

BC, Beetles, & Increasing Timber Values

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The Beck Group

- Planning, consulting and benchmarking services for the Forest Products Industry
- 5 full-time consultants on staff
- Sawmill Planning & Design
 - Collins Companies Hardwood Sawmill, Boardman, OR
- More than 30 North American benchmarking studies completed over the past 10 years
 - Softwood and Hardwood lumber
 - Particleboard and MDF
 - OSB and Plywood
- Biomass Power
 - Fuel Supply
 - Feasibility

Benchmarking Report

Western Stud Mills (2004, 13 Mills)

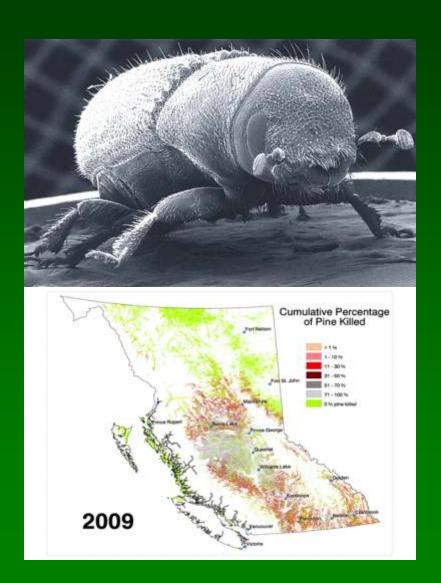
Statistic	Mill A	Mill B	Mill C	Survey Average	Range
Annual Production (MMBM)	50	125	225	71	53-225
Production/Manhour (bm/mh)	715	544	518	496	383-715
Employees (hourly)	30	117	203	120	30-203
Total Conversion Cost (\$/MBM)	95	80	123	103	75-140
Net Sales Average (\$/MBM)	313	283	316	288	268-316
Lumber Recovery (MBM/MBF) Westside Log Scale	2.46	2.51	2.44	2.55	2.26-2.80

The Perfect Storm

- 1. Mountain Pine Beetle
- 2. Shelf-life & reduced harvests in BC and Eastern CA
- 3. Global growth in demand for lumber
- 4. Russian log export tax



Mountain Pine Beetle

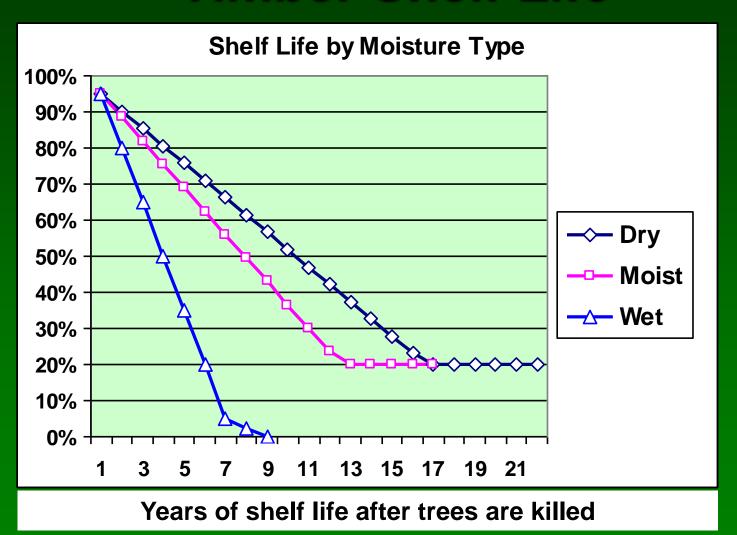


- 650 million M3 dead in 2008 = 14 times BC Interior's annual harvest
- Expected to peak in 2022 at 900 million M3 dead = 70% of all BC's pine
- Beetles are now in Alberta and moving east

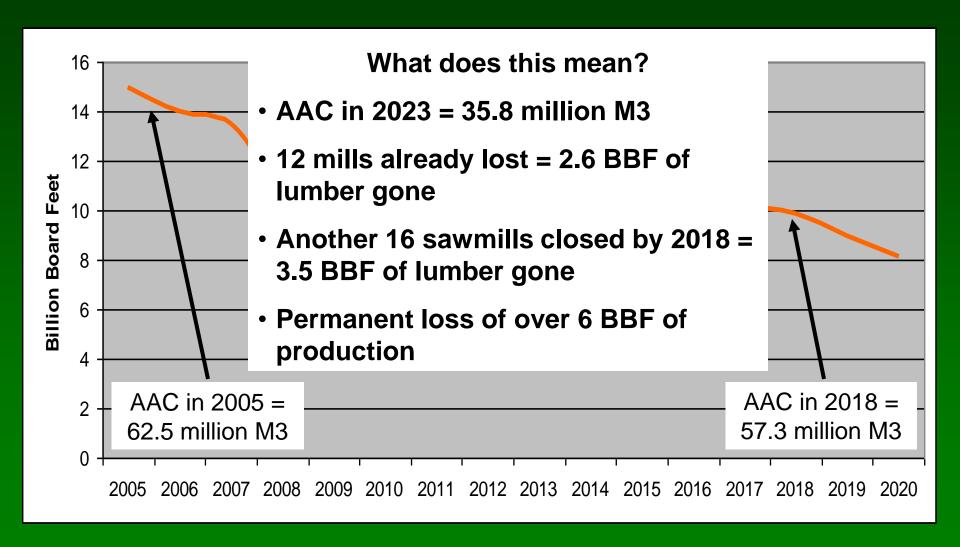
BC: Strategies for MPB Epidemic

- Pheromone Baiting
- Sanitation Harvesting
- Snip and Skid
- Fall and Burn
- Salvage greatly increase annual harvest levels

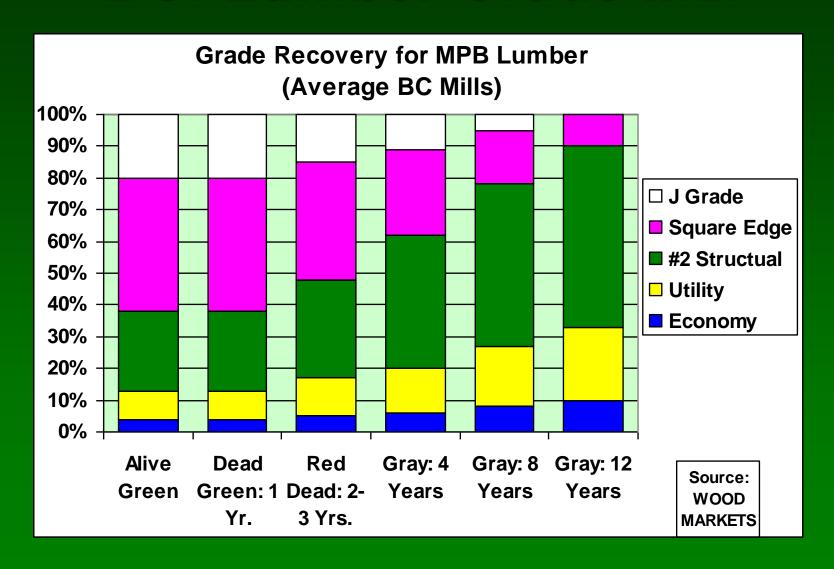
BC: Standing Dead Timber Shelf Life



BC Lumber Production

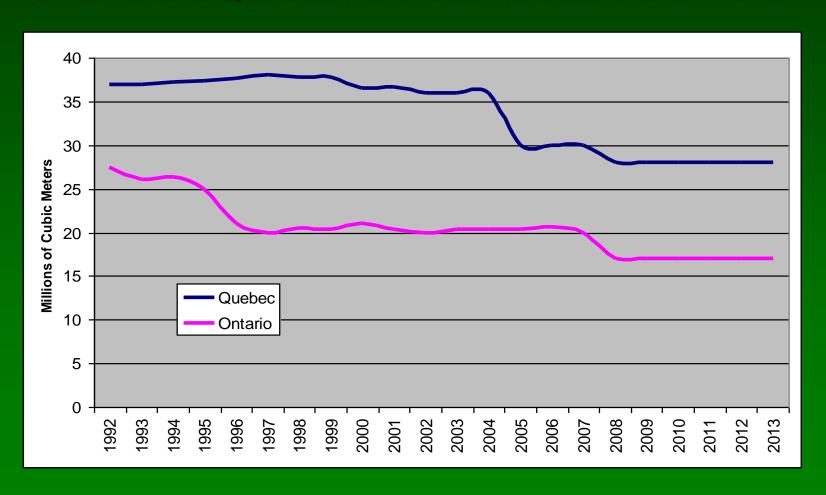


BC: Lumber Grade Mix



Ontario & Quebec

Ontario and Quebec have both reduced their AAC

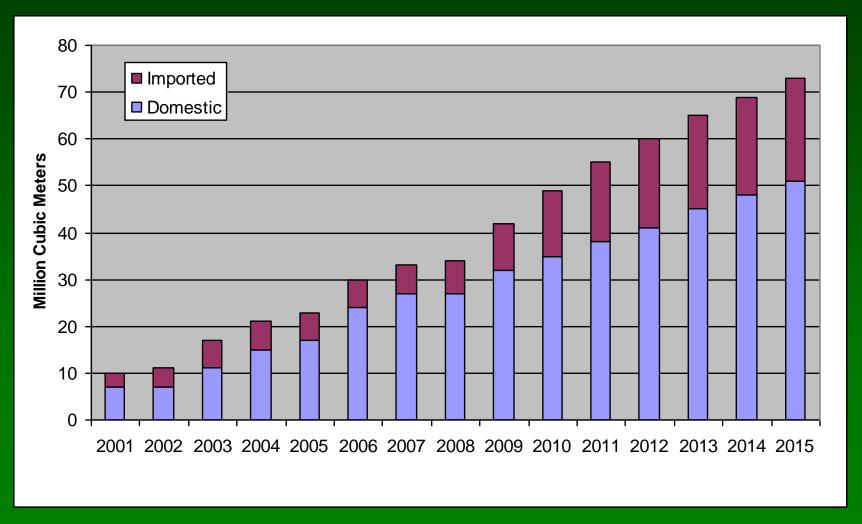


Increasing Global Demand

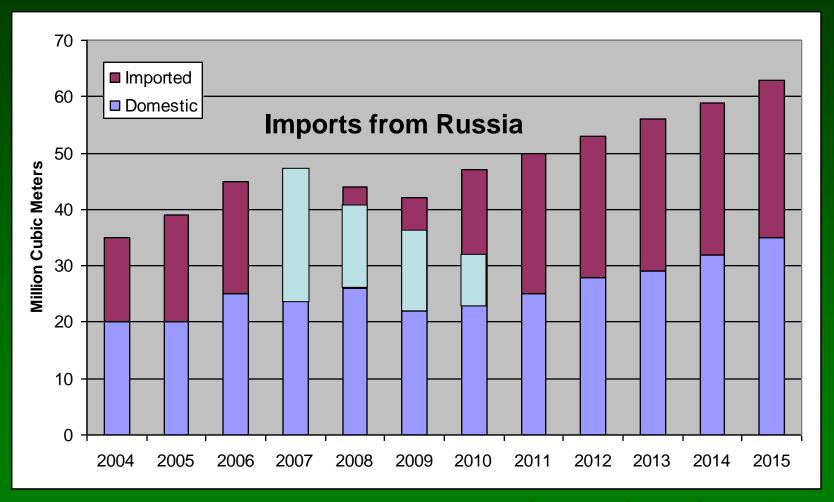
(lumber vol. bbf)	2003	2004	2005	2006	2007	2008	2009
U.S. Production	36.4	38.9	40.4	38.7	35.2	29.2	23.4
Imports	21.2	23.5	24.7	22.8	18.4	12.7	8.9
Exports	0.9	0.8	0.9	0.9	1.0	1.0	1.0
Net Trade	-20.3	-22.7	-23.8	-21.9	-17.4	-11.7	-7.9
Apparent Consumption	56.7	61.6	64.2	60.6	52.6	40.9	31.3
Housing Starts (000s)	1,979	2,087	2,215	1,918	1,451	988	604

Source: Wood Markets International

China: Softwood Lumber Consumption



China: Softwood Log Consumption



Source: The Campbell Group, LLC

Russian Log Export Tax: A Key Driving Factor

Russian Log Export Tax

- Before February 2007: 6.5%
- February 2007 to April 2008: 20%
- April 2008 to present: 25% (80%)

December 2010, Russia applies to join WTO

- If Russia joins, log export tax cut by ½
- Applies only on trade between EU WTO member countries and Russia
- No commitment to reduce tax on trade between Russia and other countries

