Overview of Forest Industry Trends & Local Impacts

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Sustainable Forestry Conference:
How Communities Can Plan for the Future

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Florence, WI

Department of Forest Ecology and Management

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UW Extension

Outline

- Forest products history and use
- Forest resource - the big picture
- Consumption - the big picture
- Trends forest products industry
  - pulp & paper
  - solid wood

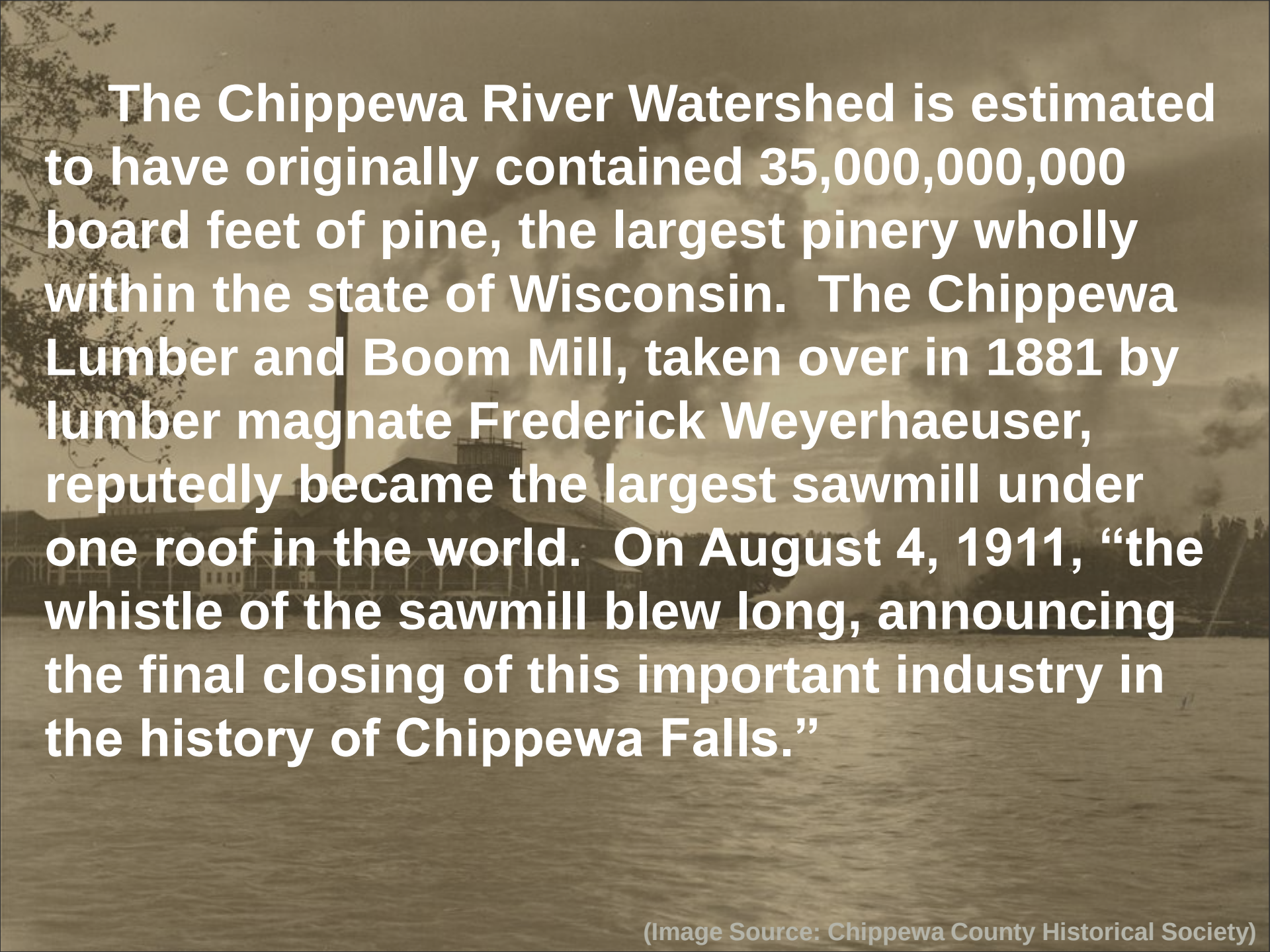
Back in Time

- 1492
  - Columbus sailed the ocean blue!
  - wood use - fuelwood American Indians
- 1634: Jean Nicolet
- 1787: Northwest Territory
- 1799: United States Wood Use
  - 300,000 MBF (88% softwoods)
- 1830s: Settlement along Lake Michigan
- 1848: Wisconsin Statehood
  - 5,392,000 MBF(76% softwoods)

Chippewa Lumber and Boom Company (circa 1900)

(Image Source: Chippewa County Historical Society)

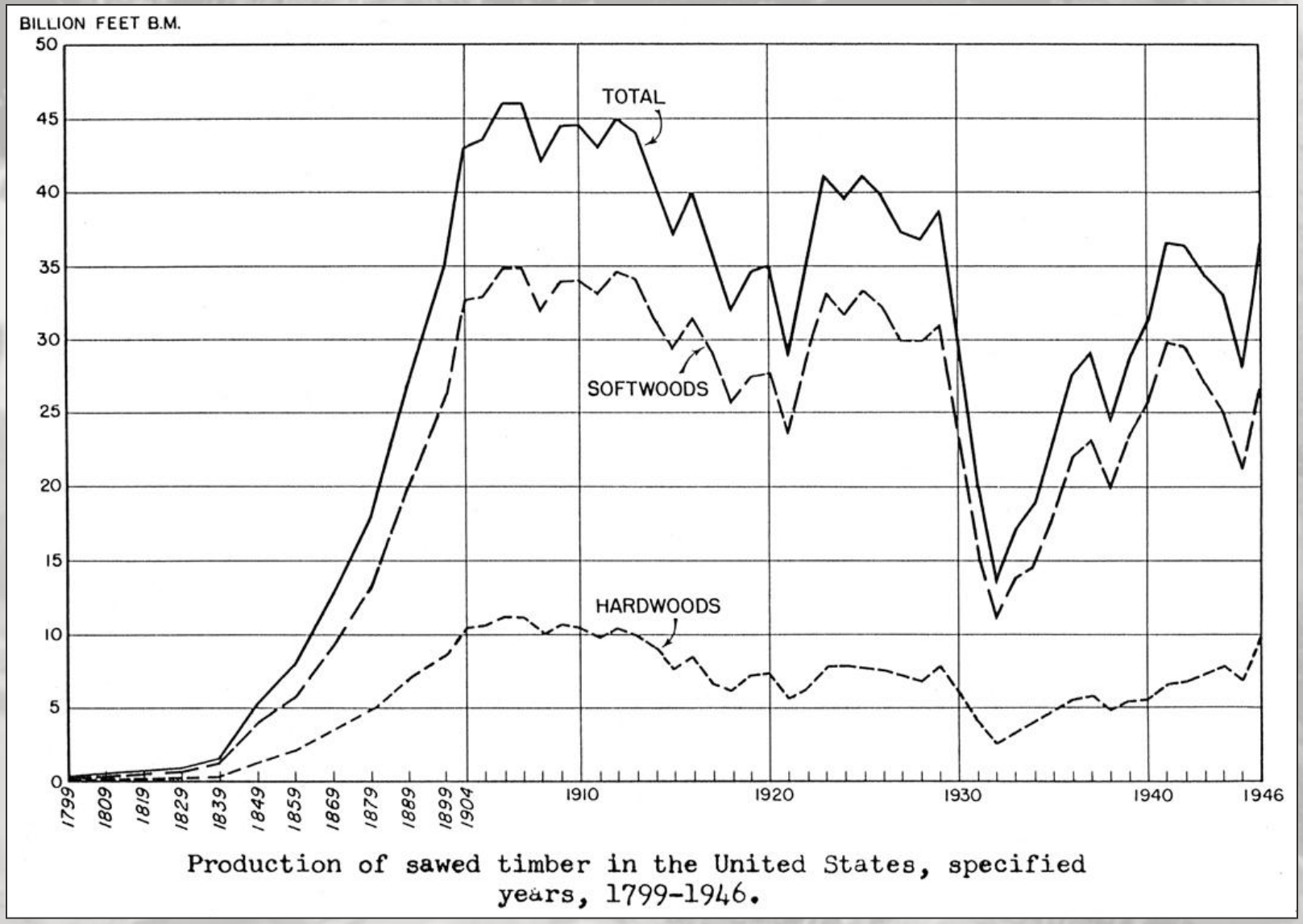

Endless Resource!
Sustainability?
(Image Source: Chippewa County Historical Society)



The Chippewa River Watershed is estimated to have originally contained 35,000,000,000 board feet of pine, the largest pinery wholly within the state of Wisconsin. The Chippewa Lumber and Boom Mill, taken over in 1881 by lumber magnate Frederick Weyerhaeuser, reputedly became the largest sawmill under one roof in the world. On August 4, 1911, "the whistle of the sawmill blew long, announcing the final closing of this important industry in the history of Chippewa Falls."

(Image Source: Chippewa County Historical Society)

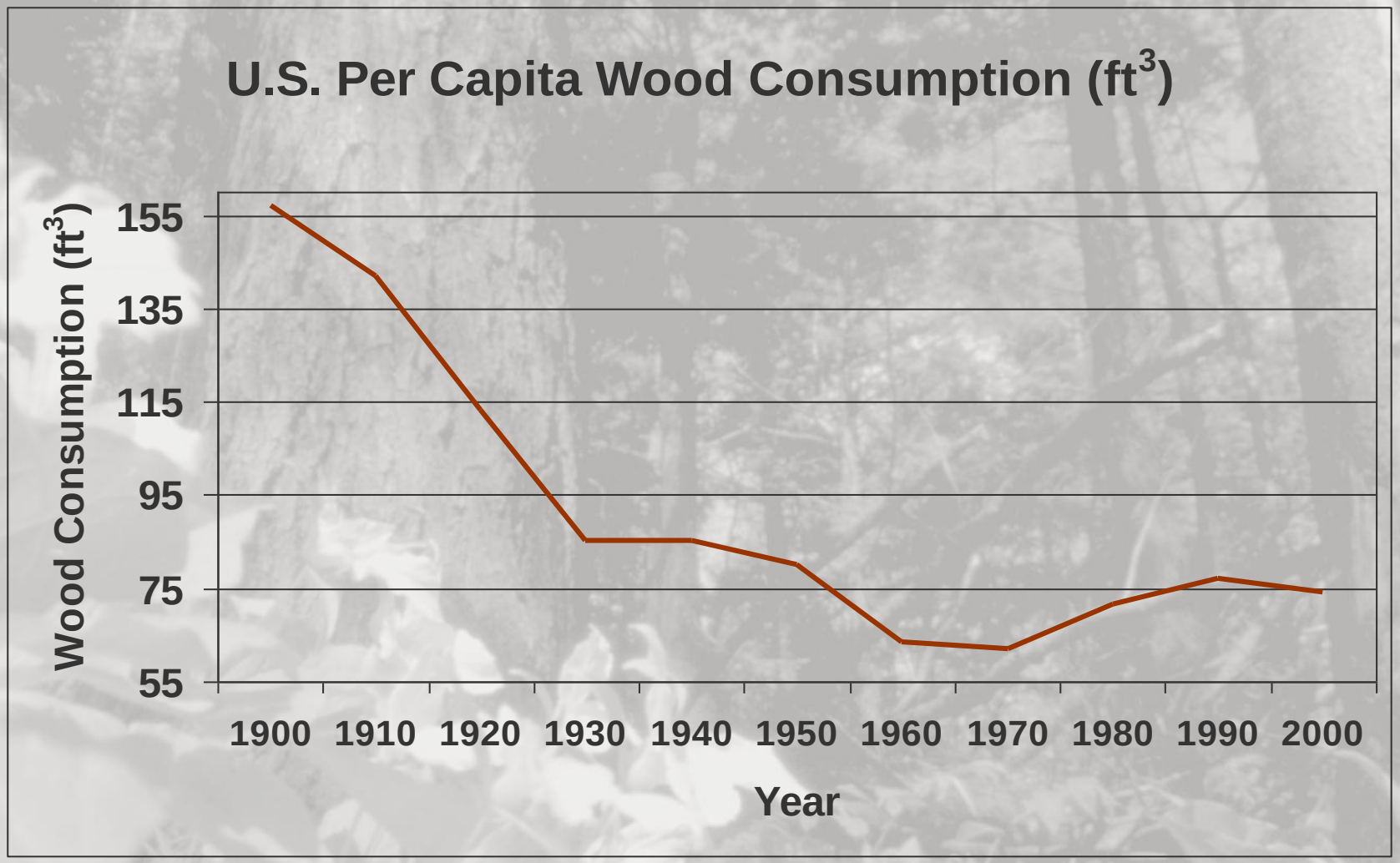
Wood Use Across Time



Production of sawed timber in the United States, specified years, 1799-1946.

(Image Source: Steer 1948)

Wood Use Across Time

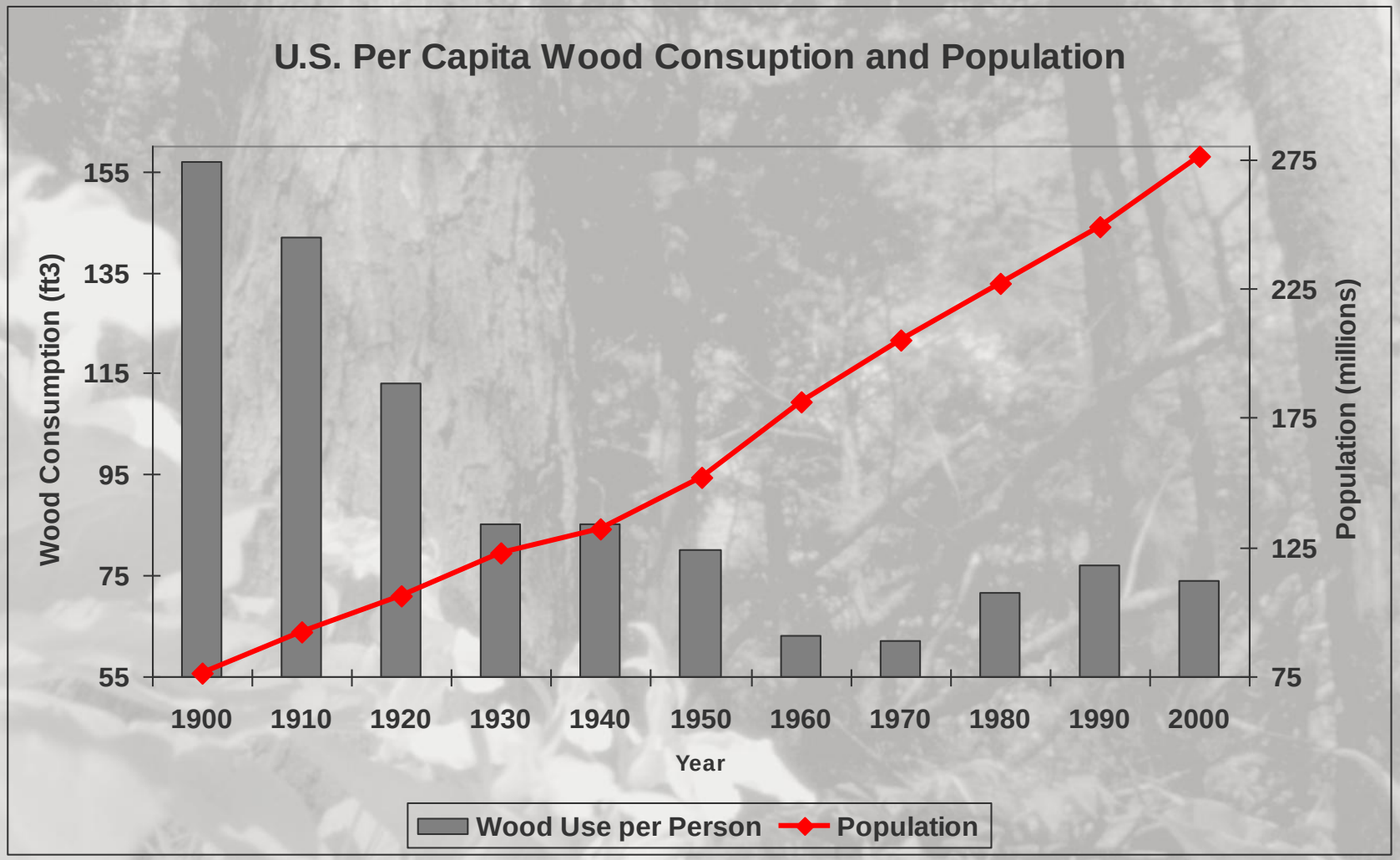


(Data Source: Anonymous circa 1970; Howard 1999)

Wood Use Across Time

- Per capita consumption down since 1900
- But…
  - U.S. population is way up
    - 76,094,000 in 1900
    - 295,782,000 today
  - overall wealth is way up

Wood Use Measure Across Time



(Data Source: Anonymous circa 1970; Howard 1999)

Production Today

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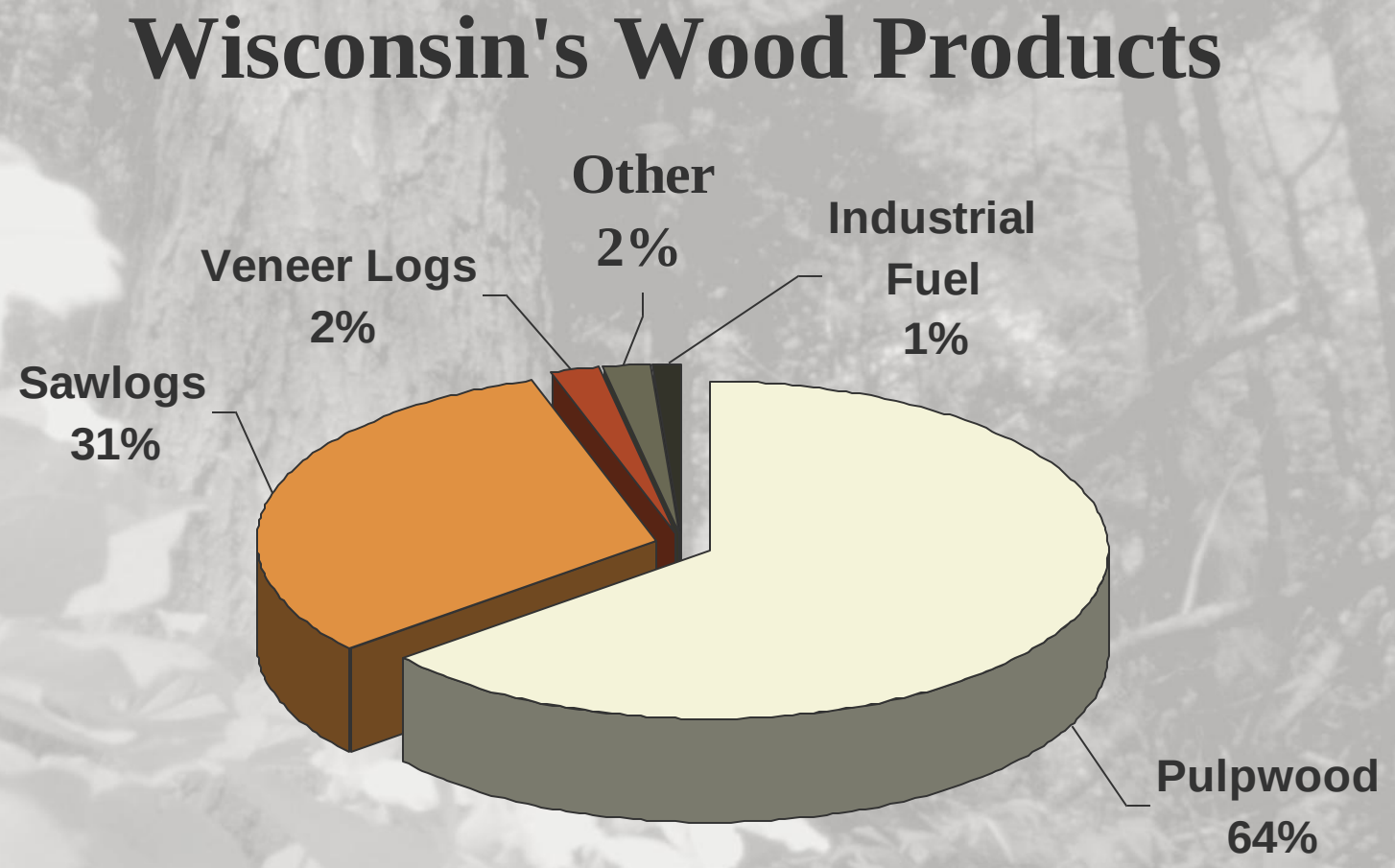
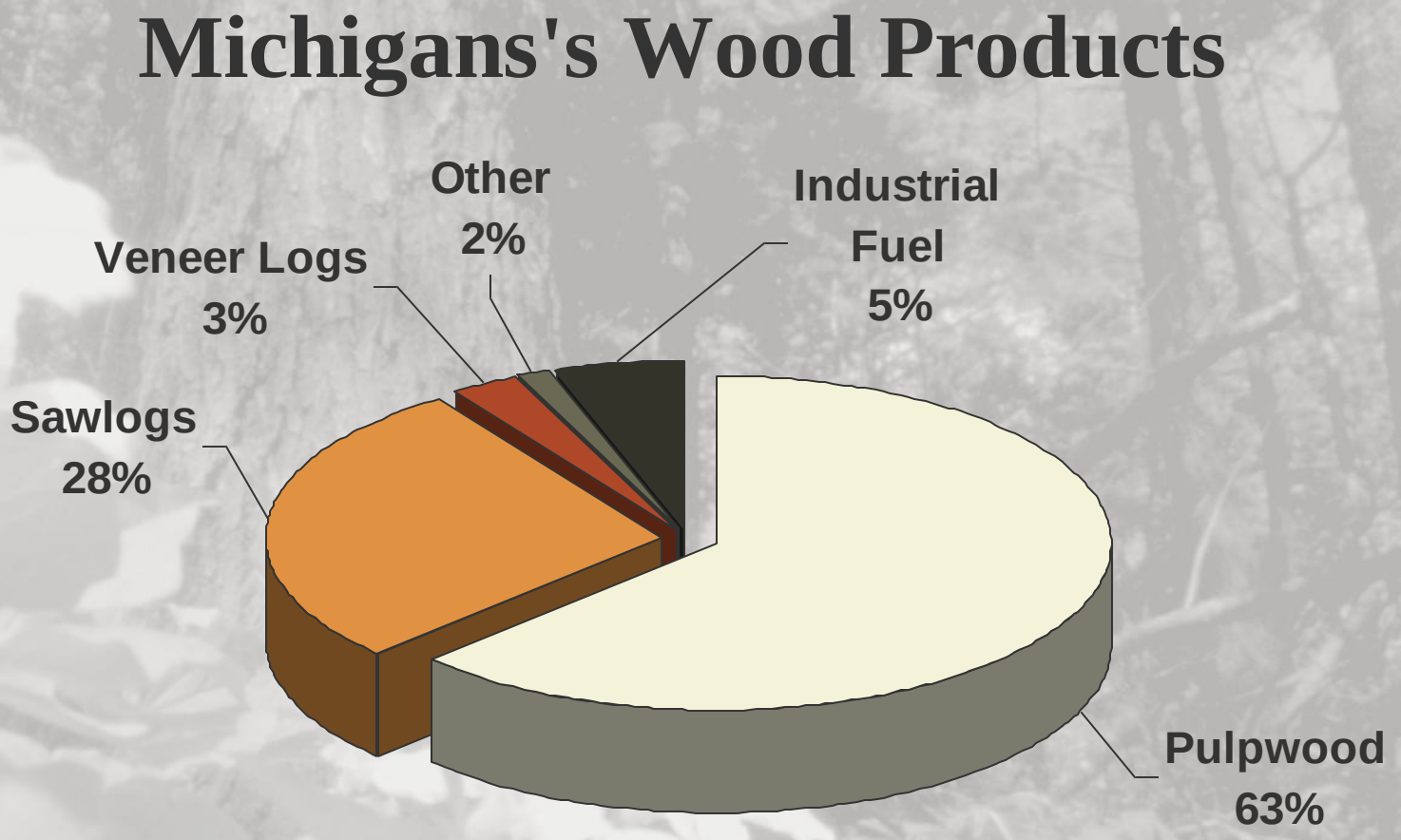
What products are produced?



(Source: Hackett *et al.* 2002)

What products are produced?



(Source: Haugen & Pilon 2002)


Yesterday
(Image Source: Chippewa County Historical Society)

Yesterday:
Local Markets by Today's Standards

(Image Source: Chippewa County Historical Society)

Today's Wood Products Industry Operates in a Global Market

(http://www.astlettrubber.com/images/shipping1.jpg)

(Image Source: Quick Reference World Atlas)


HAWA
Oak Flooring
Engineered
Exotic solid Wood Flooring

The General Public and Global Markets

- General public's disconnect
  - People don't understand how much they depend upon wood
  - People have a limited amount of time to focus on important issues
- Global markets fit well with the general public's disconnect
  - food comes from the grocery store and lumber comes from The Home Depot

Forest Resources in a Global Market

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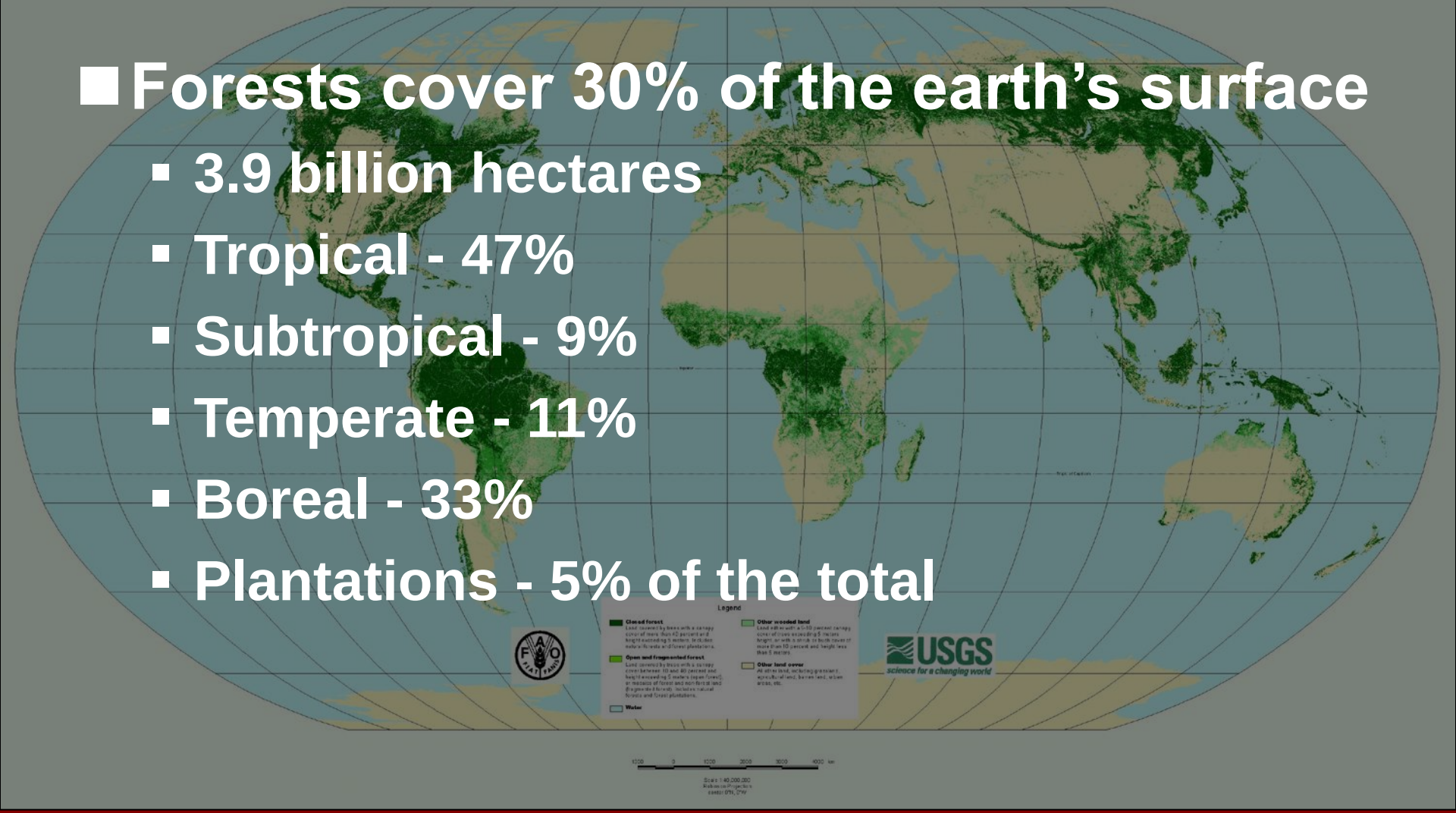
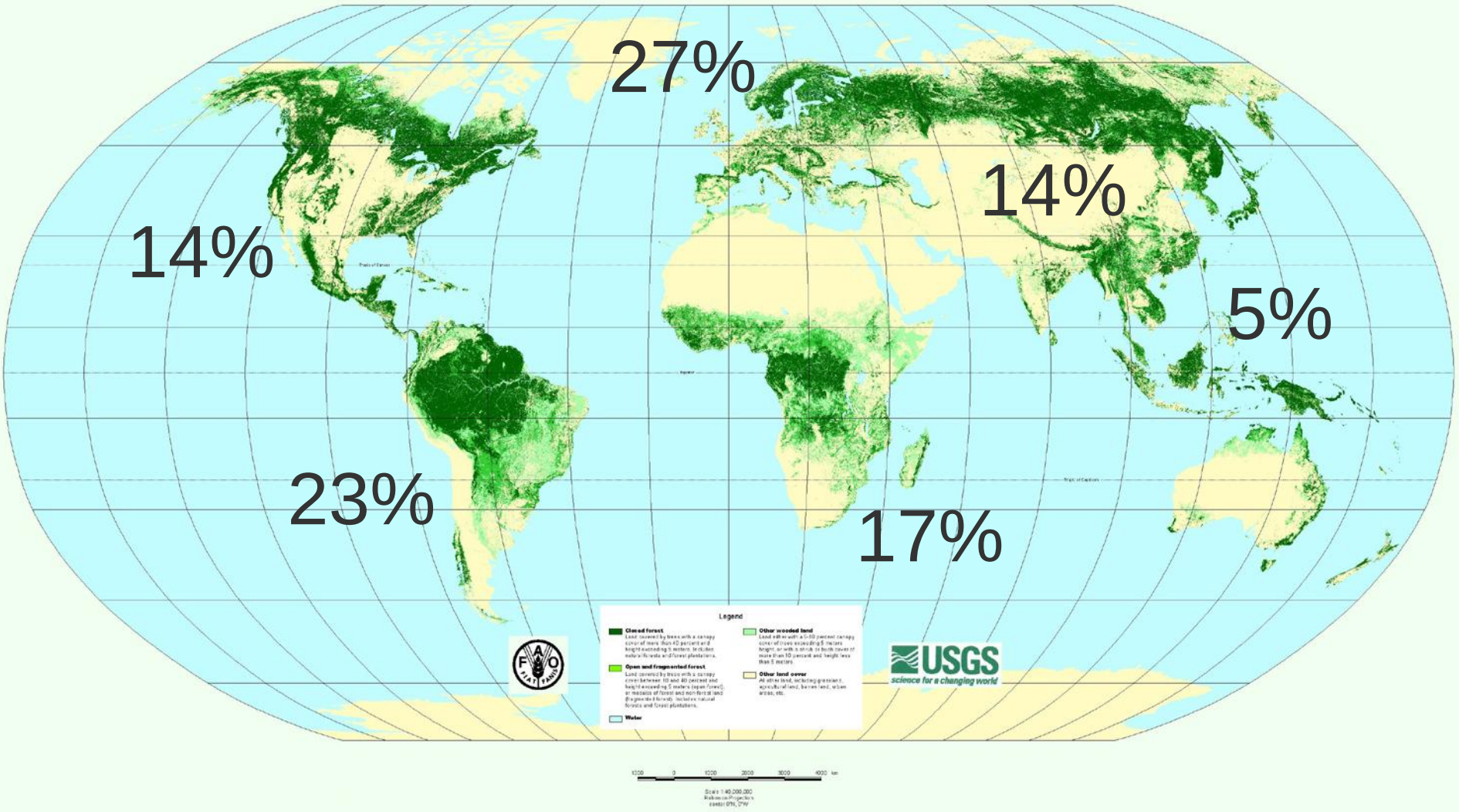
Global Forest Land

- Forests cover 30% of the earth's surface
  - 3.9 billion hectares
  - Tropical - 47%
  - Subtropical - 9%
  - Temperate - 11%
  - Boreal - 33%
  - Plantations - 5% of the total



(Image Source: http://www.fao.org/forestry/fo/fra/index.jsp)

Percent of Global Forest Land



(Image Source: http://www.fao.org/forestry/fo/fra/index.jsp)

Countries with Major Forest Holdings

(Source: FAO State of the World's Forests 2001)

115,700,000,000

Global roundwood consumption in ft^3

6.4 billion people

19 ft^3 per person per year globally

294 million people

74 ft^3 per person per year in the USA

880

Net Annual Increment Harvested

World Region	Harvests as % of NAI
Europe-41	60%
EU-15	64%
Nordic countries	72%
Baltic countries	50%
Central & eastern Europe	56%
Russia	16%
North America	80%

Source: *Temperate and Boreal Forest Resources Assessment 2000.*

Back to the Lake States: Impact of the Forest Industry

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Forest Industry's Impact

- The forest industry built Wisconsin & Michigan in the 1800s
- The forest industry is critical to their economy's today

Forest Industry's Impact in Wisconsin

- Why should we care?
  - ~$20 billion annually
  - add ~$10 billion annually with secondary impacts
  - employs ~ 100,000
  - impact is know by very few
- The health of Wisconsin's economy depends upon the health of our industry
- The health of Wisconsin's forests depend upon the health of our industry

Impacts of a Global Market Place

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2003 Wood Products Exports

- All wood products except wood furniture:
  - World = $4,963,541,373 (up ~ $40 million)
  - Canada =$1,789,221,856 (up ~ $114 million)
- All wood furniture:
  - World = $1,289,796,719 (up ~ $236 million)
  - Canada = $577,238,518 (up ~ $61 million)
- Grand total for wood products:
  - World = $6,253,338,092

(Source: D.M. Emanuel. 2003. U.S. Department of Commerce, Bureau of the Census)

2003 Wood Products Imports

- All wood products except wood furniture:
  - World = $17,715,959,410 (up ~ $900 million)
  - Canada = $10,793,378,791 (up ~ $500 million)
- All wood furniture:
  - World = $13,858,803,331 (up ~ $1.7 billion)
  - China = $5,554,470,957 (up ~ $1.3 billion)
- Grand total for wood products:
  - World = $31,574,762,741

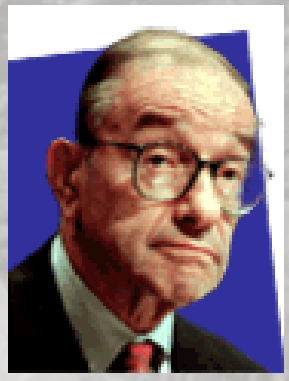
(Source: D.M. Emanuel. 2003. U.S. Department of Commerce, Bureau of the Census)

Exports vs. Imports

$31,574,762,741 - $6,253,338,092 =

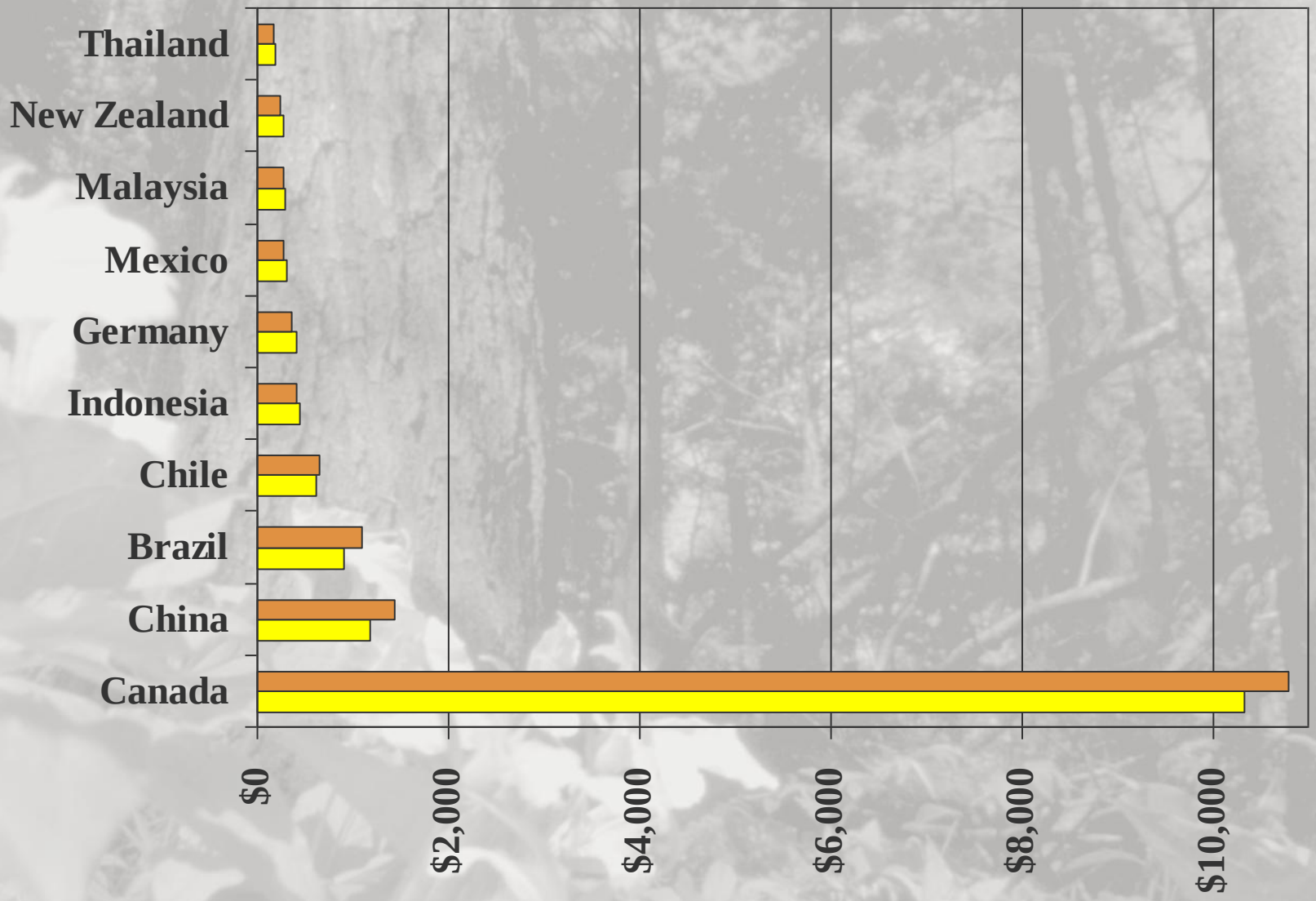
$25,321,424,649

- 2003 trade deficit in solid wood



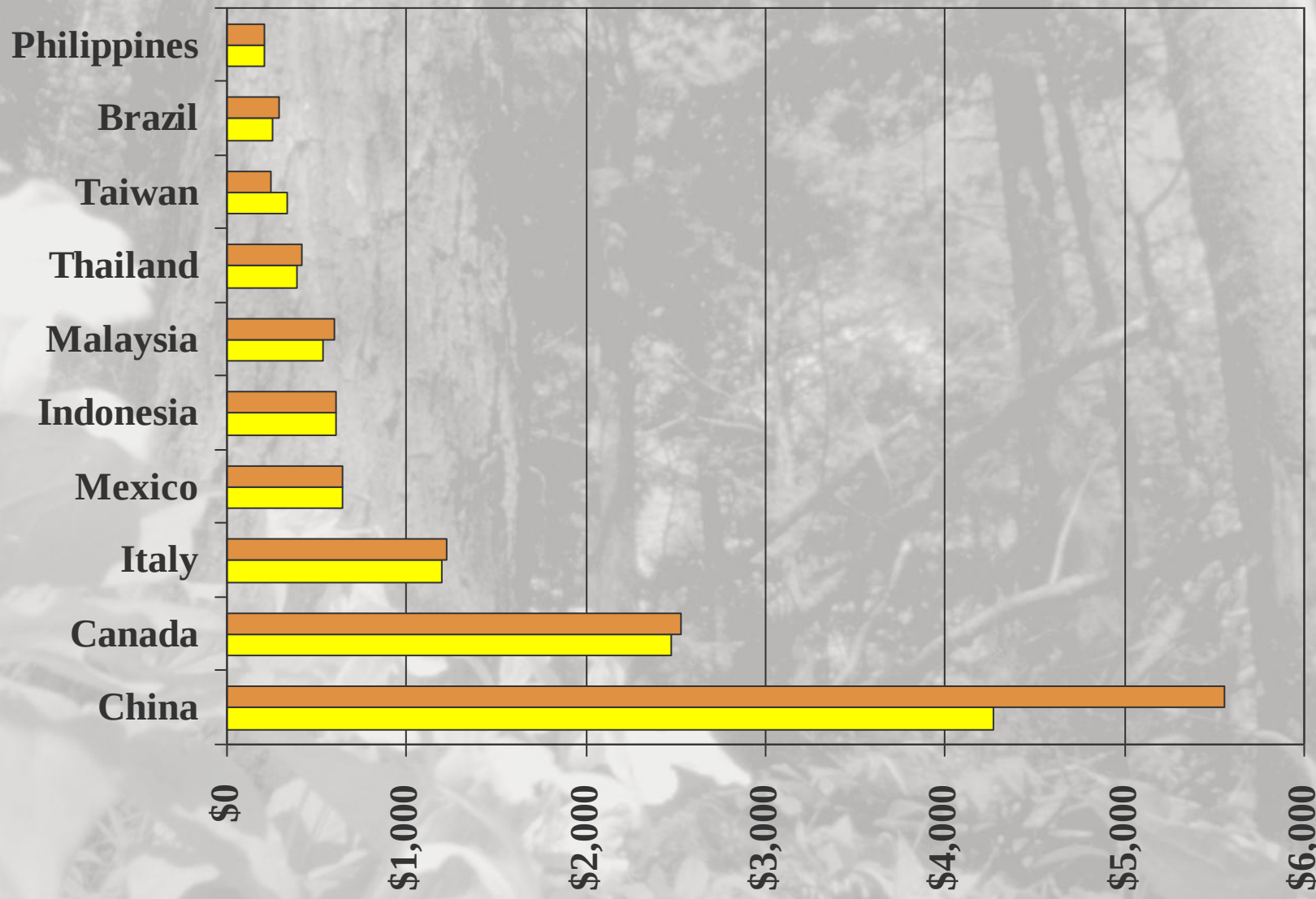
(Image Source: Ince 2003)

2002 vs. 2003 Non-Furniture Imports ($ millions)



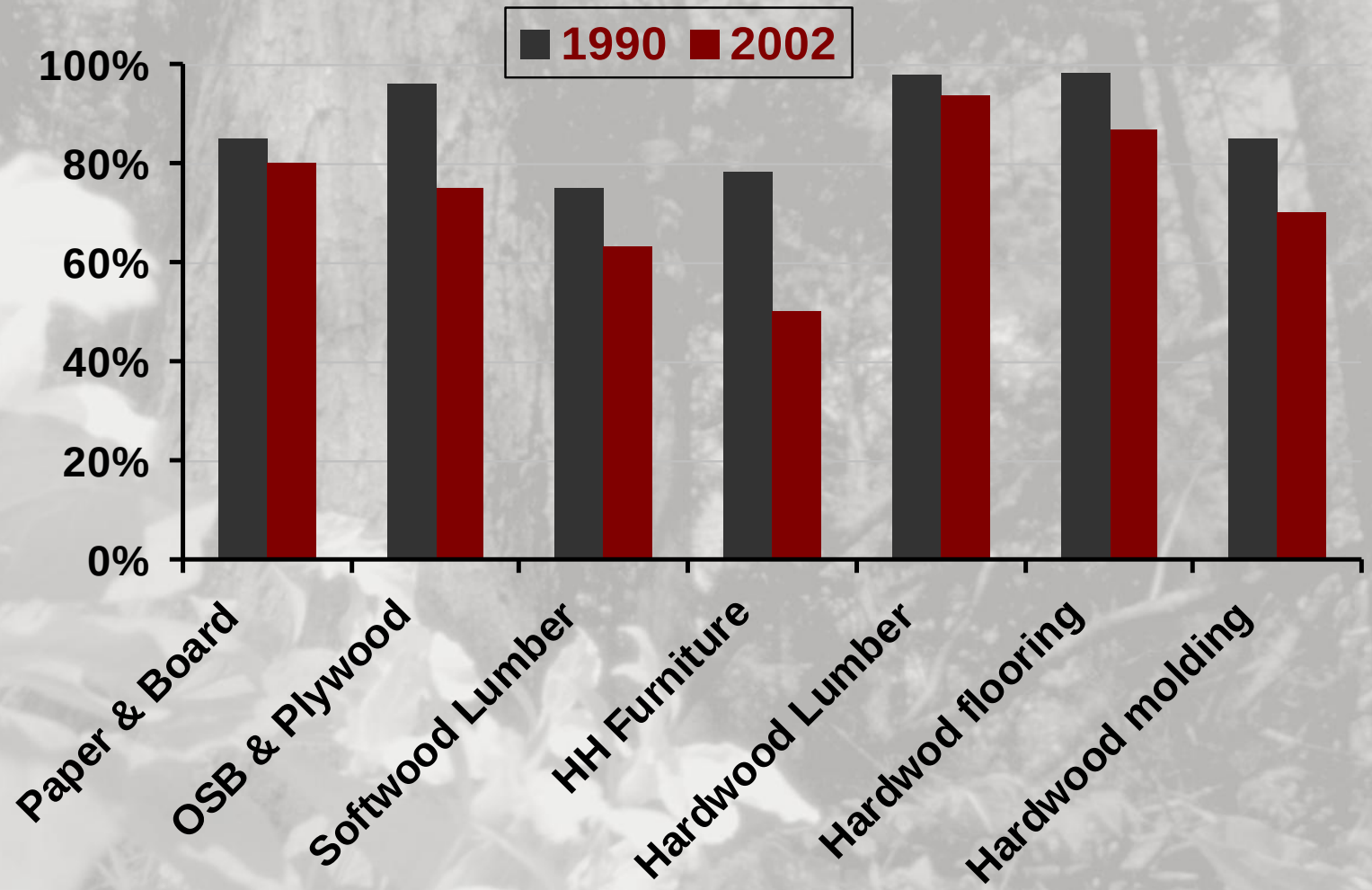
(Source: D.M. Emanuel. 2004. USDA Forest Service
U.S. Department of Commerce, Bureau of the Census)

2002 vs. 2003 Furniture Imports ($ millions)



(Source: D.M. Emanuel. 2004. USDA Forest Service
U.S. Department of Commerce, Bureau of the Census)

Domestic Production

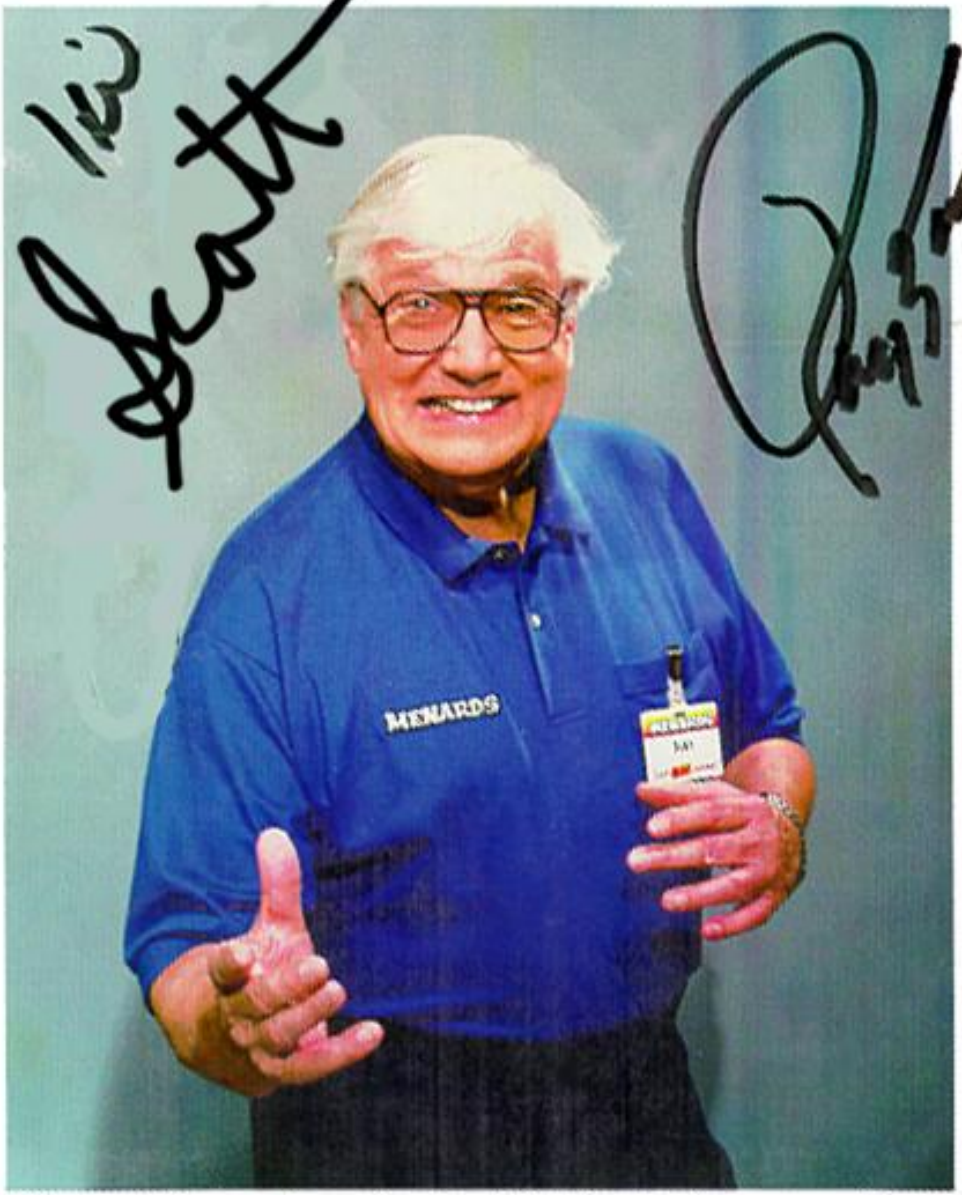


Source: Peter Ince, derived from Census, BLS

Several Issues Here

- We could supply all of our wood raw material demands from U.S. forests and still practice sustainable forestry
- Wood Demands vs. Wood Needs
  - intelligent consumption
- Are we exporting our problems?
- $100,000 question - Why are we importing value added products from other countries?

"THE MENARDS GUY"



"Menards has such great prices!! That's why I'm so proud to relay that message in television." Ray Szmanda.

China Example

(Source: http://www.webs4you.com/bedrooms/pulaski_bedroom4.jpg)

- Why?
  - dollar value
  - health care
    - none
  - wages
    - $1 to $8 per day
  - environmental issues
  - construction (~1/2 cost)
- Red Alder
- Rubberwood

Furniture Cost Comparisons

	American-Made	Chinese-Made
Materials	56.6%	53.1%
Labor	17.7%	1.6%
Overhead (GS&A, Profit & Transportation)	25.7%	25.1%
Total	100.0%	79.8%

- Tariff on solid wood bedroom furniture

(Source: Lawser 2003)


Kretz
Lumber

NWFA Wood Flooring Expo: April 2004

Asian cherry
Brazilian cherry
Chilean cherry
Pacific cherry

Alpine ash

Australian beech

Australian wormy chestnut
Southern chestnut

Brazilian maple

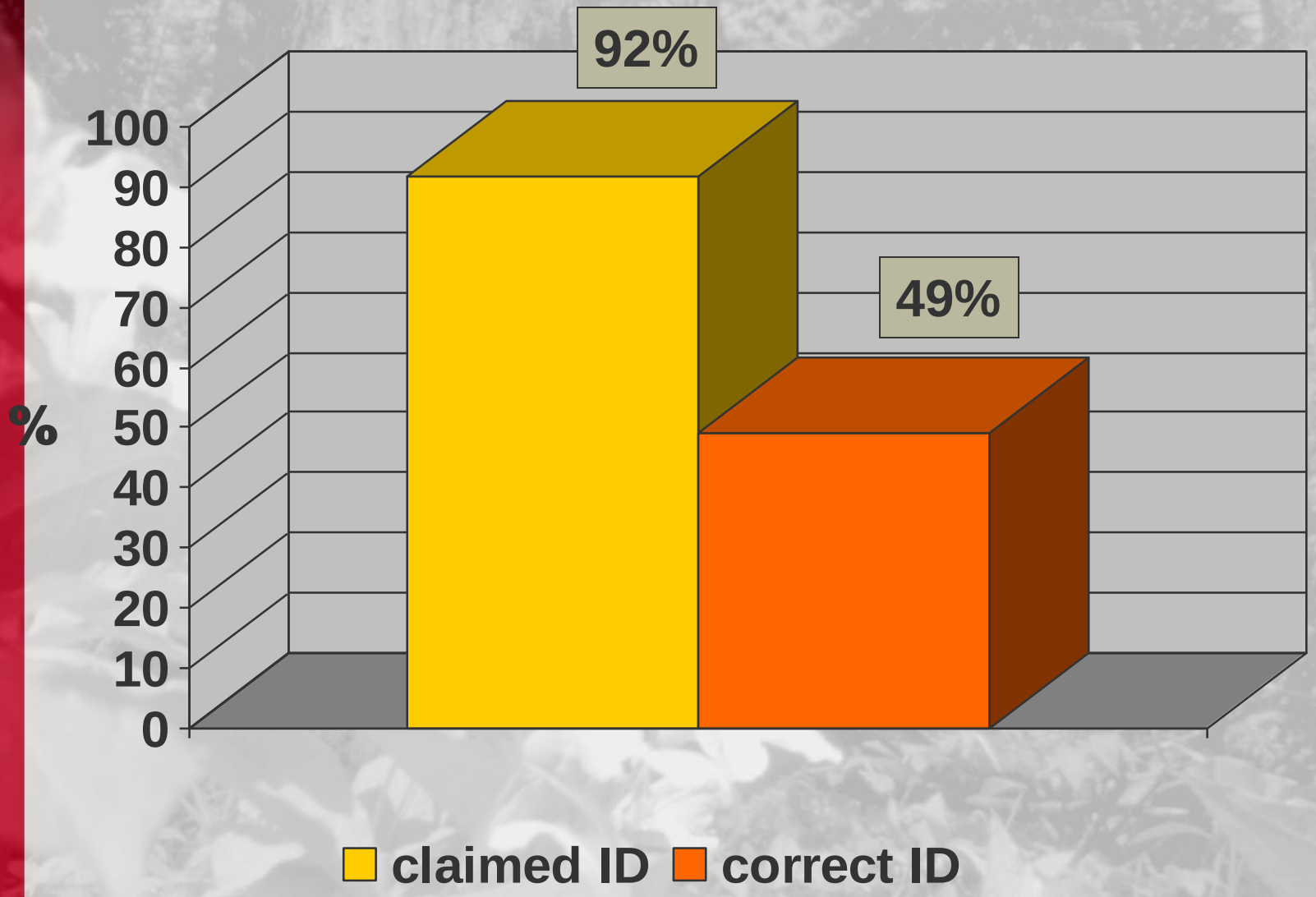
African walnut
Brazilian walnut
Mandalay walnut
Peruvian walnut

Chinese oak
Chilean oak
Malaysian oak
Tasmanian oak

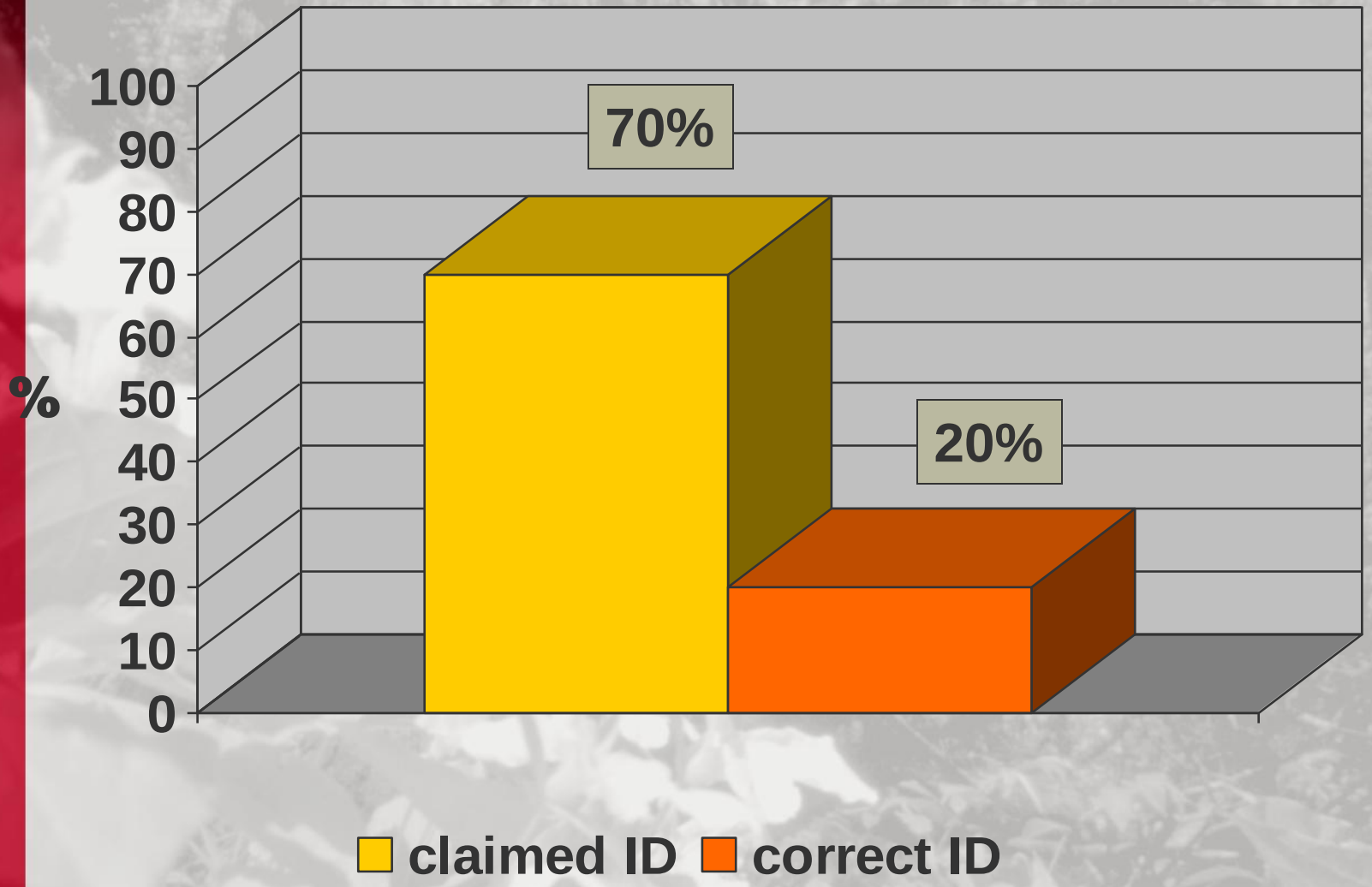
98 different names in sum!!

Source: Hardwood Review Weekly. May 21, 2004

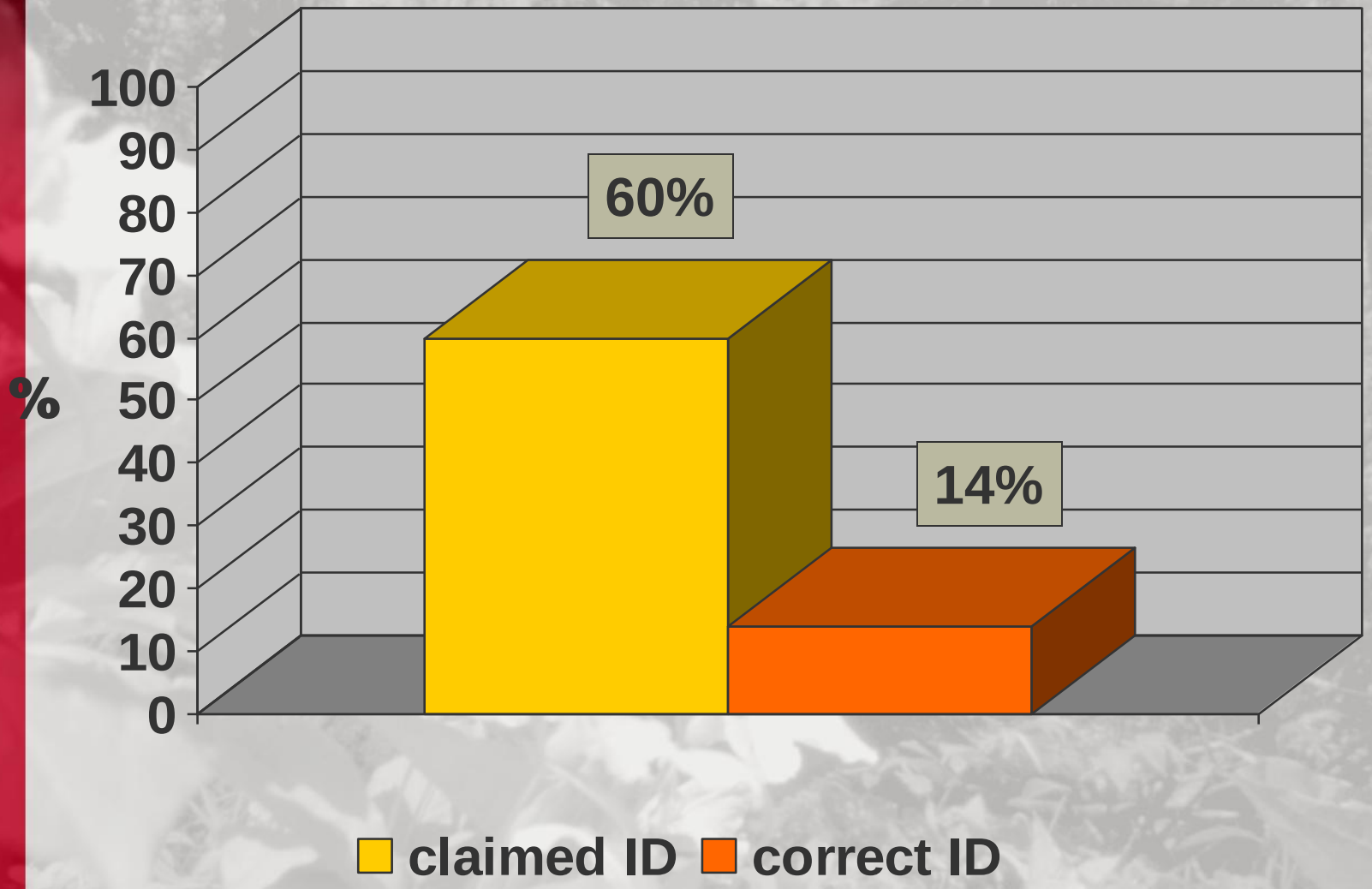
Knowledge of Oak



Knowledge of Cherry



Knowledge of Maple



Blame Game

- Too easy to blame China for our losses in manufacturing
- Blame ourselves as consumers
- Blame our complacency as manufacturers

(Image Source: http://www-keeler.ch.cam.ac.uk/pictures/pictures2002/Richard.html)

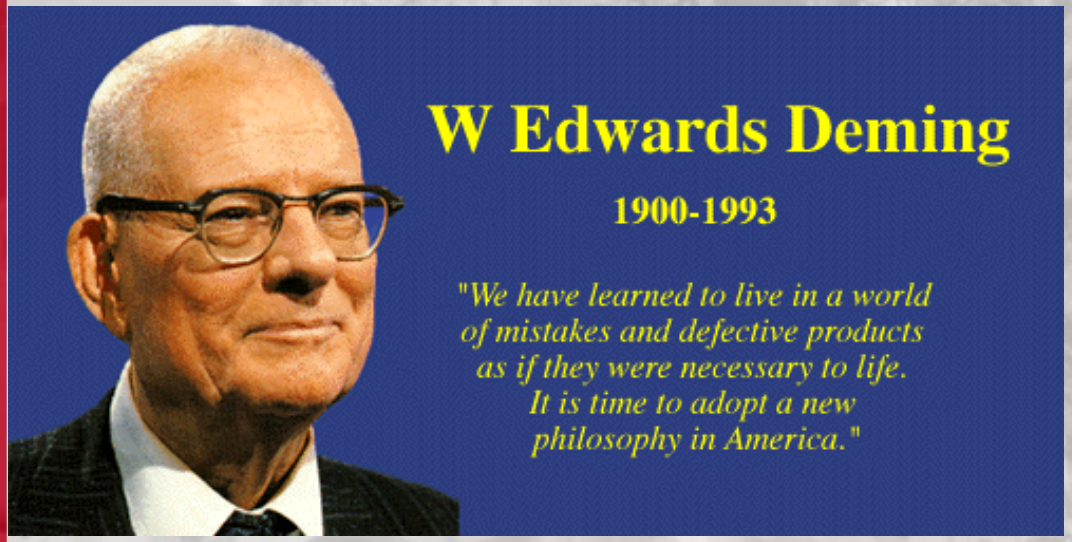
What is the Silver Bullet?

(Image Source: http://www.leconcombre.com/serials/comics/img3/lone-ranger-19.jpg)

A thought for today

"You don't have to change, survival is not mandatory."

W. Edwards Deming



(Image Source:courses.bus.ualberta.ca/.../ demingobituary.html)

Where Do WI & MI Fit In?

- Specialty markets
- Access to the largest market in the world
- Solid Wood
  - species
  - pallets
  - cabinet parts
  - moulding and millwork
- Pulp & Paper
  - specialty paper
  - old small machines – fully depreciated

5 Operating Strategies

1. Control or operate own retail outlets (Ethan-Allen, Norwalk, Bassett, Ashley)
2. Develop strong brand names (Lazy-Boy)
3. Close factories & become importers (Pulaski, Furniture Brands Int'l.)
4. Focus on customized, niche markets of little interest to offshore competitors
5. Maintain efficient factories in the U. S. (Vaughan-Bassett)

(Source: Lawser 2003)

Non-Price Advantages

- Speed of delivery
- Guaranteed delivery times
- Willingness to inventory components
- Ability to ship small fill-in orders
- Ability to make last minute changes
- Flexible payment terms
- Faster & easier claim settlement

(Source: Lawser 2003)

Other Issues

- Certification
  - solid wood
  - pulp & paper
- Biomass
  - current studies

Closing Thoughts

- The forest industry built our states
- The forest industry is a large component of our state's economies today
- Demand for wood is increasing
- Where will our wood raw material come from in the future?
  - forest management in Wisconsin
- Where will our value added wood products come from in the future?

Changing World


Questions

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Email: forecol@calshp.cals.wisc.edu

Send suggestions and comments!

http://www.woodindustry.forest.wisc.edu/

Wisconsin's Wood Using Industry Online Databases

Wisconsin's Primary and Secondary Wood Using Industry Databases are now available through searchable online databases. Company contact information, raw material use, and production data are available in a convenient sales and marketing tool. Follow the links below to start using these online databases.

Primary Wood Using Industry Database

Wisconsin's Primary Wood Using Industry consists of firms that manufacture logs and pulpwood into value added wood products. Specific examples include sawmills, plywood mills, and pulp mills.

Secondary Wood Using Industry Database

Wisconsin's Secondary Wood Using Industry consists of firms that manufacture dimensional and reconstituted wood products into value added wood products. Specific examples include furniture and cabinet manufacturers.

References

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Chippewa Lumber and Boom
April 1869
~150,000,000 bdft
(Image Source: Chippewa County Historical Society)