



UNIVERSITY of NEW HAMPSHIRE
COOPERATIVE EXTENSION

New Hampshire Forest Market Report 2000-2001



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Cover drawing by Inge Seaboyer, NH Division of Forests and Lands

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UNH Cooperative Extension's Forestry Program in New Hampshire

The UNH Cooperative Extension Forestry Program is conducted by county Extension educators in forest resources and by Extension specialists based at the University of New Hampshire in Durham. These educators provide technical information to woodland owners, foresters, woods workers, community officials, and processors of primary and secondary forest products.

County Extension educators in forest resources and specialists in forestry and wildlife can provide recommendations about managing forest stands. This includes advice about regenerating forest land, pruning, pre-commercial weeding and thinning, wildlife habitat improvement, recreational uses, commercial harvesting of sawlogs, pulpwood, biomass or firewood, and marketing of a wide variety of forest products.

The Forest Industry specialist can provide business management and technical information to timber harvesters, sawmills and other wood industry businesses. This includes information on production control and yield, regulatory compliance, personnel, safety, wood processing, lumber drying, and lumber grading.

This is a cooperative program between the University of New Hampshire Cooperative Extension, the NH Division of Forests and Lands of the Department of Resources and Economic Development, NH Fish and Game, the U.S. Department of Agriculture, and the U.S. Fish and Wildlife Service.

For additional information or assistance, call UNH Cooperative Extension Forestry Information Center at 1-800-444-8978 or visit the UNH Cooperative Extension web site at ceinfo.unh.edu.

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Timber Sale Guidelines

The term “timber sale” refers to the harvest of wood products involving the exchange of money. Timber sales may involve the sale of trees used to make lumber (sawtimber), veneer, fuelwood, whole tree chips, pulp, or any combination of these products.

A decision to harvest timber is a critical one and should be handled as a business transaction. Timber sales often culminate many years of investment by a landowner in the form of taxes and management costs. A timber sale may have both immediate and long-lasting effects on a forest. It is important to have as much information prior to the harvest as possible. Proper harvesting can provide multiple benefits, income, improved wildlife habitat, recreational access, views, and healthy and vigorous forests. Uncontrolled, exploitative cutting can reduce such values, leading to environmental degradation, public resentment and legal entanglements. Your decision to sell timber should be based on good information.

Why Do You Want To Harvest?

The first step in a timber sale project is identification of management goals and the development of priorities.

Objectives may include many of the following:

- forest improvement
- access, road construction
- development of recreational opportunities
- wildlife habitat improvement
- land conversion
- income generation
- long-term investment

Before You Decide to Sell Timber

The following questions should be considered BEFORE selling timber. If you can't answer these questions seek professional assistance before initiating a timber sale.

- Have you identified your long-term management objectives such as income, wildlife habitat, recreation, and aesthetics?
- Have you developed a plan to achieve your objectives?
- Have you identified your objectives for this sale?
- What harvest method is best suited to meet your objectives?
- What affect will a harvest of this type have on your forest and its related resources?
- Do you know what your forest will look like following a harvest?
- Do you have a written contract?

- Will the harvest leave an improved stand for increased value growth?
- Have you consulted with all parties having legal interest in your land (co-owners, mortgagees, banks, etc.)?
- What laws relate to timber harvesting on your land?
- What products are saleable from your land (whole tree chips, fuelwood, pulpwood, mortgagees, banks, etc.)?
- What is the anticipated volume to be harvested?
- What is your timber worth by species, product and quality?
- How will you be paid?
- Do you know how stumpage values are determined?
- Are your boundaries clearly identified?
- Have you identified sensitive areas on your land?
- Who is a reliable logging contractor?
- Are you familiar with timber harvesting insurance regulations and your liability?
- Are you familiar with preparation of a timber sale agreement?
- Who is responsible for payment of the NH Yield Tax?
- Will there be adequate supervision of the harvest?
- Do you have the information you need regarding federal tax treatment of timber income?

Why a written contract is necessary

A written timber sale contract is necessary so both the buyer and seller have a clear understanding of the conditions under which the sale is made. The written contract protects both buyer and seller and outlines what is expected during the timber sale. Therefore, it is important both parties agree to the terms of a contract. A well-written timber sale contract should:

- identify buyer and seller
- provide the location of the property
- specify dollar amounts and payment schedule
- state the basis for measurement
- specify time frame
- outline expectations for compliance with federal, state and local regulations
- assign responsibility for payment of NH Yield Tax
- outline expectation for limiting residual stand damage and restoring skid trails and landings
- specify utilization expectations
- include a liability disclaimer
- require proof of Worker's Compensation Insurance
- prohibit the assignment of harvesting rights to another without written consent
- provide for resolution of disputes
- assign liability for property damage and accidental forest fire damage
- specify when the title for timber harvested transfers
- provide for a termination clause if any provisions of the agreement are not adhered to

Who Can Help?

Assistance is available to landowners from both the public and private sector. UNH Cooperative Extension educators in each county are available at no cost to help with a preliminary assessment of the forest land and provide information and educational assistance to help guide landowners through the timber sale process. This may include helping to identify landowner harvest objectives and motives, and perhaps examining the property. This will help match individual harvest objectives with the resource needs and capabilities. Since their role is educational, Extension educators have limitations on the time and effort that can be expended. The Extension educators can also provide a directory of NH licensed professional foresters, and NH Professional Logger Program timber harvesters. See page 2 for a listing of UNH Coop Ext. Natural Resource professionals.

Other useful publications from UNH Cooperative Extension:

- Directory of Sawmills and Lumber Wholesalers in NH
- NH Best Log Scaling Practices Guide
- Guide to NH Timber Harvesting Laws

Obtain a copy by calling the Forestry Information Center at 1-800-444-8978
or from the web: ceinfo.unh.edu

Selling Timber

Stumpage Sale

Most timber marketed in New Hampshire is sold through a stumpage sale in which the value of the trees is given as they exist in the woods or “on the stump.” Stumpage value is the value associated with standing timber. Stumpage value reflects current market conditions, the total timber sale volume, the species and quality of the stumpage being sold, and how easy the timber is to access.

Payment for stumpage is usually made in one of two methods. Each has advantages. The timber is usually paid for by unit of volume (per thousand board feet, per cord or per ton). Most sawtimber is sold per thousand board feet (MBF). Cordwood and pulpwood are sold per cord or ton. Timber sold in this way is paid for as it is removed and the scale (measurement of the product) delivered to the mill is accepted as the standard for payment. Records of delivery are kept on mill scale slips. Landowners conducting their own timber sale should request copies of mill scale slips, particularly if they don’t have a preharvest estimate of the volume of timber being harvested. Scale slips are the only concrete evidence of the actual volume of timber removed.

Timber may also be sold by what is referred to as a “lump sum” sale. Payment in a lump sum sale is based on an estimate of the total stumpage value. This timber sale method is best applied when an accurate preharvest volume estimate is made. Lump sum payments may be made prior to the start of a harvest or by installment payments. Since the total amount of money is fixed in a lump sum sale, it’s very important landowners know the value of their standing timber before entering into a lump sum sale agreement. There are also different federal tax laws that apply to lump-sum sales.

Roadside Sale

Roadside sale is a term used when a landowner either harvests the timber or contracts to have the logging done and sells the timber at a location accessible to a truck. Payment and measurement is most often made on the basis of mill scale though it can also be done where the timber is picked up.

Delivered

Landowners are paid a delivered price when, at their expense, they are responsible for the harvesting and transportation to the mill. Mill scale would be the basis for payment. This is commonly termed “contract logging.” If you are selling high value timber such as veneer, this method may yield more income.

Note: Each method of sale has different implications concerning landowner liability, worker’s compensation insurance, etc. It’s important to understand them before proceeding.

Belknap County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$185/MBF	\$ 350/MBF
	medium	130	220
	low	50	125
Hemlock		30-50	100-180
Spruce-fir		60-120	200-280
Red Pine		30-60	150-200
Red Oak	high	600	750
	medium	400	500
	low	200	325
Sugar Maple	high	500	700
	medium	300	500
	low	100	200
Red Maple		30-80	120-325
White Ash		95-150	150-550
Yellow Birch		90-100	200-500
White Birch		70-100	100-350
Beech		30-80	100-250
Aspen		–	–
Basswood		–	–
Pallet		20-40	80-120

Prices quoted are an average range for the county. Prices will vary depending on quantity, quality, diameter, length, access, and market conditions. More specific prices can be obtained by contacting Consulting Foresters or Sawmills. A listing of sawmills can be obtained from:

UNH Cooperative Extension Publications or website: ceinfo.unh.edu
 131 Main St., 16 Nesmith Hall
 Durham, NH 03824
 Tel. 603-862-2346

Sources for data include: Consulting Foresters, UNH Cooperative Extension, the NH Division of Forests & Lands, the NH Timberland Owners Association, "Quarterly Market Report" and *The Sawlog Bulletin*.

Carroll County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$185/MBF	\$350/MBF
	medium	130	220
	low	50	125
Hemlock		30-50	100-180
Spruce-fir		60-120	200-280
Red Pine		30-60	150-200
Red Oak	high	600	750
	medium	400	500
	low	200	325
Sugar Maple	high	500	700
	medium	300	500
	low	100	200
Red Maple		30-80	120-325
White Ash		90-150	150-550
Yellow Birch		90-100	200-500
White Birch		70-100	100-350
Beech		30-80	100-250
Aspen		20-60	130-200
Basswood		25-60	100-145
Pallet		15-40	80-125

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Cheshire County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$175/MBF	\$300/MBF
	medium	100	220
	low	50	125
Hemlock		30-55	100-180
Spruce-fir		60-120	230-280
Red Pine		40-100	150-210
Red Oak	high	550	800
	medium	300	600
	low	100	300
Sugar Maple	high	450	1000
	medium	250	500
	low	100	175
Red Maple		40-100	125-350
White Ash		75-200	150-550
Yellow Birch		90-200	150-300
White Birch		65-150	100-350
Beech		35-60	130-250
Aspen		30-40	-
Basswood		35-40	100-175
Pallet		20-40	80-125

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Coos County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$150/MBF	\$400/MBF
	medium	120	280
	low	80	125
Hemlock		40-70	125-200
Spruce-fir		100-170	250-350
Red Pine		35-60	110-160
Red Oak	high	300	750
	medium	250	425
	low	200	180
Sugar Maple	high	420	850
	medium	250	600
	low	125	180
Red Maple		30-85	120-300
White Ash		80-150	110-325
Yellow Birch		100-150	180-500
White Birch		70-180	180-350
Beech		30-50	180-200
Aspen		25-60	80-160
Basswood		30-50	85-150
Pallet		25-50	80-120

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Grafton County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$170/MBF	\$400/MBF
	medium	120	280
	low	60	150
Hemlock		25-50	125-200
Spruce-fir		40-140	225-300
Red Pine		30-70	150-200
Red Oak	high	600	800
	medium	325	450
	low	170	220
Sugar Maple	high	600	900
	medium	300	700
	low	150	200
Red Maple		30-150	150-400
White Ash		100-250	150-400
Yellow Birch		80-200	150-450
White Birch		60-150	180-340
Beech		20-100	100-250
Aspen		20-50	80-160
Basswood		-	100-250
Pallet		20-50	80-120

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Hillsborough County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$190/MBF	\$400/MBF
	medium	110	250
	low	70	130
Hemlock		30-50	110-180
Spruce-fir		60-100	200-250
Red Pine		50-95	150-200
Red Oak	high	600	800
	medium	400	600
	low	100	300
Sugar Maple	high	400	1000
	medium	300	700
	low	200	300
Red Maple		30-70	150-350
White Ash		75-200	125-350
Yellow Birch		100-180	200-600
White Birch		70-150	100-225
Beech		40-100	100-225
Aspen		30-50	95-150
Basswood		-	-
Pallet		20-50	80-150

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Merrimack County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$190/MBF	\$400/MBF
	medium	120	250
	low	70	130
Hemlock		35-55	100-180
Spruce-fir		60-100	180-220
Red Pine		40-60	150-200
Red Oak	high	500	800
	medium	350	600
	low	150	300
Sugar Maple	high	400	1000
	medium	300	650
	low	200	275
Red Maple		40-60	125-300
White Ash		75-200	125-350
Yellow Birch		50-80	150-500
White Birch		75-150	100-225
Beech		40-100	100-225
Aspen		30-50	95-150
Basswood		-	-
Pallet		30-50	80-150

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Rockingham County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$200/MBF	\$300/MBF
	medium	120	200
	low	40	125
Hemlock		30-50	110-200
Spruce-fir		-	-
Red Pine		30-50	120-240
Red Oak	high	500	750
	medium	350	500
	low	200	300
Sugar Maple	high	-	-
	medium	-	-
	low	-	-
Red Maple		40-60	125-300
White Ash		30-50	150-400
Yellow Birch		50-80	-
White Birch		-	-
Beech		-	-
Aspen		-	-
Basswood		-	-
Pallet		20-30	80-120

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Strafford County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$200	\$325/MBF
	medium	150	260
	low	50	120
Hemlock		30-60	110-180
Spruce-fir		50-100	120-240
Red Pine		30-80	120-180
Red Oak	high	600	800
	medium	250	450
	low	100	300
Sugar Maple	high	-	-
	medium	-	-
	low	-	-
Red Maple		25-70	125-300
White Ash		50-125	150-400
Yellow Birch		60-125	100-300
White Birch		60-90	100-300
Beech		30-50	130-240
Aspen		-	-
Basswood		-	-
Pallet		25-50	125-175

Prices quoted are an average range for the county. Prices will vary depending on quantity, quality, diameter, length, access, and market conditions. More specific prices can be obtained by contacting Consulting Foresters or Sawmills. A listing of sawmills can be obtained from:

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Sullivan County

2000-01 Price Range for Forest Products

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

Species	Quality	Stumpage	Delivered
White Pine	high	\$170/MBF	\$400/MBF
	medium	120	280
	low	75	150
Hemlock		25-50	125-200
Spruce-fir		40-140	200-250
Red Pine		30-75	150
Red Oak	high	500	800
	medium	300	500
	low	150	300
Sugar Maple	high	600	900
	medium	300	700
	low	150	300
Red Maple		40-100	150-300
White Ash		100-225	150-400
Yellow Birch		75-200	180-400
White Birch		60-125	125-300
Beech		30-100	130-200
Aspen		20-40	80-160
Basswood		30-60	150-200
Pallet		20-50	80-140

Prices quoted are an average range for the county. Prices will vary depending on quantity, quality, diameter, length, access, and market conditions. More specific prices can be obtained by contacting Consulting Foresters or Sawmills.

A listing of sawmills can be obtained from:

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Sources for data include: Consulting Foresters, UNH Cooperative Extension, the NH Division of Forests & Lands, the NH Timberland Owners Association, "Quarterly Market Report" and *The Sawlog Bulletin*.

Price Range: White Birch Boltwood (per cord delivered)

Stumpage \$35-60/cord

Delivered: \$100-150/cd.

(Price per cord varies according to diameter and length of bolt. Some mills prefer to buy by the MBF.)

Veneer Grade Logs (per thousand board feet, MBF)

High quality veneer has strict requirements for size (diameter and length), straightness, lack of defects, color & heart size (in some species). Curly and birdseye figuring can command even higher prices. It is important to understand specifications for the market before cutting the trees.

Species	Stumpage	Delivered
Red Oak	\$500-1000	\$800-1500/MBF
Yellow Birch	400-1000	600-1500/MB
White Ash	250-800	500-900/MBF
Hard Maple	600-1200	850-2000/MBF

Pulpwood Prices - Northern New Hampshire

Species	Stumpage	Delivered Per Ton
Spruce and Fir	\$4.00 - 7.00 /ton	\$25.00-40.00
Hemlock	2.00 - 5.00 /ton	23.00-30.00
White Pine	1.00 - 4.00 /ton	20.00-30.00
Hardwood	2.00 - 6.00 /ton	20.00-30.00

Pulpwood Prices - Central/Southern New Hampshire

Species	Stumpage	Delivered Per Ton
Spruce and Fir	\$2.00 - 4.00 /ton	\$15.00-25.00
Hemlock	2.00 - 4.00 /ton	20.00-30.00
White Pine	.50 - 1.00 /ton	10.00-18.00
Hardwood	1.00 - 4.00 /ton	18.00-26.00

Price of Debarked , Chipped & Screened Roundwood Per Green Ton

Species	Delivered
Softwood (mixed)	\$ 35 - 40 /ton
Hardwood (mixed)	35 - 45 /ton

Price of Pulp Chips

Delivered To Pulp Mill (Clean, Screened, Bark Free)

Species	Per Green Ton
Pine, Hemlock	\$ 16 - 22/ton
Spruce, Fir	16 - 22
Hardwood (mixed)	16 - 22

Average Price of Wood Fuel, Fuel Chips, and Biomass

Species	Stumpage	Delivered
Biomass Fuel: Mixed Species	\$ 50 - 1.00 /ton	\$17 - 20/ton
Sawdust		6 - 12
Sawdust and Bark Combination		15 - 20
Bark Fuel		17 - 20

Price Range of Hardwood Fuelwood Per Cord

Species	Stumpage	Delivered to Buyer
Hardwood	\$ 5.00 - 10.00/cd.	
12" - 24" unsplit		\$75.00 - 100.00 /cd
12" - 24" split		85.00 - 150.00
Slabs (Hardwood or Softwood)	15.00 - 40.00 (picked up)	25.00-55.00
Kiln Dried Fuelwood		175.00+
Tree length Fuelwood		
Southern N.H.	5.00 - 15.00	50.00 - 65.00
Northern N.H.	7.00 - 15.00	50.00 - 65.00

Cordwood as defined by NH State law (RSA 438:20):

A cord is 128 cubic feet “ranked and well stowed”- Pieces of wood are placed in a line or row, with individual pieces touching and parallel to each other, and stacked in a compact manner.

Except for small packages less than 4 cubic feet and logs, firewood shall be advertised, offered for sale, and sold only by measure, using the term “cord” and fractional parts of a cords, or the cubic meter.

Except as noted above, firewood shall be sold by the cord and a cord is 128 cubic feet.

Price Range of Sawdust, Shavings and Bark (Not Fuel)

Quantities are expressed by how product is most commonly sold.

Sawdust (retail, green)	\$2.00 - 3.00 / yd. unloaded	\$ 3.00 - 5.00 / yd. loaded
Shavings (retail, air dry)	3.00 - 5.00 / yd. unloaded	
Shavings (bagged dry, retail)	2.50 - 4.00 / bag	
Bark mulch (wholesale, loaded)	6.00 -14.00 / yd unprocessed	12.00 -20.00 / yd. processed*
Bark mulch (retail)	13.00 -16.00 / yd. unprocessed	22.00 -32.00 / yd. processed
Hemlock	30.00- 40.00 / yd. unprocessed	40.00 -50.00 / yd. processed

*mixed softwood

Representative Operating Costs (Contract Prices) N.H. per Thousand Board Feet (MBF)

		Manual	Mechanical*
Sawlogs:	Spruce/Fir	\$80-120/MBF	\$80-120
	Pine/Hemlock	80-120	80-120
	Hardwood	80-130	80-120
	Veneer	120-175	
Pulpwood and Cordwood: (with machine)			
	stump to landing random length		\$10-16 per ton
Biomass Chipping			8-15 per ton
Contract Chipping-roadside			10-15 per ton

*Mechanical harvesting is more appropriate for larger woodlots with larger volumes of wood. Moving costs are substantially higher. As of this writing fuel costs, labor costs and insurance premiums continue to increase.

Representative Trucking Costs*

Sawlogs:			
Local deliveries	\$30.00-60.00	per MBF	
Distant deliveries	30.00-60.00	per MBF for the first 10 miles and \$0.30 to 0.60 for each additional mile per MBF or \$45.00 to 60.00 per hour	
Cordwood and Pulpwood:			
	20.00-50.00	per cord	
Chips:		6.00	per loaded mile

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

Representative Processing Costs (Contract Prices) Average for N.H.

Custom Sawing:

Softwood	\$150-200 per MBF
Hardwood	250-500 per MBF
Planing	50-75 per MBF, 2 sides; 75+ per MBF 4 sides; (patterns \$20 extra)
Resawing	40-60 per MBF

Representative Custom Kiln Drying Costs per MBF

		>75 MBF	<75 MBF
4/4 Pine	6 - 8% MC	115.00 - 120.00/MBF	150-220/MBF
4/4 Oak	6 - 8% MC	175.00 - 190.00/MBF	225-325/MBF
4/4 Maple	6 - 8% MC	120.00 - 140.00/MBF	150-250/MBF
8/4 Oak	6 - 8% MC	400.00 - 450.00/MBF	500-800/MBF

New Hampshire Christmas Tree Situation

More than three hundred Christmas tree farmers are involved in New Hampshire's \$6 million Christmas tree industry with about three-fourths of the farmers managing on a part-time basis. Despite intense regional and national competition, NH growers fair very well in the marketplace. Wholesale markets are strong, with the national surplus of the past decade no longer a concern, and in-state orders stronger than in the past. While real tree competition from large national retail stores and artificial tree demand are a concern, NH's Christmas tree industry is in good shape.

Marketing efforts including increased use of the internet have proved successful for both wholesale and retail cut-your-own. As New Hampshire Christmas trees and related products are sold throughout the United States and other countries, the local harvest-your-own business is very strong with some growers concerned about keeping up with the demand. Select and cut-your-own operations continue to be popular particularly when combined with hayrides, Christmas shops, refreshments, and other agritainment activities.

While current and projected markets are good, cautious consideration should be given to the 7-10 years it takes to produce quality trees.

New Hampshire's Christmas tree industry benefits from assistance from and interaction with UNH Cooperative Extension, the NH Department of Agriculture, the New England Christmas Tree Alliance, the NH-VT Christmas Tree Association and the NH Christmas Tree Promotion Board.

Wholesale Price Range of Christmas Trees

Roadside 6'- 8' Trees

	Premium	Grade 1(a)	Grade 2
Balsam Fir	\$16-22.00	\$10.00-14.00	\$ 6.00-9.00
White Spruce		6.00-12.00	—
Scotch Pine		6.00-10.00	5.00
Blue Spruce		14.00-18.00	10.00
White Pine		7.00-10.00	5.00
Fraser Fir	\$16-22.00	14.00-16.00	12.00-16.00
Delivered Trees	\$12.00-25.00 ea. depending on species, quality and quantity		
Trucking	\$1.00-2.00/tree or \$2.50 per loaded mile		
Cut Your Own (wholesale)	\$8-20.00 per tree		

Wholesale Price Range of Boughs and Wreaths

Boughs (baled or tied)

Balsam Fir	50 lb. bundle	\$ 7.00-9.00	\$280.-400./ton
Pine	50 lb. bundle	5.50-7.50	220.-300./ton
Wreaths Size 12" to 14" (Ring Size)			
Balsam Fir	single faced	\$ 2.75-4.00 ea.	
	double faced	4.50-7.00	

Retail Price Range of Single Christmas Trees

Depending on size, species, and quality

Retail Site	\$18-45/tree	\$3-7 per linear foot
Cut-your-own	\$12-35	\$2-6 per linear foot
Mail Order	\$55-75 (including shipping)	

Maple Situation: Market Report 2001

Temperatures during the 2001 season were favorable and sugarmakers in the southern part of the state reported an average to good crop. In the western and northern parts of the state, additional deep snowfalls during the season required many hours of shoveling out lines and taps. Because of the exceptionally deep snow in these areas, producers made about half their normal crop and few had good runs. Although many were discouraged with the 2001 season, they'll pull themselves up by their snowshoe harnesses and enjoy a better season next year.

(excerpted from *Maple Syrup Digest* article by Barbara Lassonde)

Average Maple Sap Prices at Sugar Houses in New Hampshire

% sugar	cent per gal.	% sugar	cent per gal.
1.5	10.6	3.6	41.4
1.6	12.4	3.7	42.6
1.7	14.3	3.8	44.0
1.8	16.0	3.9	45.3
1.9	17.5	4.0	46.8
2.0	19.0	4.1	48.1
2.1	20.3	4.2	49.5
2.2	21.8	4.3	50.9
2.3	23.2	4.4	52.2
2.4	24.5	4.5	53.7
2.5	26.0	4.6	55.0
2.6	27.3	4.7	56.4
2.7	28.7	4.8	57.9
2.8	30.1	4.9	59.2
2.9	31.5	5.0	60.6
3.0	32.9	5.1	61.9
3.1	34.2	5.2	63.4
3.2	35.6	5.3	64.8
3.3	37.1	5.4	66.1
3.4	38.4	5.5	67.5
3.5	39.8		

Source: Maple Syrup Digest, February '01

Prices for Table Grade Maple Syrup and Products

Volume	Retail	Wholesale
1 gallon	\$ 34.10	\$ 24.40
1/2 gallon	19.60	15.60
quart	11.31	9.10
pint	6.70	4.90
1/2 pint	3.90	2.80

Bulk Wholesale (per lb.)

Grade A	Light Amber	-
	Medium Amber	1.81
	Dark Amber	1.41
Grade B & C		.87

Maple Products

Retail	Sugar 1 lb.	\$8.40
	Cream 1 lb.	8.85
Wholesale	Sugar 1 lb.	\$6.95
	Cream 1 lb.	5.75

Rent Price Per Tap Hole

Tap hole rentals: 25 to 50 cents with the average being 30 cents. Sugar maples in the woods, which are not easy to get to, average 25 cents per tap, while easily accessible trees and roadside trees average 40 to 50 cents per tap, respectively.

Spring 2001 Seedling Price List from NH State Forest Nursery

Department of Resources and Economic Development
 Division of Forests & Lands
 P.O. Box 1856, Concord, NH 03302-1856
 Tel. 603-271-3456 Website: www.nhnursery.com

Species	Age	Avg. Size	Price Per 25	Price Per 100	Price Per 500	Price Per 1000	
White Pine	2-0	3-5"	-	\$ 15	\$ 50	\$ 95	
Red Pine	2 yr	4-6"	-	15	50	95	
Red Pine	3 yr.	8-14"	15	30	100	150	
Norway Spruce	2 yr	6-14"		30	100	150	
Norway Spruce	3 yr.	16-26"	20	45	150	250	
White Spruce	2 yr.	6-12"	-	30	100	150	
White Spruce	3 yr.	14-24"	20	45	150	250	
Blue Spruce	2 yr.	6-12"		30	100	150	
Blue Spruce	3 yr	14-24"	20	45	150	250	
Hemlock	4 yr.	8-20"	50	125			
White Ash	1 yr	8-12"	20	45			
Red Oak	1 yr.	6-16"	20	45	200	300	
Black Oak	1 yr	6-16"	20	45	-	-	
Douglas Fir	2-0	8-14"	15	30	100	150	
Scotch Pine	2-0	6-10"	15	30	100	150	
Fraser Fir	3-0	6-8"	-	45	150	250	
Fraser Fir	4-0	8-14"	25	60	200	300	
Balsam Fir	3-0	6-10"	-	30	100	150	
Balsam Fir	4-0	8-16"	20	45	150	250	
N. White Cedar	2 yr.	6-8"	-	30	100	150	
N. White Cedar	3 yr.	8-18"	25	60	-	-	
Black Walnut	1 yr.	12-20"	25	60	-	-	
Buttonbush	2 yr.	8-16"	available in wetlands package only				
Arrowwood	2 yr.	10-20"	20	45	-	-	
Bayberry	2 yr.	5-10"	20	45	-	-	
Beach Plum	1 yr.	12-20"	20	45	150	225	
European Barberry	2 yr.	12-20"	20	45	150	225	
Dogwood, silky	2 yr.	12-20"	20	45	150	225	
Dogwood, red osier	2 yr.	12-20"	20	45	150	225	
Dogwood, gray	2 yr.	12-20"	20	45	150	225	
Rose, rugose	1 yr.	8-16"	20	45	150	225	
Rose, Virginia	1 yr.	6-12"	20	45	-	-	
Rose, swamp	2 yr.	8-16"	available in wetlands package only				
Elderberry	2 yr.	12-20"	20	45	-	-	
Crabapple	2 yr.	8-16"	20	45	150	225	
Cranberry, European highbush	2 yr.	8-20"	20	45	150	225	
Euonymous, winterberry	1 yr.	12-20"	20	45	-	-	
Black chokeberry	1 yr.	12-20"	20	45	-	-	

Seedling Price List (cont.)

Species	Age	Avg. size	Price Per 25	Price Per 100	Price Per 500	Price Per 1000
Hazelnut, American	2 yr.	12-20"	20	45	-	-
Mountain-ash, American	2 yr.	12-20"	20	45	150	225
Mountain-ash, European	2 yr.	12-20"	20	45	-	-
Nannyberry	2 yr.	12-20"	20	45	-	-
Wild-raisin	2 yr.	8-16"	20	45	150	225
Winterberry holly	2 yr.	12-20"	20	45	150	225
Fragrant sumac	1 yr.	6-10"	20	45	-	-
Grapes	2 yr.	8-16"	20	45	-	-
Hawthorne	2 yr.	12-18"	20	45	150	225
Native Species Package (25 assorted seedlings) - \$20 per package						
Winter Survival Package (25 assorted seedlings) - \$20 per package						
Wetlands Package (25 assorted seedlings) - \$20 per package						
Songbird/Wildlife (25 assorted seedlings) - \$20 per package						
Christmas tree sampler package (25 assorted seedlings) - \$20 per package						

Age: The first number after species (white pine 2-0) is the number of years in the seed-bed. The second number is the number of years in the transplant bed. Total age is the sum of both. Flowering Shrubs and trees will flower best and produce fruit most abundantly when planted in full sunlight.

Metric Equivalentents - Lumber and Pulpwood

(Source: Anthony Binek, 1973)

Lumber

1 MBF = 2.36 m³ = 83.33 cu. ft.
 1 m³ = .424 MBF = 35.31 cu. ft.

Pulpwood

1 m³ = 35.31 cu. ft.
 Solid wood content of a cord may vary between 75 and 90 cubic feet or 2.12 m³ and 2.55 m³.
 (Example: 1 cord = 85 cu. ft.= 2.40 m³)

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 International 1/4 Rule is the most commonly accepted log scale in N.H. For more information about log scaling or to obtain a copy of "New Hampshire Best Log Scaling Practices", call 1-800-444-8978.

The volume of a standing tree or log is determined using tree and log scale. These rules simply give the predicted amount of board feet of sawn lumber.

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 4.5' 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 (Bd. Ft.)

D.B.H. Inches	Number of 16 foot logs-to 6" top						
	1	1 1/2	2	2 1/2	3	3 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 Scale

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 1/4 Log Rule (Board foot, BF)

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	300	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.

A cord of softwood weighs between 2.2 - 2.4 tons/cord
hardwood weighs between 2.5 - 2.7 tons/cord

Solid Wood Content of a Cord of Pulpwood

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 (Pulpwood)

1 standard cord (4' x 4' x 8')	=	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

Lumber

Lumber is most often sold by the **board foot**.

To determine board footage:

$$\frac{\text{Width" X length' X thickness"}}{12}$$

Lineal footage or “running foot” is a measurement of length with no regard for width or thickness.

Weights of Various Species (Pounds per Mbf thousand board feet)

Weight calculations based on published estimates of specific gravity for each species and the resulting density at the moisture contents indicated. The moisture content of “green” wood, however, varies from species to species.

Species	Green	Kiln Dry (12%mc)	Kiln Dry (8%mc)	Air Dry (20%mc)
Ash (White)	4,350	3,500	3,350	3,750
Aspen (Popple)	4,150	2,300	2,200	2,450
Basswood	4,000	2,150	2,100	2,350
Beech	5,325	3,700	3,600	4,000
Birch (White)	5,050	3,200	3,100	3,400
Birch (Yellow)	5,550	3,600	3,500	3,850
Cedar (White)	2,500	1,800	1,750	1,900
Cherry (Black)	4,300	2,900	2,800	3,100
Fir (Balsam)	4,300	2,100	2,050	2,250
Hemlock	4,350	2,350	2,250	2,500
Hickory	6,100	4,150	4,000	4,450
Maple (Hard)	5,600	3,650	3,550	3,900
Maple (Soft)	4,750	3,150	3,050	3,350
Maple (Silver)	4,400	2,750	2,650	2,900
Oak (Red)	5,750	3,650	3,550	3,950
Oak (White)	6,100	3,950	3,800	4,250
Pine (Red)	3,850	2,550	2,450	2,750
Pine (White)	3,050	2,050	1,950	2,200
Spruce (White)	5,550	2,350	2,250	2,500

Source: “Log Rules and Other Useful Information” Northeastern Loggers Association