

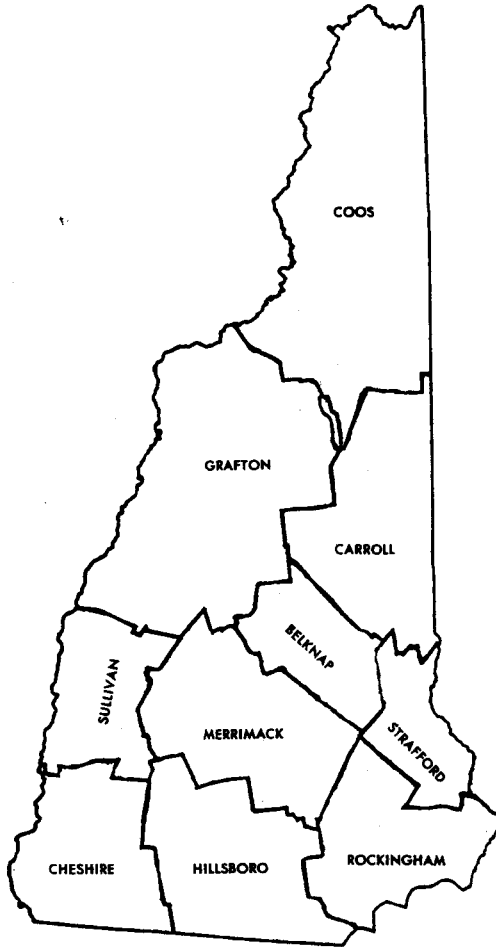
NEW HAMPSHIRE FOREST MARKET REPORT 1971



Good Forest Management Protects The Environment

**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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Published and distributed by the University of New Hampshire, Durham, N. H.,
S. W. Hoitt, Director of the Cooperative Extension Service, in furtherance of the
purposes provided for in the Acts of Congress of May 8 and June 20, 1914, the
United States Department of Agriculture cooperating.

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A GROWING FOREST AND WOOD PRODUCTS INDUSTRY CONTRIBUTE TO THE QUALITY OF ENVIRONMENT

Wood is a "flow" resource as contrasted with other basic materials which are "stock" resources. Wood is a perpetually renewable resource while others are exhaustible. To produce wood no irreplaceable ores or fossil fuels are required. Through the process of photosynthesis, the leaves and needles of trees remove carbon dioxide from the air, combine it with moisture from the soil using the energy of the sun to grow wood. In this everlasting process, oxygen is released to purify the air. While a properly managed forest is growing, it regulates water flow, shelters and feeds wildlife, provides man with a great number of products and offers a place of beauty for recreation and contemplation.

The bountiful positive contributions of the forest are available to man forever as long as sunlight falls on the earth's forests and as long as man recognizes the obligation to manage this unique resource wisely.

FOREST MARKET REPORT FOR 1971

INDUSTRY OUTLOOK

Softwood lumber consumption is expected to rise to 34.3 billion board feet in 1971, compared with 32.4 billion board feet this year. Hardwood lumber consumption is expected to increase to eight billion board feet next year, compared with an estimated seven billion board foot level this year.

New federal mortgage expansion programs enacted by the Congress have the potential of stimulating additional billions of dollars for home mortgage financing. The new federal programs — contained in the important Emergency Mortgage Credit Act—authorize innovative programs to tap additional credit resources for mortgage lending, both on an emergency basis and over the long term.

FORECASTS ALL OPTIMISTIC

Forecasts of 1971 housing activity are all optimistic. The Department of Commerce is forecasting a combined conventional and mobile home production of 1,935,000 units. The National Association of Home Builders foresees a total production of 2,020,000 units, and NFPA is predicting total new starts will be slightly more than 2,000,000 units. Much, however, will depend on the availability of mortgage credit.

The volume of new starts forecast for the balance of the 1970's, predictably, is very much on the upside. The Department of Housing and Urban Development projects peak housing activity of 2,950,000 units in 1975 and then a gradual tapering off through 1978. The National Association of Home Builders predicts housing starts and mobile home shipments will average about 2,240,000 units annually through 1975 and, in the last half of the decade, will average 2,780,000 units annually.

INCREASED LUMBER DEMAND EXPECTED

Based on projected increases in 1971 housing starts, a somewhat flat trend in non-residential construction and a small up-turn in the index of industrial production, domestic softwood lumber shipments should increase to 29.7 billion board feet next year from the 28.1 billion board feet expected in 1970. Domestic softwood lumber production in 1971 is estimated at about 29.5 billion board feet, an increase over the 28 billion board feet expected this year.

Hardwood lumber shipments also are expected to increase next year in line with predicted consumer expenditures for furniture, home furnishing and housing. An offsetting effect may develop from a sluggish industrial sector, but 1971 hardwood lumber shipments are estimated at 7.7 billion board feet, compared with 1970 shipments of 6.8 billion board feet.

Two significant reports, issued this past summer, emphasized the urgency of applying intensive forest management practices to these lands. The President's Task Force on Softwood Lumber and Plywood asserted that a supply-demand gap could be expected by 1974 and called

for immediate steps to increase forest management on federal lands and incentive programs to raise the level of timber growth in private woodlands.

The recommendations of the Public Land Law Review Commission to increase forest yields from National Forest lands supported the findings of the President's Task Force and testimony presented during five separate Congressional hearings on timber supply-demand problems.

MOVING FORWARD

A milestone in the annals of the American lumber standard was achieved September 1 of this year when the new standard for softwood lumber became fully effective. It marked the successful conclusion of a 10-year effort for an improved new softwood standard. In this it was successful. The new standard, for the first time, relates softwood lumber sizes to moisture content at the time of manufacture so that both seasoned and unseasoned lumber are uniform sizes in use.

The industry is also laying plans to launch a program to up-date its design and construction data to fully capitalize on the improvements of the new softwood standard. These efforts will be correlated with fire performance evaluations to assure acceptance of the new sizes under existing fire durability classifications and a review of all regulatory agency design criteria to ensure that wood markets remain open and competitive.

SHOULD BE HELPFUL

Of all the remedies suggested for stimulating the industrial economy, none seems to promise more speedy and substantial benefit than President Nixon's authorization of a faster tax write-off on equipment depreciation, and this is particularly true of the forest products industry.

Great advances are being constantly made in the design and efficiency of the machinery and equipment used in the production of lumber and plywood — including that now required for the reduction or elimination of air and water pollution. To keep up with the competitive procession, the present-day manufacturers of lumber and plywood must constantly endeavor to produce a better product at a lower cost, and the machinery manufacturers are just as constantly bending their efforts to help them accomplish this aim by making available equipment that will lower their costs and increase their efficiency.

To a great extent, the lumber manufacturer's ability to make the necessary investment in such cost-reducing aids is dependent on the rate of depreciation he is allowed to charge on his books. Accelerated depreciation should be a definitely helpful factor in many operators' decision regarding the purchase of needed new equipment.

RECOMMENDATIONS TO PERSONS SELLING TIMBER

New Hampshire woodland owners who plan to sell stumpage, logs, pulpwood, and other forest products are urged to consider the following recommendations before selling.

1. If you are in doubt as to whether you have enough of the right

sort of timber to attract a buyer and are interested in the sort of selective cutting operation that would benefit the remaining stand, contact the County Forester or a Consulting Forester.

2. Consider the possibility of retaining the services of a qualified forester to act as your agent in handling a timber sale in your behalf when you are not in the position to look after the details of a sale, such as marking the trees for cutting, negotiating a fair price for the marked trees, looking after the cutting operations, and making sure the terms of the contract or agreement are being followed. The names and addresses of Consulting Foresters that practice in New Hampshire are listed in this report.

3. Assuming you have enough timber to have selectively cut, find out what sort of operation would be involved — whether a thinning, or an improvement, or re-production, or harvest cut, or a combination of two or more of these.

4. Arrange to have the trees that are to be cut to be marked with paint or a blaze. If not in a position to do this yourself with help from the County Forester, hire a Consulting Forester for the purpose.

5. Find out from buyers of stumpage, logs, pulpwood, and other forest products the prices they offer in order that you may take advantage of the best market. Compare the local prices with those quoted from other sections of the state.

6. Thoroughly investigate all timber markets and prices since in many cases outside markets pay better prices than local markets because of special demands.

7. Before selling, consult your neighbors who have recently sold timber and use their experience as a guide. Ask your County Forester. In many instances, failure to do this has resulted in the woodland owner not getting full value of the product.

8. Advertise and secure competition among outside purchasers. The expense will be small and outside buyers will thus learn of chances to bid on timber in competition with local buyers.

9. Secure bids whenever possible, both by the lump sum sale based on closely estimated volume and by log scale measure. A choice is thus offered and a more profitable form of bid can be accepted.

10. Consider the responsibility of the prospective purchaser before making the sale in order to avoid slow payment, costly collections, and losses.

11. When there is quality timber to market, these trees are worth more than average or poor quality trees. Be sure the buyer takes the factor of tree quality into consideration when offering you a price for stumpage.

12. Remember that standing timber usually increases in values and generally can be sold at any time. The owner, therefore, is not obliged to place his produce on the market, if the price offered is not satisfactory. Sell only trees that should be cut. These trees should be marked by the owner or his agent with the help and advice of a qualified forester. Reliable operators will make partial cuttings by taking only the market trees, if the owner insists.

13. A written timber sale agreement between buyer and seller is more important before cutting starts on a lot. Sample sale agreement forms to fit different kinds of operations can be obtained from your County Forester.

ASSISTANCE RENDERED BY THE 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, 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. Under the provisions of the Rural Environmental Assistance Program, the Federal Government shares the cost of woodland improvement and tree planting with woodland owners. Your County Forester can provide you with the information about the cost-sharing programs.

1971 PRICE RANGE FOR FOREST PRODUCTS

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

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

Belknap County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Medium	\$15-22	\$30-32	\$45-55
	High	22-30	32-36	55-60
Hemlock and Spruce	All grades	10-16	26-32	38-45
Red Oak	Low	10-12	26-32	40-42
	Medium	12-16	30-36	45
	High	16-20+	36+	55-120
White Birch and Yellow Birch	Low	10-12	26-32	38-42
	Medium	12-20	32-40	45-65
Rock Maple	High	20+	40+	75-125
	Low	10-12	26-32	38-42
	Medium	12-20	32-40	50-75
Beech	High	20+	36+	75-100
	Medium to High	8-12	26-32	40-60
White Ash	Low	10-12	26-32	40-42
	Medium	12-20	30-40	45-55
	High	20+	40+	65-75
Mixed Hardwoods		6-12	26-32	36-42

Carroll County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	\$10-15		\$40-50
	Medium	15-25	\$30-40	50-60
	High	25-35	40-55	60-70
Hemlock	Medium	10-18	30-35	40-45
	High	18-25	35-40	
Spruce	Low	15	25	
	Medium	18	25-30	55
	High	24	35-45	60
Ash	Medium	15-30	40	60
	High	40	50	70
Basswood		8		35-70
Beech	Low	6		
	Medium	15	25	45
	High	20	35-40	65
Beech-Boltwood				25-32/cord
Red Maple	Low to High	7-12	20-30	50
Sugar Maple	Low	15	25-30	50
	Medium	30	40-50	90
	High	40	70	140
Sugar Maple Boltwood				20-32/cord
Paper Birch	Low	15-25		65
	Medium	25-45	50	80-90
	High	45-70	80	100-140

Carroll County (Continued)

Species	Quality	Stumpage	Roadside	Delivered
Paper Birch Boltwood		10-15/cord	30-35/cord	40-46/cord
Yellow Birch	Medium	45		110
	High	70		175
Oak	Medium	15-20		45-60
	High	20-30		65-70

Cheshire County¹

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low to Medium	\$10-15	\$30-35	\$35-45
	Medium to High	15-22	35-42	45-55
Hemlock	Low to Medium	10-15	30-35	36-45
	Medium to High	15-20	35-40	45-50
Spruce	Low to Medium	10-15	32-35	40-45
	Medium to High	15-20	35-40	45-50
Red Oak	Low to Medium	15-20	30-40	50-60
	Medium to High	20-30	40-60	60-70
Yellow (Silver) Birch	Low to Medium	15-20	30-35	50-60
	Medium to High	20-30	35	60-80
Paper (White) Birch	Low to Medium	15-20	30-35	50-60
	Medium to High	20-30	35-45	60-90
Sugar (Rock) Maple	Low to Medium	15-20	30-35	50-60
	Medium to High	20-30	35-50	60-75
Red (Soft) Maple	Low to Medium	10-15	28-35	40-45
	Medium to High	15-20	35-40	45-50
Beech	Medium to High	10-20	25-30	35-50
White Ash	Low to Medium	(Not purchased separately except as logs)		45-60
	Medium to High			60-130

¹ Prices for Brattleboro-Vernon Vermont areas are also included.

Coos County

Species	Quality	Stumpage	Roadside	Delivered
SAWLOGS				
White Pine	Low	\$15		\$40-50
	Medium	18		45
	High	25	\$40	60-70
White Spruce	Low	15	55	50-55
	Medium	15	55	60
	High	15-25	55	65-70
Red Spruce	Low	15	55	50-55
	Medium	18	55	60
	High	18-20	55	65-70
Hemlock	Low	8		
	Medium	8		
	High	8		43
Balsam Fir	Low	15	55	50-65
	Medium	15	55	60-66
	High	18	55	67-70
Hard Maple	Low			40
	Medium	25		70-75
	High			80-105

Coos County (Continued)

Species	Quality	Stumpage	Roadside	Delivered
Soft Maple	Low	10		
	Medium			60
	High			80
White Birch	Low	20		60
	Medium			
	High			100
Yellow Birch	Low	25	109	60-80
	Medium			110
	High			120-160
White Ash	Low	20		45-90
	Medium			115
	High			105-160
White Cedar (over 6" DBH)				
6' to 10' lengths		10	32	40
12' to 16' lengths		10	35	42-47
6' logs by the cord			21	33
VENEER				
Yellow Birch	Low			\$110
	Medium			210
	High			315
Red Oak	Low			100
	Medium			110
	High			135
White Birch	Low			110
	Medium			135
	High			175

Grafton County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Medium	\$10-16	\$35-40	\$40-50
	High	15-25	38-48	45-60
Hemlock	Average	10-20	30-40	36-45
Spruce	Average	15-25	35-48	45-60
Yellow Birch	Sawlog	15-25	35	50-125
	Veneer	25+	45+	125-335
Sugar or Hard Maple	Sawlog	10-25	35-45	50-100
	Veneer	20+	45+	100-150
White Birch	Sawlog	12-30	35-45	50-125
	Veneer	20+	45+	100-150
Soft (Red) Maple	Sawlog	5-12	30+	32-60
Red Oak	Sawlog	10-16	30-40	40-90
	Veneer	20+		60-120
Beech	Sawlog	5-15	30-40	38-60
	Veneer	15+		60-90
White Ash	Sawlog	12+		65-160
Basswood	Sawlog	10-15	30-40	40-50
	Veneer	20+		60-140
Pallet Logs	Mixed Hardwood	10-20	25-38	40-50

Hillsboro County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	\$10	\$28	\$35
	Medium	17	35	45
	High	25	40	55
Hemlock	Low	8	25	35
	Medium	14	30	40
	High	17	34	45
Red Oak	Low	10	25	35-45
	Medium	18	35	45-55
	High	25	45	55-70
Other Hardwoods Birch, Maple, Ash Mixed Hardwood, (Pallet Stock)	Low	8	25	36-45
	Medium	12	30	42-70
	High	18	35	47-100
	Logs			35-45

Merrimack County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	\$ 8-15	\$30-40	\$35-45
	Medium	15-18	40-45	45-50
	High	20-30	45+	50+
Hemlock	Low	10	25-30	35
	Medium	12	30-35	35-45
	High	14+	35+	45+
White Birch	Medium	16-25	50	60-80
	High	25-50	50-90	90-100
Hard Maple	Medium	16-25	50	50-70
	High	30-50	50-90	90-100
Yellow Birch	Medium	25+	50	50-70
	High	30-50	50-90	90-100
Red Oak	Medium	12-25	35-50	50-70
	High	25-50	40+	70-80
Mixed Hardwood (Pallet Stock)	Logs	5-12	28-35	35-45

Rockingham County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	\$ 8-11	\$28-32	\$35-42
	Medium	12-17	32-38	42-50
	High	18-29	38+	50+
Hemlock	Medium	10-14	30-35	38-45
	High	15-18	35+	45+
Oak	Medium	12-17	32-38	42-52
	High	18-25	38+	52+
Other Hardwoods	Low	8-12	25-30	35-90
	Medium	13-17	30+	40+
	High	*		

* Higher prices are paid for white birch, yellow birch, sugar maple, and white ash when the grades are suitable for specialty items such as boltwood and veneer logs.

Strafford County²

Species	Quality	Stumpage	Roadside	Delivered
White Pine ³	Low	\$10-15	\$30-36	\$32-40
	Medium	12-20	32-38	40-45
	High	20-28	40-45	50-55
Hemlock and Spruce	Low	10	28	35-38
	Medium	15	38	38-44
	High	20	42	48
Yellow Birch ¹				
White Birch ¹				
Sugar Maple ¹				
Soft Maple	Low	8	32	38
Red Oak ¹	Medium	12	34-38	40-45
White Oak	High	18	36-44	42-50
Beech				
White Ash ¹				
Basswood ¹				

¹ Higher prices are paid for these species when the grades are suitable for specialty items such as boltwood and veneer logs.

² Prices based on either International rule or sawmill tally of square edge lumber.

³ Occasionally higher prices paid for select logs.

Sullivan County

Species	Quality	Stumpage	Roadside	Delivered
White Pine	Low	\$12-16	\$31-38	\$40-45
	Medium	15-18	35-40	46-50
	High	20-22	38-42	48-55
Hemlock	Medium	12-15	30-35	40-45
	High	14-18	34-38	44-48
Spruce	Medium	15-16	35-40	45-50
	High	18-20	40-42	48-55
Yellow Birch	Medium	20-25	40-55	50-70
	High	25-35	45-70	55-90
White Birch	Medium	20-22	40-45	50-60
	High	25-30	45-60	55-75
Sugar Maple	Medium	20-25	40-55	50-70
	High	25-45	45-70	55-90
Red Oak	Medium	20-25	40-45	50-60
	High	25-30	45-50	55-70
White Ash	Medium	20-30	40-50	50-65
	High	25-45	45-65	55-85
Beech	Medium	10-20	30-40	40-55
	High	14-25	34-45	44-60
Other Mixed Hardwoods		10-14	30-34	40-44

Table II. Prices Pulpwood Per Cord — Northern New Hampshire¹

Species	Stumpage	Roadside	Mileage Zone	Mill Yard
Spruce and Fir Rough	\$3.00-6.00	\$14.50-18.50	0-20 21-40 41+	\$21.75 22.00-23.00 26.00 17.00-18.00
White Pine	1.00-2.00			
Hemlock				
Tamarack	1.00-3.00		0-20	19.00
Red, Pitch			21-40	20.00
Scotch Pine			41+	21.50
All Hardwood	1.50-2.00			18.00-22.50
Poplar (if scaled)	.50-1.00			15.00

Prices of Pulpwood Per Cord — Southern New Hampshire¹

Species	Stumpage	Roadside	Delivered at Mill
Softwood Rough			\$7.00/Ton
Hardwood Rough	\$2.00-3.00		6.00/Ton

¹ When buying pulpwood by weight: 5600 lbs. equals one cord in hardwoods and 4800 lbs. equals one cord in softwoods.

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

	Delivered to Chipping Plant
Softwood ¹ (mixed)	\$5.25-7.00
Hardwood (mixed)	5.00-6.50 ²

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 Per Cord¹

	Scheduled Deliveries of Chips Produced from Roundwood ²	Produced from Slabs and Edgings Delivered to Pulp Mill ²
Pine and Hemlock		\$20.00-23.50
Spruce and Fir	\$25.00-28.00	22.00-27.00
Hardwood (mixed)	24.00-27.00	20.00-27.00

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
and Railroad Cross Ties**

Species	Stumpage	Roadside	Delivered at Mill
Excelsior Wood Per Cord			
Poplar Peeled Rough			\$22.00- 28.00 18.00
Boltwood Per Cord¹			
White Birch	\$8.00-15.00	\$20.00-30.00	30.00- 45.00 per Cord 60.00-105.00 per Mbf.
Beech			20.00- 38.00 per Cord 45.00- 60.00 per Mbf.
Sugar Maple			20.00- 38.00 per Cord 60.00-100.00 per Mbf.
Yellow Birch and Black Birch	8.00-12.00		30.00- 45.00 per Cord 60.00-105.00 per Mbf.
Mixed Hardwood (pallet)	2.00- 5.00	10.00-15.00	18.00- 25.00 per Cord

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

Posts

Species	Top Diameter	Stumpage	Roadside Price (per post)
Red (Norway Pine) and Pitch Pine			
	8"	\$.40	\$1.00
	6"	.10	.50
	3-6"	.01	.35

Railroad Cross Ties

Grade	Size	Rail Bearing Face	Prices Paid for Green Mixed Oak and Hardwood ¹ Ties (loaded at Mill)	
No. 1	(6"x6"x8'6")	6"		MBF
No. 2	(6"x7"x8'6")	7"	\$1.45	\$48.86
No. 3	(6"x8"x8'6")	8"	2.00	67.40
No. 4	(7"x8"x8'6")	8"	2.70	79.38
No. 5	(7"x9"x8'6")	9"	3.50	88.34
			3.80	85.12

¹ Beech, Birch, Maple, Cherry, Oak, Ash, Hickory.

Table V. Price Range of Fuelwood Per Cord

Species	Stumpage	Roadside	Delivered Buyers Premises
Hardwood ¹			
4' Wood	\$1.00-3.00	\$12.00-20.00	\$20.00-34.00
12", 14", 16", Lengths		18.00-22.00	20.00-45.00
Slabs		5.00-20.00	16.00-25.00

Fireplace white birch will be slightly higher than above when bought in bundles.

Prices range up to \$60.00 + 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%).

¹ 3.00-8.00 asked for sawing 4' wood into stove length.

Table VI. Price Range of Sawdust and Shavings and Bark

	Per-Cord Green at Sawmill	Per Bale Air Dry
Sawdust	\$2.00-5.00	
	or \$.02 to .06 per cubic foot	
Shavings	2.00-5.00	\$1.00
	or \$.02 to .04 per cubic foot	
Bagged Dry Shavings		\$.35/Bag
Bark	\$.02 per cubic foot (loaded)	
	1.00-6.00 per yard (loaded)	

Table VII. Operating Costs (Contract Prices)

	Felling and Bucking per Mbf	Yarding per Mbf	Trucking ^{3/4} per Mbf
Logs			
Softwood ¹	\$ 6.00-13.00	\$ 6.00-15.00	\$ 5.00-15.00
Softwood ²	8.00-10.00	6.00-11.00	8.00-15.00
Hardwood ¹	6.50-13.00	7.00-18.00	6.00-25.00
Hardwood ²	8.00-12.00	8.00-14.00	9.00-24.00
Pulpwood	per cord	per cord	per cord
Softwood ¹	\$ 7.00- 9.00	\$ 2.00- 4.50	\$ 3.00- 7.00
Hardwood ¹	6.50- 8.50	2.50- 6.00	4.00- 8.00
Hardwood ²	6.50- 9.00	4.00- 6.00	4.00-11.00
Fuelwood	6.00- 9.00	4.00- 6.00	
Lopping Tops (for aesthetics)		\$1.00-2.00/Mbf	
Horse Rental	\$ 1.00 per cord if the jobber feeds the animal.		
	\$ 1.50- 2.00 per cord if the chopper feeds the animal.		
Twitching Stump to Roadside	8.00- 9.00 per cord, horse furnished.		
Chain Saw Rental	0.50- 2.00 per hour.		
Man with Chain Saw	4.00- 5.00 per hour		

Table VII. Operating Costs (Contract Prices) (Continued)

Stickings	4.00- 5.00 square edge hardwood lumber per Mbf.
	3.00- 4.00 round edge softwood lumber per Mbf.
Custom Sawing	20.00-35.00 per Mbf for softwoods or \$15-20 per hour.
	10.00-15.00 more per Mbf for hardwoods.
Planing	10.00-15.00 per Mbf one face or \$6.00-10.00 per hour.
	15.00-20.00 per Mbf two faces or \$6.00-10.00 per hour.
Resawing	6.00- 8.00 per Mbf, per cut.

¹ For Northern New Hampshire.

² For Southern New Hampshire.

³ Intra-state and inter-state rates are sometimes used.

⁴ There are no established I.C.C. rates for trucking sawlogs and pulpwood. Rates are determined between the trucker and the party wanting the logs hauled on the basis of mileage involved. Average hauling prices are as follows:

Trucking Costs

		Truck	Truck with Loader
Logs	0- 30 miles	\$ 5.00- 8.00 per Mbf	\$15
	30- 50 miles	8.00-12.00 per Mbf	20
	50- 85 miles	12.00-19.00 per Mbf	25
	85-100 miles	19.00-22.00 per Mbf	30
Pulpwood	0- 15 miles	3.00 per cord	
	15- 30 miles	3.00- 4.00 per cord	
	30- 40 miles	4.00- 5.00 per cord	
	40- 60 miles	5.00- 8.00 per cord	
		or .11 per loaded mile per cord plus \$1.01 for standby, delay and unload.	

Note: (Using Forest Service Information from White Mountain National Forest)

Table VIII. Wholesale Rough Air Dried Price
for Graded Eastern White Pine¹

D. Select and Btr.	No. 1 and No. 2 Common	No. 3 Common	No. 4 Common
1x3	\$215	\$170	\$125
1x4	215	170	125
1x5	215	170	125
1x6	250	175	130
1x7	220	175	130
1x8	250	175	130
1x9	230	175	130
1x10	305	175	130
1x11	305	175	130
1x12	345	195	135
$\frac{3}{4}$ to $\frac{3}{4}$ — No. 2 and No. 3 and D select		Add \$5 per M	

**Table VIII. Wholesale Rough Air Dried Price
for Graded Eastern White Pine¹ (Continued)**

D. Select and Btr.		No. 1 and No. 2 Common	No. 3 Common	No. 4 Common				
Rough Air Dried Native Hemlock								
Boards			6'	8'	Dimensions			
					10'	12'	14'	16'
1x3	\$75							
1x4 & 1x5	75	2x3 & 2x4	\$55	80	80	80	80	80
1x6 & 1x7	80	2x6 & 2x8	55	80	80	80	80	80
1x8 & up	85	2x10	55	80	80	80	80	80

¹ Prices may vary somewhat from those quoted depending on market and quantities.

**Table IX. Wholesale Price List for White Pine Lumber per MBF
at a New Hampshire Lumber Yard¹**

Dressed 1, 2 or 4 sides, Matched or Novelty Siding

Grades	D Select and Better (Clear)	No. 1 and No. 2 Common	No. 3 Common	No. 4 Common
1x4	\$235	\$190	\$145	\$ 90
1x6	270	195	145	95
1x10	285	195	145	110
1x12	325	215	145	110

Single Clapboard Siding — 1x5 only — add \$5 per M

Double Clapboard Siding — 1x8 — No. 3c — add \$5 per M

V Joint, Knotty Pine. No. 2 and No. 3 — add \$5 per M

Pickwick Pattern — No. 3 Knotty Pine — \$150

Eastern Hemlock				Dimensions			
Boards			6'	8'			
					10'	12'	14' 16'
1x3	\$ 90	2x3	\$70	95	95	95	95
1x4	90	2x4	70	95	95	95	95
1x5	90	2x6	70	95	95	95	95
1x6 & 1x7	95	2x8	70	95	95	95	95
		2x10	70	95	95	95	95
1x8 & up	100						

¹ Retail prices \$35-50 more than wholesale.

Table X. Wholesale Price Range of Christmas Trees and Boughs¹

	Stumpage		Roadside	
	Single	Bundle	Single	Bundle
Pasture Run (unimproved)				
Balsam Fir	\$.35- .50	\$1.75-3.50	\$.60- .90	\$2.25-4.75
Spruce	.25- .35	1.25-2.50	.45- .75	1.75-3.00
Improved (but not sheared)				
Balsam Fir			1.25-1.75	2.75-5.50
Spruce			.60- .90	2.00-3.50
Sheared				
Balsam Fir			1.75-4.25	3.50-6.00
Spruce			1.50-2.50	3.00-5.00
Boughs		Per Bundle	Per Ton	
Balsam Fir (tied)		1.00-1.80	\$40.00-72.00	
Balsam Fir (baled)		1.50-2.00	60.00-90.00	
Spruce (tied)		.80-1.25	32.00-50.00	
Spruce (baled)		1.25-1.50	50.00-60.00	

¹ Producers should contact buyers well in advance of cutting and arrange for deposits and specific prices, and use a written contract.

Table XI. Retail Price Range of Single Christmas Trees

(Select and cut your own)	
Scotch Pine	} \$2.00-7.00 or \$.50-.75 per lineal foot
Balsam Fir	
White Spruce	
Douglas Fir	
Norway Spruce	

Companies and Individuals Buying Standing Timber and Logs and Doing Custom Sawing

Listed by County and Town

Names of buyers listed in this bulletin are those who have indicated to the County Foresters that they are in the market now or at a later date to purchase one or more of the following: stumpage, logs, pulpwood, bolts, excelsior wood, pilings, posts, and other forest products. Many buyers and operators will give a preference to owners in the purchases of forest products who are interested in harvesting forest products from their holdings in accordance with cutting practices recommended by a County forester or a private forester. Owners can well consider giving options for further cuts to operators who will make partial cuttings in stands operated according to good forest management.

The following abbreviations are used:

SW - Softwood	HW - Hardwood	Stump - Stumpage
Road - Roadside	Cus. - Custom Sawing	Del. - Delivered at mill
P - Portable	S - Stationary	B - Buyer only
		L - Logger

Names of forest products buyers, and other persons listed are offered without recommendation or preference. Omission is not a reflection on the integrity of any person. A list of registered sawmills and of secondary processors is available from the Department of Resources and Economic Development, Concord, New Hampshire.

Belknap County

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Belmont</u>						
Contigiani Lumber Co. LaPlante, Albert L. Tilton, N. H.	S	SW & HW	X	X	X	X
Dickinson Lbr. Corp. Dickinson, John Box 696, Laconia		SW & HW	X	X	X	X
Dawson, Robert RFD 1, Barnstead	S	SW & HW	X	X	X	X
Potter, Robert RFD 1, Barnstead	S & L	SW & HW	X	X	X	X
<u>Laconia</u>						
Allen-Rogers Corp. Water St., Laconia	B	HW- -Boltwood	X		X	
Banfill, Ernest 500 Union Avenue Laconia	B & L	SW & HW -Oak Piling	X			

Belknap County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
Dow, Harry RFD 3 Laconia	S	SW & HW	X			X
<u>Tilton</u>						
Daniels, Thomas G.	S	SW & HW	X	X	X	

Carroll County

Bartlett

Kearsarge Peg Co., W. F. Hodgins and S. E. Davidson, Jr.	S	Birch Bolts	X		X	
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Conway

Conway Supply Co., Inc. A. Kenneth Lucy	S	SW	X		X	
Cummings, C. B. & Sons c/o Howard Young, Sr.	S	HW Boltwood			X	
Garland, Roger North Conway	B & L	SW & HW	X	X	X	
Heath Brothers Center Conway	B & L	SW & HW	X			
Geo. W. and Noyes K. Heath	B & L	SW & HW	X			X
Morrill, Brewster Oak St., N. Conway	B & L	SW & HW	X			
North Conway Lumber Co. North Conway	S	SW & HW	X		X	
Valladares, Ricardo Box 188 Conway	B & L	SW & HW	X			

Glen

Parker, John E.	B & L	SW & HW	X	X	X	
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Jackson

Dundee Mgmt. Corp. Mack Beal Box 101, Jackson	B & L	SW & HW	X			
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Moultonboro

Cannuli, Frank RFD 1 Center Harbor	B & L	SW & HW	X			
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Carroll County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Ossipee</u>						
Marsh, Raymond Box 117 West Ossipee	B & L	SW & HW	X			
Portland Dowel Co., Inc. Center Ossipee Fred P. Greenwood	S	HW Bolts	X	X	X	
New England Lumber Co., Inc. Box 126 West Ossipee Earl W. Chandler	S	SW & HW	X		X	
Welch, Austin E. West Ossipee	B & L	SW & HW	X		X	
<u>Sanbornville</u>						
Hill, Wallace F.	B & L	SW & HW	X			
Rouleau, Samuel	B & L	SW & HW	X			
<u>Sandwich</u>						
Chocorua Valley Lbr. Co. North Sandwich, and Lake Street Bellingham, Mass.	S	SW & HW	X	X	X	
<u>Tamworth</u>						
Bickford Logging Bickford, Fred M., Jr. South Tamworth	B & L	SW & HW	X			
Hammond, Roy Tamworth	B & L	SW & HW	X	X	X	
Saunders Brothers c/o Elton Perkins South Tamworth	B & L	Birch Bolts & HW	X	X	X	
Rowe, Ernest Tamworth	S	SW & HW	X	X	X	
Thomas, Bruce Tamworth	B & L	SW & HW	X	X	X	

Cheshire County

<u>Alstead</u>						
Blanchflower Lbr. Corp. P.O. Box 235	S	SW & HW	X		X	
<u>Chesterfield</u>						
Stone, D. S. Lumber Co. RFD 1, Keene	S	SW & HW			X	X

Cheshire County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Fitzwilliam</u>						
Damon, Clayton	S	SW & HW	X	X	X	X
Tommila Bros.	S	SW & HW	X		X	
<u>Gilsum</u>						
Lackey, Frank RFD, Keene	B & L	SW & HW	X			
Duffy, Arthur Gilsum	B & L	SW & HW	X			
Prevost, David, Jr. Box 183, Gilsum	B & L	SW & HW	X			
<u>Marlborough</u>						
Beauregard, Chas & Sons, Inc. P.O. Box 395	S	SW & HW	X	X	X	X
Miner, Theodore Roxbury Road Marlborough	B & L	SW & HW	X			
<u>Swanzy</u>						
Lane, C. L. Company East Swanzy	S	SW & HW	X	X	X	
Frazier Furniture Co. West Swanzy	S	HW			X	X
<u>Troy</u>						
Starkey, Eugene	P	SW & HW	X			
<u>Walpole</u>						
Damaziak, K. Felix	S	HW	X	X	X	X
<u>Winchester</u>						
New England Lbr., Co. Box 124	S	SW & HW	X		X	
Prouty, Leonard Old Chesterfield Road	B & L	SW & HW	X			
Hildreth, C. H. & Son	S	SW & HW	X	X	X	X

Coos County

Berlin

White Mt. Lbr. Co., Inc. East Milan Road	S	SW			X	
White Mountain Woodcraft Boucher, George, Buyer E. Milan Road	S	SW & HW			X	

Coos County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Colebrook</u>						
Weir, Harlie	B	HW & SW			X	
<u>Dalton</u>						
Saunders Bros. Clifford Wentworth, Buyer RFD, Whitefield	S	HW	X	X	X	
<u>Groveton</u>						
Crawford, Wilson	S	HW	X		X	
C. B. Cummings & Son, Co.	S	HW	X		X	
<u>Lancaster</u>						
Alden, Clayton M. RFD No. 1	S	HW	X	X	X	
Alden, Harold B. RFD No. 1	S	SW			X	X
Placey, George RFD No. 1	S	SW			X	X
<u>Milan</u>						
Audet Bros.	S	SW			X	X
<u>North Stratford</u>						
Allied Wood Products Gary Black	S					
Washburn Lumber Co. Reuben Washburn, Buyer	S	SW & HW	X	X	X	
<u>Shelburne</u>						
Poretta Lumber Co.	S	SW			X	
<u>Whitefield</u>						
Miles Pond Wood Products, Inc.	S	HW	X	X	X	
Saunders Brothers Raymond Bartlett, Buyer Box 67	B	HW			X	

Grafton County

<u>Ashland</u>						
Concord Lbr. Co.	S	SW & HW	X	X	X	X
<u>Benton</u>						
Page Hill Farms Pike, N. H.	S	SW			X	X

Grafton County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Bristol</u>						
Williams, R. P. & Son	S	SW & HW	X	X	X	
<u>Campton</u>						
North American Rockwell Corp. Draper Div. Beebe River	S	SW & HW	X	X	X	
<u>Canaan</u>						
Roberts Lbr. Co.	S	SW & HW	X	X	X	X
<u>Hanover</u>						
Lacoss, Niles	S	SW	X	X	X	X
<u>Haverhill</u>						
Grafton Tree Farm Service Pike	L	SW & HW	X			
Heberbrand, Arthur D. (N. Haverhill)	S	SW & HW		X	X	X
Newman Lbr. Co. & Transit Milling Co. Woodsville		SW	X	X	X	
Northeast Hardwoods, Inc. N. Haverhill		HW	X	X	X	
<u>Landaff</u>						
Davis, Jack RFD, Lisbon	S	SW & HW				X
<u>Lebanon</u>						
Brown, P. K.	S	HW	X	X	X	
<u>Lincoln</u>						
Franconia Paper Corp.	B & L	SW & HW	X			
<u>Lisbon</u>						
Profile Lumber Co.	S	SW & HW	X	X	X	
<u>Littleton</u>						
Poulson Lumber Co.	S	SW & HW	X	X	X	
Crowe, Luther	B & L	SW & HW	X	X		
Schoff, Arthur	S	SW & HW	X	X	X	
Timber Products Laurence Bean	S	HW				X
Little, Raymond	B	SW & HW	X			

Grafton County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Orford</u>						
Tatham, Donald A.	B & L	SW & HW	X			
<u>Plymouth</u>						
Ireland Lumber Co.	S	SW & HW	X	X	X	X
Whitman Division USM Corporation	S	HW			X	
Roy, Thomas	B	SW & HW	X			
<u>Rumney</u>						
Keniston, Raymond	S	SW & HW	X	X	X	X
<u>Warren</u>						
Whitcher, Kenneth	S	SW & HW	X	X	X	X
<u>Wentworth</u>						
Allen Rogers, Corp.	S	HW			X	
King, John M.	B & L	SW & HW	X			
Hillsboro County						
<u>Amherst</u>						
Cohverse & Peaslee c/o Max Sherburne Tyngsboro, Mass.	S	SW & HW	X			X
<u>Bennington</u>						
Durgin, John D. RFD, Antrim	P	SW & HW	X	X	X	
Low, Forest	S	SW				X
<u>Brookline</u>						
Tapley, Wm. Lunenburg, Mass.	S	SW & HW	X	X	X	
<u>Goffstown</u>						
Goffstown Building Supply Co.	S	SW & HW	X			
Hebert Lucien Route 4, Box 208 Manchester	P	SW & HW	X			
<u>Hollis</u>						
Woods, Arthur Hollis	S	SW			X	X
Stateline Lbr. Co. Box 35, Nashua	S	SW & HW	X	X	X	
<u>Hudson</u>						
Esty, Ralph Upstock Road Georgetown, Mass.	P	SW & HW	X			

Hillsboro County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Lyndeboro</u>						
Riley Bros. c/o Peter Riley 47 Elm St., Milford	S	SW & HW	X	X	X	
Birch, Joseph RFD No. 1 Old Mountain Rd.	S	SW & HW	X	X	X	X
<u>Milford</u>						
Hopkins, John, Jr.	S	SW			X	X
Lorden Lbr. Co.	S	SW & HW	X		X	
Matson, Theodore	P	SW & HW	X	X	X	
Whitten, Chester	S	SW	X	X	X	
Wilkins, Harold, Jr. Amherst, N. H.	S	SW	X	X	X	X
<u>New Ipswich</u>						
Dudar, John Box 56, RFD No. 1	S	SW & HW	X	X	X	X
<u>Weare</u>						
Colburn, Robert	S	SW				X
Merrimack County						
<u>Andover</u>						
Dalphond Bros., Inc. RFD No. 1	S	SW & HW	X	X	X	X
<u>Boscawen</u>						
Colby Lumber Co. Box 146, Penacook	S	SW & HW	X	X	X	X
Durant, Herbert B. 164 N. Main St. Penacook	S	SW & HW		X	X	X
Bailey, Wm. G., Jr. R. 5, Penacook	B	SW & HW	X			
Steenbek & Sons, Inc. RFD No. 5, Penacook	S	SW	X		X	
<u>Chichester</u>						
Reed, Edgar	P	SW	X			
<u>Concord</u>						
Concord Lumber Co. Box 469	S	SW	X	X	X	X

Hillsboro County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Franklin</u>						
Dickinson, Elbert E. Pleasant St.	B	SW & HW	X			
<u>Henniker</u>						
Buxton, F. H.	B	SW & HW	X	X		
Goss Lumber Co.	S	SW	X		X	
Henniker Lumber Co., Inc.	S	SW & HW	X	X	X	
Patenaude, Barry Rush Road	S	SW & HW	X	X	X	
Thelvicki Corp. Henniker, N. H. Thomas Johnson, Buyer	B	HW	X	X	X	
Henniker Hardwood Pallet Co., Inc. Richard French, Mgr.	S	HW	X	X	X	X
<u>Hill</u>						
Robie, Robert	S	SW & HW	X	X	X	
<u>Loudon</u>						
Berwick & Ford Lumber Co., Inc. 6 Grove St., Concord	S	SW & HW	X			
Maxfield, Ralph H. Box 30	S		X	X	X	X
<u>New London</u>						
Messer, J.	B	SW & HW	X			
Page Lumber Co. RFD No. 8, Concord	S	SW & HW	X	X	X	X
<u>Pittsfield</u>						
Barton Bros.	P & S	SW	X	X	X	
Pittsfield Box & Lumber Co.	P	SW	X			
<u>Salisbury</u>						
Prince, Raymond	B	SW & HW	X			
<u>Sutton</u>						
Meding, Stephen Y. Enterprises RFD, New London	S	SW & HW	X	X	X	X

Hillsboro County (Continued)

Town & Operator	Type of Sawmill	Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Warner</u>						
Nichols, L. Earl	S	SW			X	
<u>Webster</u>						
Jones, Paul S. RFD, Contoocook	B	SW & HW	X			
Rockingham County						
<u>Atkinson</u>						
Feuer, Martin M. Main Street	S	SW & HW	X	X	X	
<u>Brentwood</u>						
Lyford, Lawrence E. RFD No. 2, Exeter	L & B	SW	X			
<u>Candia</u>						
Perkins, Fletcher East Candia	P	SW & HW	X			
<u>Chester</u>						
Lewis, Richard D. Route 2, Box 15A	L & B	SW & HW	X			
<u>Deerfield</u>						
Mathes, Roger V.	P	SW	X			
<u>Derry</u>						
Concord Lbr. Co. John Saturley P.O. Box 469 Concord, N.H.		SW		X	X	
Kelly, Lester	B		X	X		
True & Noyes East Derry Contact: Richard M. True	S	SW & HW	X	X	X	
<u>East Kingston</u>						
Sargent Lumber Co. Bear Hill Road Merrimac, Mass.	S	SW & HW	X		X	
<u>Epping</u>						
Johnson Lumber Co., Inc. 875 Elm Street Manchester, N.H.	P & S	SW	X		X	

Rockingham County (Continued)

		Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Fremont</u>						
Spaulding & Frost Co. Edward Jewett Vice President and General Manager	S	SW	X	X	X	
<u>Kensington</u>						
Brown, Everett W. RFD, East Kingston	L & B	SW	X			
Cole, George RFD, East Kingston	S	SW				X
<u>Kingston</u>						
Cheney, R. W. & Son RFD, East Kingston	S	SW	X		X	
<u>Nottingham</u>						
Fernald, Frederick President J. E. F. F., Inc.	B	SW & HW	X	X		
<u>Raymond</u>						
Campbell, Avery	S	SW & HW	X			X
<u>Rye</u>						
Rand Lbr. Co., Inc. 511 Wallis Road	S	SW & HW	X	X	X	X
<u>Salem</u>						
Tardy, Donald R. 111 Millville Cir.	B & L	SW & HW	X	X		
<u>Strafford County</u>						
<u>Barrington</u>						
Clark, Melvin East Barrington	B	SW	X			
Green, George East Barrington	P	SW	X			
<u>Dover</u>						
Mathes, Valentine	B	SW	X			
<u>Durham</u>						
Woodward, William	S	SW	X	X	X	X
<u>Farmington</u>						
Leary, Kenneth RFD, Farmington	S	SW & HW				X

Strafford County (Continued)

		Kind of Logs	Stump.	Road.	Del.	Cus.
Mooney, G. & F. & Son, Inc. Box 578, Farmington	S	SW & HW			X	
<u>Madbury</u>						
Felker, Elliot	S	SW & HW				X
<u>Middleton</u>						
Diprizio, Charles & Sons, Inc. (Middleton) RFD No. 1, Union	S	SW & HW	X	X	X	X
<u>Milton</u>						
Tibbetts Lbr. Co. Farmington	S	SW	X	X	X	
<u>New Durham</u>						
Bickford Bros.	S	SW				X
<u>Rochester</u>						
Leroy E. Allen Co. 153 Wakefield Street	P	SW	X			
Hussey, Robert Flagg Road RFD, Gonic	S	SW	X			X

Sullivan County

Claremont

Atkinson-Davis Corp. Box 704	B & L	SW & HW	X			
Davis & Symonds Lbr. Co. Box 56	S	SW & HW	X		X	
Freeman & Hawkins Winter St. Ext.	S	SW & HW				X
Red Water Lbr. Co. RFD No. 1	S	SW & HW	X	X	X	X

East Lempster

Onnela Lbr. Co. 24 Pinnacle Rd. Newport	S	SW & HW	X	X	X	
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Grantham

Cote & Reney Lbr. Co., Inc.	S	SW & HW	X		X	X
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Langdon

Porter, George RFD, Alstead	S	SW & HW			X	
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Sullivan County (Continued)

		Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Newport</u>						
Rowe Lumber Co. Box 383	S	SW & HW	X		X	
Wilcox Lbr. Co., Inc. RFD No. 2 Newport	S	SW & HW	X	X	X	
<u>Plainfield</u>						
Demers, Warren	P					X
<u>Sunapee</u>						
Trow, W. W. & Son	S	SW & HW			X	X

**Out-of-State Stumpage, Log, and Specialty Buyers
Who Buy in New Hampshire**

		Kind of Logs	Stump.	Road.	Del.	Cus.
<u>Maine</u>						
Andover Wood Products, Inc. Andover, Tel. Rumford 364-4409		Y. Birch H Maple			X	
Chadbourne, P. H. & Co. Dick Waldron, Buyer Bethel		SW & HW (also SW & HW slabs for chipping)	X	X	X	
Crouse, Harry G. N. Fryeburg		SW & HW	X			
Cummings, C. B. & Sons c/o Norman H. Gray Fryeburg		HW (Birch)	X	X	X	
Fryeburg Lbr. & Chipping Corp. Archie Lane, Buyer Fryeburg		SW	X		X	
Saunders Bros. Hall & Smith Stanley Fitts, Buyer Garland Burnham, Woodlands Supt. Fryeburg		HW & SW	X	X	X	
Hammond & Son, Thomas E. Hiram		SW		X	X	X
					Logs by grades	
Hanover Dowell Mill Bethel, 824-2191		HW				X
Hurd Lbr. Co. E. Lebanon		SW & HW	X	X	X	X

**Out-of-State Stumpage, Log, and Specialty Buyers
Who Buy in New Hampshire (Continued)**

	Kind of Logs	Stump.	Road.	Del.	Cus.
Kendall Dowell Mill W. Bethel, 836-2473	HW			X	
LaValley, Albert Sanford	SW	X	X	X	
		(Softwood roundwood for chipping)			
Maine Woods Products Corporation Gunter, Steward W., Buyer Steep Falls	HW			X	
Newton Tebetts, Inc. W. Bethel, 836-2336	HW			X	
Paris Mfg. Co. Henry W. Morton Box 259 South Paris	HW	X		X	
S. D. Warren Co. Westbrook Wayne Jackson David Clement Steve Orach	SW & HW	X (pulpwood)		X	
Sprang, Phillip RFD, Kennebunk	SW & HW	X			
Smith, Wilmer Fryeburg	B & L	X			
Stowel, Silk Spool Co. Bryant Pond, Tel. 44	HW			X	
		(boltwood and squares)			
Westonis John F. Weston Fryeburg	SW & HW	X	X (pulp and logs)		
<u>Massachusetts</u>					
Bartlett, Edmund W. 240 Main Street Salisbury	SW & HW tree length		X	X	X
Blair Logging 385 West Street Winchendon, Mass.	Pine		X	X	X
Brown Package Co., Inc. Winchendon	W. Pine	X		X	
Esty, Ralph A. & Sons, Inc. Hobart B. Esty, Buyer Main Street Groveland	SW & HW	X	X	X	X
Freys Lumber Co. Cross St. Bernardston	SW & HW	X			

**Out-of-State Stumpage, Log, and Specialty Buyers
Who Buy in New Hampshire (Continued)**

	Kind of Logs	Stump.	Road.	Del.	Cus.
Haskel, C. M. & Sons 400 Canal St. Bernardston	SW	X	X	X	X
High Grade Logging Thomas Hill Ashburnham 827-4768	SW & HW	X			
<u>Vermont</u>					
Atlantic Lbr. Co. Jack Davis, Buyer East Burke, Vt. Tel. 626-5269	HW	X			
Batchelder, Earl Windham, Vt.	HW		X	X	X
Bates, Elmer Westminster	SW	X			
Beecher Falls Div. of Baumritter Corp. Beecher Falls	SW & HW			X	
Bradford Veneer & Panel Co.	HW (Veneer)	X	X	X	
Carroll Snelling E. Thetford	SW & HW		X	X	
Cersosimo Lbr. Co., Inc. RFD No. 3 Brattleboro	SW & HW	X			
Clark Ash Mill V. L. Morse, Buyer Brattleboro	White Ash			X	
Clark, C. E. & Sons c/o Francis Clark 29 Western Ave. Brattleboro	SW & HW	X	X	X	
Colby Lbr. Corp. Lunenburg 892-5320	SW & HW		X	X	X
Concord Woodworking Co. of Vt. Lyndonville	SW & Cedar		X	X	
Fournier, Arthur Chester (for Newport, N.H. mill)	SW	X	X	X	X
Green Mt. Box & Lbr. Corp. White River Junction	SW & HW			X	
Indian Head Plywood Newport Ivan Elger (Buyer) Berlin, N. H. 752-6428	HW (Veneer)	X	X	X	

**Out-of-State Stumpage, Log, and Specialty Buyers
Who Buy in New Hampshire (Continued)**

	Kind of Logs	Stump.	Road	Del.	Cus.
Malmquist-Wood Products Co. Post Mills	HW			X	
National Lbr. Co. Chester	SW & HW	X	X	X	
Peck Lbr. Co. Vernon Howard Mason, Buyer	SW & HW	X	X	X	X
River Basket Corp. Putney	Pine, ash, oak, logs, 8', 10', 12'			X	
Smead Lumber Co. Vernon	SW & HW	X	X	X	X
Tri-State Timberland 56 Summer St. Hartland, Vermont	SW & HW	X	X	X	
Tenney's Lbr. Mill Saxton's River Claude Tenney, Buyer	SW & HW	X	X	X	
True Temper Corp. Wallingford and St. Johnsbury	Ashlogs and Boltwood	X	X	X	
Vermont Log Bldg., Inc. Hartland	W. Pine			X	
West River Basket Putney	Pine, Oak, Ash			X	
Weyerhaeuser Co. North Troy	HW (Veneer)			X	
White River Valley Hardwood, Inc. P.O. Box 6, Bellows Falls	HW	X	X	X	
<u>Quebec — Canada</u>					
Atlantic Lbr. Co. Sawyerville 889-2644	HW			X	
Commonwealth Plywood Mr. Tennolthy Montreal, Que.	HW				
LaBranche & Son St. Isadore 658-3666	SW & HW	X	X	X	X
LaLiberte Coaticook 849-4111	HW			X	

**Out-of-State Stumpage, Log, and Specialty Buyers
Who Buy in New Hampshire (Continued)**

	Kind of Logs	Stump.	Road	Del.	Cus.
Louzon & Son East Hereford 844-2393	SW	X	X	X	
Vallee, Paul Sawyer ville 889-2777	HW & SW	X		X	
Sherbrooke Wood Products Paul Blais, Buyer Sherbrooke 567-7768	Ash Logs			X	

Portable Pulpwood Debarkers

Benjamin, Mariner

40 East Main St., Merrimac, Mass.

Planing Mills

	C — Custom	W — Wholesale only
Alden, Harold B.	C	Lancaster
Audet Bros.	W	Milan
Beauregard, Chas. & Sons, Inc.	W	Marlborough
Chase, Benjamin Co.	C	Derry
Cheney, Roland & Son	C	Kingston
Chick. John F. & Son	C & W	Silver Lake
Cole, George	C	RFD East Kingston
Concord Lumber Co.	W	Commercial St., Concord
Contigiani Lumber Co.	W	Belmont
Conway Supply Co., Inc.	C	Conway
Cote & Reney Lbr. Co.	C & W	Grantham
Currier, P. L. Lumber Co.	C	RFD Milford
Damon, Clayton	C	Fitzwilliam
Davis, Jack	C	RFD Lisbon
Davis & Symonds Lumber Co.	W	Claremont
Demers, Warren (Portable)	C	Plainfield
Dickinson Lumber Co.	W	Belmont
DiPrizio, Chas. & Sons	W	Union
Freeman & Hawkins	W	Claremont
Green Lbr. Co.	C & W	1253 Hooksett Rd., Manchester
Heberbrand, Arthur D.	C	N. Haverhill

Planing Mills (Continued)

Lorden Lumber Co.	W	Milford
Newman Lumber & Transit Milling Co.	W	Woodsville
Page Hill Farms	C	Pike
Paulsen Lumber Co.	C & W	Littleton
Pennsylvania Box & Lumber Co.	C	Plaistow
Porter, George	W	Alstead
Rand Lumber Co.	C	511 Wallis Road, Rye
Rowe Lumber Co.	W	Newport
State Line Lumber Co.	C & W	Box 35, Nashua
Tibbets Lumber Co., Inc.	W	Farmington
Trow, W. W. & Son	C & W	Sunapee
White Mt. Lumber Co., Inc.	W	E. Milan Road, Berlin
Woodward, William	C	Durham

Kiln Drying (Custom)

Chick, John F. & Son	Silver Lake
Colonial Pine Bucket, Inc.	310 Marlow St., Keene
Pennsylvania Box & Lbr. Co.	Plaistow

Wood Preservation — Treating Plants

Koppers Co., Inc.	Nashua
Wood Preserving Division	

Wood Chipping Plants in New Hampshire

Company	Location	Type
Allen-Rogers Corp. Wentworth Division	Wentworth	2
Audet Bros.	Milan	2
Beauregard, Charles & Son, Inc.	Marlborough	2
Blanchflower Lbr. Co.	Alstead	2
C. B. Cummings & Sons, Co.	Groveton	2
Chocorua Valley Lumber Co.	No. Sandwich	2
Cloutier Lumber Co.	Northumberland	3
Connecticut Valley Chipping Co., Inc.	Woodsville	1
Connecticut Valley Chipping Co., Inc. (Littleton Division)	Littleton	1
Dalphond Bros. Inc.	RFD No. 1, Andover	2
Davis & Symonds Lbr. Co.	Claremont	2

Wood Chipping Plants in New Hampshire (Continued)

Company	Location	Type
Draper Div., North American Rockwell Corp.	Beebe River	2
Lakes Region Chipping Corp.	Ashland	1, 1a
Lorden Lumber Co.	Milford	2
Miles Pond, Inc.	Whitefield	2
New England Lbr. Co., Inc.	West Ossipee	2
New England Lbr. Co., Inc.	Winchester	2
New Hampshire Pulp Co.	Fremont	1
Ossipee Lumber Co.	Center Ossipee	1
Roberts Lumber Co.	Canaan	2
Tommila Bros.	Fitzwilliam	2
Washburn Lumber Co.	N. Stratford	2 & 2a
Whitcher, Kenneth E., Inc.	Warren	2
White Mountain Lumber Co., Inc.	E. Milan Road, Berlin	2
White Mountain Woodcraft	Berlin	2
Wilcox Lbr. Co., Inc.	RFD No. 2, Newport	2

1. Central Chipping Plant (Stationary)
- 1a. Facilities available for roundwood debarking & chipping
2. Chipper at sawmill (Stationary)
- 2a. Facilities available for roundwood debarking & chipping
3. Roundwood Debarking & Chipping Plant (Mobile)

Pulpwood Buyers

Company and Individual Buyers	Kinds of Wood Purchased
Benjamin, Mariner 40 East Main St., Merrimac, Mass.	Hardwood
Brown Company, Berlin Dyer, Donald, Colebrook Grella, Douglas, Bethlehem Hamlin, Mark, Berlin Pike, William, Jr. 446 Grafton St., Berlin Renoux, John, Gorham	Spruce, fir, hemlock, tamarack, pines, beech, birches, maples, oak, elm, ash.
Chadbourne, P. H. and Co.	Softwood and hardwood slabs for chip- ping
Franconia Paper Corp., Debtor, Lincoln Macomber, Elwin (Chief Forester) RFD 1, Plymouth Waldo, Henry C., Lincoln, (Woodlands Mgr.)	Spruce and fir; limited amount of hem- lock, pine and peeled or rossed hard- wood and old rough hardwood. No wood purchases until further notice.

Pulpwood Buyers (Continued)

Company and Individual Buyers	Kinds of Wood Purchased
Groveton Paper Co., Groveton Subsidiary of Diamond International Haynes, Eldwood, N. Stratford Ingersoll, Laverne, Groveton Mountain, Harold, Groveton Ruch, Lewis, Lancaster	Spruce, fir, hemlock, and hardwood (no elm)
International Paper Co. Sawyer, Rhoades, N. Stratford	Spruce, fir (inquire direct) wood
Lakes Region Chipping Corp. Ashland Jesse E. Bushaw, Warren, N. H.	Hardwood
New Hampshire Pulp Co. Tom McGall, Raymond RFD Fremont, N. H.	Softwood and hardwood
Oxford Paper Co., Rumford, Maine and Lawrence, Mass. Ashton, R. V. 158 School St., Concord Hartranft, John L., Manager Wood Dept., Rumford, Maine MacKay, Claude, Asst. Manager, Wood Procurement, Rumford, Maine	Spruce, fir, hemlock, and northern hard wood, chips. Buying pulp for Rumford mill. Chips in Merrimack County
Thelvicki Corp. Johnson, Thomas, President Henniker	Hardwood
Warren, S. D., Co., Westbrook, Me. Orach, Steve	Spruce, white pine and hardwood

Excelsior, Pole, Piling, Posts and Railroad Tie Buyers

Company and Individual Buyers	Kinds of Wood Purchased
Excelsior Buyers*	
Berry, O. P. Co., Wolfeboro F. Berry, Manager	Peeled poplar and basswood

Poles, Piling, and Post Buyers

Hill, Wallace F. Sanbornville, Tel. 522-3308	
Koppers, Co., Inc., Wood Preserving Div., Nashua	Norway (Red) pine posts
Morrill, Brewster Oak Street, North Conway	Norway (Red) pine poles & piling
Miner, Theodore Roxbury Road, Marlboro	Norway (Red) Pine

Railroad Tie Buyers

Koppers Co., Inc. Wood Preserving Division Nashua	Oak, Birch, Beech, Maple, Cherry
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* Excelsior companies prefer peeled wood. The sticks must be 48 inches long and 4 inches minimum diameter at the small end.

Specialty Product Buyers — Birch Bolts and Other Roundwood Products

Town and Operator	Species and Specifications
Allen-Rogers Corp., Laconia, N.H., Andover Division, E. Andover, N.H. —	buying white birch, hard maple and yellow birch bolts and logs. For prices and specifications contact mill manager, Herman Schumaker, East Andover, N.H., or David McKay, Allen-Rogers Corp., Laconia.
Allen-Rogers Corp., Laconia, N.H., Wentworth Division, Wentworth, N.H. —	buying white birch, hard maple, and limited quantities of beech and yellow birch. Logs only. For prices and specifications contact mill manager, Bruce Bumford, Wentworth, or David McKay at Laconia.
Bartlett, Edmund, Salisbury, Mass. —	oak boat keel stock.
Birch, Joseph, Lyndeboro, N.H. —	hardwood bolts and sawlogs
Bradford Veneer & Panel Co., Bradford, Vt. — B. E. Farr, Buyer —	yellow birch and other veneer logs. Write for specifications.
Concord Woodworking Co., Inc., Lyndonville, Vt. —	white cedar posts, poles and logs. Write for specifications.
Cummings, C. B. & Sons, Conway and Groveton —	white and yellow birch, stumpage, bolts. Roadside and delivered.
Crawford, Wilson, Groveton —	white and yellow birch bolts and logs.
North American Rockwell Corp. Draper Division, Beebe River —	sugar maple, hemlock, pine and spruce logs.
Fairfax Corp., Route 11, Charlestown, N.H. —	mixed hardwood, pallet stock 4x4 and 4x6 cants.
Foote, Thomas, Marlow —	49" hardwood stumpage and bolts all species, 6"-24" in diameter.
Frye, E. B. & Son, Wilton —	birch, beech, and pine logs 12" min. diameter veneer quality preferable.
Kearsage Peg Co., Bartlett —	straight grained white and yellow birch in 4' lengths, 6" top diam. Red heart not over $\frac{1}{8}$ diam. of stick. Comparatively free from knots and burls.
Labree, Clifton, Wilson Hill Rd., New Boston, N.H. —	50" hardwood bolts, all species, 6" to 20" diam.
LeBlanc, Gerard, 150 River St., Franklin —	softwood bolts. Contact for specifications. (Mail RFD No. 1, Hill).
Mooney, G. F. & Son, Farmington, N.H. —	write for specifications.
Morse, V. L., Brattleboro, Vt. —	white ash logs.
Northeast Hardwoods, Inc., N. Haverhill —	buys white birch in log and bolt form. Write for specifications.
Northeast Wood Products, Inc., Plainfield, N.H. —	white ash, No. 1 logs, handle quality, 5½', 11' and 16' lengths plus 2" trim, 10" min. diam.
Portland, Dowell Co., Center Ossipee, Fred Greenwood, Mgr. —	hardwood stumpage, birch, beech, maple within 25 miles radius of mill and boltwood delivered to mill.
Saunders Bros., Westbrook, Me. —	Concentration Yards at S. Tamworth, N.H., Dalton, N.H., Warren, N.H.; contact Mr. Elton Perkins, Box 34, S. Tamworth, N.H., or Mr. Hugh Hastings, Fryeburg, Me. — birch logs 39", 48", 59", lengths; min. 3" white wood around red heart, also beech, maple and elm.

Smead Basket Shop, West Swanzey — white ash logs.

Thelvicki Corp., Thomas Johnson, Mgr., Henniker, N. H. — mixed hardwood bolts, log and pallet stock.

True Temper Corp., St. Johnsbury, Vt. — white ash logs and bolts, specifications on request.

Whitman Division, USM Corporation, Plymouth — white birch, length 10' to 24' min. top diam. 8". No more than 2 small knots per 4' section. Sound, no cracks or crooks.

Vermont Log Bldg. Inc., Hartland, Vt. — white pine 8"-11" diam., 8'-16' length.

West River Basket Corp., Putney, Vt. — ash, oak and pine logs 8', 10', 12', 14' custom sawing.

White Mountain Lumber Co., Arthur Napert, Buyer, Berlin — No. 3 common hardwood lumber for pallets and skids.

Shingle Mills

Town and Operator	Species
<u>Errol</u> Umbagog Shingle Mill Box 51, Errol	Cedar and pine

NATIONAL CHRISTMAS TREE SITUATION

Christmas trees sold in the United States today come mainly from two sources — natural forest lands and managed Christmas tree plantations.

In natural forest lands, be they private or government owned, the Christmas trees are harvested judiciously as part of a program of thinning — removing smaller trees to allow others a better chance at sunlight, moisture and soil nutrients.

On Christmas tree lots, usually of small acreage, Christmas trees are raised and harvested as a farmer would raise and harvest any other crop. A tree farmer with ten acres would selectively harvest one-tenth of his crop each year, replant, and plan on another selective harvest of another acre's worth the following year.

On natural forest lands, the cutting of Christmas trees is a part of the thinning process. It provides trees for the holiday market and added growth opportunities for trees left to grow; it also helps in the control of drainage and watershed management, and makes way for the growth of plants on which wildlife can feed. If the trees cut out were not used as Christmas trees, they would be wasted, since thinning is required to allow remaining trees to grow to size for timber and pulpwood use later on.

This year, according to the National Christmas Tree Growers' Association, Americans are expected to buy 45 million trees to decorate home, office, school and church. An estimated 15,000 individual growers, one quarter of whom belong to the national association, are marketing their trees through 50,000 wholesalers and retailers in every state of the Union, according to Edgar J. Lott, Purdue University forester and treasurer of the association. Lott expects 1971 retail sales will amount to \$200 million — about the same as last year.

Scotch pine, which Lott says accounted for 65 per cent of last year's cutting and sales by association members, is raised primarily for Christmas cutting, is the easiest evergreen to farm, and responds well to the mechanical shearing process. Shearing has to be done annually for from 4-12 years to produce a full, conical tree.

A reasonably well-stocked stand of young Christmas trees, say the U. S. Department of Agriculture, can yield an annual harvest of at least 50 trees per acre with good management.

At that rate of growth, provided land for growing and harvesting remains available, there always will be a Christmas tree.

CHRISTMAS TREE PRODUCTION IN NEW HAMPSHIRE

Despite the ever increasing competition from artificial trees, the Christmas Tree industry in New Hampshire is very much "alive and well". 1970 sales exceeded the sales for previous years in both quality and quantity.

The number of growers are also increasing. Latest statistics show that over 300 New Hampshireites are growing Christmas Trees. In the northern counties of the State where most of the trees are grown, trees are produced by growers in large quantities and sold to retail lots in the cities. However, many producers in southern New Hampshire now operate on the cut your own basis where trees are sold to the consumer right off the lot.

Species now being grown in New Hampshire consist of balsam fir, white spruce, scotch pine, Norway spruce, blue spruce with experimental plantings of Douglas Fir and Concolor Fir.

A new research program to improve the quality of balsam fir was launched this year by the University of New Hampshire, in cooperation with the New Hampshire-Vermont Christmas Tree Association, the Division of Resources Development — Department of Resources and Economic Development of New Hampshire and the Agricultural Experimental Station of the University of Vermont. Research plots were laid out in both northern and southern New Hampshire.

Last Fall the Coos County Extension Service published a market bulletin for Christmas Trees and other Christmas Products called the "The New Hampshire Christmas Vendor". This bulletin, revised three times during the fall season, lists producers as many times as the number of products they have for sale and also gives an estimate of production, address and telephone number of the producers.

Anyone who wishes to receive the vendor or be listed in it should write to the County Forester, Coos County Cooperative Extension Service, 148 Main Street, Lancaster, New Hampshire 03584.

Christmas Tree Dealers and Producers

(c) Christmas Trees (s) Stumpage (b) Boughs (w) Wreaths (r) Producer Retailers

Anderson, Henry A., State Line (c)
 Arsenaault, Oliver, RFD 1, N. Stratford (c)
 Bachelder, Stewart, Clarksville (P.O. Pittsburg) (c)
 Bacon, Claude, Beecher Falls, Vt. (c & b)
 Ball, Harold, N. Stratford (c)
 Barlow, Paul, Linden St., RFD, Exeter (c & r)
 Beloin, Alcide, Hall Stream, Pittsburg (P.O. Beecher Falls, Vt.) (c)
 Beloin, Germain, RFD, Colebrook (c)
 Bessett, Alex, RFD 2, N. Stratford (c & b)
 Blood, Edward, Durham, N.H. (c)
 Boothman, John, Randolph (c)
 Bradley, Walter (Mrs.), RFD, Whitefield (c)
 Brissett, Alex, RFD, Colebrook (c & b)
 Brockelman, Curtis, Franconia (c)
 Brooks, Darwin, Stewartstown (P.O. RFD No. 1, Colebrook) (c)
 Brooks, Douglas, N. Haverhill (c)
 Brown, Peter, RFD 1, Bristol (c)
 Bryant, Walter, South Hill Road, Colebrook (c)
 Burt, Herschel, RFD, Exeter (c & r)
 Bunnell, Holman, RFD 3, Colebrook (c)
 Carder, Walter, RFD, Alton (c & r)
 Carney, Howard, RFD, Colebrook (c)
 Chaplick, Adolph, 131 Lowell Road, Hudson, N.H. (c)
 Chappell, Colon, Pittsburg (c)
 Chappell, Fay, Pittsburg (c & b)
 Colby, Helen, Eastman Ave., RFD, Laconia, N.H. (c & r)
 Conway, Raymond, RFD 1, Jefferson (c)
 Cook, Roland, West Stewartstown (c)
 Corneliusen, Robert, English Range Rd., Derry (c & r)
 Couture, J. P., Colebrook (c)
 Couture, Wilfred, P.O. RFD No. 1, Jefferson (c & b)
 Cree, Leighton, Colebrook (c)
 Danforth, Benjamin, Colebrook (c)
 Day, M. Eva, West Stewartstown (c, b & w)
 Day, Louis, West Stewartstown (b & c)
 Dearborn, Richard, RFD No. 3, Plymouth (c)
 Deblois, Paul, RFD No. 1, Colebrook (c & b)
 Dunn, Red, Laconia (c)
 Emerson, Stephen, RFD No. 1, Lancaster (c & b)
 Fistere, Gilbert G., RFD No. 2, Rochester, N.H. (c)
 Forbush, Daniel, Groveton (c)
 Fitts, Perley, Durham, N.H. (c)
 Foss, George III, Lisbon (50 Windsor Rd., Westwood, Mass.) (c & s)
 Furguson, W. W., Colebrook (c)
 Furber, Alan W., South Rd., South Deerfield (c & r)
 Gagnon, Conrad, Beecher Falls, Vt. (c & b)
 Gangwer, Jesse, Durham, N.H. (c)
 Geller, Frederick F., 26 Hanover St., Keene (c)
 Giguere, Paul, RFD 3, Colebrook (c)
 Giroux, Yvon, RFD 3, Colebrook (c)
 Glover, Clayton, Dummer (c)
 Godzyk, Michael, Colebrook (c)
 Goodwin, Clyde, RFD 1, Colebrook (c)
 Goodrum, Hazen, RFD 1, Colebrook (c & b)
 Goodrum, Monty, Colebrook
 Gorman, Redmon, RFD, Colebrook (c, b & w)
 Gray, Tabor, Pittsburg (P.O. Beecher Falls, Vt.) (c)
 Gregory, Franklin, Greytor Farm, RFD No. 3, Concord (c & r)
 Grondin, Claude, Stewartstown (P.O. RFD No. 3, Colebrook) (c)
 Guay, Alex, West Stewartstown (c, b, w & s)
 Gustavson, Sten C., Pike (b)

Haynes, Orville, RFD No. 1, Colebrook (s)
 Henson, Everett, N. Haverhill, N.H. (c)
 Hollingsworth, Schuyler, RFD 2, Peterborough (c)
 Hughes, Thomas and Wendall, RFD, North Stratford (c & b)
 Huggins, Harry, Pittsburg (c & b)
 Hyde, John L., 6 Columbus Avenue, Concord (c)
 Jackson, Charles, Colebrook (c)
 Jackson, Frank, 59 Prospect St., Lebanon (c)
 Jacques, Nelson Plymouth (c)
 Johnson, Arthur, 404 Winnicunnett Rd., Hampton (c & r)
 Keach, Douglas, 747 Beech Street, Manchester (c)
 Keller, John, Bethlehem (c)
 Ladd, Robert, Lancaster (c, & r)
 Ladd, Wayne, RFD 2, Colebrook (c & b)
 Laflamme, Gaston, W. Stewartstown (c)
 Lakin, Calvin, RFD, Colebrook (c)
 Lamoureux, Peter F., Colebrook (c & w)
 Lang, Harry, RFD 1, Colebrook (c & s)
 Laperle, Roland, Colebrook (c)
 Larcomb, Charles, Meadows (c)
 LaRoche, Arthur, Keene (c & r)
 LaRochelle, Albert, Groveton, Box 62 (c & b)
 Lewis, Darwin, Colebrook (c, b & s)
 Lynch, F. Robert, RFD 3, Colebrook (c & b)
 Lyons, Albion J., RFD 1, Colebrook (c)
 Mallery, Bayard, c/o John Keller, Bethlehem (c)
 Magnusson, Ted, RFD, East Kingston (c & r)
 Marchessault, Lorrainy, RFD, Colebrook (c & b)
 Marquis, Leon, Pittsburg (P.O. Beecher Falls, Vt.) (c)
 Maurais, Raymond, RFD, Colebrook (c)
 McAllaster, Roger & Shirley, Stewartstown (P.O. RFD No. 3, Colebrook) (c)
 McCrone, Henry, Knox Marsh Rd., RFD, Dover (c)
 McKinnon, Frank C., South Hill Road, Colebrook (c)
 McMann, Harlan, RFD 1, Stratford (c)
 Melendy, Harry, Milford (r)
 Moss, Donald, RFD 2, Concord (c & r)
 Merrill, Lee, RFD 1, Whitefield (c & b)
 Nelson, Charles, Groveton (c)
 Nimms, Everett, Keene (c & b)
 Nottingham, Evelyn, RFD, East Rindge (c & r)
 Northrup, Sydney, N. Rd., Brentwood, (P.O. RFD, Exeter) (c & r)
 Noyes, Chester, RFD 1, Colebrook (c)
 Noyes, David R., RFD, Gossville (c)
 Olsen, Morris, N. Haverhill (c)
 Oleson, Norman, RFD 1, Jefferson (c)
 Ouimette, Marcel, Colebrook (c)
 Owen, Frank, Colebrook (c)
 Paquette, Marcel, Twin Mountain (c, b & w)
 Paquette, Maurice, Colebrook (c)
 Peaslee, David, Newfields (c & r)
 Perry, Glenn, RFD 1, Colebrook (c)
 Parker, Herman, 576 Post Rd., Greenland
 Philbrick, Walter, 99 Fair Street, Laconia (c)
 Placey, Burleigh R., RFD, Colebrook (c & b)
 Placey, Claude, RFD No. 1, Lancaster (c & b)
 Putnam, Cortland, Winchester (c & r)
 Rainville Brothers Tree Company, Colebrook (c)
 Rainville, Frederick, Colebrook (c)
 Rainville, Robert, Colebrook (c)
 Rainville, Stewart, Colebrook (c)
 Rancloes, Frank, RFD 3, Colebrook (c)
 Reed, Kenneth, RFD 1, Jefferson (c)
 Reynolds, William N., Stratford (c)
 Ricard, James, Canaan (c)
 Riley, Gilbert, Milford (r)
 Roberts, George, Gilmanton (c & r)

Robinson, Eric, Hall Stream (P.O. Beecher Falls, Vt.) (c & b)
 Robitaille, Gerald, RFD, Colebrook (c)
 Rogers, Lawrence R., RFD 1, Whitefield (c)
 Russell, Lee, Farmington (c)
 Savage, Chester, RFD 1, Lancaster (c & w)
 Sawyer, Alfred, Jaffrey (c)
 Schander, John, Newmarket (c)
 Sibulkin, Jason, Colebrook (c)
 Slanetz, William, Keene (c & r)
 Smith, Leonard, RFD 7, Penacook (c & r)
 Society for the Protection of New Hampshire Forests, State House, Concord (c)
 Stiles, Ernest, Milan (c)
 Stiles, Walton, Ctr. Strafford (c)
 Struhsaker, Philip, Flintlock Lodge, Franconia (c)
 Tatham, Donald A., Orford (c & b)
 Taylor, Sidney J., Contoocook (c & r)
 Thibeault, Joseph, Hall Stream (P.O. Beecher Falls, Vt.) (c)
 Tyler, George, Monroe (c)
 Vaitl, Matthew, Jefferson (c)
 Vatcher, George, Sanborn Rd., Hampton Falls (c & r)
 Wagner Woodlands & Co., Lyme (c & b)
 Wallace, Lew, RFD No. 1, Colebrook (c)
 Warren, Richard, Barrington (c & r)
 Watson, Gail, Laconia (c)
 Watson, Lyle, Belmont (c)
 Webber, Carl, Dublin (c)
 Weir, Harlie, Colebrook (c)
 Wheeler, Claude, Hall Stream (P.O. Beecher Falls, Vt.) (c, b & w)
 Wheeler, Leonard, Beecher Falls, Vt. (Bishop Brook Road, N. H.) (c)
 Wheeler, Raymond, Pittsburg (P.O. Beecher Falls, Vt.) (c)
 Weyant, Donald, RFD 2, W. Franklin (c & r)
 Wilkins, Malcolm, Canterbury (c & r)
 Yale, William, Sandown, RFD 2, Chester (c)
 Yost, Karl, Gilmanton (c)
 Young, Merle & Son, Colebrook (c & b)
 Zalbielski, Joseph, Winchester (c)

Christmas Tree Truckers (Partial List)

Covell, Walter, Colebrook
 Currier Trucking, Gorham
 Dostie, Andre, Colebrook
 MacLean, Joseph, Colebrook
 Marchand, Neil, W. Stewartstown
 Marquis, Gilles, W. Stewartstown
 Marquis, Ronald, Hall Stream (P.O. Beecher Falls, Vt.)
 Rancloes, Frank, W. Stewartstown

Partial List of Consulting Foresters Practicing in New Hampshire

The services rendered by the Consulting Foresters are indicated by the numbers following their name. The service rendered is keyed to the numbers as follows:

- | | |
|--|--|
| 1. Forest Management plan | 8. Approved vendor for R.E.A.P. Forestry practices |
| 2. Timber & timber land appraisal | 9. Forest land survey |
| 3. Income tax assistance
(timber depletion) | 10. Title and boundary search |
| 4. Timber sales & supervision | 11. Recreational development |
| 5. Timber marking | 12. Laying out and supervision of
woods road construction |
| 6. Timber stand improvement work
(weeding, thinning, pruning) | 13. Owners or operators representative
in trespass cases |
| 7. Tree planting | 14. Licensed real estate brokers |

Attridge, J. Milton, Antrim — 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13.

Baker, David, Box 27, Newton — 1, 2, 4, 5, 6, 8, 12.

Bean, William, c/o Williams Est., Windy Row, Peterborough — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

Boomer, Stephen J., White Mountain Highway, Center Ossipee — 2, 9, 10.

Breckenridge, Walter F., Spruce Street, Newport — 2, 9, 10, 13.

Brown, J. Wilcox, RFD No. 2, Concord — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14.

Calhoun, John C., Jr., Gilsum — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14.

Coville, Stanley, Tamworth — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13.

Dickenson, Howard, Eaton Center — 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12.

Dundee Management Corp., P.O. Box 101, Jackson — 1, 2, 4, 5, 6, 7, 8, 9, 10, 12.

Dwyer, Walter W., Jr., Briar Hill Road, Hopkinton Village — 4, 9, 14.

Feuer, Martin M., Main Street, Atkinson — 2, 5, 12, 13.

Hambrook, Francis G., RFD, Center Harbor — 1, 2, 4, 5, 6, 8, 9, 10, 12, 13.

Herr, C. S., 15 Cedar Street, Berlin — 1, 2, 4.

House, William P., RFD, Marlboro — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.

Hyde, Gerald R., 73 South River Road, Bedford — 2, 9, 10, 11, 12, 13.

Johnston, Richard B., RFD, Center Harbor (Sandwich) — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14.

Keller, John C., Bethlehem, Northern Land Services — 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

Knickerbocker, Gerald C., Lake Spofford Realty, Spofford Lake, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.

LaBree, Clifton, New Boston, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.

Lane, William, Crown Point Road, Rochester — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14.

Loiselle, Robert, Lee Rd., Newmarket — 1, 2, 4, 5, 6, 7, 8, 9, 10, 12.

Macomber, Elwin E. RFD No. 2, Plymouth — 1, 2, 4, 5, 9, 10, 11, 12, 13.

Marshall, Raymond H., Mann's Hill Road, Littleton — 2, 4, 5, 6, 7, 8, 9, 10, 13.

Morse, John H., P.O. Box 65, Wilmot, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

New England Forestry Foundation, Inc., 1 Court St., Boston, Mass.

Noyes, David R., RFD, Gossville, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
 Plumb, Allan W., Box 12, Marlow, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
 Poppema, Donald, RFD No. 1, Center Barnstead, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.
 Rastallis, Stanley J., RFD No. 1. Box 227, Newport — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.
 Richer, Clifford, 122 Cheney St., Newport, N.H.—1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 13.
 Thorne, Thaddeus, Center Conway, N.H. — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
 Woodward, Howard, 234 Main Street, Berlin, N.H. — 1, 2, 3, 4, 9, 10, 12, 13, 14.
 Woodward, Karl, Rte. 2, Box 138A1, Dover — 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12.
 Woodward, Steve, 234 Main Street, Berlin, N.H. — 1, 2, 4, 5, 9, 10, 12.

Partial List of Industrial and Municipal Foresters Employed in New Hampshire

Allen Rogers Corp., Laconia
David McKay

Andorra Forest, Stoddard
William Dussault

Brown Company, Berlin

K. S. Scott
M. E. Hamlin
J. D. Bates
K. S. Norcott

F. Renoux
L. Parsons
C. W. Rand
D. Grella

M. Grigel
D. R. Bennett
D. Dyer
A. York
B. Wyman

Dartmouth College, Hanover
Robert S. Monahan

Draper Division, North American Rockwell Corp., Beebe River
John French, Woodlands Mgr.
David Ash

Franconia Paper Corp., Lincoln
Henry C. Waldo
Elwin Macomber

Groveton Paper Company, Subsidiary of Diamond International Corp., Groveton
Harold S. Mountain
Collin Sutherland

International Paper Co., North Stratford
Rhoades F. Sawyer

Manchester Water Works, Manchester
Aldis J. Christie

David & Symonds Lumber Co., Claremont
Blynn Merrill

Oxford Paper Co., School Street, Concord
Richard Ashton

St. Regis Paper Co., West Stewartstown

George D. Gates
David B. Strathdee

Frederick W. Cowan
Philip Nowell

Peter Ludwig

Wagner Woodland & Co., Lyme
Robert Berti
Richard Dearborn

Partial List of Timber Stand Improvement Contractors

These men offer the following forestry services: weeding, thinning, pruning, tree planting.

Bartlett, John, RFD 5, Laconia, N. H.

Bennett, Harry J., RFD No. 3, Winchester, N. H.

Carlson, Walter Jr., Timberland Improvement Co., Wolfeboro, N. H.

Day, Louis C., High Street, West Stewartstown, N. H.

Dundee Management Corp., Box 101, Jackson, N. H.

Garneau, Leo, Box 148, Lowell, Mass.

Grafton Tree Farm Service, Pike, N. H.

Janicki, John, RFD No. 1, Center Barnstead

Klear-Wood Inc., Wilmot, N. H.

Mason, Gary, 211 Sage St., Hanover and RFD No. 1, Exeter, N. H.

Natoli, Ronald, Colby Rd., Tilton, N. H.

Olson, Kurt, RFD, Nashua, N. H.

Robinson, Clarence, RFD No. 1, Tilton

Russell, Lee, Farmington, N. H.

Tatham, Donald, Orford, N. H.

Timberland Improvement Co., Carlson, Walter, Jr., Mgr., Wolfeboro

Wagner Woodlands & Co., Lyme, N. H.

Quinn, George, N., 33 Central, Farmington, N. H.

AMERICAN SOFTWOOD LUMBER STANDARD

The "American Softwood Lumber Standard", Voluntary Product Standard PS20-70 became fully effective on September 1, 1970. The new softwood lumber standard relates softwood lumber sizes to moisture content at the time of manufacture so that both seasoned and unseasoned lumber is uniform in sizes when used.

Copies of the standard can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C., 20402. Price 35 cents. (Catalog No. C13.20/2:20-70).

LUMBER SIZE TABLE

Nominal and Minimum-dressed Sizes of Boards, Dimension and Timbers
(All Figures In Inches)

ITEM	THICKNESS			FACE WIDTHS		
	Nominal	Minimum Dressed		Nominal	Minimum Dressed	
		Dry	Green		Dry	Green
Boards*				2	1-1/2	1-9/16
				3	2-1/2	2-9/16
				4	3-1/2	3-9/16
				5	4-1/2	4-5/8
	1	3/4	25/32	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	13-1/4	13-1/2
				16	15-1/4	15-1/2
Dimension				2	1-1/2	1-9/16
				3	2-1/2	2-9/16
				4	3-1/2	3-9/16
	2	1-1/2	1-9/16	5	4-1/2	4-5/8
	2-1/2	2	2-1/16	6	5-1/2	5-5/8
	3	2-1/2	2-9/16	8	7-1/4	7-1/2
	3-1/2	3	3-1/16	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				2	1-1/2	1-9/16
				3	2-1/2	2-9/16
				4	3-1/2	3-9/16
				5	4-1/2	4-5/8
	4	3-1/2	3-9/16	6	5-1/2	5-5/8
	4-1/2	4	4-1/16	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
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.

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, $\frac{1}{4}$ " kerf, is most commonly accepted.

The volume of a standing tree or log is determined by 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 $4\frac{1}{2}$ 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	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	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 Diameter 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 $\frac{1}{4}$ -inch Saw Kerf

<i>Diameter (Small end inside bark) Inches</i>	<i>Length of Log in Feet</i>						
	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

Lumber (Square Edge)

The standard unit of measurement for lumber is the board foot. It is equivalent to $\frac{1}{12}$ 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 in inches by the length in feet and divide by 12.

Example:

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

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 $\frac{1}{3}$	1 $\frac{2}{3}$	2	2 $\frac{1}{3}$	2 $\frac{2}{3}$
1 x 3	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4
1 x 4	2	2 $\frac{2}{3}$	3 $\frac{1}{2}$	4	4 $\frac{2}{3}$	5 $\frac{1}{3}$
1 x 5	2 $\frac{1}{2}$	3 $\frac{1}{3}$	4 $\frac{1}{6}$	5	5 $\frac{5}{6}$	5 $\frac{2}{3}$
1 x 6	3	4	5	6	7	8
1 x 7	3 $\frac{1}{2}$	4 $\frac{2}{3}$	5 $\frac{5}{6}$	7	8 $\frac{1}{6}$	9 $\frac{1}{3}$
1 x 8	4	5 $\frac{1}{3}$	6 $\frac{2}{3}$	8	9 $\frac{1}{3}$	10 $\frac{2}{3}$
1 x 10	5	6 $\frac{2}{3}$	8 $\frac{1}{3}$	10	11 $\frac{2}{3}$	13 $\frac{1}{3}$
1 x 12	6	8	10	12	14	16
1 $\frac{1}{4}$ x 4	2 $\frac{1}{2}$	3 $\frac{1}{3}$	4 $\frac{1}{6}$	5	5 $\frac{5}{6}$	6 $\frac{2}{3}$
1 $\frac{1}{4}$ x 6	3 $\frac{3}{4}$	5	6 $\frac{1}{4}$	7 $\frac{1}{2}$	8 $\frac{3}{4}$	10
1 $\frac{1}{4}$ x 8	5	6 $\frac{2}{3}$	8 $\frac{1}{3}$	10	11 $\frac{2}{3}$	13 $\frac{1}{3}$
1 $\frac{1}{2}$ x 4	3	4	5	6	7	8
1 $\frac{1}{2}$ x 6	4 $\frac{1}{2}$	6	7 $\frac{1}{2}$	9	10 $\frac{1}{2}$	12
1 $\frac{1}{2}$ x 8	6	8	10	12	14	16
2 x 4	4	5 $\frac{1}{3}$	6 $\frac{2}{3}$	8	9 $\frac{1}{3}$	10 $\frac{2}{3}$
2 x 6	6	8	10	12	14	16
2 x 8	8	10 $\frac{2}{3}$	11 $\frac{1}{3}$	16	18 $\frac{2}{3}$	21 $\frac{1}{3}$
2 x 10	10	13 $\frac{1}{3}$	16 $\frac{2}{3}$	20	23 $\frac{1}{3}$	26 $\frac{2}{3}$
2 x 12	12	16	20	24	28	32
2 $\frac{1}{2}$ 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 $\frac{2}{3}$	13 $\frac{1}{3}$	16	18 $\frac{2}{3}$	21 $\frac{1}{2}$
6 x 6	18	24	30	36	42	48

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.

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 Standard cord of boltwood	= 500 board feet

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

5600 - 5700 pounds = 1 cord (hardwood)
4600 - 4700 pounds = 1 cord (softwood)

**Number of Four-Foot Bolts Contained in a
Standard Cord by Bolt Diameter¹**

<i>Bolt Diameter in inches</i>	<i>Rough Wood</i>	<i>Peeled Wood</i>
4	244	270
5	156	175
6	109	120
7	79	88
8	61	68
9	48	54
10	39	43
11	32	36
12	27	30
13	23	26
14	20	22
15	17	19
16	15	17

¹ Average figures which will vary somewhat with the method of piling and the characteristics of the material.

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.

**Number of Cords of Round Wood Required for
1 M Bd. Ft. of Lumber**

<i>Bolt Diameter inches</i>	<i>Number of cords</i>
5	2.20
6	2.18
7	2.10
8	2.07
9	2.01
10	1.94
11	1.87
12	1.81

Number of Bd. Ft. of Lumber per Cord of Round Wood

<i>Bolt Diameter inches</i>	<i>Number of Bd. Ft.</i>
5	454
6	459
7	476
8	483
9	498
10	515
11	535
12	552

Comparative Volume Table¹ for Log Rules Commonly Used in the Northeast

Name of Rule		Volume in Board Feet											
		Diameter in Inches											
	6	8	10	12	14	16	18	20	22	24	28	32	36
International (1/4")	20	40	65	95	135	180	230	290	355	425	585	770	980
Scribner													
Decimal "C"	20	30	60	80	110	160	210	280	330	400	580	740	920
Scribner				79	114	159	213	280	334	404	582	736	923
Doyle or Ontario	4	16	36	64	100	144	196	256	324	400	576	784	1024
Bangor	23	41	69	100	137	182	238	300	369	444	609	792	
Holland or Maine	20	44	68	105	142	179	232	302	363	439	614	795	1026
Vermont	24	43	66	96	130	170	217	267	320	384			
New Hampshire or Blodgett Caliper	35	54	78	106	139	176	217	262	313	367	489	628	785

¹ The values given are for 16' logs.

Railroad Tie Volume Table

<i>Grade</i>	<i>Dimensions</i>	<i>Bd. ft. volume per tie</i>	<i>No. of pcs. per MBF</i>
1	6"x6"x8'6"	25.7	38.9
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"x8"x8'6"	44.6	22.4

**Calculated Sawdust Weights in Pounds Per Cubic Foot
at Selected Moisture Contents.¹**

Moisture Content Level		Species and Compaction Classes							
		White Pine			Red Oak			Red Maple	
Percent	Percent	Light	Shaken	Packed	Light	Shaken	Packed	Light	Shaken
Oven-	Green								
dry	Basis	7.7	9.7	13.2	11.0	13.9	16.8	8.9	12.2
5	4.8	8.1	10.2	13.7	11.5	14.6	17.3	9.3	12.8
10	9.1	8.5	10.7	14.0	12.1	15.3	17.7	9.8	13.4
15	13.0	8.8	11.1	14.5	12.6	16.0	18.3	10.2	14.0
20	16.6	9.2	11.6	14.9	13.2	16.7	18.9	10.7	14.6
25	20.0	9.6	12.1	15.2	13.7	17.4	19.5	11.1	15.2
30	23.1	10.0	12.6	15.5	14.3	18.1	20.0	11.6	15.9
50	33.3	11.5	14.5	17.3	16.5	20.8	22.8	13.3	18.3
75	42.8	13.5	17.0	19.5	19.2	24.3	26.2	15.6	21.3
100	50.0	15.4	19.4	22.0	22.0	27.8	31.0	17.8	24.4
125	55.5	17.3	21.8	25.0	24.7	31.3	36.0	20.0	27.4
140	58.3	18.5	23.3	27.1	26.4	33.3	40.0	21.4	29.3

¹ Weights by each compaction class are mean values calculated to be within $\pm \frac{1}{2}$ pound of the true mean value at the 95 percent confidence level.

AVAILABLE HEAT FROM WOOD

The heat value of a substance is determined by the amount of heat, expressed in Btu (British thermal units) produced in burning it to total ash. Since different woods are fundamentally alike in the chemical composition of the wood substance, at the same moisture content, the heat value obtained from unit weights of all woods, regardless of species, is about the same. Exceptions are woods containing resins, oils and gums.

Heat Available from 1 lb. of Moist Wood

Moisture Content of Wood, %	
Ovendry Basis	Available Heat, Btu.
0	7098
5	6701
10	6341
15	6011
20	5710
25	5432
30	5176
40	4718
50	4322
75	3529
100	2934
150	2101
200	1546
250	1149

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

<i>Woods</i>	<i>Weight, lb.</i>	<i>Available Heat, Million Btu</i>	<i>Equivalent in Coal Tons</i>	<i>Equivalent in Gallons of Fuel Oil</i>
	<i>Air-dry</i>	<i>Air-dry</i>	<i>Air-dry</i>	
Ash	3,440	20.0	0.91	145
Aspen	2,160	12.5	0.57	91
Beech, American	3,760	21.8	0.99	158
Birch, yellow	3,680	21.3	0.97	154
Douglas-fir	2,400	18.0	0.82	130
Elm, American	2,900	17.2	0.87	125
Hickory, shagbark	4,240	24.6	1.12	178
Maple, red	3,200	18.6	0.85	135
Maple, sugar	3,680	21.3	0.97	154
Oak, red	3,680	21.3	0.97	154
Oak, white	3,920	22.7	1.04	165
Pine, eastern white	2,080	13.3	0.60	96
Pine, southern yellow	2,600	20.5	0.94	149

CAUSES OF DEGRADE IN AIR-DRIED LUMBER

TO REDUCE DEGRADE in air-dried lumber, follow proper stacking and storing principles. Here are the different types of degrade and the causes:

Split—(1) two few stickers, (2) lack of roofing or poor roofing, (3) stickers not flush with ends of boards.

Check—(1) lack of roofing, (2) board edges exposed at bunk spaces, (3) stickers not flush with ends of boards, (4) drying too rapid due to excessive exposure of lumber stacks.

Warp—(1) poor sticker alignment, (2) poor bunk alignment, (3) lack of sufficient stickers, (4) foundation out of level, (5) thick and thin lumber in same course in stack.

Stain—(1) no chemical dip, (2) use of green or wide stickers, (3) base of piles too low, (4) grass and weeds growing between stacks, (5) poor yard location, (6) stickers too thin.

Source: U. S. Forest Service

FOREST PRODUCTS LABORATORY PUBLICATION LISTS

LISTS OF PUBLICATIONS dealing with investigative 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 & Packaging Data; Drying of Wood; Fire Protection; Glue & Plywood; Growth, Structure & Identification of Wood; Furniture Manufacture; Logging, Milling, & Utilization of Timber Products; Mechanical Properties of Timber; Structural Sandwich; Plastic Laminates, & Wood-Base Components; Thermal Properties of Wood; Wood Finishing Subjects; Wood Preservation; Architects, Builders & Engineers.

METRIC EQUIVALENTS

(Based on National Bureau of Standards)

Length

Mm.	=	0.0393 in.	In.	=	25.4 mm.
Cm.	=	0.3937 in.	In.	=	2.5400 cm.
Meter	=	39.37 in.	Ft.	=	304.8 mm.
Meter	=	3.2808 ft.	Ft.	=	30.48 cm.
Meter	=	1.0936 yd.	Ft.	=	0.3048 m.
Km.	=	3,280.8 ft.	Yd.		
Km.	=	0.6214 mile	Yd.	=	0.9144 cm.
			Mile	=	1,609.34 m.
			Mile	=	1.6093 km.

Area

Sq. cm.	=	0.1550 sq. in.	Sq. in.	=	6.4516 sq. cm.
Sq. m.	=	10.7639 sq. ft.	Sq. ft.	=	929.03 sq. cm.
Sq. m.	=	1.1960 sq. yd.	Sq. ft.	=	0.0929 sq. m.
Hectare	=	2.4710 acres	Sq. yd.	=	0.8361 sq. m.
Sq. km.	=	247.105 acres	Acre	=	0.04687 sq. m.
Sq. km.	=	0.3861 sq. mile	Acre	=	0.404 hectare
			Sq. mile	=	2.5900 sq. km.

Volume

Cu. m.	=	2.8877 bd. ft.	Bd. ft.	=	0.0025 cu. m.
Cu. cm.	=	0.0610 cu. in.	Cu. in.	=	16.3872 cu. cm.
Cu. m.	=	35.3145 cu. ft.	Cu. ft.	=	0.0283 cu. m.
Cu. m.	=	1.3079 cu. yd.	Cu. yd.	=	0.7646 cu. m.

Capacity

Liter	=	0.0353 cu. ft.	Cu. ft.	=	28.3162 liters
Liter	=	0.2642 gal (U. S.)	Gal.	=	3.7853 liters
Liter	=	61.0250 cu. in.	Cu. in.	=	0.0164 liter
Liter	=	2.2046 lb. of pure water at 4 deg. C.			

Weight

Gram	=	15.4324 gr.	Grain	=	0.0648 g.
Gram	=	0.0353 oz.	Oz.	=	28.3495 g.
Kg.	=	2.2046 lb.	Lb.	=	0.4536 kg.
Kg.	=	0.0011 ton	Ton (sht)	=	907.1848 kg.
		(sht)	Ton (sht)	=	0.9072 ton
Ton (met.)	=	1.1023 ton			(met.)
		(sht)	Ton (lg)	=	1.0160 ton
Ton (met.)	=	0.9842 ton			(met.)
		(lg)			

Pressure

1 kg. per sq. cm.	=	14.223 lbs. per sq. in.
1 lb. per sq. in.	=	0.0703 kg. per sq. cm.
1 kg. per sq. in.	=	0.2048 lb. per sq. ft.
1 lb. per sq. ft.	=	4.8824 kg. per sq. m.
1 kg. per sq. cm.	=	0.9678 normal atmosphere