Timberland Report
JAMES W. SEWALL COMPANY
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Timberland Ownership and Forest Industry Changes in the US Northeast

While the timber and timberland markets of the South and Pacific Northwest comprise the majority of the timberland assets and forest products capacity in the US, the Northeast continues to thrive as a region of interest for institutional investors. This interest manifested itself in a virtual upheaval of ownership changes associated with industrial and investment grade timberlands in the past fifteen years. In addition, owners and operators of forest industry mills have responded to changes in the relative competitiveness of their operations as compared to Canada and other regions in the US. One source of growth in the region has been the biomass-fired power generation industry, especially in the state of Maine. The resulting shifts continue a trend which increases the nationwide importance and relevance of timberland ownership associated with institutions and real estate investment trusts (REITs) specializing in timber.

TIMBERLAND OWNERSHIP CHANGES

From 2005 through early 2007, forest industry and financial investors participated in over two-and-a-half million acres of publicly-announced northern timberland transactions exceeding 20,000 acres each in size (Table 1). While the sellers of these timberlands represented a mix of industrial and institutional entities, the buyers of nearly one-half of these acres were timberland investment management organizations (TIMOs) on behalf of institutional clients. Another 30% of the acres were purchased by the three publicly-traded timber REITs: Plum Creek, Potlatch and Rayonier.

Wood supply agreements and conservation easements increasingly factor into transactions associated with investment-grade timberlands. Of the 17 transactions listed in Table 1, seven (41%) include wood supply agreements and five (29%) conservation easements. Note that nearly 80% of the acres traded include active wood supply agreements.

Conservation easements continue to be used strategically, especially as interest in recreation properties with water frontage remains extremely strong. The June 2007 purchase by The Nature Conservancy from Finch Paper Holdings in New York's Adirondacks included miles and miles of undeveloped lake and river frontage, with much of the land lying adjacent to forever-wild State Forest Preserve. International Paper's 275,000-acre sale (Spring 2006) was approximately 23% encumbered by conservation easements at the time of the transactions with Lyme Timber Company. However, the State of New York had already secured a contract with International Paper to acquire easements on the remainder of the lands, so the property is now fully encumbered by easements. Table 1 does not include an additional 581,000 acres in sales of conservation easements across the Northeast and Lake States during 2005-2007.

Table 1. Eastern Timberland Transactions 20,000 Acres Since 2005[1]

Seller	State	Acres	Wood Supply Agreement	Conservation Easement	Buyer(s)
Fraser Papers	ME	244,000	Yes	No	The Forestland Group
Up North Corp.	ME	23,000	No	No	Timbervest
H.C. Haynes et al	ME	23,000	No	No	Roxanne Quimby
Domtar	ME	23,000	No	No	J.M. Huber
H.C. Haynes	ME	22,000	No	No	Timbervest
GMO	ME	21,000	No	No	H.C. Haynes
The Forestland Group	PA	32,000	No	No	Harvard
Harvard Mgt. Co.	PA	128,000	No	No	John Hancock
Irving Ltd.	ME	234,000	Yes		TimberStar
Pingree	ME	105,000	No	89% encumbered	TimberStar
Escanaba Timber	MI	650,000	Yes	No	Plum Creek
Tomahawk Timber	WI	76,000	No	46% encumbered	Potlatch
International Paper	WI	69,000	Yes	No	FIA/Conserv. Forestry
International Paper	MI	442,000	Yes	No	GMO
International Paper	NY	276,000	Yes	Yes	Lyme Timber Co.
GMO	NY	75,000	No	28% encumbered	Rayonier
Finch Paper Holdings	NY	161,000	Yes	~3,000 acres encumbered	The Nature Conservancy
TOTAL		2,600,000			

The recent transactions further the changing profile of large-scale timberland ownership in the region. The maps in Figures 1 and 2 highlight this shift over the most recent twelve-year period from 1995 to 2007. In 1995, private forestland ownership in the Northeast was dominated by paper and lumber companies, as shown by the red in Figure 1. By 2007, the leading owners of forestlands in the region had shifted to institutional investors and timber REITs, as shown by the green in Figure 2. In addition, the importance and holdings of environmental and non-governmental organizations (ENGOs) increased dramatically over the same period, as shown by the increased yellow between Figures 1 and 2. ENGO ownership, mostly in New York in 1995, expanded significantly into Maine and, to a lesser extent, Vermont and New Hampshire, by 2007.

[1] Source: James W. Sewall Company.

Figure 1. Northeastern Timberland Ownership, 1995

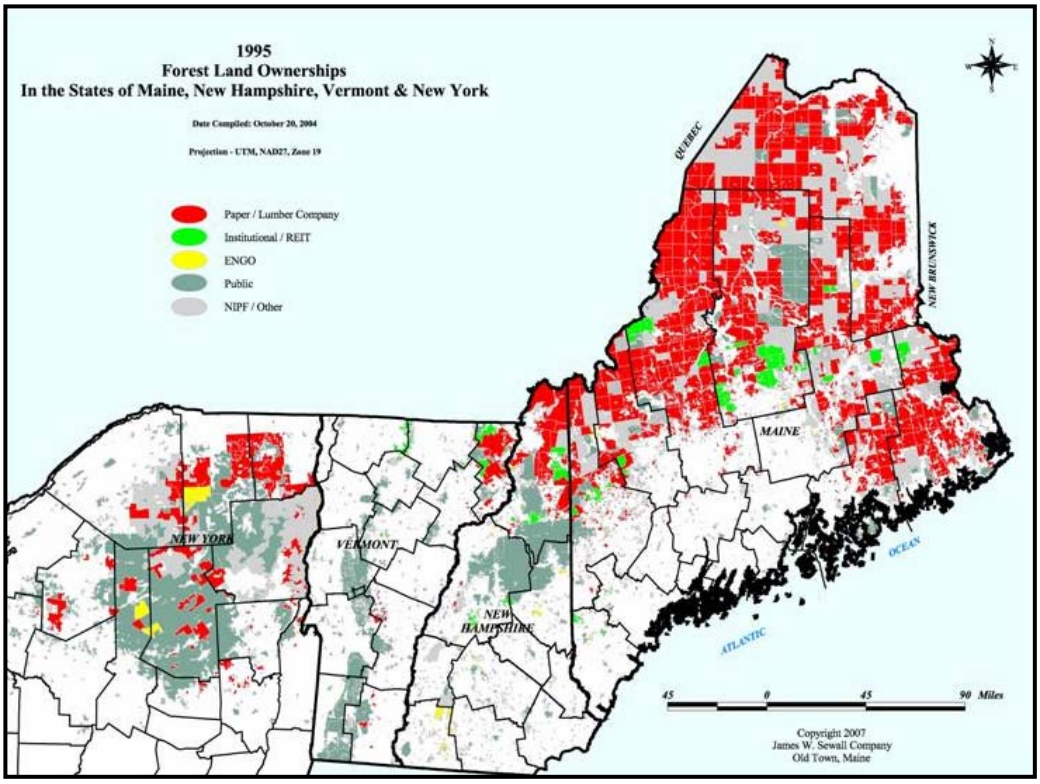
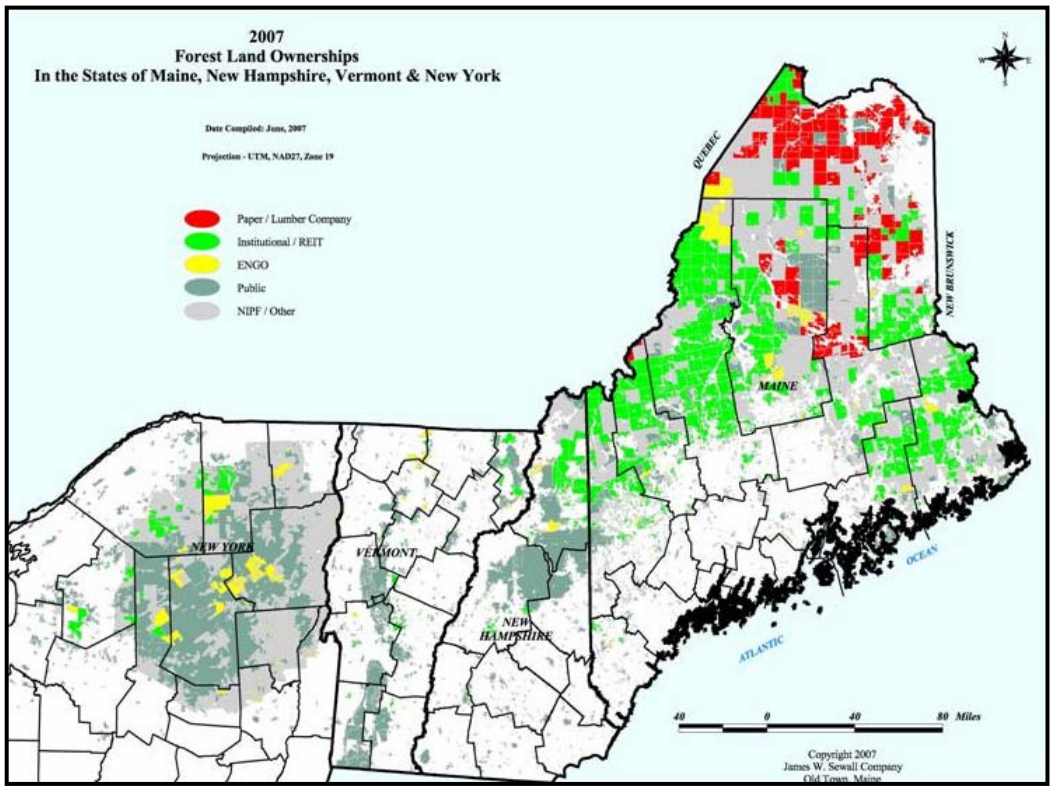


Figure 2. Northeastern Timberland Ownership, 2006



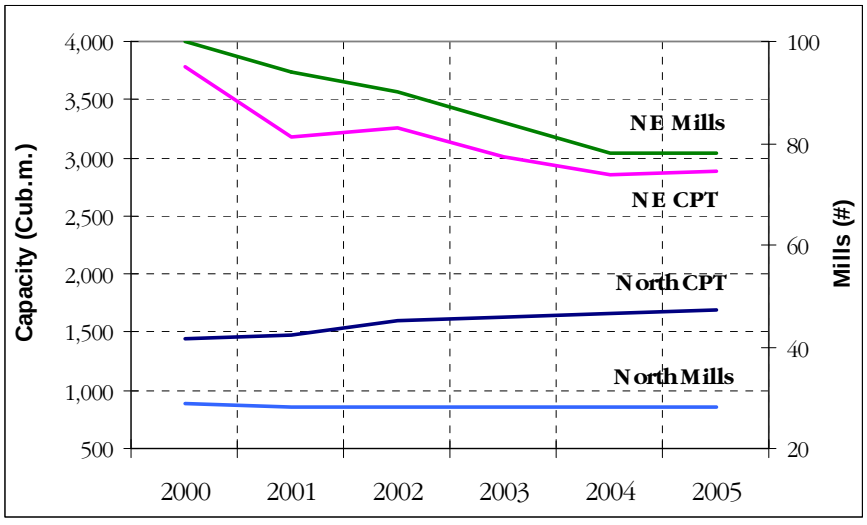
International Paper's divestitures in the region emphasize the differing approaches taken by the traditional fully-integrated forest industry firms in restructuring their timberland ownerships elsewhere in the US. While MeadWestvaco continues to pursue the sale of its timberland operations, Temple-Inland is implementing its planned breakup of the firm into divisions, with nearly 1.8 million acres of timberlands being offered for sale in four packages. Temple-Inland is holding onto approximately 330,000 acres of land in its Forestar Real Estate division.

Weyerhaeuser, on the other hand, continues to ponder whether to re-structure and, if so, how. Following Weyerhaeuser's Investor Day on June 1, Mark Wilde of Deutsche-Bank wrote that the key message was Weyerhaeuser's willingness to consider many options with respect to restructuring the firm and its timberland holdings. These options implicitly included restructuring as a REIT and explicitly excluded pursuing an IP-like wholesale breakup of its timberland operations.

INDUSTRIAL WOOD CAPACITY CHANGES

According to USDA Forest Service research, the Northeastern region – which includes Maine, Vermont, New Hampshire, and New York – has experienced a 24% decline in softwood lumber capacity, while the Northern region – which includes Michigan, Wisconsin, and Minnesota – had a net 17% increase in capacity between 2000 and 2005 (Figure 3).

Figure 3. Changes in Northern and Northeastern Sawmill Capacity, 2000-2005[2]

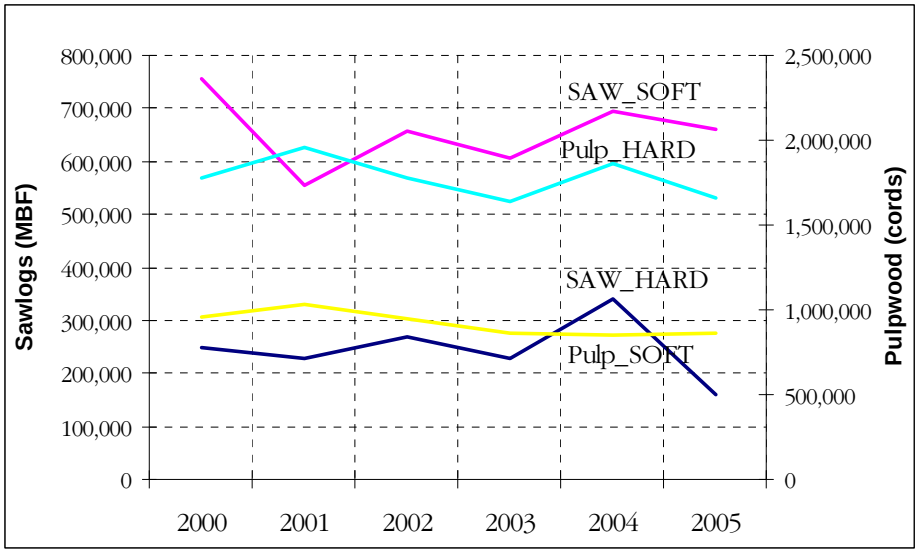


Capacity reductions in the Northeast were primarily driven by 22 mill closures over six years. Of eleven mills that closed in Maine, four were large-capacity facilities: two International Paper (formerly Champion) mills, one Georgia-Pacific facility and one Canfor mill. Vermont and New Hampshire had a total of 11 closures, all small mills, while New York had no mill closures between 2000 and 2005. The loss of capacity in the Northeastern region was partly compensated by capacity increases in mills – mostly in Maine – that continued to operate.

[2] Spelter and Alderman. *Profile 2005: Softwood Sawmills in the United States and Canada*. USDA Forest Service.

In contrast, the Northern region of Michigan, Wisconsin, and Minnesota had no significant mill closures during the same time period and only marginal capacity growth in each state. Specifically, Michigan and Wisconsin had no reported sawmill closures between 2000 and 2005.

Figure 4. Roundwood Production in Maine, 2000-2005[3]



Leading the Northeast region in timber production, Maine had strong and consistently growing demand for sawlogs between 2001and 2004. Combined with capacity shrinking among the softwood lumber mills, this suggests and confirms that the mills in the market increased their capacities and demand following the closure of the states four largest mills, which represented about a 35% loss of capacity. The demand for pulpwood, both hardwood and softwood, in the state was declining, despite a temporary increase in demand for hardwoods in 2004. Demand for hardwood, both pulpwood and softwood, declined in 2005.

Renewable power generators represent a growing market for forestry biomass in the Northeast. A key driver of this market is legislation passed at the state level in Connecticut, Maine, Massachusetts and Rhode Island which requires electricity providers to include renewable energy as part of their total energy supplies. These programs represent the states' respective Renewable Portfolio Standard (RPS), and Maine features the highest RPS in the country by requiring at least 30% of the energy sold in the state sourced from renewable sources.[4] This legislation has encouraged firms such as Boralex to make additional biomass-fired power generation. Operations belonging to Boralex in the Northeast now use 1.6 million tons of wood residues per year.

On a related note, Maine and other New England states are hosting efforts by investors to develop wood pellet manufacturing operations.

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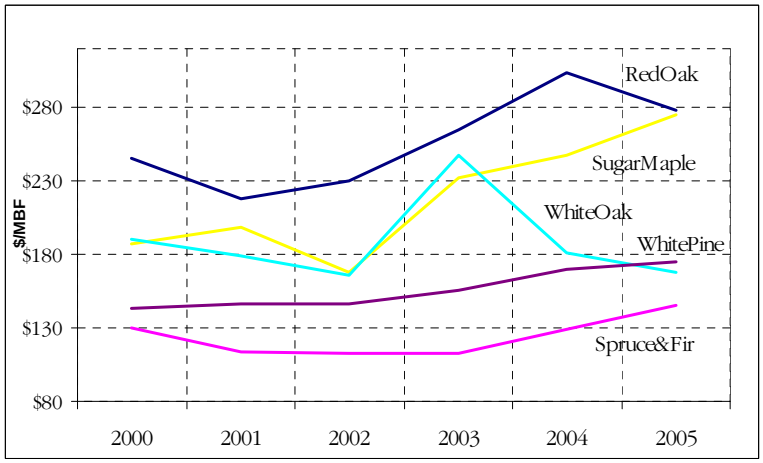
[3] Maine Forest Service, 2000-2005 Wood Processor Report; available at www.maineforestservice.gov

[4] Kryzanowski, Tony. 2007. Biomass benefits: making wood waste into power and profits. *Forest Products Equipment*. June: 10-13.

TIMBER PRICES

The Northeastern market for timber has remained relatively steady and strong given the significant range of changes among wood-using mills (Figure 5). After a modest decline in 2001-2002 across hardwood species and spruce/fir, stumpage prices for the major species began a steady recovery that continued through 2005. White oak prices declined over 27% between 2003 and 2004, while red oak prices declined nearly 9% between 2004 and 2005. The decline in prices corresponded to the recorded decline in hardwood sawlogs and pulp logs in Maine during the same timeframe. Meanwhile, sawtimber prices for white pine, spruce-fir and sugar maple continued their upward march.

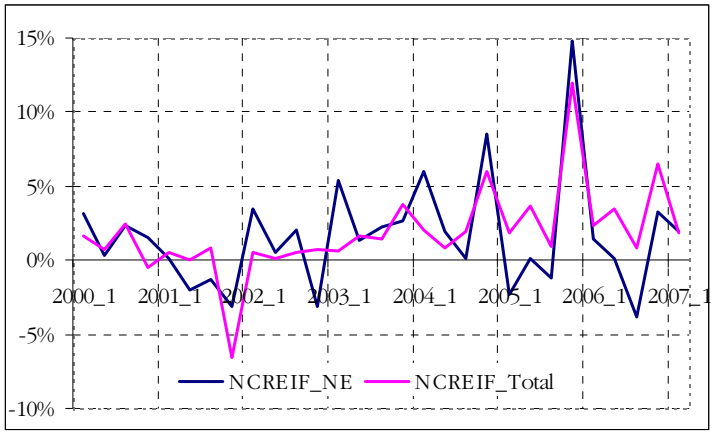
Figure 5. Sawtimber Stumpage Prices in Maine, 2000-2005 ($/MBF)[5]



TIMBERLAND RETURNS

While total returns from Northeast timberlands were comparable to those for returns from NCREIF's Total Timberlands Index as measured since 1994 and 2000 (Table 3), the Northeast returns exhibited greater volatility (Figure 6). This volatility is especially evident beginning in 2002 and continuing through early returns from 2007.

Figure 6. NCREIF Total vs. Northeast Returns, 2000- 1Q 2007



[5] Ibid.

The return characteristics of Northeast timberlands help explain the continued strong interest of institutional investors, as their performance significantly enhances the diversification of any broad-based timberland investment portfolio. As measured against a stock portfolio – which captures most of the benefits associated with diversification with 8-10 equities – a timberland portfolio captures most diversification benefits with three geographically diverse timberland investments.

Table 3. NCREIF Timberland Index Returns

Time Period	Total Timberlands	Northeastern Timberlands
1994-Q1 2007	9.65%	10.17%
2000-Q1 2007	7.31%	6.32%
2004	11.20%	17.36%
2005	19.36%	11.03%
2006	13.68%	0.88%
Q1 2007	1.86%	1.99%

CONCLUSION

Recent trends in the timberland and forest industry markets of the Northeast highlight an increasing sophistication and specialization among investors, investment managers and mill operators. The startling shift in forestland ownership between 1995 and 2007 captured in Figures 1 and 2 capture this story: traditional, vertically-integrated forest industry firms sold their industrial timberlands to institutional investors and timber REITs who specialize in managing and generating returns from forestland assets. In addition, forest products manufacturers continue to shutter smaller, less efficient mills, particularly in states such as Vermont and New Hampshire which feature smaller timber markets and fewer opportunities to grow solid wood businesses. Alternately, new energy-related markets for woody biomass are materializing, especially in Maine. These markets, while welcome, have to an extent been born through legislation and associated tax credits. Together, these trends and activities point to continued, changing and niche investment opportunities in the Northeast. These opportunities exist in each part of the region's forest industry supply chain as specialized and experienced operators – in timber and timberlands, forest products and alternative markets – have moved forward with implementing their localized investment strategies.

Investors continue to wonder about the long-term viability of pulp and paper manufacturing in the U.S. Northeast, particularly in light of the cost structure of mills in the Southern Hemisphere.

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