New England River Systems

Rainfall
Granite Bedrock
Lake Systems
Cheap, but Risky Transportation
3. Climate
1. Square Pine Timber
   “Ton” Timber
   “Sided” in Woods
2. Mastling Trade

Hovels
Limbing
Masting Trade
- Very Lucrative
- Capital Intensive
- Highly Selective Removal
- Carefully Regulated
- Undermined by Revolution
3. Shipbuilding
   - Fishing
   - Carrying Trade

- Note: This is a High Value-Added Industry....
Frames, ribbing: coastal black spruce, white oak
Decking, planking: spruce, white pine
Cabins white pine, spruce
Spars, masts: pine
Bracing: tamarack "ship's knees"
Finishings: birch, maple
The End of an Era:

- Confederate Raiders
- British Steel (Steam) Ships
- Railroads and the Continental Pivot
4. Construction
Lumber Production
Rivers
Water Power
Forests
Seaports
Bangor 1842: Lumber Capital of the World
-250 sawmills above Bangor
-2/3 all homes Northeast Penobscot Pine
End of an Era, 1870-1920
- Depletion
- Regional Competition
- Substitute Materials
This map shows the composition of the Maine forest in the latter half of the nineteenth century. (Source: U. S. Bureau of the Census, TENTH CENSUS, "Forests of the United States.")
MAP 17. Peaks of Lumber Production and Major Lumber Centers, 1923.
- Full Vertical Integration
- 1.6 Million Acres Timberland
HOW THE WOOD FLOWS TO THE MILLS

Wood moves to the mills along many traffic arteries:
- **On waterways**
- **On railroad lines**
- **On public highways**
- **On 400 miles of roads built by Great Northern**

*An elaborate transportation network, of which only the major elements are shown here.*
Portable Sawmills
-Second-Growth Pine
-Match Blocks
-Box Boards
Woodworking Mills
- "Forest Weeds" into Short-Lumber Products
- Low Overhead (re-tool rapidly)
- Flexibility vs. capital
Cherry, poplar, birch: boards, boxes, veneer, toys, wooden ware, furniture, shoe lasts, tool handles, spools, bobbins, doors, house trim, sashes, fencing, poles, toothpicks, excelsior, spool stock.

Small chestnut and oak: railroad ties, posts, poles

Second-growth pine: box boards, match blocks

Second-growth beech, birch, maple: denatured alcohol, charcoal
The shrinking paper industry

Maine’s paper companies employed more than 5,700 people in 2011. With Madison’s impending closure, the industry will have lost more than 2,300 jobs in five years.

1. Twin Rivers Paper Co.
   Madawaska
   Employees: 635

2. Great Northern Paper Co.
   East Millinocket
   Employees: 200

3. Lincoln Paper & Tissue LLC
   Lincoln
   Employees: 170

4. Woodland Pulp LLC
   Baileyville
   Employees: 308

5. Old Town Fuel & Fiber
   Old Town
   Employees: 200

6. Catalyst Paper
   Rumford
   Employees: 500

7. Verso Paper Corp.
   Jay
   Employees: 600

8. Bucksport
   Employees: 500

9. UPM Madison (to close in May)
   Madison
   Employees: 214

10. Sappi Fine Paper North America
    Skowhegan/
    Employees: 770
    Westbrook
    Employees: 320

SOURCE: Maine Department of Labor; Center for Workforce Research and Information 2011

STAFF GRAPHIC | MICHAEL FISHER
Final Thoughts.....

1. The Northern Forest industries have been incredibly dynamic

2. New England's 40 million timberland acres have been used continuously for 400 years

3. Forest use becomes more intensive with each new phase

4. Culturally speaking, forest use have become increasingly fragmented
Future of the Northern Forest?
Pulpwood Products? 
Lumber? 
Value Added Forest Products? 
Culture – Nature-based Tourism? 
Second-Home Development? 
Forest Residuals?