LUMBER CONSUMPTION

IN THE

SPRINGFIELD DISTRICT

Report on a Market Survey by the Harvard Forest

1925

SUMMARY OF MARKET FACTORS

The facts brought out by this survey emphasize and confirm a situation that was already being brought home both to producers and consumers of New England lumber. For several years our native woods, particularly softwoods, have been losing ground in local markets. A part of this loss applies to the lumber market as a whole and is due to general business conditions. As regards native pine, hemlock, and spruce, the principal causes of decline are the increasing use of new materials in the container business and the competition by producing regions outside New England.

For many years the great bulk of the market for native pine has been the box factories and other industries, such as woodenware and toys, which use lumber of the box grade. The market for the softwood box has been steadily reduced by the development of other containers: the fibre box, the plywood box, and the wire-bound box. The replacement of the pine container by these new materials is variously estimated at from 20% to 40%. While the box lumber was thus losing part of its market, the medium grades of pine and hemlock, together with a considerable share of spruce, all of which have been in fairly common demand locally in the building trades, have been almost driven from the market, even in the small inland towns, by a large volume of southern, western, and Canadian competition. The great recent increase in this competition comes largely from the Pacific Coast and the Inland Empire, from which fir and pine now fill our lumber yards at prices and in grades and sizes which the native lumber is unable to meet. Thus, taking the softwood market as a whole, both wood-using industries and the building trades, the consumption of low grade has suffered seriously from the use of substitutes, and the outlet for the medium grades has been largely taken up by producers from beyond New England.

In respect to hardwoods, the loss of market is not nearly so apparent and native hardwood is not faced to anything like the same extent either with outside competition or the introduction of substitutes. The situation as a whole means, for the present at least, that from the point of view of the producer, there is not only a serious loss of market, but a probable temporary decline in stumpage values. With so much of New England in forest land and fit for no other use, and so many communities in urgent need of some productive business that will replace or supplement farming, it is not encouraging that when native lumber is selling at such a disadvantage we must pay for bringing what we use all the way from Oregon.

The question is, how about the future? Is the outlook for native lumber likely to grow worse, or is the situation in part curable?

One of the main reasons for conducting the present survey was the hope that a beginning might be made in answering these questions. It is obvious that the future effect of certain of the broader factors can only be guessed at. Western competition, for example, judging by the amount of timber available for manufacture is likely to last for a good many years. On the other hand, it seems certain that the present low prices at which western lumber is laid down in New England cannot be maintained. According to the Lumber World Review, during the past year the sawmill industry in the Douglas fir region suffered a net loss of $4,000,000. Furthermore, owing to the remoteness of much western timber and the consequent greater expense involved in logging it, the costs of production are certain to go up. Even so, and admitting that there is great overproduction in the big sawmill centers, the best New England can hope for in the immediate future is some rise in the price of western material that will offer a possible margin on the sale of native stock. As regards box lumber, a decline in stumpage will certainly stimulate renewed use of that material in the container business, and thus tend to correct itself.

Nevertheless, behind the principal economic factors which are not controllable, there are a number of minor obstacles to the marketing of native lumber which were brought out or corroborated by the information gained in the survey. The following are among the most significant complaints or difficulties from which native lumber is suffering today.

1. Absence of grade or knowledge of grading. For many years while the wood-using industries were buying native lumber in quantities and with little outside competition, 90% of the timber was sawed round edge, or through and through, and bought and sold log run with little or no reference to grade. It is true that the great bulk of native pine timber now yields but a small percentage of any grade better than Number 2. Nevertheless, the market in general has demanded more and more definition of quality, if not actual standardized grades; and producers, particularly those operating portable mills, are seldom able to produce either the required grade or any uniform quality of board.

2. Poor sawing and seasoning. There is much complaint that lumber from the average small mill is not true to dimension, is too thick or too thin. Frequently also it is poorly seasoned, and owing to careless piling or the poor location of the drying ground, it gets to the purchaser stained, warped, or checked. For lumber, much of which is potentially no better than a medium grade, the addition of

these defects in manufacture and handling is a serious handicap in competition with material made by large, efficient mills with a competent knowledge of sawmill machinery and the principles of seasoning.

3. Handicaps of small operations and small timber. A certain percentage of the production in native lumber comes from operations where either the amount cut in one place or the size of the timber is unduly small. Thus, the product is difficult to market economically and is inferior in value on account of the necessary high percentage of waste in manufacture.

4. Insufficient knowledge of markets and market conditions. Not a few timber owners and mill operators carry on considerable sized operations without being sure in advance either just where their product is to be sold or whether the market in general is in a condition to warrant cutting at all. The result is that much lumber is sawed on an oversupplied market, or cut to sizes which may not be in demand.

5. Too much investment in production equipment. Apparently as a heritage from the expansion of war times, there is still a greater supply of mills and investment in lumber production than the present normal demand will justify. This has resulted either in too much production or in undesirable competition for available markets.

Taking these items individually, they may not seem of fundamental importance as affecting a general condition of decline. Taken as a whole, however, they indicate a fairly general lack of the organization, knowledge, and, perhaps, equipment which the making of lumber now seems to require. Producers are still operating and selling according to standards and customs which were entirely satisfactory for the kind of consumption and utilization that prevailed before and during the war, but which today, with an altered market and a greatly enlarged competition, are ineffective and out of date. It is true and important to keep in mind that New England timber as a whole no longer yields more than a small percentage of the high grade material which is abundantly secured from old growth timber of the far west. On the other hand, the native material has an immense advantage in the matter of transportation and in closer contact with local markets. If native timber, particularly softwood, is to regain some of its lost market, or develop wider uses for the future, there must be a marked improvement in methods of production and distribution all the way from the management of the timberland to delivery to the purchaser.

As a result of this survey, the following items of improvement or desirable policy stand out.

1. Cutting only larger, older timber. Low grade is always the difficult thing to sell. Small timber means high costs and a low yield of better grades. To much timber is being cut that is not only hard to market for these reasons, but would be making more money for its owner if left standing. The bigger the average log or tree, the lower the cost of lumber, and the better the average quality. The place to start grading is in the woods before the trees are cut. A few operators are already following this principle, especially those that own timberlands. Properly applied, it means more money from growth as well as more money per thousand feet sold.

2. Accurate sawing and proper seasoning. Apparently many of the portable type sawmills are not mechanically able to saw true sizes, even where the sawyer is competent. If this is true, the business needs a better type of mill. Certainly it should be possible to saw true to dimension, even with a small mill. Still more is it possible with reasonable common sense and efficiency to lay out a lumber yard and pile lumber so that it will not deteriorate in air drying.

3. Sawing to grade. If it were possible, and it may be before very long, some fairly standardized definitions of grades for native lumber ought to be set up and put in practice, perhaps by some of the lumber associations. Existing grades as followed in the principal wholesale centers, and to some extent in the smaller towns, are much modified by particular purchasers, and are not always easy to apply to native softwood. Even so, however, the knowledge of grading in principle, and particularly the knowledge of how to get the largest amount of the best quality out of a given log, will soon be indispensible to any producer of lumber. The portable mill sawyer who understands this kind of sawing is an exception.

4. Possible associations of producers or timberland owners. This may be a difficult idea to apply. It is not new, however, but is already in successful operation in certain branches of agriculture. One of the present weaknesses in the marketing of native timber is that so large a volume of it comes from such small holdings and in such scattered localities. Even the best lumber is at a disadvantage if there is too little to load a car. Sooner or later if our timber is to maintain any importance in the market or be of real value to its owners, it will have to be handled in one of two ways. Either a considerable neighborhood or locality will combine to supply a local woodworking industry or finishing plant with a good share of its raw material, or else there will develop certain distribution centers with the necessary mill equipment where the logs or rough lumber produced within a practical hauling radius will be gathered together, finished, and sold in quantities large enough to

make a paying business. Already enterprises of this type are in successful operation in parts of the South; and in certain especially favorable parts of New England, there are woodworking industries which have been taking the product of the same neighborhood for several generations.

5. Selling points for native pine. Many retailers have not forgotten, and still maintain, that white pine lumber, even from the present second growth, is superior, if properly made, to the western pine that is taking its place. Not very long ago white pine was a synonym for the best all-around lumber that was known.

6. Growing higher grade timber. This is a matter which, of course, does not concern the operators of the present merchantable stands. It does, however, concern the many land owners who are attempting to practice forestry. Often it is not more expensive so to handle young timber crops that a high quality of lumber will be produced instead of the poor to mediocre stand that commonly results from the usual plantations, pasture pine, or neglected hardwood stands.

7. Surveys of supply and consumption. It is obvious that marketing in general is vastly improved by an accurate knowledge of the requirements of purchasers, both in volume, sizes and quality.

Such in a preliminary way is the information gained in the present survey. Sooner or later, however, it will doubtless be helpful and important to sum up the quality, kind and location of the timber itself. The individual owner must know both the character of his timberland and the opportunities of the market. It should be no less important from the point of view of general economic policy that such statistics should be available for the whole of New England.

Tabular Summaries

The outstanding fact shown by these tables is the percentage of lumber now coming from sources outside New England. Only 30% is produced in New England; 25% comes from the South; 18% from Canada; 26% from the Pacific Coast; and the remainder from miscellaneous sources. The item of over 16 million feet of New England lumber still handled by retail yards—a surprising amount in view of the general situation—consists about one-third of building material, largely spruce, from Maine. Of the remaining two-thirds, the greater part is rough box and crating lumber supplied to manufacturers, and the rest is log run hardwood and some pine pattern stock. Thus, the sum total of box lumber and crating coming into the district, in order to avoid overlapping, is listed in part under the head of retail yards and dealers who resell to manufacturers, and in part under the head of box and crating manufacturers as such. Probably the sum total of native New England lumber used in Springfield is proportionately greater than would be the case for the whole state.

TABLE I

Consumption of Lumber According to Industries and Regional Sources

Board Feet in Thousands

Industry	New England	Canada	New York Adirondacks	Southern States	Lake States	Pacific Coast	Tropics Mexico Europe	Pennsylvania	Total
Automobile and Truck Bodies	295,000			118,000	40,000				453,000
Railroad and Electric Companies' Supplies	247,900	262,394		1,661,522	12,000	150,000	40,000		2,373,816
Textile Machinery	2,157,000			20,000	20,000				2,197,000
Sporting Goods	340,000	95,000		34,000	25,000		5,000		499,000
Patterns and Flasks	27,000	15,000		30,000	70,000		48,000		190,000
Screens and Picture Frames	19,000			12,000		10,000			41,000
Furniture	343,000	100,000	80,000	125,000			110,000		758,000
Wood Specialties	290,000	260,000	45,000	105,000	120,000	150,000			970,000
Tools and Machinery	665,000		20,000	55,000	30,000				770,000
Crating and Boxes	3,425,000	4,421,000				580,000			8,426,000
Retail Lumber Dealers	16,700,000	9,225,000		16,150,000	125,000	18,885,000		1,000,000	62,085,000
Miscellaneous	1,580,000	400,000		2,420,000		2,500,000			6,900,000
Totals	26,038,900	14,778,394	145,000	20,730,522	442,000	22,275,000	203,000	1,000,000	85,662,816
Per cents	30.5%	17.2%	0.2%	24.2%	0.5%	26.0%	0.2%	1.2%	100%

TABLE II

Consumption of Lumber According to Industries and Species

Board Feet in Thousands

	Automobile and Truck Bodies	Textile Machinery	Sporting Goods	Patterns and Flasks	Furniture	Tools and Machinery	Wood Specialties	Crating and Boxes
Beech, Birch, Maple	60,000	2,000,000			300,000	430,000	75,000	
Yellow Birch			55,000		195,000	10,000	230,000	
Maple		75,000	25,000		10,000	85,000	15,000	
Basswood	10,000	50,000	50,000		50,000		120,000	
White Ash, Oak	60,000							
White Ash	80,000		240,000			130,000		
Whitewood	43,000	50,000			75,000		75,000	
Southern Pine	40,000	20,000				35,000		
Red and White Oak	160,000	2,000	8,000		10,000	35,000	5,000	
White Pine				112,000		10,000	45,000	3,585,000
Elm			40,000					
Chestnut			15,000					
Hickory			2,000			10,000		
Spruce			15,000			15,000	30,000	4,676,000
Walnut			37,000					
Cherry			12,000		8,000	10,000	45,000	
Mahogany				48,000	110,000			
Spanish Cedar				10,000				
Baywood				20,000				
White Birch							210,000	
Douglas Fir							120,000	
Hemlock								165,000