wood in home framing in the South
  - **Attitude ahead of behavior?**
  - **In the South, treated wood means SYP! How do we insure SPF maintains market share?**



## Benefit / Impact to Industry

- Educate homeowner on treated wood benefits
  - life-cycle cost of treated wood compared to alternatives such as fumigation and non-wood
  - safe use / handling / disposal
- Market research on willingness-to-pay
- Increase brand recognition
- Further develop prefabricated components industry, incorporating Canadian treated wood products



## Benefit / Impact to Industry

- At stake for the US South market?*
- 8 billion bf of untreated lumber
- 8 billion sf of untreated structural panels

**BUILT IN PROTECTION**  
Borates: proven protection for sill plates

Builders need a new solution to protect building materials against termites, particularly sill plate, the critical barrier between foundation and framing. **BORAX** provides the answer.

**AFFORDABLE PROTECTION** – proven to be less expensive than other CCA treatments.

**EFFECTIVE PROTECTION** – proven to prevent termites, decay and corrosion.


**DURABLE PROTECTION** – proven over decades in the world's worst hazard zones.

**SAFE PROTECTION** – proven to be safe for people and the environment, but not for termites.

Ask your local supplier for borate treated lumber, plywood and OSB, or call **BORAX** at 1-800-441-2222 or [www.borax.com/wood](http://www.borax.com/wood)



## 2003/2004 Forintek market study

Value to Wood  Valeur au bois

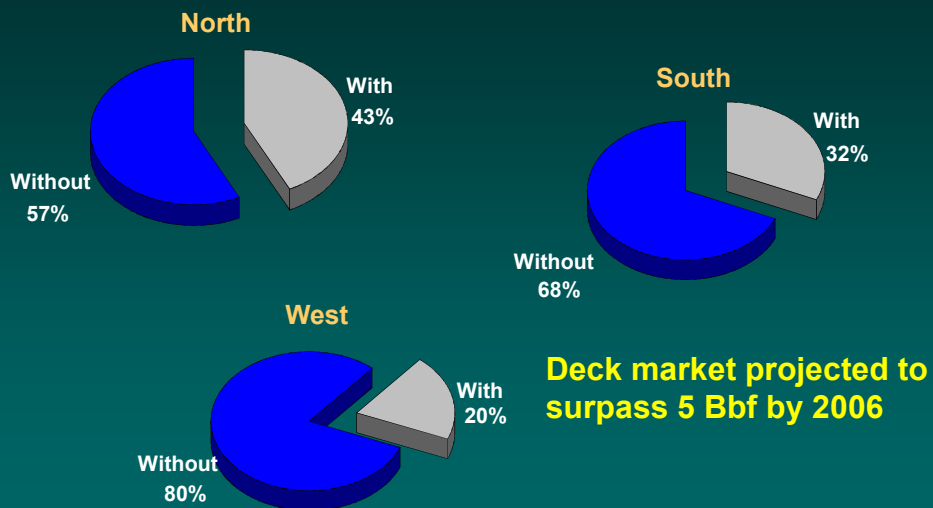
### Consumer Preferences for Decking Products: North America

David Fell  
Market Researcher  
Western Division

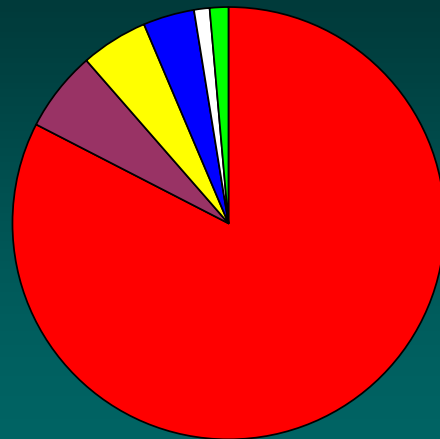
[www.valuetowood.ca](http://www.valuetowood.ca) [www.valeuraubois.ca](http://www.valeuraubois.ca)



## Homes built with decks in the US



## Material for decking in the US



- Treated Wood 83%
- Redwood 6%
- Red Cedar 5%
- Wood Plastic Composite 4%
- Plastic 1%

Wood Market Monthly 2002



## Results—Material

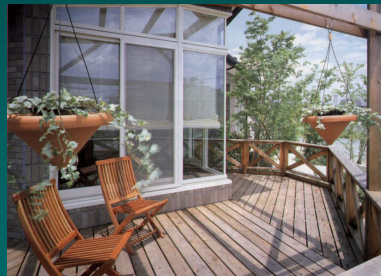
Material was the most important attribute in both years

### 2000

- Treated wood and naturally durable wood equal in preference.
- Plastic lumber very negative

### Conditions

- Pre-arsenic issue
- Western Canada



## Results—Material

### 2003

- Treated wood dropped from most preferred to least preferred (and highly negative)
- Wood plastic went from highly negative to ranked a close second

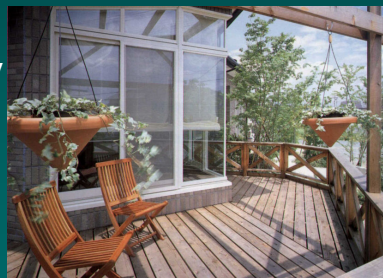
### Conditions

- Post-arsenic issue
- Eastern Canada and US



## Results—Other attributes

- Expected lifetime of a deck is a close second in decision making criteria for consumers
- Cost is the 3<sup>rd</sup> most important attribute
- Expected annual maintenance is the 4<sup>th</sup> most important attribute
  - Consumers were surprisingly insensitive to this attribute





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