THE ECONOMIC IMPORTANCE OF THE FOREST-BASED ECONOMIES OF MAINE, NEW HAMPSHIRE, NEW YORK & VERMONT 2013

The forest-based economy of the states of Maine, New Hampshire, New York and Vermont is an important component of the region's economic health. Forest-based economic activity annually contributes more than \$33 billion, and provides 178,000 jobs to the four-state region.

- The annual value of sales or output of the region's forest products industry totals over \$18.8 billion, while the forest-based recreation economy is worth \$14.3 billion.
- Including economic multipliers that show the ripple effect of the total forest-based economy, approximately 104,000 workers are employed in the forest products sector, including maple syrup and Christmas trees, while another 74,000 jobs are found in the sectors that include and support the forest recreation economy.

Gross Output and GSP of Forest-based Manufacturing & Recreation, ME, NH, VT & NY, 2011

Gross Output	millions of \$	jobs*
Forestry, logging & trucking	\$905	11,235
Wood products manufacturing	\$2,537	18,189
Furniture and related product manufacturing	\$3,032	18,720
Paper manufacturing	\$10,498	25,900
Wood energy	\$571	1,795
Christmas trees and maple syrup	\$75	1,898
Sub-total direct	\$17,618	77,737
Sub-total with multipliers	\$18,792	103,891
Forest Recreation	\$14,336	72,576
Total	\$33,128	176,467

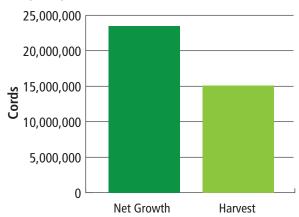
GSP , Forest Products Manufacturing	\$5,501
GSP , All Manufacturing	\$79,392
GSP, Total Economy	\$1,351,857

*full-time equivalent jobs

GSP – Gross State Product includes value added, which is equal to its gross output minus its intermediate purchases from domestic industries or from foreign sources. Gross Output – Includes the total value of all products produced and shipped by all producers (essentially sales).

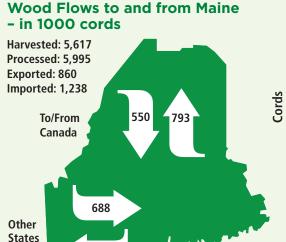
- Forest area and species The region's forests cover 46,068,165 acres of land and have largely remained at this level since the 1980s. Northern hardwood (beech, birch, maple) at 51% and spruce-fir forests at 16% make up over 67% of the forest cover in the region. Forest ownership The region's forests continue to be largely privately owned by individuals/families and business that together own over 93% of the forest.
- Forest inventory, and growth vs. harvest The forests of the region continue to add to the inventory of tree volume as net growth exceeds harvest annually. Currently, on an annual basis, the region's forests grow 23.5 million cords while approximately 15.1 million cords of timber are harvested. The region's standing forest contains approximately 1.1 billion cords of timber 5 inches in diameter or larger.
- Economic output and number of jobs in the forest products sector have declined since peaks in the 1990s and early 2000s. This mirrors similar trends in other manufacturing sectors in the U.S., as more and more manufacturing has become more automated and/or moved to other parts of the world.

Forest Growth vs. Harvest ME, NH, VT & NY 2012

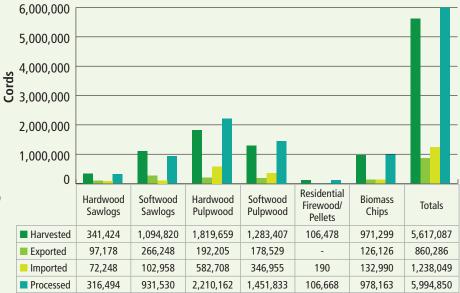


2011 NEFA Region Wood Flow Estimates

WOOD FLOWS IN MAINE



Wood Flows in Maine, 2011



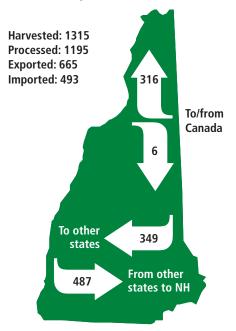
Source: Maine Forest Service

Source: Maine Forest Service 2011

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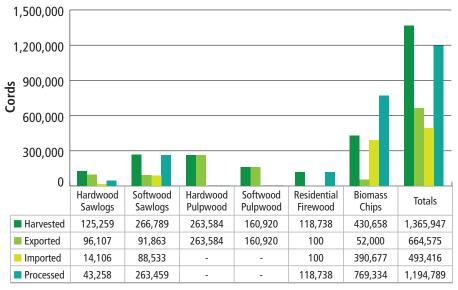
WOOD FLOWS IN NEW HAMPSHIRE

Wood Flows to and from New Hampshire - in 1000 cords



Source: New Hampshire Division of Forests & Lands 2011, Innovative Natural Resource Solutions LLC

Wood Flows in New Hampshire, 2011

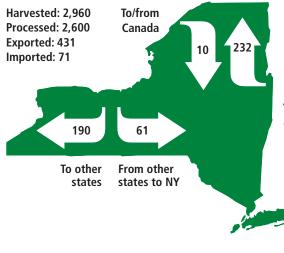


Source: New Hampshire Division of Forests and Lands, Innovative Natural Resource Solutions LLC

Note: to convert to tons, multiply cords by 2.4 tons per cord for softwood and 2.5 tons per cord for hardwood.

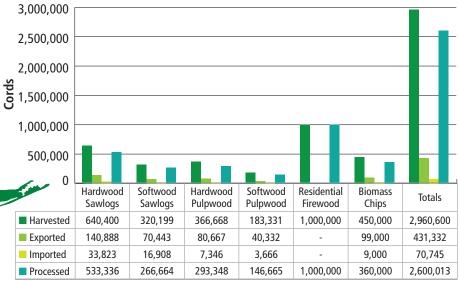
WOOD FLOWS IN NEW YORK

Wood Flows to and from New York 2011 - in 1000 cords



Source: New York State DEC, Division of Lands and Forests 2011, Innovative Natural Resource Solutions LLC

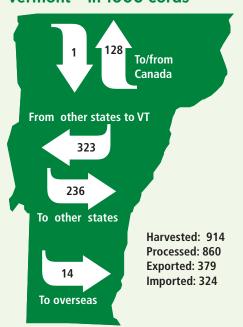
Wood Flows in New York, 2011



Source: New York DEC, Division of Lands and Forests, Innovative Natural Resource Solutions LLC

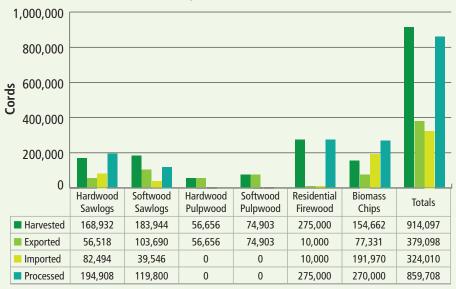
WOOD FLOWS IN VERMONT

Wood Flows to and from Vermont - in 1000 cords



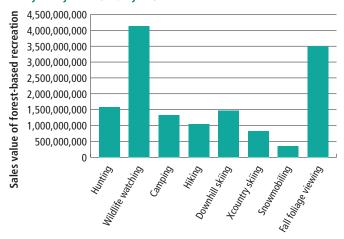
Source: Vermont Department of Forests, Parks and Recreation 2011, Innovative Natural Resource Solutions LLC

Wood Flows in Vermont, 2011



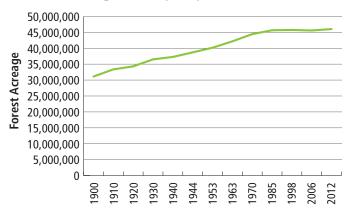
Source: Vermont Department of Forests, Parks and Recreation, Innovative Natural Resource Solutions LLC

Value of Forest-based Recreation in ME, NH, NY & VT, 2011



Sources: Multiple sources including National Survey on Recreation and the Environment from the USDA Forest Service and National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

Forest Acreage in ME, NH, NY and VT



Source: Harvard Forest - multiple data sources.

Forest acreage means land that contains an ecosystem characterized by a more or less dense and extensive tree cover, often consisting of stands varying in characteristics such as species composition, structure, age class. Source: SAF Dictionary of Forestry

North East *State* Foresters Association (NEFA)

The North East *State* Foresters Association (NEFA) is the State Foresters of Vermont, New Hampshire, Vermont, and New York cooperating

with the US Forest Service State & Private Forestry on issues of common interest (see www.nefainfo.org).

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This publication is a summary of a series of state publications on the economic importance and value of forest-based manufacturing and forest-related recreation and tourism of the four states in the NEFA region - New York, Vermont, New Hampshire, and Maine. The state reports and past reports are available at www.nefainfo.org.

The reports include both direct economic value and indirect or induced multipliers, the latter of which gives a truer picture of how these sectors affect the economy in the states and region. The reports update a similar series produced by NEFA in 1995, 2001, 2004 and 2007. This latest version includes substantial trend data to explain the changing nature of these economies. The economic benefits associated with ecosystem services such as wildlife habitat and biological diversity, clean air, clean water and watershed services, scenic landscapes, and carbon storage are not included in these reports so the values should be considered conservative.