



Forest Policy Bulletin

Guideline # 11

MAINE FOREST PRODUCTS COUNCIL

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"Maine forest policy should protect and preserve Maine's traditional forest-based economy and culture by encouraging the health and growth of Maine wood-products industries, supporting forest-dependent rural communities, and facilitating the free flow of raw materials and finished products."



With 17 million acres of forest covering 90% of the state's land area, Maine's economic and cultural heritage is surely defined more by the Maine Woods than by any other part of its landscape. For 400 years, the support and sustenance which the forests have provided for so many of Maine's families and communities have made them inseparable from the image that people, both in Maine and elsewhere, have of this being a place where the patterns of human life are still largely shaped by the demands and rewards of our rich natural environment.

Since the early 1600s, when English explorers first cut trees on Monhegan Island, the forest products industry has been an integral part of the region's economic fabric. In 1634, the first sawmill, powered by water, was built at South Berwick. The first sawmill in Bangor was built in 1772, and by 1832, Bangor had become the largest shipping port for lumber in the world. In the mid-1830s, Bangor was home to more than 300 sawmills, and between 1832 and 1888, over 8.7 billion board feet of lumber were shipped from Bangor.

From the Maine Forest Products Council's Forest Policy Guidelines

A New Century

Even now, at the beginning of the 21st century, the forest-based industries play an indispensable role in the livelihoods of tens of thousands of Maine citizens. According to a recent study by the North East State Foresters Association (NEFA), "the contribution of forest-based manufacturing and forest-related tourism and recreation to the Maine economy is over \$6.5 billion" per year. Moreover, "forest-based manufacturing is the largest manufacturing industry in Maine, contributing \$5.6 billion in value of shipments to the economy in 1998, or 40.5% of Maine's total manufacturing sales."

The report goes on to note that "the forest-based manufacturing industry provides employment for 30,000 people and generates wages and salaries of \$1 billion, the largest payroll in Maine's manufacturing sector. Forest-based recreation and tourism provides employment for over 7,000 and generates payrolls of \$51 million."

In recent years, the Maine forest products industry, like all manufacturing sectors in Maine, has had to endure the effects of technological change, corporate consolidation, and increased global

competition. While it is tempting to view these myriad changes as an indication of the decline of the industry, a longer-term perspective clearly puts that notion to rest.

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From a report by the North East State Foresters Association.

As Professor David Field, of the University of Maine's Department of Forest Management, recently pointed out in an article in *Northern Woodlands* magazine, "for the past 40 years, Maine's forest products sector has steadily accounted for 25 to 31 percent of Maine's annual manufacturing employment, 29 to 38 percent of manufacturing wages, 34 to 44 percent of the value of all manufactured goods, and one-third of all value added in manufacture."

To be sure, there have been job and wage losses due to technological advances, but as those changes have improved the efficiency and competitiveness of industry, the jobs that remain are safer and

more stable than ever before. Furthermore, despite all the changes, the NEFA report notes that “the average Maine forest products sector worker earns 80% above the Maine average. One forest products sector job equals 1.8 average Maine jobs in terms of wages and salary income earned.”

Finally, Professor Field points out that “of the 20 Maine industries that employed 10,000 or more persons in 1996, paper mills provided the highest average employee compensation, \$60,750, including benefits.”

raw material into lumber, veneer, pulp, and paper. Some of the lumber is shipped out-of-state for further processing.

Logging: Harvesting the Raw Material

The forest “manufacturing” process begins when loggers harvest standing trees. According to the NEFA report, during 1999, “334 million board feet of hardwood sawlogs and 1.2 billion board feet of softwood sawlogs were harvested from Maine’s forests . . . Maine’s pulpwood harvest was 2.5 million cords.” Also, “over one million green tons of whole tree chips were harvested.” After being harvested, the raw logs are trucked to various sectors of the forest manufacturing industry.

Primary Manufacturing: The Backbone of the Industry

In Maine, the pulp and paper sector dominates primary wood-based manufacturing. According to the NEFA report, “Maine has 15 pulp mills, 16 paper mills, and 56 paper machines with a combined paper-making capacity that is second only to the state of Wisconsin. The paper industry relies on wood harvested from Maine forests for 75% of its supply. Imports of pulpwood and wood pulp supplement the in-state cut. In 1998 there were 15,000 individuals employed in this sector with wages and salaries totaling \$790 million. The total value added for this sector was \$1.5 billion and the value of shipments was \$4.3 billion.”

Those logs not used for pulp are shipped either to softwood or hardwood sawmills. The NEFA report points out that in 1999, “sawmills in Maine processed 265 million board feet of hardwood sawlogs and 872 million board feet of softwood sawlogs into lumber.”

Still another segment of the primary manufacturing sector is the biomass industry. Biomass is the collective name for the wood fiber and bark that are derived from sawmill residue, land-clearing waste, and the tops and low quality stems of harvested trees. This wood waste is burned in 9 biomass plants in Maine and provides approximately 24% of the state’s electricity. In 1999, these plants consumed 1.4 million tons of chips.

Wood waste is also burned in 37 Maine sawmills

Revenues from Maine’s Forests

	<i>millions of \$</i>	<i>\$ per acre</i>
Forest-based manufacturing value of shipments	5,600	316
Forest-related tourism and recreation expenditures	900	51
Christmas trees/wreaths/maple products	13	1



Source: The North East State Foresters Association

The Forest Products Economy: Linking Maine’s Communities Together

Of all the forest-based industries, it is those sectors that involve the forest-based manufacturing system that constitute the most widespread use of the Maine forest resource, and, consequently, provide the most broad-based support for Maine communities. To appreciate fully the overall contribution of the Maine forest products industry to the Maine economy, one must have a basic understanding of how the industry works.

The forest-based manufacturing system consists of timber harvesting, primary manufacturing, and secondary manufacturing. The chain of relationships among different parts of the system varies. Timber harvesters cut down the trees and market the logs, which are processed at sawmills in Maine, or exported for further processing. Primary manufacturers convert

	# of businesses	% of manufacturing businesses	value of shipments (\$1,000)	% of values of shipments, all manufacturing	payroll (\$1,000)	% of manufacturing payroll	# of employees	% of manufacturing employees
Forest-based manufacturing	873	48	6,391,067	45	982,918	38	26,633	32
Transportation equipment manufacturing	100	5	1,755,193	12	392,372	15	11,125	13
Leather and allied products manufacturing	45	2	1,081,429	7	166,815	6	7,466	9

Source: The North East State Foresters Association

and ten pulp and paper mills and used to heat their manufacturing plants and dry kilns. This biomass market is a critical market for low grade wood that would otherwise go to waste. According to the NEFA report, “revenues of sales of biomass chips in 1999 totaled \$13 million.”

Secondary Wood-based Manufacturing: The Refined Finished Product

Secondary manufacturing involves the drying, planing, cutting, and assembly of lumber into finished products. The wood products made in Maine range from apple boxes to bird feeders to clothes pins, decking, furniture, and posts. In 1998, the secondary manufacturing sector employed over 1900 Maine workers and had a payroll of \$40 million.

While not as large a part of the forest products industry as the pulp and paper sector, secondary manufacturing has significantly increased its contribution to Maine’s economy in recent years. For example, the value of shipments by all Maine forest-based industries, a combination of Lumber, Furniture, and Paper, increased by 27% from 1992–1997. Taken alone, however, the value of shipments of furniture and fixtures, which does include some businesses that do not use wood, increased by two-thirds during this same time period. Finally, payroll for furniture and fixture manufacturers grew by almost three-quarters from 1992–1997, roughly three times the national average.

Sustaining a Resource for the Future

Despite the fact that the forest products industry has been the backbone of Maine’s economy for generations, Maine citizens and policy makers alike have concerns about the industry’s future. After all, perhaps more than in any other state in the country, Maine is defined by the traditions of its major natural resource industries, including fishing, farming, and forestry. Given the role of these industries in Maine’s history, it is no surprise that when troubles arise in any of them, many Mainers begin to fear that the core identity of the state is on the verge of disappearing forever.

These fears have led to numerous calls for Legislative action, and in the spring of 2000, the 119th Maine Legislature passed into Law as Resolve 99 *“An Act to Promote Natural Resource-based Industries.”* The law required the State Planning Office (SPO) to submit a report to the joint standing committee of the Legislature having jurisdiction over business and economic development matters that gave “. . . a comprehensive view of the history and heritage of Maine’s natural resource based industries, their economic contribution, the business incentives currently offered for development, the supporting educational structure, the major opportunities for and barriers to further development of these industries and recommendations for ensuring the long-term viability of these industries . . . “

Specifically, the law required the SPO to submit a report that:

- ◆ “Examines the resources available to business development . . . in the natural resource-based industries;
- ◆ Analyzes existing education programs and the overall needs and condition of the natural resource-based workforce;
- ◆ Develops a proposal to establish education programs with the aim of increasing the number of trained entrants into the natural resource-based industries; and
- ◆ Identifies barriers to and opportunities for enhancing the growth and sustainability of the State’s natural resource-based industries.”

Using the expertise and services of a range of state agencies including the Departments of Economic Development and Conservation, then calling on a Forestry Advisory Council consisting of industry and state officials, the SPO released a report in March of 2001 entitled *“Fishing, Farming and Forestry: Resources for the Future.”*

The report included several general findings and recommendations regarding the combined natural resource industries, and it also made a number of recommendations specific to each industry. For the forest products industry, the report made the following recommendations:

- ◆ Improve the marketing and coordination of small business training programs by the State, education institutions, trade associations and nonprofit groups.
- ◆ Educate smaller Maine forest industry companies about how to reach out to, and compete in, national and international markets.
- ◆ Leave Maine’s worker’s compensation reforms alone.
- ◆ Include small forest industry firms in efforts to lower health insurance costs for small businesses in the State.
- ◆ Revise the referendum process
- ◆ Develop a comprehensive forest policy that provides direction on current and emerging issues.
- ◆ As new laws, regulations and rules are pro-

posed, carefully examine the impact on forestry and the forest products industry in Maine.

- ◆ Maintain the Tree Growth Tax program and avoid adding to the cost of belonging to the program.
- ◆ Improve transportation systems (road and rail) in Northern Maine to lower the cost of transporting forest products.

The SPO’s report recognizes the continuing importance of the forest products industry in Maine’s economic and cultural life. The lack of clear, stable forest policy has discouraged the investment needed to ensure that Maine’s forest resource continues to play a critical role in the Maine economy and the lives of tens of thousands of Maine citizens.

Maine policy makers should strive toward clear goals as they devise their plans. First, ensure that the total value of products shipped from Maine’s working forests and wood-using plants reaches and retains optimum sustainable levels as measured by Maine’s gross domestic product.

Next, guarantee that Maine policy recognizes and supports the infrastructure and public systems necessary for forest-based industries and communities to thrive.

Finally, at all times, they should remained focused on achieving an optimum level of public and private investment in wood-using industry facilities.



**This Forest Policy
Bulletin
can also be found at
www.maineforest.org.**