



## Wood & Timberland Markets in the Midwestern U.S.

In discussions of U.S. timberland investment regions, the Midwestern U.S. – the “Heartland” – often remains unmentioned. And with reason. While regional opportunities exist to invest in forestry activities and operations, they participate in smaller markets with mills of smaller scale relative to the industrial softwood operations of the Pacific Northwest and the South. That said, over 2 million acres and \$3 billion of forestry assets changed hands in the Midwest since 2005, indicating interest from the financial investment community. In this issue, we profile the Midwest timber market and trends for wood consumption in the region.

### REGION PROFILE

While definitions vary, we refer to the Midwest as encompassing seven states including Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin (Figure 1).



Figure 1. Regional map of Midwestern U.S.

Most of the larger timberland ownerships lie in northern Michigan, Wisconsin, and Minnesota where large working forests are more prevalent. The region features lower forest operating costs than in the Northeast; soils tend to be lighter, road building costs lower, and the terrain easier to navigate. A relatively high proportion of timber prepared for sale is marked with paint to ensure maximum utilization of higher grades, particularly in northern hardwood stands. Stumpage sales are most common, but a few large landowners sell timber directly to mills and pay contractors for cut and haul services.

Of the midwestern states, Wisconsin seems to have suffered disproportionately with respect to lost facilities and production. Not only did Glatfelter announce the closing of its Neenah mill, but Badger Paper of Preshtigo, Wisconsin shut down its pulp and paper mill, after filing for bankruptcy in the third quarter. Otherwise, many of the pulp and paper mills of the Midwest have experienced capital improvements and compete favorably against comparable facilities in Ontario and the U.S. Northeast.

**Hardwood Markets**

Midwest forestry outreach activities and timber market information focus largely on northern hardwood and aspen resources. Midwestern forests produce dozens of hardwood products. The region’s crown jewel is sugar maple, but hardwood pulpwood markets have also performed well for landowners.

Michigan and Wisconsin feature, along with northwestern Pennsylvania and southwestern New York, the nation’s premium hard maple with sawtimber yields often producing 15% veneer. Recent price increases reflect a shift in the furniture and flooring markets from open-grain to closed-grain woods. Red maple, seen as a cost-effective substitute for sugar maple and black cherry, has benefited directly from the run-up in its higher-priced cohorts.

Figure 2 summarizes price trends for hard maple sawtimber and hardwood pulpwood in Michigan’s Upper Peninsula for the past ten years. Hardwood pulpwood prices show a similar upward trend with prices doubling between 2003 and 2005.

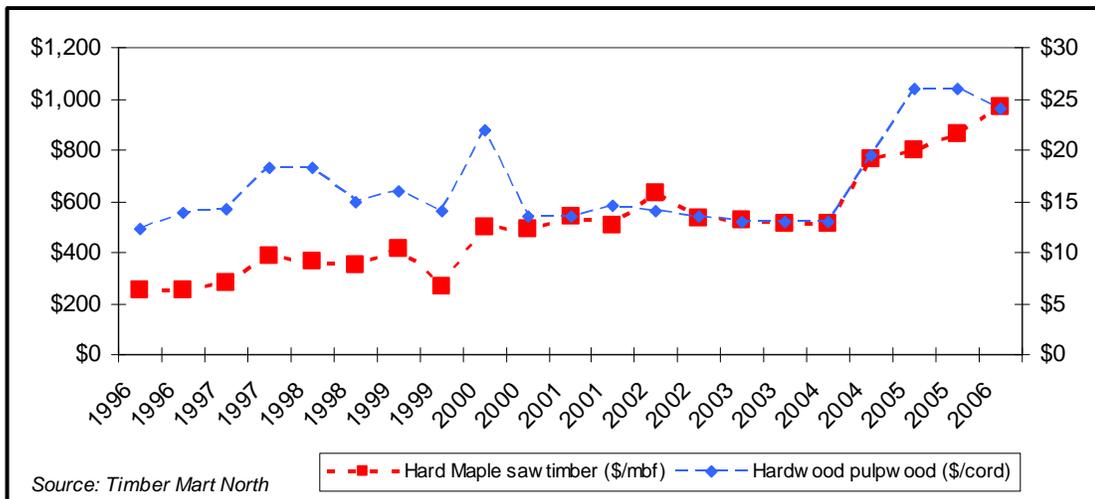


Figure 2. Average hard maple sawlog and hardwood pulpwood prices, Michigan Upper Peninsula

### Softwood Markets

While most of the focus in the Midwest is on hardwood, the region also features a stable softwood industry, particularly in the lake states (Figure 3). As of 2005, these three states had more than 29 softwood lumber mills consuming on average 70,000 tons of annually.<sup>1</sup> In comparison, average softwood consumption of a typical softwood lumber mill in the South exceeds 300,000 tons annually.<sup>2</sup> In total, these states consume one-tenth or less softwood grade than a state in the South. The principal difference between the two regions with respect to softwood consumption is the relative role of industrial consumers. While Potlatch operates large lumber mills in both Michigan and Wisconsin, the South includes dozens of mills owned by, for example, Georgia-Pacific (Koch), International Paper, Rayonier, and Weyerhaeuser.

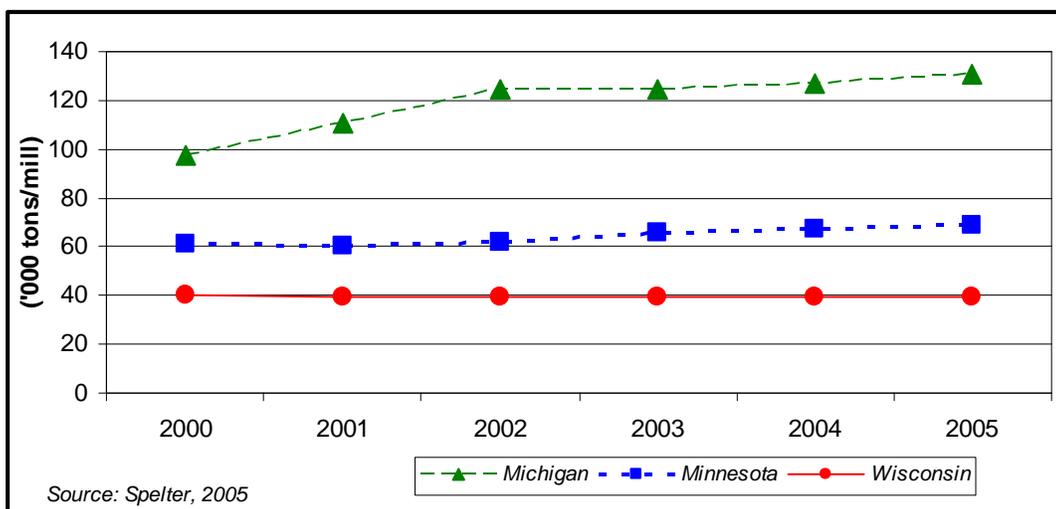


Figure 3. Average capacity per Midwest softwood lumber mill, 2000-2005 ('000 tons)

During the six years covered in Figure 2, Michigan, the largest softwood market of the three states, saw capacity increase an average of 35% per mill. Minnesota increased capacity just over 13% per mill while Wisconsin decreased wood capacity approximately 2% to 3% per mill.

Publicly available historical softwood prices from these three states during this six year period match the story told in Figure 3. Figure 4 shows strengthening red and white pine sawlog prices in Michigan, and a softening of prices in both Minnesota and Wisconsin. However we report the statewide average prices with caution: the limited population and size distribution of lumber mills in these states highlight how variable local markets could be for local forest owners. Unlike the U.S. South, where most timberlands reside within active procurement regions for multiple mills, most midwestern timberland owners have fewer marketing alternatives.

<sup>1</sup> Spelter and Alderman. 2005. Profile of softwood sawmills in US and Canada. Available online in pdf from the USFS.

<sup>2</sup> Forisk Consulting, 2006. Wood Demand Report database.

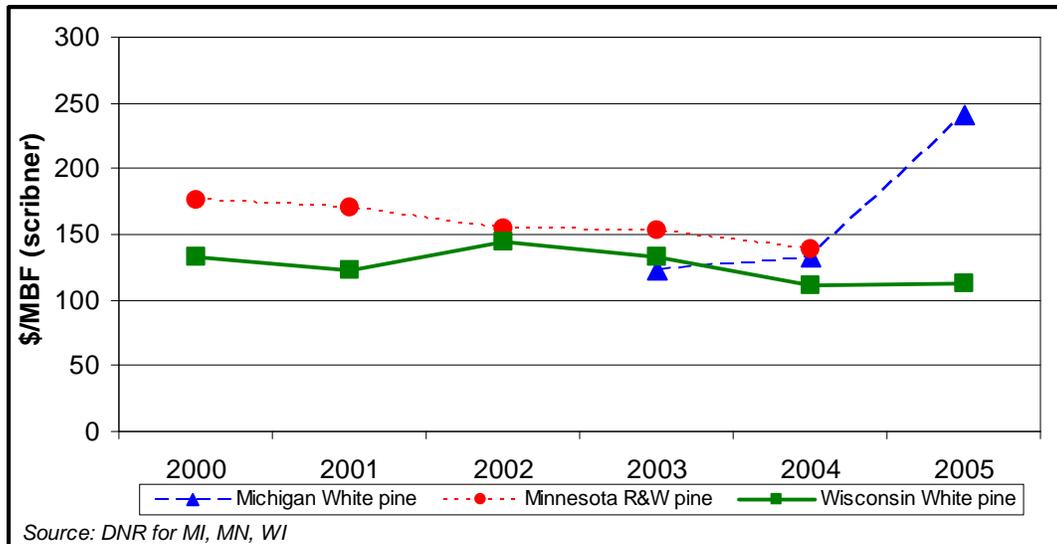


Figure 4. Average softwood sawlog stumpage prices, 2000-2005 (\$/Mbf, Sc.)

#### TIMBER PRICE SOURCES BY STATE

Understanding price activity in the Midwest requires juggling the range of products and grades produced on an ongoing basis. For example, the Michigan DNR tracks quarterly prices for 32 product species categories. The Illinois Agricultural Statistics Service tracks 17 species plus two woods-run categories. Jeff Prestemon and John Pye of the U.S. Forest Service maintain a website with state-by-state links to publicly available timber prices across the United States (<http://www.srs.fs.usda.gov/econ/data/prices>). This site provides a starting point for getting a handle on current and historical pricing for the range of stumpage products sold and consumed.

Table 1 summarizes the relevant resources with exact links for your reference. As a group, these price sources are managed by state departments of natural resources and rely on information provided from federal timber sales and/or surveys of timber buyers and other forestry professionals. In all cases, historical data of some sort or another are available.

State	Source	Description	Link
Illinois	Il Ag Statistics Service & Il Div. of Resources Protection	Timber Price newsletter published twice yearly; based on buyer surveys; by species, product, & zone	<a href="http://ilvirtualforest.nres.uiuc.edu/harvest/t_prices.htm">http://ilvirtualforest.nres.uiuc.edu/harvest/t_prices.htm</a>
Indiana	Purdue University Extension	Annual forest products price report & trend analysis	<a href="http://www.ces.purdue.edu/extmedia/FNR/FNR-177-W.pdf">http://www.ces.purdue.edu/extmedia/FNR/FNR-177-W.pdf</a>
Michigan	MI Depart of Natural Resources	Detailed quarterly Stumpage Price Reports; by product & USFS unit	<a href="http://www.michigan.gov/dnr/0,1607,7-153-10368_22594-81536--,00.html">http://www.michigan.gov/dnr/0,1607,7-153-10368_22594-81536--,00.html</a>
Minnesota	MN Depart of Natural Resources	Part of annual "MN Forest Resources" reports; p. 59 in 2005 issue; by species & year	<a href="http://files.dnr.state.mn.us/forestry/um/2005mn_forest_resources.pdf">http://files.dnr.state.mn.us/forestry/um/2005mn_forest_resources.pdf</a>
Ohio	OH State Univ. & OH Ag Research & Development Center	Delivered & stumpage price reports published twice yearly; pdf & Excel files; by product & species	<a href="http://www.oardc.ohio-state.edu/ohiowood/">http://www.oardc.ohio-state.edu/ohiowood/</a>
Wisconsin	WI Depart of Natural Resources	Average annual values by product; based on sales data from foresters	<a href="http://www.dnr.state.wi.us/org/land/forestry/private/harvest/NR_46.htm">http://www.dnr.state.wi.us/org/land/forestry/private/harvest/NR_46.htm</a>

Table 1. Available online timber price information for the Midwest

## FOREST ASSET TRANSACTIONS

Wachovia Timberlands, with its purchase of 30,000 acres from Abitibi in Wisconsin in 1992, led institutional investors to the Midwest.<sup>3</sup> Not until The Forestland Group (TFG) bought 78,000 acres from Mead in Michigan's Upper Peninsula in 1998 did another institutional investor acquire lands in the region. In 2001, TFG acquired another 90,000 acres from Ned Lake Timber Company in the Upper Peninsula. The next large transaction was Plum Creek's acquisition of 309,000 acres in northern Wisconsin from Stora Enso in 2002. In 2003, the Bishop Estate of Hawaii sold its Shelter Bay lands to TFG – some 390,000 acres spanning most of the Upper Peninsula. In 2004 Boise sold its nationwide land base and mills to Madison Dearborn who, in 2005, spun off 2.2 million acres to Forest Capital Partners, including 309,000 acres in Minnesota.

Recent regional activity includes major asset transfers related to MeadWestvaco and International Paper. In 2005, MeadWestvaco sold its Papers business to Cerberus Capital Management., initiating a series of transactions. The \$2.3 billion dollar transaction included five mills and 911,500 acres of timberlands, of which 802,500 were in the Midwest (Table 2). Specifically, 650,000 acres were in Michigan's Upper Peninsula, 3,500 in Illinois, 149,000 in Ohio (which were then sold to a group led by Robert Chambers<sup>4</sup>), and the balance in Kentucky, Missouri, and Tennessee. The Papers business was renamed NewPage Corporation and, a few months later, Escanaba Timber LLC of Dayton, Ohio began operating as an independent firm to manage the timberlands and wood flows associated with these timberland assets. Later in 2005, Plum Creek acquired the 650,000 Michigan acres from Escanaba Timber. This transaction included supply agreements for NewPage's Escanaba pulp and paper mill in Michigan

Year	Seller	State(s)	Acres	Buyer
2005	MeadWestvaco	MI, IL, OH	802,500	Cerberus Capital Management
2005	Escanaba Timber	Michigan	650,000	Plum Creek
2006	International Paper	Michigan	440,000	GMO Renewable Resources
2006	International Paper	Wisconsin	69,000	The Nature Conservancy, Forest Investment Associates, Conservation Forestry LLC, State of Wisconsin

*Table 2. Selected Midwest timberland transactions*

Glatfelter of York, Pennsylvania acquired the NewPage corporation mill in Chillicothe, Ohio. In early 2006, the firm announced its intent to shutter its mill in Neenah, Wisconsin and move the displaced production to the newly acquired mill.

In March International Paper announced the divestiture of the bulk of its U.S. industrial timberland base. The largest portion – some 4.2 million acres – went to Resource Management Service (RMS). Most of these lands are in the South, but one of RMS's consortium members, GMO Renewable Resources, will take title to 440,000 acres in Michigan's Upper Peninsula. These lands include a fiber supply agreement to IP's regional coated paper facilities. IP's 69,000 acres in northern Wisconsin include 5,000 acres along the rivers to be sold to the State of Wisconsin.

<sup>3</sup> These lands are now held by Wachovia's successor, RMK Timberlands.

<sup>4</sup> Chambers brokered the re-sale of most of these assets to RMK Timberlands, but retained approximately 20,000 acres for sale to the State of Ohio. The Ohio lands held by RMK are under a wood supply agreement with the Chillicothe mill.

The remaining 64,000 acres will be sold to an NGO-investor group including The Nature Conservancy, Forest Investment Associates, and Conservation Forestry LLC (a new TIMO focusing on conservation-oriented assets).<sup>5</sup> The State will also acquire a working forest conservation easement on the 64,000 acres; it will provide for sustainable forest management, public recreation, habitat, and limited development.

Smaller industrial ownerships offer further opportunities for institutional buyouts. For instance, Wisconsin's Wausau Paper has been peddling small parcels for a couple of years. In late 2005 they confirmed plans to divest upwards of 42,000 acres of its timberland ownership. At least one other sizeable ownership in the region is expected to go on the market before long.

Compared to timberlands in the Northeast, the transactions mentioned above offer buyers significant opportunities to redeem recreation values. Land use regulations are relatively liberal, and markets for small tracts are deep. Even large blocks command significantly higher "dirt" values, placing pressure on investors to recognize these values going in, and then actively pursue parcelization or conservation easement deals.

Following many conservation easement deals in the Northeast, Lake States forest owners have begun monetizing non-timber values in similar fashion. Plum Creek granted a conservation easement on 18,500 acres in Wisconsin. The grant was structured to take effect over two years, with 10,800 acres put in easement in 2005 and the balance scheduled for 2006. Potlatch agreed to a conservation easement on 3,100 acres in north central Minnesota with the Trust for Public Lands.

Forest Capital Partners also just signed (June 2006) an agreement with TPL with support from Minnesota's DNR and The Nature Conservancy to protect up to 50,000 acres in Itasca and Koochiching Counties. The proposed conservation lands are adjacent to the George Washington State Forest.

Other large working forest easements include The Forestland Group's 2005 agreement with The Nature Conservancy and Michigan's DNR to encumber 248,000 acres in the Upper Peninsula, and Wisconsin's DNR's 2002 Forest Legacy acquisition of a 35,000-acre easement from Tomahawk Timberlands.

## CONCLUSION

Financial buyers and timberland investors discovered opportunities in the Midwest in 2005 and 2006, securing both productive capacity and forest lands in a series of transactions. While a much smaller industrial softwood market than those in the South and Pacific Northwest, the region does feature strong hardwood stumpage markets, conservation easement interest, and specialized forest investment opportunities.

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<sup>5</sup> Most recently, IP announced the sale of its coated paper business – with four mills in Maine, Michigan, and Minnesota – to an affiliate of the investment firm Apollo Management LP (Wall Street Journal, 6/6/06).