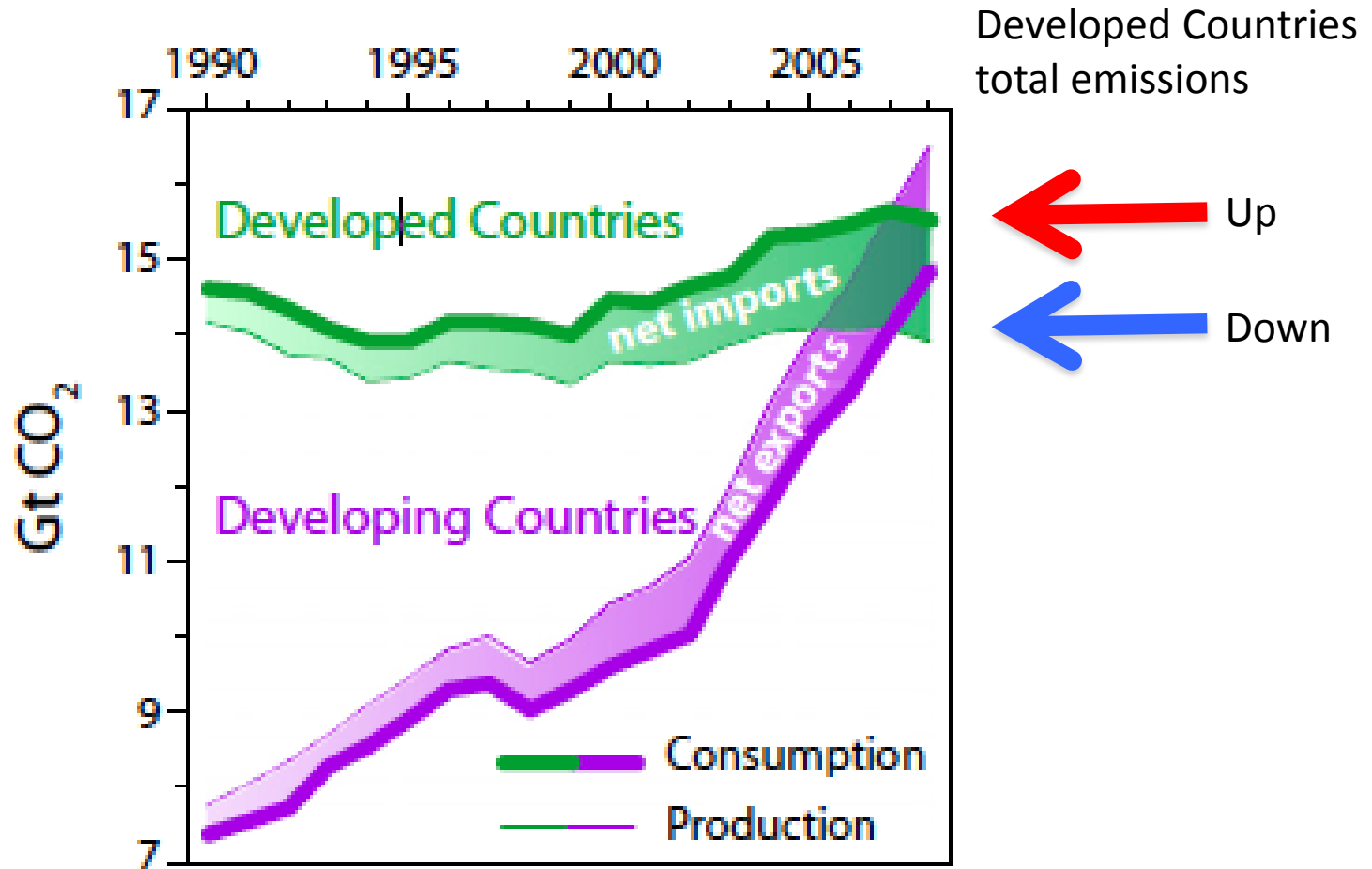


A photograph of a forest with a large tree stump in the foreground and a semi-transparent text box overlaid on top. The text box contains the title and presenter information. The background shows a dense forest with many trees and sunlight filtering through the leaves.

Managing Redwood Forests for Global Climate Benefits

Bill Stewart, UC Berkeley, March 6, 2013

National and local CO₂ accounting doesn't equal global accounting

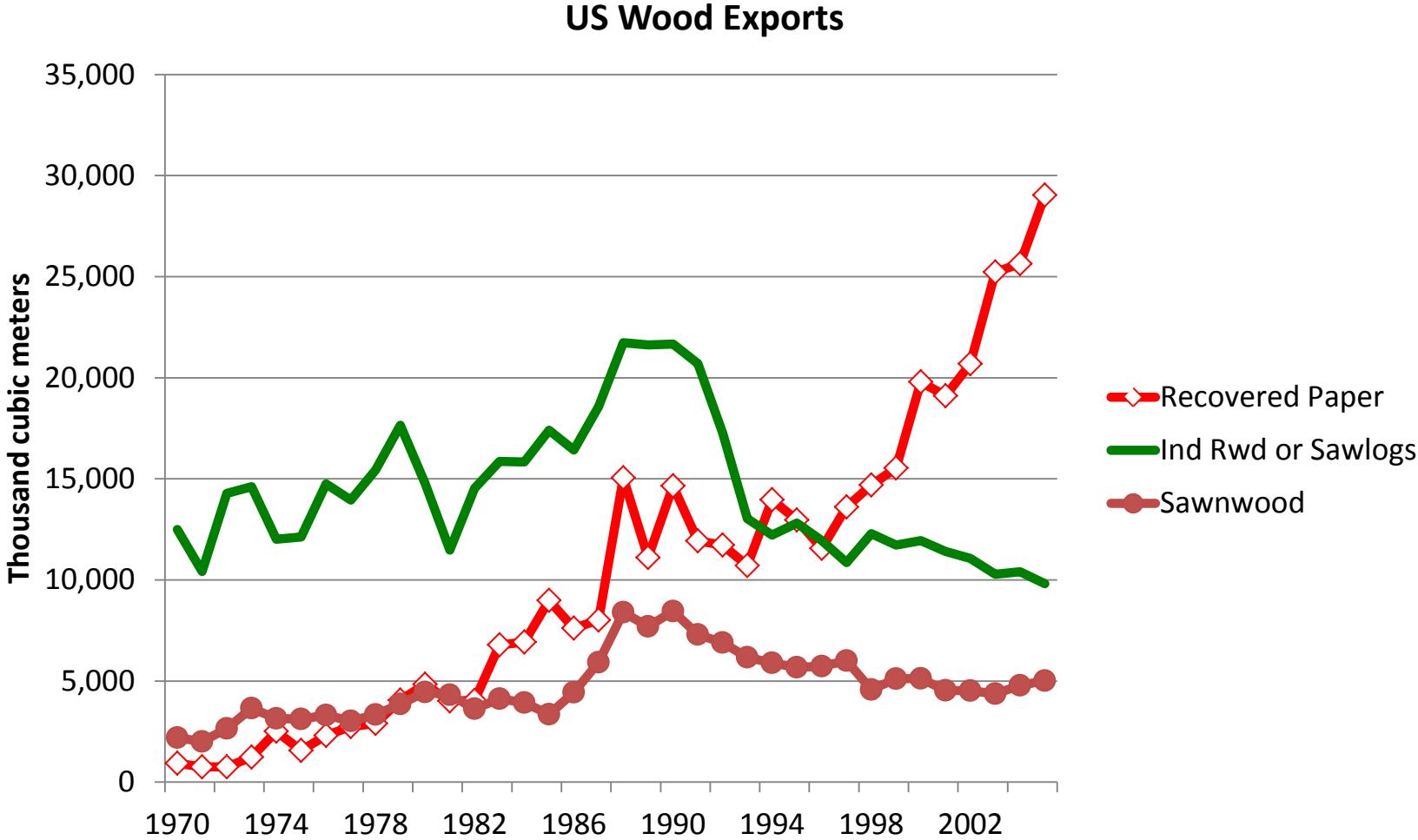


Caldeira and Davis, PNAS,
May 24, 2011

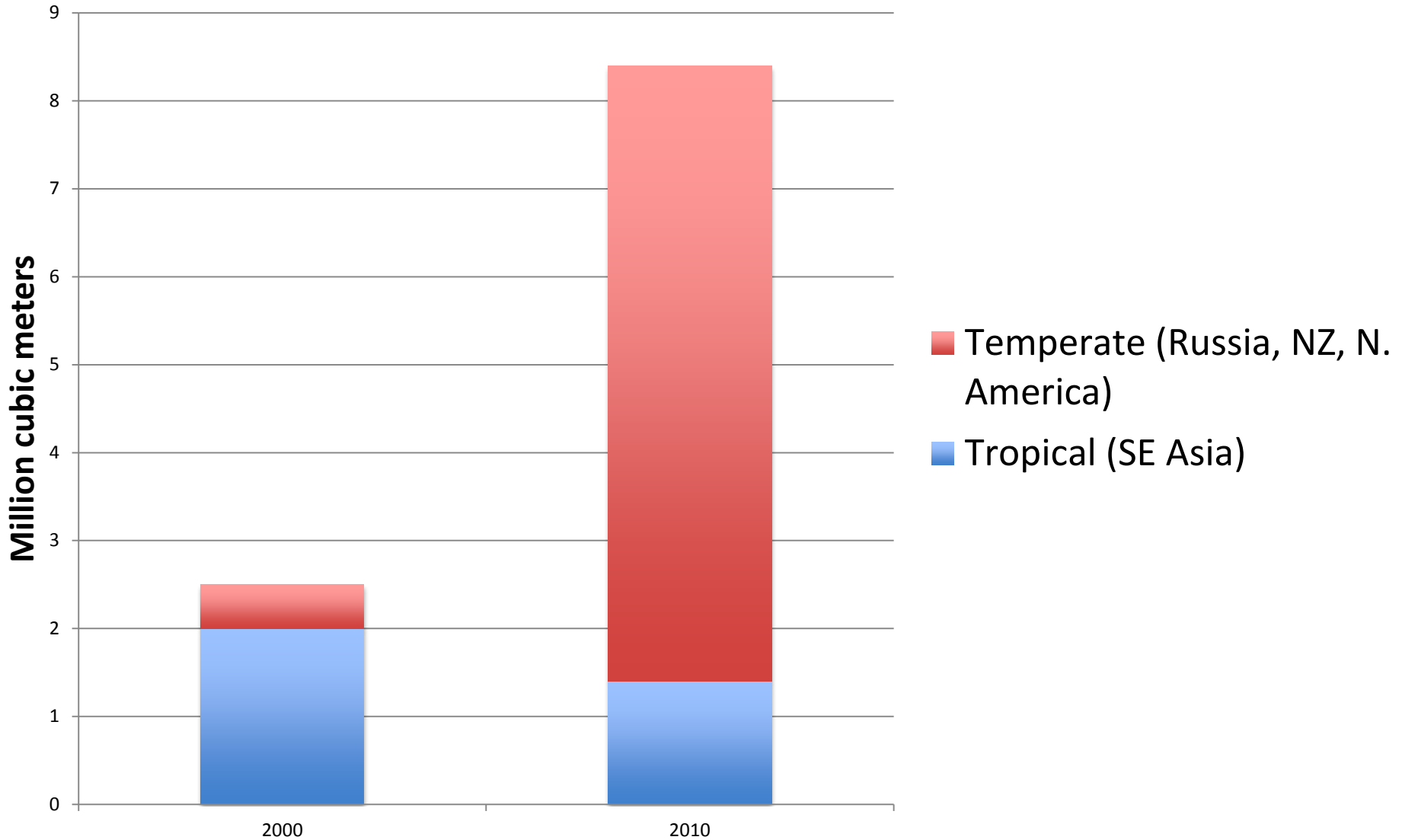
Siberian forests are close but not cheap to deliver to China



The US already specializes in low value wood fiber exports

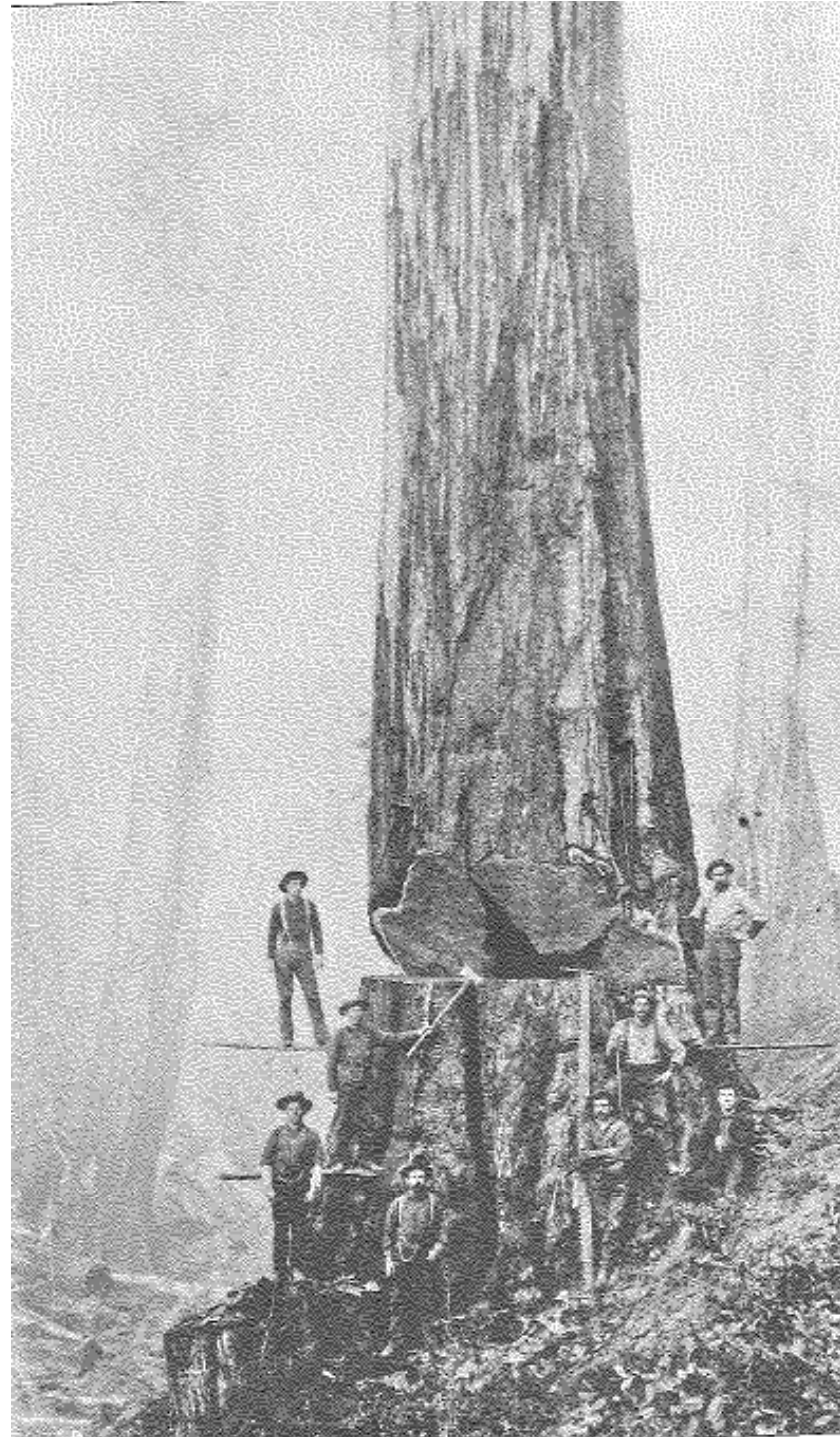


Temperate v Tropical Logs and Lumber Imports to China



In 1850 the *Frolic*, built for the lucrative opium trade, ran aground off Mendocino. By the time the owners came from SF to get it, the goods were already disbursed following shipwreck law.

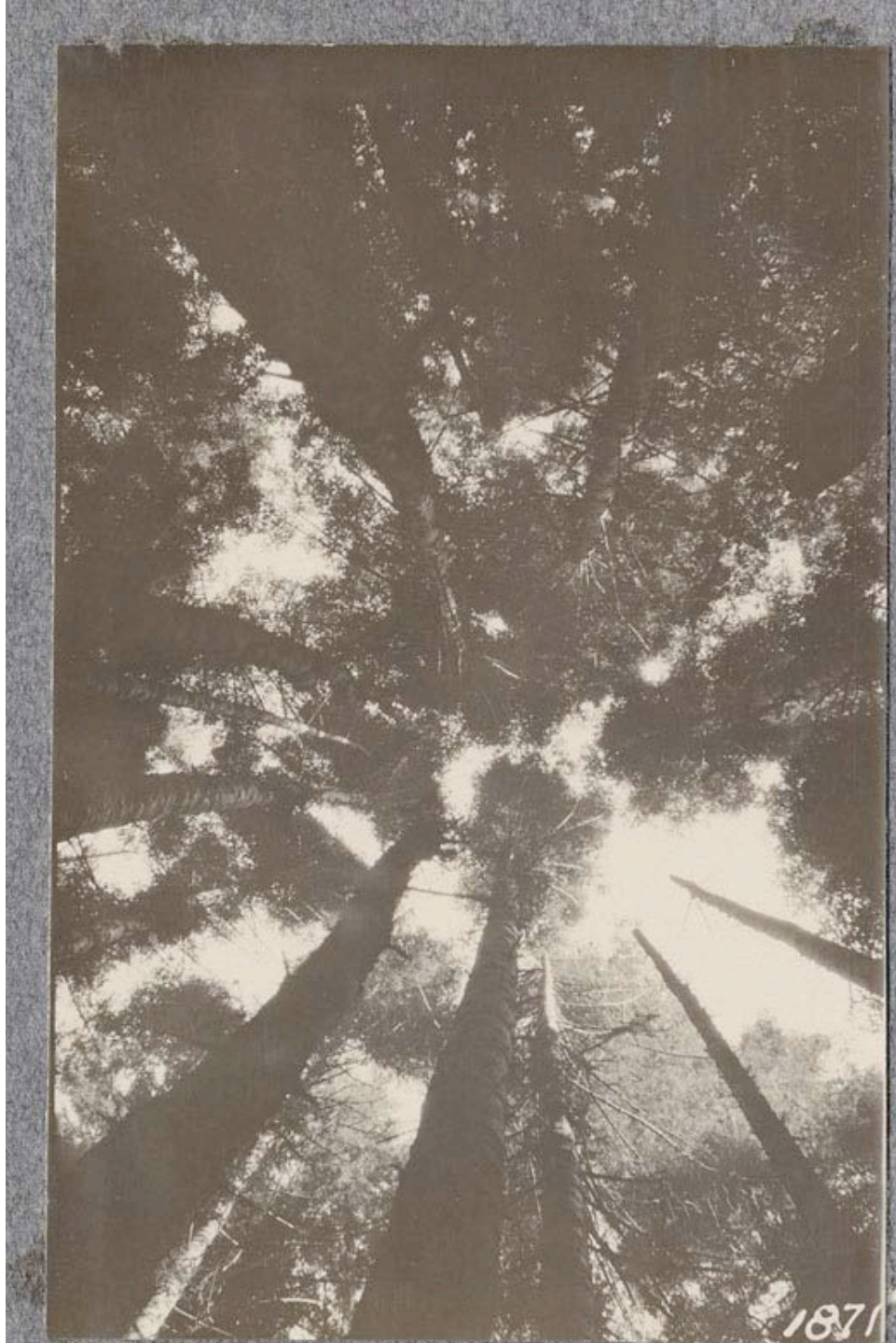
But they saw the trees and knew ocean transport. The rest is our history. The redwood region has been global since then.



Bolling Memorial Grove on the SF Eel River. The tree on the left scaled at 77,180 board feet



Eureka Park (1922)
140,000 board feet
per acre, and growing
at ~ 3 mbf/ac/yr









128

Mendocino did not have a Bay

Needle Rock Chute 1890 ->

Cuffey's Cove 1868

|



Even without machinery, they harvested everything except the root stock – this is Arcata

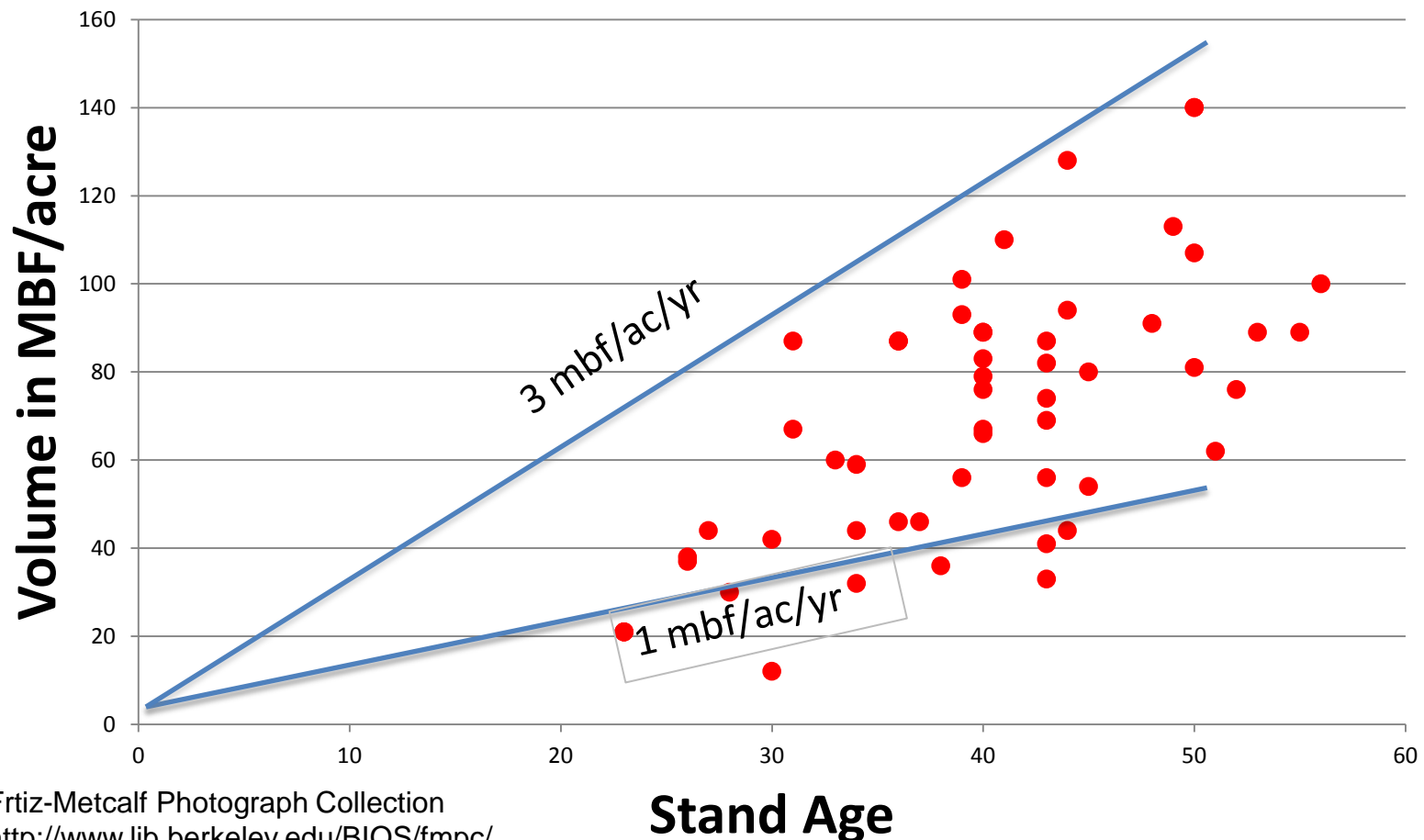




First Forestry SUV, near Garberville in 1921

1777

Why the next generation of timber companies stuck with it: Early evidence from UC's Second Growth Redwood Study Plots of the 1920s



Fast growth and efficient wood utilization makes sustainable temperate forestry a global superstar

Forest Product-related Climate Benefits	Pre-2008 USFS wood utilization coefficients	Post-2008 USFS wood utilization coefficients
C stored in products	15	27
C stored in landfills	11	7
Energy from logging residues	0	26
Energy from sawmill residues	17	23
Energy from post-consumer residues	7	11
Energy benefits of product substitution	16	30
Total	66	123

Stewart and Nakamura. 2012 @ UCCE website – ‘forest research and outreach’ under ‘carbon sequestration’ page

