Extension Publication 11

April 1980

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NEW HAMPSHIRE

FOREST MARKET REPORT

1980

Ed Downing, Thornton, N.H.
Note the all-steel logging sulky.

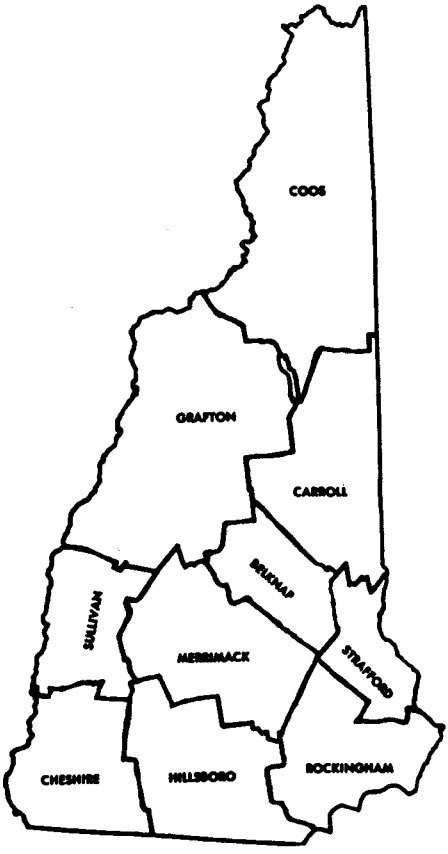
COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF NEW HAMPSHIRE

with the

NEW HAMPSHIRE DEPARTMENT OF RESOURCES
AND ECONOMIC DEVELOPMENT COOPERATING

MAP OF NEW HAMPSHIRE

(Showing Counties)



By

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Forest Products Marketing and Utilization

and

Roger P. Sloan, *Extension Specialist*

Forestry

Cooperative Extension Service

University of New Hampshire

Published and distributed by the University of New Hampshire, Durham, N.H., Maynard C. Heckel, Director of the Cooperative Extension Service, in furtherance of the purposes provided for in the Acts of Congress of May 8 and June 30, 1914, the United States Department of Agriculture cooperating.

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The information in this bulletin covering prices and specifications was gathered by the New Hampshire County Foresters and the Assistant Utilization and Marketing Specialists. The bulletin was prepared by:

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MARKET TRENDS FOR 1980

Few timber products are consumed by individuals in the form in which they are manufactured. Instead, most move to various major markets where they are remanufactured or made a part of a product that is ultimately used by individual consumers. Thus, although consumer demand is the underlying force, direct demand for timber products is largely determined by the levels of activity in their primary end-use markets.

The gross national product, the most comprehensive measure of total economic activity, grew at an annual rate of 2.4 percent (measured in 1972 dollars) in the third quarter of 1979, a sharp reversal of the 2.3 percent drop recorded during the second quarter. The gain in the third quarter was largely due to increases in consumer spending, financed in part by savings, giving the economy an impetus that analysts feel is not likely to be repeated in the months ahead. As a result of these trends and other factors such as continuing high rates of inflation and increasing interest rates, most government and private economists forecast some decline in the real gross national product in the fourth quarter. Many also feel that there may likely be little sustained improvement before the second quarter of 1980 but that the average for the year will be somewhat above that for 1979.

A key determinant of the demand for many timber products is construction activity, and most particularly, residential construction activity. Not only is it a large direct consumer of wood, but it provides the stimulus for homeowner purchase of many manufactured goods, including household furniture. Furniture production, of course, is a key manufacturing use of hardwood lumber, plywood and veneer, hardboard, and particleboard.

In 1978 new housing starts rose to just over 2.0 million units. This year, however, there were sharp declines. Preliminary data indicate that the seasonally adjusted annual rate of new private housing starts during the first three quarters of 1979 was about 1.76 million units. Placements of mobile homes for residential use in 1979 have also been below 1978 levels.

Expeditures for residential upkeep and improvements have been increasing slowly in 1979 as many homeowners apparently met their housing needs by alterations and remodeling rather than purchases of new homes. A continuation of this slowly rising trend can probably be expected into 1980 if the economy moves as discussed earlier. During 1979 expenditures for private buildings, the most important wood using segment of nonresidential construction, was up almost 15 percent. The outlook for the coming months is mixed. In light of recent credit developments, new nonresidential construction expenditures seem likely to show little rapid growth until the second half of 1980.

Industrial output – an important indicator of the demand for pallet lumber, container board, and some grades of paper – increased slowly through 1979 rising from an index value of 146.6 (1967=100) in December 1978 to 152.3 in September 1979. Container production, a large market for paperboard, hardboard, veneer, and some grades of lumber, was following the same trend. Output of the furniture and fixtures industry – a major end-user of hardwood lumber, plywood, and veneer, and of particleboard and hardboard was 3 percent above 1978. Many analysts expect that growth in most of these important wood products markets is likely to remain slow until the second half of 1980.

The United States is the world's leading importer of timber products – chiefly lumber, woodpulp, and paper and board from Canada and veneer and plywood from Southeast Asia. The total value of these imports in 1979 was about 4.6 percent of the value of all U.S. imports. In terms of roundwood equivalent, about a fifth of our apparent consumption of timber products has been imported in most recent years.

The United States is also a major timber product exporter – some 3.5 percent of our exports. Although we ship a variety of wood products to many countries, our principal export markets are Japan for softwood logs and lumber, pulp chips, woodpulp, and paper and board products, and western Europe for woodpulp, paper and board products, and smaller amounts of lumber and plywood.

International demand for many U.S. timber products, which had been slowly rising since economic conditions in our major overseas markets began to improve in 1975, continued up in 1979. Current estimates are for continued slowly rising markets in most European countries in 1980. The Japanese economy, which was moving at a relatively rapid rate in 1979, is expected to slow somewhat in 1980.

TIMBER SALE GUIDELINES

by
Marshall Patmos, Coos County Extension Forester
and
Rich Kinder, Extension Specialist – Logging

A decision to harvest timber is a very critical one and should be handled as a business venture. A timber sale often culminates 50 to 150 years of investment in the form of taxes and management costs and more importantly the effort that Mother Nature provided to produce the growth and volume of the timber.

Your motives for selling timber should be based on sound decisions which will hopefully be best for the land. Depending on the type of cutting, it may be many years before further revenues can be obtained from your woodland.

DO NOT COMMIT YOURSELF TO ANY BUYER OR LOGGER without thoroughly understanding the long term affects of your action. Plan far enough in advance to avoid hasty decisions that you might regret.

MAKE SURE YOU HAVE THE LEGAL RIGHT TO SELL YOUR TIMBER – Clear your intentions with any and all parties having legal interest in your timberland (mortgagors, bank, lien holders, co-owners, heirs, etc.).

Would you sell your home without first knowing the full value and market situation? Would you seek professional advice from a lawyer, banker, broker, etc? Would you give the sale of timber the same consideration? YOU SHOULD!!

Contracts, down payments, payment schedule, performance guarantees, etc. should all be considered in a timber sale, much the same as they would be in the sale of your home.

Why Do You Want to Harvest?

Are you following a specific management plan for your woodland? Has a logger made you an offer? Do you need money? Do you have a specific product that is currently in big demand?

ASSESS YOUR OWN OBJECTIVES – which might be any combination of the following:

1. Forest Improvement
2. Access and recreational improvement
3. Wildlife habitat improvement
4. Land conversion for other use
5. Maximum immediate dollar returns
6. Tax considerations

Hopefully your objective would be to harvest your timber in a manner that would assure a good crop of improved trees for the future.

What Is Your Timber Worth?

The value of the standing timber on a 100 acre woodlot may be $15,000 or more, or $500 – would you know the difference just from looking at your woods? If not, the obvious answer is to seek professional assistance.

The following questions should all be answered BEFORE considering a timber sale.

What Do You Have To Sell?

What is the age, species and quality of timber you have?
What should be cut?
What is the anticipated volume to be harvested?
Is my timber sawlogs, boltwood, veneer quality, pallet stock, pulpwood or combination?
Where and when are the best markets for my timber?

How Should Your Timber Be Cut?

What is a fair price, by species and quality for the timber?
Will you be able to harvest again in a few years?
What harvest method is best suited for my woodlot, i.e. selective cut, shelter-wood, clear cut, seed tree, etc.?

Can I wait a few years to harvest?
How will those trees to be cut be designated?
Will access and twitch roads be passable upon completion of a timber sale?
What laws relate to timber harvesting?
How can I protect the remaining stand from unnecessary damage?
How long will it take to harvest my wood?
Will my timber be utilized to its highest use, thus giving me more revenue?

How Will You Be Paid?

What should I receive for a down payment or performance bond?
What method will be used to measure my wood?
When and how will I get paid for my wood?

How Will The Sale Be Administered?

Who is a reliable logging operator?
Who is responsible for compliance with the law?
Are my boundaries clearly marked?
Who will be liable for personal injury or property damage?
How do I figure my federal income tax for a timber sale?
Who is responsible for the N.H. Yield Tax?
How will disputes be settled?
When does the title for forest products transfer?
What type of a contract will be prepared for the timber sale?

Who Can Help You?

The first step is to evaluate what you have to sell in terms of your objectives, the county forester can help you, at no direct charge, with the preliminary assessment of your over-all situation.

If you decide after meeting with your county forester that you do want to sell timber and your time and experience are limited then you should have a professional consulting forester ***handle the sale for you.*** The professional forester can, depending on your need:

1. check your boundaries
2. inventory your timber
3. select and mark the trees to be cut
4. determine the species, quality and volume to be sold
5. lay-out the roads
6. advertise for and receive bids on the timber
7. prepare a written contract between you and the buyer
8. supervise the logging operation

Depending on extent of service, the consultant fee could be 10 to 20% of the receipts from stumpage. Higher stumpage prices and closer supervision as a result of the foresters' efforts more than make up for the fees charged.

How Is Timber Sold?

STUMPAGE SALE

Most timber is sold as it stands in the woods or "on the stump". The timber may be paid for by unit of volume (per thousand board feet or per cord) as it is

removed and sold. Or a lump sum may be paid on an agreed upon *estimate* of the total volume to be harvested.

When timber is sold by the thousand or by the cord, the scale or measurement of the product delivered at the mill is accepted as the standard for payment. Copies of the mill delivery slips should be made available to the landowner. The price offered for different species may vary according to the quality and demand.

For a lump sum sale, the payment may be made prior to the start of the operation or installment payments may be made during the operation. Nevertheless, the total amount of money is fixed. It is, of course, very important to know the value of your standing timber before accepting the terms of a lump sum sale.

ROADSIDE SALE

When a landowner harvests the timber himself or hires the work done and sells the timber at a location accessible to a truck, mill scale is most often the standard for measurement although scaling and payment can also be done at time timber is picked up roadside.

DELIVERED TO THE MILL

The landowner retains title to the timber until it is sold at the mill.

How Is Timber Designated For Sale?

INDIVIDUAL TREE SELECTION

Trees to be removed are selected and marked with tree paint to accomplish a particular forest management objective. Marked trees may be measured to provide an accurate estimate of the available volume.

DIAMETER LIMIT

All trees above an established minimum diameter are to be cut. Stump diameter should be used to allow for measurement after the tree is cut and removed. Diameter limits may vary for different species on the same lot. This method is applicable where distinct age classes exist.

CLEARCUTTING

Complete cutting of all trees in a designated area to eliminate an over-mature or undesirable stand and provide openings for regeneration, may be done in patches, strips or blocks.

UNCONTROLLED CUTTING

Whereby the logger chooses the trees according to merchantability.

The Timber Sale Contract

A written agreement is necessary for a timber sale so that both buyer and seller have a common understanding of the conditions under which the sale is made. The agreement should state clearly the objectives of the operation where appropriate and special conditions if they exist.

A CONTRACT SHOULD CLEARLY DEFINE:

1. Identity of buyer and seller.
2. Identity of location of tract of land.
3. Identify, by exact terms, what is to be sold, cut and removed.
4. Specify price to be paid and basis of measurement for the timber and the method and schedule of payment.
5. Specify time limit for timber sale including seasonal limitations if any.
6. Provide for seller granting access to the tract of land for purposes of harvesting.
7. Specify compliance with all applicable state, federal and local regulations and specify responsibility for payment of N.H. Yield Tax.
8. Provide for protection of residual stand with penalty provisions for unnecessary damage.
9. Provide for restoration of skid trails and landings.
10. Provide for the utilization of all merchantable material cut.
11. A disclaimer by the seller for any liability for accident or injury to the buyer, his employees or his equipment. (Check with your lawyer regarding the validity of disclaimer statements).
12. Provide for prohibiting assignment of harvesting rights to another without written consent of the landowner.
13. Provide for resolution of disputes, perhaps a third party agreeable to buyer and seller.
14. Assign liability for property damage (buildings, fences, wells, power lines, etc.).
15. Assign liability for damages and suppression expenses if a forest fire occurs as a result of the harvesting operation or because of carelessness of those involved in the harvesting.
16. Provide for immediate termination of the sales agreement if any of the provisions of the agreement are not adhered to.
17. Specify when the title for forest products transfers, usually when the wood is paid for rather than when it is cut.

Be sure that any conditions of the sale and the responsibilities for performance and expenses are clearly defined in writing. Any designation of condition in a timber sale agreement which does not express whose responsibility and at whose expense the burden lies is a useless addition to any legal instrument and can lead to unnecessary disputes. In other words put in writing WHO IS RESPONSIBLE FOR WHAT AND WHO PAYS FOR IT!

The importance of a written contract can't be stressed enough as it protects both the buyer and the seller and allows each to see in writing what is expected of him. It would be a good idea to obtain legal counsel when preparing a contract.

Each timber sale is unique in its own way and therefore, provisions of each contract may vary although an attempt has been made to present the most important and common considerations that should be included in a contract.

Consult your county forester for sample timber sale contract.

ASSISTANCE RENDERED BY COUNTY FORESTER

The County Forester helps woodland owners to help themselves. Your County Forester will assist you in the examination of your woodlands and make recommendations for managing them. He will help you or your agent in marking trees for cutting in limited amounts, as an educational demonstration and advise you in the marketing of forest products.

There are thousands of acres of young growing trees, such as pine, spruce, fir, and desirable hardwood that can be converted into desirable stands of trees if the overtopping weed and cull trees are cut or killed. It is profitable to prune young, fast-growing, well-formed trees, especially white pine, with the purpose of growing quality logs that will yield clear lumber. Your County Forester can assist you in getting a forest improvement program started in your woodlands. Your County Forester can provide you with information about the cost-sharing programs.

HIRING A PROFESSIONAL CONSULTING FORESTER

by

Roger P. Sloan, Extension Specialist, Forestry
John A. Conde, County Forester, Merrimack County
Leslie B. Sargent, Jr., County Forester, Grafton County
Joseph A. Szymujko, County Forester, Sullivan County

Consulting Foresters play an important part in the management of New Hampshire forests. They offer services which result in the establishment and the implementation of forest management needs. In order to encourage harmonious and effective relationships between forest landowners and Consulting Foresters, these guidelines are presented.

A person hiring a Professional Consulting Forester should know what services he expects from the Consulting Forester. By the same token, the Consulting Forester should know just what services the person hiring him expects him to perform. A Professional Consulting Forester is a person who represents the landowner in managing his woodlands. He may provide many of the following services:

1. Woodland examination
2. Forest management plan
3. Timber and timber land appraisal
4. Income tax assistance (timber depletion, capital gains tax exclusion)
5. Owner's agent in timber sales and supervision
6. Timber marking, and estimating, and appraisal

7. Timber stand improvement work (weeding, thinning, pruning)
8. Tree planting
9. Approved vendor (contractor) of Agricultural Conservation Program and Forestry Incentives Program forestry cost sharing practices
10. Forest land surveying
11. Title and boundary search
12. Recreational development
13. Laying out and supervision of woods road construction
14. Owner's representative in trespass cases
15. Licensed real estate broker
16. Registered Forester
17. Registered commercial applicators for pesticides
18. Registered surveyor
19. Urban forestry consulting
20. He may offer continuous management services over a period of years for an annual fee, or a specific service for an agreed upon period.

Consulting Foresters are, in contrast to Industrial Foresters, privately employed to represent only the landowner's interest. The Industrial Forester may represent the landowner's interest but must represent the interest of the industry employing him. A timber buyer may not be a Professional Forester and may not be qualified to offer the services the Consulting Forester or Industrial Forester offers. In considering hiring a Consulting Forester, consider the following in this order.

As a woodland owner:

1. To determine what your forest resources are and the alternatives that are available to you in the form of management of your woodland, you should contact your County Forester. After the consultation, you can decide what your management objectives are.
2. Obtain service and cost proposals from available Consulting Foresters for each of the services which you want.
3. It is recommended that you obtain references from the consultant's previous clients. Ask for the names and addresses of the latest clients he served in the area.
4. Determine the professional qualifications and performance ability of the consultant offering to provide the service.
5. Foresters' fees for timber sales may be on a percentage of the value of the timber sold, whether it is sawlogs, pulpwood, or cordwood, or there may be a fee per 1,000 board feet or per cord of timber marked. This fee may be

based on the value of the standing timber (stumpage) or on the value of sawlogs delivered to the sawmill. The forest owner should ask the Consulting Forester to quote his fee per 1,000 board feet based on the value of the stumpage (marked trees).

In some cases the fee may be based on the value of the sawlogs delivered to the sawmill where the owner and the consultant each get a percentage of the value of the logs delivered to the mill, after deducting the costs of felling, bucking, yarding, trucking, severance tax and marking fee from the value of the sawlogs at the sawmill. If the fee is based on the above percentages, in the case of sawlogs, the consultant should quote the actual stumpage returns to the landowner.

The owner should have the option to have his timber put out to competitive bid.

6. The alternative selected on how an owner can sell his timber should be completely understood.

   Some Consulting Foresters operate their own logging crews and equipment or are closely associated with contract loggers. This may or may not be an advantage to the forest owner. The alternatives are contract logging, competitive bid and negotiated bid.
7. Determine what supervision of a timber sale actually means. How often the cutting operation will be checked by the consultant to see that the contract is being fulfilled by the buyer – at least once a week or more frequently if necessary to see that the job is done right.
8. The Consulting Forester should reserve the right to check scale the logs at any time during the operation to represent the owner's interest in case of dispute.
9. The contract between the landowner and the Consulting Forester should clearly specify each other's expectations.

Suggestions for a Contract between a Forest Owner and a Consulting Forester

1. Identity of forester and woodland owner – name, address and telephone number.
2. Identify the location of the tract of land involved in the contract.
3. Identify by exact terms the services to be performed.
4. Specify cost to owner to be paid for each of the services to be performed by the forester. If services are to be performed on an hourly basis, the rate per hour should be specified and an estimate of the total cost should be given. It is extremely important that the forest owner understands how the forester arrives at his fee. Rates may also be expressed in units of: per 1,000 board feet, cords, acres, lineal feet, or other units as agreed upon.
5. Specify estimated time limit for termination of contract.
6. Define the extent, frequency and duration of supervision for each of the services to be performed.
7. Provide for landowner granting access to the forester to the tract of land for purposes of performing the services.
8. Specify who will be responsible for compliance with all applicable state, federal and local regulations.

9. There should be a disclaimer by the landowner for any liability for any accident or injury to the forester, his employees, or his equipment. (Check with your lawyer regarding the validity of disclaimer statements).
10. Assign liability for property damage for the period of the contract. The landowner and forester should agree about responsibility for property damage to buildings, fences, wells, power lines, etc.
11. Provide for immediate termination of the contract if any of the provisions of the contract are not adhered to. Any dispute should be settled by arbitration. Each party shall select a disinterested person; they in turn shall select a third party and the opinion of the majority shall rule.
12. Specify when foresters fees will be paid. Be sure that any conditions of the contract and the responsibilities for performance and expenses are clearly defined in writing.
13. Any designation of conditions in the agreement which does not express whose responsibility and at whose expense the burden lies is a useless addition to any legal instrument and can lead to unnecessary disputes. In other words, put in writing WHO IS RESPONSIBLE FOR WHAT AND WHO PAYS FOR IT!

****

The importance of a written contract cannot be stressed enough as it protects both the woodland owner and the Consulting Forester and allows each to see in writing what is expected of him.

Each woodlot is unique in its own way and therefore, provisions for each contract may vary although an attempt has been made to present the most important and common considerations that should be included in a contract.

FOREST PRODUCTS LABORATORY PUBLICATION LISTS

LISTS OF PUBLICATIONS dealing with research projects of the U.S. Forest Products Laboratory or relating to special interest groups are available from the Director, Forest Products Laboratory, Madison, Wis. 53705. Separate lists have been compiled for each of the following subjects: Box, Crate, and Packaging Data; Drying of Wood; Fire Protection; Glue and Plywood; Growth, Structure and Identification of Wood; Furniture Manufacture; Logging, Milling and Utilization of Timber Products; Mechanical Properties of Timber; Structural Sandwich; Plastic Laminates and Wood-Base Components; Thermal Properties of Wood; Wood Finishing Subjects; Wood Preservation; Architects, Builders and Engineers.

1980 PRICE RANGE FOR FOREST PRODUCTS

Table I. Price Range Standing Timber (Stumpage) and Sawlogs Per Thousand Board Feet (MBF)

Prices quoted are an average range for the county. Prices will vary from those quoted depending on market conditions. More specific process can be obtained by contacting the County Forester, Consulting Foresters, or industry representatives. Read carefully the recommendations for selling on page 6, Timber Sale Guidelines, before disposing of stumpage, logs, and other forest products.

Belknap County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40-50	$70-80	$90-100
	Medium	50-65	80-95	95-115
	High	65-85+	90-115+	110-135+
Hemlock	All grades	25-50	50-75	70-90
Red Oak	Medium	60-75+	100-120+	120-140+
	High	75-130+	125-155	145-200+
White Birch and	Medium	45-50	75-90	90-110
Yellow Birch	High	50-60	75-85	95-105
Sugar Maple	Medium	30-50	60-85	90-140+
	High	50-80	75-130+	150+
Beech	Medium to High	25-50	60-95	85-105
White Ash	Medium	55-70	85-110	95-130
	High	70-110	130-140	160-180
Mixed Hardwoods (Pallet Stock)		30-50	55-70	80-95

Carroll County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40	$75	$90-100
	Medium	70	80-115	100-130
	High	70-95	115-140	130-160
Hemlock	Medium	20-35	50-60	65-80
	High	35-40	60-90	80-110
Spruce	Medium	20-40	60-85	80-100
	High	40-50	85-100	100-135
Ash	Medium	40-60	80-90	135-150
	High	60-90	120	150-250
Basswood		25-50	50-80	85-110
Beech	Low	20	45	60
	Medium	25-30	50	65-80
	High	35-60	80-100	130-160
Beech Boltwood	High	20	30-35	70-90
Red Maple	Low to High	20-40	70	80-125
Sugar Maple	Low	25	60	80
	Medium	40	90	130
	High	70-90	110-140	135-190

Carroll County *(Continued)*

Species	Quality	Stumpage	Roadside	Delivered
Sugar Maple Boltwood				$60/cord
Paper Birch	Low	$60	$100	120-140
	Medium	75	120	140-160
	High	90	140	160-180
Paper Birch Boltwood	Medium	30/cord	40-50/cord	70-100/cord
Yellow Birch	Medium	50	65-70	80-90
	High	90	90-140	160-250
Oak	Low	40	50-60	80-90
	Medium	60-90	140-170	200
	High	90-130	170-200	200-300

Cheshire County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40-50	$70-80	$90-100
	Medium	45-55	80-85	100-110
	High	60-70	80-100	120-140
Hemlock	Low	25-30	50-55	65-70
	Medium	30-35	55-60	70-80
	High	35-40	65-75	80-90
Spruce	Low	25-30	50-55	65-70
	Medium	30-35	60-65	75-85
	High	40-45	65-70	85-90
Red Oak	Low	70-90	100-120	175-200
	Medium	90-100	130-150	200-230
	High	120-150	175-200	230-250
White Birch	Low	40-50	70-75	80-90
	Medium	55-60	65-80	95-100
	High	65-75	95-110	125-150
Sugar Maple	Low	50-65	80-90	100-120
	Medium	65-90	95-110	130-140
	High	90-100	110-130	150-175
Soft Maple	Medium	25-30	45-50	70-80
	High	40-45	60-70	90-100
Beech	Medium	25-30	45-50	60-70
	High	35-45	50-55	80-90
White Ash	Low	70-90	85-90	100-120
	Medium	90-100	95-110	150-175
	High	120-150	175-200	200-250

Coos County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Sawlog	$50-75	$100-120	$140-160
Spruce-Fir	Sawlog	40-60	95-115	130-155
Hemlock	Sawlog	20-35	60-75	100-115
Hard Maple	Sawlog	50-85	100-140	140-180
	Veneer	75-100		160-250
Cherry	Sawlog	60-90		225
	Veneer	90-120		350-450

Coos County *(Continued)*

Species	Quality	Stumpage	Roadside	Delivered
Soft (Red) Maple	Sawlog	$20-35	$60-90	$95-130
Poplar	Sawlog	20-35	50-70	90-105
White Birch	Sawlog	55-90	100-145	145-200
	Veneer	80-125		150-350
Beech	Sawlog	20-35	70-90	110-160
Yellow Birch	Sawlog	70-90	125-175	175-245
	Veneer	80-125		160-400
White Ash	Sawlog	60-100	100-235	125-305
	Veneer	80-125		160-450
Red Oak	Sawlog	55-90	125-175	215-230
	Veneer	80-120		175-400
Basswood	Sawlog	40-60	100-120	140-160
	Veneer	45-70		160-350
Mixed Hardwood (Pallet & Tie Stock)	Sawlogs	20-35	45-60	105-115
White Cedar	6' logs/cord*	15-25	50	75
	8' Logs/cord	20-30	60	100

*6' cord = 700-750 bd. ft.
8' cord = 1000 bd. ft. (approx.)

Grafton County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Average	$50-90	$70-120	$120-160
Hemlock	Average	25-40	50-85	80-100
Spruce & Fir	Average	35-60	40-90	90-110
Yellow Birch	Sawlog	60-105	75-170	100-190
	Veneer	100-150+	150-200+	200-350
Sugar or Rock Maple	Sawlog	50-90+	90-150	100-220
	Veneer	60-100+	95-190+	150-250+
White Birch	Sawlogs	50-90	65-170	100-200
	Veneer	90+	125-175	200-300
Soft (Red) Maple	Sawlogs	20-40	50-70	80+
White Ash	Sawlogs	50-100+	60-150	100-225
Beech	Sawlogs	15-35	40-70	70-85
Red Oak	Sawlog	50-100	80-200	90-250
	Veneer	90+	125-200	175-300+
Mixed Hd/wood	Pallet Logs	15-25	40-50	70-90
Mixed Hd/wood	Tie Logs	15-25	50-70	70-90
Basswood	Sawlogs	20-40	50-75	75-100
	Veneer			140-200
Poplar	Sawlogs	10		75
Cherry	Sawlogs	35-50+	65-95+	110-150+
	Veneer			170-285

Hillsboro County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40	$75	$90
	Medium	60	95	120
	High	85	120	135
Hemlock	Low	30	70	80
	High	45	90	105
Red Oak	Low	40	75	90
	Medium	65	100	150
	High	100+	185	225+
Other Hardwoods				
Birch, Maple, Ash	Low	35	70	85
Mixed Hardwood	High	85	150+	175+
(Pallet Stock)	Logs			85

Merrimack County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40-50	$70-80	$85-95
	Medium	50-60	80-90	95-105
	High	60-90	90-110	105-135
Hemlock	Low	20-25	50-55	65-70
	High,	25-40	55-70	70-85
White Birch	Medium	40-50	80-90	95-105
	High	50-60	90-100	115-135
Hard Maple	Medium	50-60	90-100	105-115
	High	60-70	100-110	115-125
White Ash	Medium	60-90	100-130	115-150
	High	90-125	130-165	165-275
Red Oak	Medium	60-90	100-130	115-150
	High	90-125	130-165	165-275
Pallet Stock	Logs	25-30	50-60	65-75
Mixed Hardwood Pulp Logs				$10/ton ~~$~~ 15/TON

Rockingham County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40	$75	$90
	Medium	55	90	105
	High	70+	105	120+
Hemlock	Low	35	70	90
	Medium	45	80	95
	High	55	90	105
Red & White Oak	Medium	60	100	115
	High	80+	110+	125+
Pallet Stock		35	70	90

*Check the prices in other counties for white birch, yellow birch, sugar maple, and white ash, when grades are suitable for specialty items such as boltwood and veneer.

Strafford County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low to Medium	$37-63	$67-93	$87-115
	High	64-80	94-110	114-130
Hemlock	Low to Medium	20-40	50-70	70-90
	High	40-55	70-85	90-105
Red Oak	Low to Medium	40-70	70-100	90-120
	High	71-95	101-125	121-145
Other Hardwoods	Low to Medium	30-50	60-80	80-100
	High	50-65	80-95	100-115

Sullivan County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	$40-45	$85-90	$110-115
	Medium	45-55	90-95	115-120
	High	55-65	95-100	120-125
Hemlock	Medium	20-25	60-65	85-90
	High	25-30	65-70	90-95
Spruce	Medium	20-25	60-65	85-90
	High	25-30	65-70	90-95
Yellow Birch	Medium	60-75	105-125	130-150
	High	75-80	125-175	150-200
White Birch	Medium	40-50	105-115	130-140
	High	50-60	115-135	140-160
Sugar Maple	Medium	60-75	125-135	150-160
	High	75-80	135-175	160-200
Red Oak	Medium	60-80	125-135	150-160
	High	80-100	135-175	160-250
White Ash	Medium	60-80	125-135	150-160
	High	80-100	135-175	160-250
Red Maple	Medium	30-35	75-85	100-110
	High	35-40	85-95	110-120
Pallet		10-25	45-75	70-100
Other Hardwoods		30-40	75-95	100-120
Black Cherry		75-100	105-225	130-250

Table II. Prices Pulpwood Per Cord* — Northern New Hampshire

Species	Stumpage	Roadside	Mill Yard
Spruce and Fir	$6.00-10.00	$30.00-35.00	$44.00-48.00
Hemlock, White Pine	4.00-6.00	25.00-30.00	33.30-40.00
Tamarack, Red Pine	4.00-6.00	25.00-30.00	33.30-40.00
All Hardwood	4.00-8.00	22.00-28.00	40.00-43.00

*Pulpwood is weight scaled at the mills in green ton equivalents. Converting factors to cords vary according to species.

Prices of Pulpwood Per Cord — Central New Hampshire[2]

Species	Stumpage		Delivered
Softwood Rough	$2.00-3.00	at Consuming Mill	$16.50-20.00/Ton
Hardwood Rough			13.50-15.00/Ton
Random Length Mixed Hardwood		at Concentration Yard	11.00-12.50/Ton
Random Length Softwood			13.00+/Ton

Prices of Pulpwood Per Cord — Southern New Hampshire[2]

Species	Stumpage	Roadside	Delivered at Mill
Hardwood	$2.00-3.00		$9.00-10.00/Ton
Random Length Mixed Hardwood			9.00-10.00/Ton
Rnadom Length Softwood			9.00±/Ton

Table III. Price of Debarked Slabs and Edgings Per Green Ton Strapped

	Delivered to Chipping Plant
Softwood[1] (mixed)	$6.50-7.00
Hardwood (mixed)	6.00-7.00

[1]Special prices are paid for slabs and edgings sorted by species (spruce and fir).
[2]Contact buyers for exact prices and mileage allowances.

Price of Pulp Chips[1,2]

	Scheduled Deliveries of Chips Produced from Roundwood[2]	Produced from Slabs and Edgings Delivered to Pulp Mill[2]	
		Per Cord	Per Green Ton
Pine and Hemlock	$35.00-38.00/cord	$33.00-35.50	$17.00-19.00
Spruce and Fir		40.00-41.00	21.00-23.00
Hardwood (mixed)		37.00-42.00	17.00-20.00

[1]Chips are bought by weight or by volume.
[2]Contact buyers for exact prices and mileage allowances.

Table IV. Price Range of Excelsior Wood, Boltwood, Posts, Railroad Cross Ties, and Switch Ties

Species	Stumpage	Roadside	Delivered at Mill
	Excelsior Wood Per Cord		
Poplar Peeled			$28.00+
	Boltwood Per Cord[1]		
White Birch	$20.00-35.00	$50.00-70.00	$75.00-106.00 per cord
Beech	10.00-15.00		50.00-60.00 per cord
Sugar Maple and Ash	20.00-35.00		60.00-100.00 per cord
Yellow Birch	20.00-35.00	40.00-50.00	60.00-75.00 per cord

[1]Price per cord varies according to diameter and length of bolt. Some mills prefer to buy by the Mbf.

Guardrail Posts

Species	Min. Small End Diameter	Length	Delivered
Red Pine Pitch Pine White Pine Spruce	5½"	7',14',21',28'	$1.25 ea.

Railroad Crossties

Grade	Size	Rail-bearing Face	Prices paid for Green Mixed Hardwood[1] Ties			
			Loaded on R.R. Cars		Delivered by Truck to Nashua	
			each	per MBF	each	per MBF
3	(6" x 8" x 8'6")	8"	$6.85	$201	$7.50	$220
4	(7" x 8" x 8'6")	9"	8.55	215	9.20	231
5	(7" x 9" x 8'6")	10"	9.65	216	10.30	231

Switch Ties (mixed hardwood)[1]

(7" x 9")	9'-12' long	$210 per MBF delivered.
(7" x 9")	13'-15' long	220 per MBF delivered.

[1]Oak, Beech, Birch, Maple, Cherry, Ash, Hickory

Table V. Price Range of Fuelwood Per Cord

Species	Stumpage	Roadside	Delivered Buyers Premises
Hardwood[1]			
4' Wood	$7.00-15.00	$40.00-65.00	$50.00-70.00
12", 14", 16" Lengths		60.00-80.00	65.00-95.00+
Tree length – Delivered 4-6 cords per load – $45.00-60.00 per cord			
Slabs (Hardwood or Softwood)		10.00-25.00	25.00-55.00

Fireplace white birch will be slightly higher than above when bought in bundles.
Prices range over $100.00 per cord.
Formula for determining cords of fuelwood, pulpwood and boltwood in 4' lengths.
Average height in inches times length of pile in feet divided by 384 equals the number of cords:

$$\text{EXAMPLE: } \frac{48'' \times 8'}{384} = 1 \text{ Cord}$$

If wood is longer or shorter than standard length, which is 48", divide by standard bolt length to get current percentage. (EXAMPLE: 39" divided by 48" equals 81%).

Custom Chopping on Selectively Marked Lot –	
Cut and Stacked at Sump, 4 ft. Length	$20.00-25.00 per cord
Yarding to Roadside	$15.00-25.00 per cord

Table VI. Price Range of Sawdust and Shavings and Bark

	Per-Cord Green at Sawmill	Per Bale Air Dry
Sawdust	$3.00-7.50 94 $.02 to .06 per cubic foot	
Shavings	$2.00-5.00 or $.03 to .045 per cubic foot	$1.50-2.00
Bagged Dry Shavings		$1.00 to $1.50 per 3 cu. ft. bag
Bark	$.02 to $.08 per cubic foot (loaded) $1.25-6.00 per yard (loaded) ($3.00) $ .50-6.00 per cord	

Table VIIA. Operating Costs (Contract Prices) Northern N.H.

Sawlogs – Average Stump to Roadside	
Softwood	$35.00-40.00 per Mbf
Hardwood	45.00-60.00 per Mbf
Cordwood and Pulpwood (with machine) Stump to Roadside –	
4 ft. –	$30.00-45.00 per cord
Random Length –	25.00-35.00 per cord

Table VIIB. Operating Costs (Contract Prices) Southern N.H.

Sawlogs – Average Stump to Roadside –	
Softwood	$35.00-45.00 per Mbf.
Hardwood	45.00-50.00 per Mbf.
Cordwood and Pulpwood (with machine) Stump to Roadside –	
4 ft. –	$35.00-40.00 per cord
Random Length	25.00-30.00 per cord

Table VIIC. Operating Costs (Contract Prices) Average for N.H.

Man with Chain Saw	8.50-10.00 per hour.
Custom Sawing –	
Softwood	80.00-100.00 per Mbf. or $75.00-100.00 per hour.
Hardwood	90.00-125.00 per Mbf. or $80.00-125.00 per hour.
Planing	30.00-40.00 per Mbf.
Resawing	25.00-30.00 per Mbf.

Table VIID. Trucking Costs*

Sawlogs	15.00-22.00 for the first 10 miles and 30-35¢ for each additional mile.
Cordwood and Pulpwood	75.00-100.00 per load

*For short hauls or partial loads minimum charges may apply.

Table VIII. Wholesale Price Range[1] of Christmas Trees and Boughs[2]

	Stumpage		Roadside	
	Single	Bundle	Single	Bundle
Pasture Run (unimproved)				
Balsam Fir	$2.00-3.00		$3.00-4.00	$5.25-8.00
Spruce	1.75-2.75		2.75-3.50	4.00-7.00
Improved (but not sheared)				
Balsam	2.50-3.50		4.50-6.75	
Spruce	2.00-3.25		3.25-6.00	
Sheared				
Balsam Fir	4.00-5.50		6.50-8.00 to $1.00 per ft.	
Spruce	3.50-5.00		4.75-7.00	
Pine	4.00-5.25		5.00-7.00	

	Roadside	
Boughs (baled or tied)	Per Bundle[3]	Per Ton
Balsam Fir	$3.50-6.00	$135.00-250.00
Spruce	2.75-5.00	110.00-200.00
Pine	3.00-5.00	120.00-200.00

Wreaths
Balsam Fir – double face
size 12"-14" $2.00-2.50 each, single face 50-75¢ less

[1]Prices vary according to size of order, quality, grade and tree size.

[2]Producers should contact buyers well in advance of cutting and arrange for deposits and specific prices, and use a written contract.

[3]Price based on 50 lb. bundle. Prices vary with quality and quantity.

Table IX. Retail Price Range of Single Christmas Trees

(Select and cut your own)

Scotch Pine Balsam Fir White Spruce Douglas Fir Norway Spruce Blue Spruce	$5.00-10.00 or $1.00-2.00 per lineal foot

Table X. Average Maple Sap Prices at Sugar House in New Hampshire

% Sugar	¢/gal.	% sugar	¢/gal.
0-1.1	0	3.2	21.6
1.2	1.0	3.3	22.4
1.3	2.0	3.4	23.2
1.4	3.5	3.5	24.1
1.5	5.2	3.6	25.0
1.6	6.7	3.7	26.0
1.7	8.1	3.8	27.0
1.8	9.5	3.9	28.0
1.9	10.8	4.0	29.0
2.0	12.0	4.1	30.0
2.1	12.8	4.2	31.0
2.2	13.6	4.3	32.0
2.3	14.4	4.4	33.0
2.4	15.2	4.5	34.0
2.5	16.0	4.6	35.0
2.6	16.8	4.7	36.0
2.7	17.6	4.8	37.0
2.8	18.4	4.9	38.0
2.9	19.2	5.0	39.0
3.0	20.0	5.1	40.0
3.1	20.8	5.2	41.0
		5.3	42.0
		5.4	43.0

Table XI. Maple Syrup Price Ranges for Fancy and A Grades at Producers

	Maple Syrup		Maple Products		
	Wholesale	Retail			Retail
1 gallon	$15.40	$17.50 (jugs) 18.00-19.50 (cans)	Sugar	1 lb.	$3.75
½ gallon	8.25	9.50	Creme	8 oz.	3.75
1 quart	4.50	5.75	Candy	1 lb.	4.00
1 pint	2.75	3.75			
½ pint	1.75	2.45			
Store Prices					
1 gallon	$19.00-22.00				

No New Hampshire producers make wholesale maple sugar for sale.

Rent Price Per Tap Hole

15-30 cents for sugar maples in the woods and not too easy to get to; up to 30 cents for easily accessible trees and trees along roadsides.

CONVERSION FACTORS AND UNITS OF MEASUREMENT FOR FOREST PRODUCTS

A knowledge of the common units of measure for the various forest products is of importance to persons involved in the marketing process. These units of measure form a basis for common understanding between buyer and seller. Familiarity with these units can mean a greater financial return and a reduction of the chances of misunderstanding of the terms of forest products sale agreements.

The Blodgett rule is the official standard in New Hampshire. Several other rules are also in use by mutual agreement between buyer and seller. However, the International Rule, ¼" kerf, is most commonly accepted.

The volume of a standing tree or log is determined using tree and log rules. These rules simply give the approximate number of board feet of sawed lumber that may be manufactured after allowing for milling losses in slabs, edgings and sawdust.

Tree Scale (Tree Volume Measurement)

To determine the board foot content of standing trees, tally the trees by:

1) D.B.H. (Diameter Breast Height=measurement of diameter of tree 4½ ft. above ground)
2) Estimate the number of 16 foot logs to 6 inch top diameter
3) Apply the scale given in Table below

Tree Scale – International Rule

D.B.H.	Number of 16 foot logs – to 6" top						
Inches	1	1½	2	2½	3	3½	4
6	10	15					
8	20	35	50				
10	40	55	70	85	95		
12	60	75	95	110	125	145	165
14	85	110	135	150	165	190	215
16	110	150	190	215	240	260	285
18	140	195	245	285	320	345	370
20	180	245	310	355	400	435	465
22	220	300	380	445	505	545	585
24	270	365	460	540	615	670	730
26	320	435	550	645	735	805	875
28	370	515	655	760	870	950	1035
30	430	595	760	885	1010	1110	1205

Log Rule

To determine the board foot content of sawlogs, tally the logs by:

1) Average Diameters at the small end and inside the bark and by lengths
2) Apply volumes from the table given in Table below and total

The International Log Rule

¼-inch Saw Kerf

Diameter (Small end inside bark) Inches	Length of Log in Feet						
	8	10	12	14	16	18	20
4		5	5	5	5	5	10
5	5	5	10	10	10	15	15
6	10	10	15	15	20	25	25
7	10	15	20	25	30	35	40
8	15	20	25	35	40	45	50
9	20	30	35	45	50	60	70
10	30	35	45	55	65	75	85
11	35	45	55	70	80	95	105
12	45	55	70	85	95	110	125
13	55	70	85	100	115	135	150
14	65	80	100	115	135	155	175
15	75	95	115	135	160	180	205
16	85	110	130	155	180	205	235
17	95	125	150	180	205	235	265
18	110	140	170	200	230	265	300
19	125	155	190	225	260	300	335
20	135	175	210	250	290	330	370
21	155	195	235	285	320	365	410
22	170	215	260	305	355	405	455
23	185	235	285	335	390	445	495
24	205	255	310	370	425	485	545
25	220	280	340	400	460	525	590
26	240	305	370	435	500	570	640
27	260	330	400	470	540	615	690
28	280	355	430	510	585	665	745
29	305	385	465	545	630	715	800
30	325	410	495	585	675	765	860

Pulpwood

Pulpwood is generally sold by the cord or on the weight basis.

The Cord: A standard cord is generally accepted as equivalent to a pile of closely stacked wood 4 feet high, 4 feet deep and 8 feet long containing a gross volume of 128 cu. ft.

Solid Wood Content of a Cord

The solid wood content of a cord of pulpwood is dependent on many factors such as:

1) The average diameter of the bolts
2) Tightness of piling
3) Limbing practice and knottiness
4) Taper and straightness of individual bolts
5) Amount of bark rubbed off prior to scaling
6) Period of time between piling and scaling (shrinkage and compaction during transportation)

The volume given in the Table below are *averages* and are commonly used as conversion factors.

Solid Wood Content of a Standard Cord

1 Standard cord (4'x4'x8')	= 128 cubic feet of wood, bark and air spaces
1 Standard cord of pulpwood, rough	= 85 cubic feet of solid wood (softwood)
1 Standard cord of pulpwood, peeled	= 95 cubic feet of solid wood (softwood)
1 Standard cord of pulpwood, rough	= 85 cubic feet of solid wood (hardwood)
1 Standard cord of pulpwood, peeled	= 95 cubic feet of solid wood (hardwood)
1.7 to 2.0 cord	= 1000 board feet

When green rough pulpwood is purchased by weight, the following weight-volume equivalents are generally accepted:

5600 – 5700 pounds = 1 cord (hardwood)

4300 – 4700 pounds = 1 cord (softwood)

Cordwood

Wood fuel is generally sold by the standard cord or by the "short cord" also called "face cord" which is a pile of wood 8 feet long, 4 feet high and the length of the stick is less than 4 feet and is generally 12, 16, or 24 inches for stove and fireplace use.

Railroad Tie Volume Table

Grade	Dimensions	Bd. ft. volume per tie	No. of Pcs. per MBF
1	6"x7"x8'6"	29.7	33.7
2	6"x7"x8'6"	29.7	33.7
3	6"x8"x8'6"	34.0	29.4
4	7"x8"x8'6"	39.6	25.2
5	7"x9"x8'6"	44.6	22.4

Approximate Weight and Heating Value Per Cord (80 cu. ft.) of Different Woods, Green and Air Dry (Approximately 20% Moisture Content)

Woods	Weight, lb. per cu. ft.	Weight, lb.	Available Heat, Million BTU[1]	Equivalent in Gallons of Fuel Oil[2]
	Green	Air Dry	Air Dry	
Ash	48	3,440	20.0	204
Aspen	43	2,160	12.5	128
Beech, American	54	3,760	21.8	222
Birch, yellow	57	3,680	21.3	217
Elm, American	54	2,900	17.2	176
Hickory, shagbark	63	4,240	24.6	251
Maple, red	50	3,200	18.6	190
Maple, sugar	56	3,680	21.3	217
Oak, red	64	3,680	21.3	217
Oak, white	63	3,920	22.7	232
Pine, eastern white	36	2,080	12.0	123

[1] 50 to 60% efficiency of burning unit.
[2] 70% efficiency of furnace.

Variation of Heating Values of Wood Due to Moisture

– Per Cent of Moisture–	– Per Cent of Usable Heat –
0 (oven dry)	103.4%
4	102.7
10	101.6
20 Air-dried Hardwood	100.0 7,250 BTU*
40	96.5
80	89.7
100 (Green hardwood)	85.0

*BTU is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit.

Approximate Number of Trees per Cord for Peeled Pulpwood and Cordwood

Tree Diameter at 4½ Feet	Number of Trees
6"	25
7"	16
8"	12
9"	10
10"	8
11"	6
12"	5
14"	3
16"	2.5
18"	2
22"	1

Lumber (Square Edge)

The standard unit of measure for lumber is the board foot. It is equivalent to 1/12 of a cubic foot such as a board 12 inches by 12 inches and 1 inch thick.

Board foot measurements refer to rough lumber. Surfaced lumber is tallied on the basis of width and thickness before surfacing.

To calculate the board footage of lumber, for each piece multiply the width in inches by the thickness by the length in feet and divide by 12.

Example:

$$\frac{\text{6" wide x 2" thick x 16' long}}{12} = \text{16 board feet}$$

Board Foot Measure Contained in Lumber

Thickness and Width Inches	Board foot content Board length in feet					
	6	8	10	12	14	16
1 x 2	1	1-1/3	1-2/3	2	2-1/3	2-2/3
1 x 3	1-1/2	2	2-1/2	3	3-1/2	4
1 x 4	2	2-2/3	3-1/2	4	4-2/3	5-1/3
1 x 5	2-1/2	3-1/3	4-1/6	5	5-5/6	5-2/3
1 x 6	3	4	5	6	7	8
1 x 7	3-1/2	4-2/3	5-5/6	7	8-1/6	9-1/3
1 x 8	4	5-1/3	6-2/3	8	9-1/3	10-2/3
1 x 10	5	6-2/3	8-1/3	10	11-2/3	13-1/3
1 x 12	6	8	10	12	14	16
1¼ x 4	2-1/2	3-1/3	4-1/6	5	5-5/6	6-2/3
1¼ x 6	3-3/4	5	6-1/4	7-1/2	8-3/4	10
1¼ x 8	5	6-2/3	8-1/3	10	11-2/3	13-1/3
1½ x 4	3	4	5	6	7	8
1½ x 6	4-1/2	6	7-1/2	9	10-1/2	12
1½ x 8	6	8	10	12	14	16
2 x 4	4	5-1/3	6-2/3	8	9-1/3	10-2/3
2 x 6	6	8	10	12	14	16
2 x 8	8	10-2/3	11-1/3	16	18-2/3	21-1/3
2 x 10	10	13-1/3	16-2/3	20	23-1/3	26-2/3
2 x 12	12	16	20	24	28	32
2½ x 12	15	20	25	30	35	40
3 x 6	9	12	15	18	21	24
3 x 8	12	16	20	24	28	32
3 x 10	15	20	25	30	35	40
3 x 12	18	24	30	36	42	48
4 x 4	8	10-2/3	13-1/3	16	18-2/3	21-1/2
6 x 6	18	24	30	36	42	48

LUMBER SIZE TABLE

Nominal and Minimum-dressed Sizes of Boards, Dimensions and Timbers

(All Figures In Inches)

ITEM	THICKNESS			FACE WIDTHS		
	Nominal	Minimum Dressed		Nominal	Minimum Dressed	
		Dry	Green		Dry	Green
Boards*	1	3/4	25/32	2	1-1/2	1-9/16
				3	2-1/2	1-9/16
				4	3-1/2	3-9/16
				5	4-1/2	4-5/8
				6	5-1/2	5-5/8
				7	6-1/2	6-5/8
	1-1/4	1	1-1/32	8	7-1/4	7-1/2
				9	8-1/4	8-1/2
	1-1/2	1-1/4	1-9/32	10	9-1/4	9-1/2
				11	10-1/4	10-1/2
				12	11-1/4	11-1/2
				14	12-1/4	13-1/2
				16	15-1/4	15-1/2
Dimension	2	1-1/2	1-9/16	2	1-1/2	1-9/16
	2-1/2	2	2-1/16	3	2-1/2	2-9/16
	3	2-1/2	2-9/16	4	3-1/2	3-9/16
	3-1/2	3	3-1/16	5	4-1/2	4-5/8
				6	5-1/2	5-5/8
				8	7-1/4	7-1/2
				10	9-1/4	9-1/2
				12	11-1/4	11-1/2
				14	13-1/4	13-1/2
				16	15-1/4	15-1/2
Dimension	4	3-1/2	3-9/16	2	1-1/2	1-9/16
	4-1/2	4	4-1/16	3	2-1/2	2-9/16
				4	3-1/2	3-9/16
				5	4-1/2	4-5/8
				6	5-1/2	5-5/8
				8	7-1/4	7-1/2
				10	9-1/4	9-1/2
				12	11-1/4	11-1/2
				14		13-1/2
				16		15-1/2
Timbers	5 & Thicker		1/2 Off	5 & Wider		1/2 Off

*Boards less than the minimum thickness for 1 inch nominal but 5/8 inch or greater thickness dry (11/16 inch green) may be regarded as American Standard Lumber, but such boards shall be marked to show the size and condition of seasoning at the time of dressing. They shall also be distinguished from 1-inch boards on invoices and certificates.

Dry Sizes apply to lumber which has been seasoned or dried to a moisture content of 19 percent or less.

Green Sizes apply to lumber having a moisture content in excess of 19 percent.

Computing of Lumber Volume in Board Feet

Take the Lineal Feet and Multiply by the Contents of One Lineal Foot.

Size of Piece	Part of Foot per Lin. Ft.	Size of Piece	Part of Foot per Lin. Ft.
1x1	1/12	4x4	1-1/3
1x2	1/6	4x5	1-2/3
1x3	1/4	4x6	2
1x4	1/3	4x7	2-1/3
1x6	1/2	4x8	2-2/3
1x8	2/3	4x9	3
1x10	5/6	4x10	3-1/3
1x12	1	4x12	4
2x2	1/3	5x5	2-1/12
2x3	1/2	6x6	3
2x4	2/3	7x7	4-1/12
2x5	5/6	8x8	5-1/3
2x6	1	9x9	6-3/4
2x7	1-1/6	10x10	8-1/3
2x8	1-1/3	11x11	10-1/12
2x9	1-1/2	12x12	12
2x10	1-2/3	14x14	16-1/3
2x11	1-5/6	15x15	18-3/4
2x12	2	16x16	21-1/3
2x13	2-1/6	17x17	24-1/12
2x14	2-1/3	18x18	27
2x15	2-1/2	19x19	30-1/12
2x16	2-2/3	20x20	33-1/3
3x3	3/4	22x22	40-1/3
3x4	1	22x24	44
3x5	1-1/4	24x24	48
3x6	1-1/2	26x26	56-1/3
3x7	1-3/4	28x28	65-1/3
3x8	2	30x30	75
3x9	2-1/4	32x32	85-1/3
3x10	2-1/2	34x34	96-1/3
3x11	2-3/4	36x36	108
3x12	3		

Proposed Metric Sizes for Softwood Lumber

The U.S. metric sizes for softwood lumber were developed during 1975 by the American National Metric Council (ANMC) Subsector Committee on Softwood Lumber. A broad national cross section of the lumber industry was represented, including rules writing agencies, distributors, millwork manufacturers and other related organizations. These recommendations have been approved by the ANMC Sector Committee on Lumber and Wood Products.

Table 1. Dry Sizes at 19 Percent Maximum – Moisture Content

Item	Thicknesses			Face Widths		
	Nominal	Net	Metric, mm	Nominal	Net	Metric, mm
Finish	3/8"	5/16"	8	2"	1-1/2"	38
	1/2"	7/16"	11	3"	2-1/2"	64
	5/8"	9/16"	14	4"	3-1/2"	89
	3/4"	5/8"	16	5"	4-1/2"	114
	1"	3/4"	19	6"	5-1/2"	139
	1-1/4"	1"	25	7"	6-1/2"	165
	1-1/2"	1-1/4"	32	8"	7-1/4"	185
	1-3/4"	1-3/8"	35	9"	8-1/4"	210
	2	1-1/2"	38	10"	9-1/4"	235
	2-1/2"	2"	51	11"	10-1/4"	260
	3"	2-1/2"	64	12"	11-1/4"	285
	3-1/2"	3"	76	14"	13-1/4"	335
	4"	3-1/2"	89	16"	15-1/4"	385

Table 2. Sizes of Boards, Dimension and Timbers

Item	Thicknesses					Face Widths				
	Nominal	Net		Metric, mm		Nominal	Net		Metric, mm	
		Dry	Green	Dry	Green		Dry	Green	Dry	Green
Boards	3/4"	5/8"	11/16"	16	17	2"	1-1/2"	1-9/16"	38	39
	1"	3/4"	25/32"	19	20	3"	2-1/2"	2-9/16"	64	66
	1-1/4"	1"	1-1/32"	25	26	4"	3-1/2"	3-9/16"	89	91
	1-1/2"	1-1/4"	1-9/32"	32	33	5"	4-1/2"	4-5/8"	114	117
						6"	5-1/2"	5-5/8"	139	143
						7"	6-1/2"	6-5/8"	165	170
						8"	7-1/4"	7-1/2"	185	190
						9"	8-1/4"	8-1/2"	210	216
						10"	9-1/4"	9-1/2"	235	242
						11"	10-1/4"	10-1/2"	260	267
						12"	11-1/4"	11-1/2"	285	293
						14"	13-1/4"	13-1/2"	335	345
						16"	15-1/4"	15-1/2"	385	395
Dimension	2"	1-1/2"	1-9/16"	38	39	2"	1-1/2"	1-9/16"	38	39
	2-1/2"	2"	2-1/16"	51	52	3"	2-1/2"	2-9/16"	64	66
	3"	2-1/2"	2-9/16"	64	66	4"	3-1/2"	3-9/16"	89	91
	3-1/2"	3"	3-1/16"	76	78	5"	4-1/2"	4-5/8"	114	117
	4"	3-1/2"	3-9/16"	89	91	6"	5-1/2"	5-5/8"	139	143
	4-1/2"	4"	4-1/16"	102	104	8"	7-1/4"	7-1/2"	185	190
						10"	9-1/4"	9-1/2"	235	242
						12"	11-1/4"	11-1/2"	285	293
						14"	13-1/4"	13-1/2"	335	345
						16"	15-1/4"	15-1/2"	385	395